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| Agriculture Victoria |
| Dairy Farm Monitor Project |
| Victoria | Annual report 2021-22 |





Acknowledgements

#### Participants

The participant farmers are thanked for their efforts in supplying data for the Dairy Farm Monitor Project in 2022. A hybrid of face-to-face and remote data collection required additional efforts this year and is greatly appreciated. For continuing participants and those new to the project, thank you for your participation.

Project participants were selected based on a distribution of farm size, feeding system, herd size and geographical location within each region and results should not be viewed as a representation of Victoria’s entire dairy farm population.

#### Report

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#### Industry Partners

The Dairy Farm Monitor Project is a collaboration between Agriculture Victoria and Dairy Australia. Now in its sixteenth year, the project provides industry and government with farm-level data to inform targeted strategy and decision making.

#### Appendix Tables

The appendices at the end of this report provide detailed metrics on the physical and financial performance and efficiency for individual participants.

### Further information

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# Executive Summary

* The Victorian average profitability in 2021-22 was the fourth highest in the 16 years of DFM (accounting for inflation), reflecting the strong performance of DFM participants and was lower than the previous year’s high.
* The milk price increased to $7.37 per kilograms of milk solids ($/kg MS), however higher input costs and supply constraints, including for labour, feed and fertiliser, impacted on farm business margins.
* Average equity increased as participants used the favourable conditions and cashflows to expand and improve their business, by purchasing land, investing in infrastructure and machinery.

#### Victoria

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Victoria** |  |  |  | 2020-21 | 2021-22 |  |  |
|  |  | $1.76 | | **$1.72** | |  |
|  |  |  |  | Average EBIT $/kg MS |  |  |
| $422k | | | | **$384k** | | |
|  |  |  |  | Average earnings before interest and tax | |  |
|  | $330k | | | **$295k** | |  |
|  |  |  |  | Average net farm income |  |  |
|  |  | 5.7% | | **4.6%** |  |  |
|  |  |  |  | Average return on total assets |  |  |
|  | 8.2% | | | **6.3%** | |  |
|  |  |  |  | Average return on equity |  |  |

Many participants used the favourable conditions and cashflows to expand and improve their business, by purchasing land, investing in infrastructure and machinery, and increasing business equity (66 of the 80 farm businesses improved their equity position in the last 12 months).

#### Northern Victoria

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | 2020-21 | 2021-22 |  |  |
|  |  | $1.76 | | **$1.98** | |  |
|  |  |  |  | Average EBIT ($/kg MS) |  |  |
| $500k | | | | **$483k** | | |
|  |  |  |  | Average EBIT (total $/farm) | |  |
|  |  |  | $401k | **$391k** | |  |
|  |  |  |  | Average net farm income (total $/farm) | | |
|  |  |  | 6.0% | **5.6%** |  |  |
|  |  |  |  | Average return on total assets | |  |
|  | 7.5% | | | **7.2%** | |  |
|  |  |  |  | Average return on equity |  |  |

Favourable seasonal conditions, higher milk income, good livestock trading conditions, lower irrigation costs and low interest rates largely offset higher costs (concentrates, fertiliser, fuel and labour). Gross farm income was the second highest over the 16 years and profitability (average EBIT per kilogram of milk solids) was third highest (accounting for inflation).

#### South West Victoria

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | 2020-21 | | 2021-22 |  |  |
|  | $2.04 | | | **$1.71** | |  |
|  |  |  |  | Average EBIT ($/kg MS) | | |
| $449k | | | | **$376k** | | |
|  |  |  |  | Average EBIT (total $/farm) | | |
|  |  |  | $355k | **$287k** | |  |
|  |  |  |  | Average net farm income (total $/farm) | | |
|  | 5.5% | | | **3.9%** |  |  |
|  |  |  |  | Average return on total assets | | |
| 9.1% | | | | **5.5%** | |  |
|  |  |  |  | Average return on equity | | |

Increased use of supplements at higher per unit price (concentrates, silage and hay) were used to manage challenging seasonal conditions and lower homegrown feed production. These costs combined with greater expenditure on employed labour and repairs and maintenance saw the highest total costs in 16 years, which were not covered by higher incomes in 2021-22. Farm profitability (average EBIT per kg/MS) was seventh highest in 16 years of DFM (accounting for inflation).

#### Gippsland

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | 2020-21 | 2021-22 |  |  |
|  | $1.78 | | | **$1.43** |  |  |
|  |  |  |  | Average EBIT ($/kg MS) |  |  |
| $300k | | | | **$273k** |  |  |
|  |  |  |  | Average EBIT (total $/farm) |  |  |
|  |  |  | $220k | **$188k** |  |  |
|  |  |  |  | Average net farm income (total $/farm) | |  |
|  | 5.4% | | | **4.2%** |  |  |
|  |  |  |  | Average return on total assets |  |  |
| 8.0% | | | | **6.2%** |  |  |
|  | | | | Average return on equity |  |  |

Favourable conditions and lower irrigation costs in the Macalister Irrigation District provided stronger returns (average EBIT $2.25/kg MS) than the average for south and west Gippsland. In the dryland areas of south and west Gippsland wet seasonal conditions constrained milk and pasture production, adding further to elevated costs. Farm profitability (average EBIT per kg/MS) was sixth highest in 16 years of DFM (accounting for inflation).

#### How does 2021-22 compare?

* Average profit (per kg milk solids) for each region in 2021-22 was above the long-term average for the respective region.
* Strong profit results per farm (average $384,000) across the state, well above the 16-year long-term average of $264,000.

#### Milk price

Milk price increased nine per cent on average from 2021-22. Milk income contributed approximately 85 per cent of gross farm income due to the strong influence of livestock trading conditions.

|  |  |  |  |
| --- | --- | --- | --- |
| Victoria | An icon showing milk bottle with an upwards arrow on the label to represent milk price. | 9% to | $7.37/kg MS |
| Northern Victoria | An icon showing milk bottle with an upwards arrow on the label to represent milk price. | 7% to | $7.54/kg MS |
| South West Victoria | An icon showing milk bottle with an upwards arrow on the label to represent milk price. | 11% to | $7.39/kg MS |
| Gippsland | An icon showing milk bottle with an upwards arrow on the label to represent milk price. | 9% to | $7.15/kg MS |

#### Expectations for profit in 2022-23

Participant farmers were optimistic in their outlook for farm business returns in the coming 12 months but remain cautious for the longer-term. Participants in Northern Victoria were the most optimistic about better returns in 2022-23 (87 per cent), followed by those in South West Victoria (76 per cent) and Gippsland (60 per cent). Maintaining margins was identified by participants as a key risk to their business amid high (and rising) input costs. Labour shortages, succession planning and managing climatic conditions were other concerns identified by participants.

**Greenhouse gas emissions**

The average carbon footprint for Victorian dairy farm participants was 3,000 tonnes of carbon dioxide equivalents per farm in 2021-22. Over the last five years, larger herd sizes and greater milk production per farm have contributed to increasing average greenhouse gas emissions while emissions intensity has decreased since 2018-19.

# Part One: Victorian Overview

Statewide average profitability in Victoria was well above the 16 year long term average. Strong prices received for milk and livestock enabled farm businesses to manage the impact of higher costs.

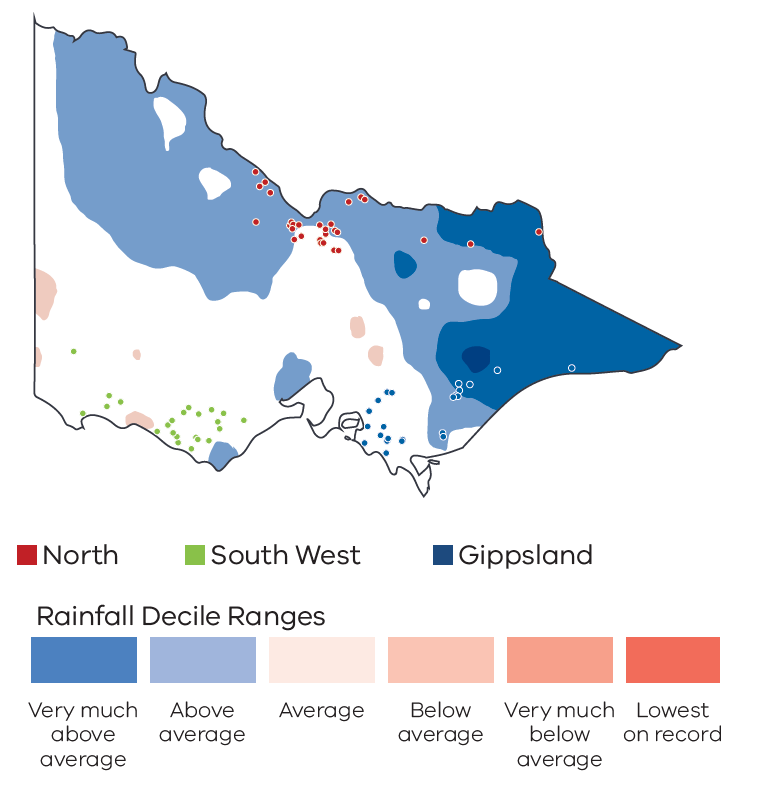
Profitability in Northern Victoria was buoyed by excellent seasonal conditions and reduced requirements for irrigation water, while South West Victoria and Gippsland profits were constrained by managing the challenging climatic conditions.

There were significant increases in costs, especially feed – accentuated in South West Victoria, west and south Gippsland, where conditions were much wetter than normal in winter and spring 2021. The amount of feed that could be harvested by direct grazing was reduced and farmers replaced this with greater quantities of higher priced concentrates.

### Dairying in Victoria

|  |  |
| --- | --- |
| Icon coloured blue showing a milk bottle to represent milk production. | There were approximately **2,985** dairy farm businesses in Victoria that produced **5.42 billion litres** or **67 per cent** of Australia’s national milk production in 2021-22. |

#### Dairy Farm Monitor Project farm locations and rainfall in 2021-22



#### In 2021-22 farm profitability for the state has been influenced by:

**9%** increase in average milk price   
to **$7.36/kg MS**.

**20%** in herd costs to **$0.39/kg MS**

**6%** in shed costs to **$0.25/kg MS**

**21%** in total feed costs to **$3.45/kg MS**

**12%** in overhead costs to **$2.68/kg MS**

### Profitability

Increased costs across the state in all areas of the business reduced the benefit of positive livestock trading conditions and a higher milk price for the season. Northern Victoria had ideal growing conditions, while less favourable seasonal conditions in South West Victoria and Gippsland further impacted profitability. The statewide average EBIT per farm was the fourth highest on record, accounting for inflation.

#### In 2021-22, 96 per cent of all Victorian participants had a positive profit (77 out of 80)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Victoria** |  |  |  | 2020-21 | 2021-22 |  |  |
|  |  | $1.76 | | **$1.72** | |  |
|  |  |  |  | Average EBIT $/kg MS |  |  |
| $422k | | | | **$384k** | | |
|  |  |  |  | Average earnings before interest and tax | |  |
|  | $330k | | | **$295k** | |  |
|  |  |  |  | Average net farm income |  |  |
|  |  | 5.7% | | **4.6%** |  |  |
|  |  |  |  | Average return on total assets |  |  |
|  | 8.2% | | | **6.3%** | |  |
|  |  |  |  | Average return on equity |  |  |

## Physical parameters and seasonal conditions

* While most farms received above average rainfall in 2021-22, the timing of the rainfall challenged those in the high rainfall zones to graze and conserve pasture and apply nutrients at optimum times of plant growth.
* Seasonal conditions in the Goulburn Murray Irrigation District (Northern Victoria) and Macalister Irrigation District (Gippsland) provided ideal growing conditions. This was reflected well in their farm profitability.
* Farm systems have intensified on average across all regions (herd size and feeding systems).

### Victorian pasture-based dairy production

Dairying in Victoria is predominantly pasture-based, with 60 per cent of all consumed metabolisable energy home grown (across participant farms). Spring and autumn rainfall is important, as is adequate irrigation water availability in the irrigation districts of Northern Victoria and Gippsland.

### Rainfall

Monthly variation to seasonal conditions has influenced physical and financial performance in each of the regions. The preceding conditions as well as the conditions prevalent in a particular month influence feed availability and conditions to harvest pastures and crops.

FIGURE 1. MONTHLY RAINFALL 2021-22

Notably the large storm events between June and December 2021 (Figure 1) provided challenges for harvesting pasture either by direct grazing or for conservation in South West Victoria and Gippsland.

With average to ‘very much above average’ annual rainfall across the state, and less homegrown feed availability, water use efficiency (rainfall and irrigation) in 2021-22 was lower 0.77t DM/ha, relative to 0.81 t DM/ha/100 mm in 2020-21.

### Feed consumption and harvest

With lower homegrown feed availability in each region, the average tonnes of homegrown feed reduced by 0.9 t DM/ha on average across the state (Figure 2). Many farms supplemented dairy herds with additional concentrates and fodder (at relatively higher prices) to maintain milk production.

The ability to grow and harvest feed may have also been due to lower fertiliser applications due to cost and ability to utilise feed if it was grown (wet soils, potentially poorer quality and pasture damage).

FIGURE 2. ESTIMATED TONNES OF HOMEGROWN FEED REMOVED

### Feeding system

Moderate to high bail feeding systems were the most popular feeding system in 2021-22 (Figure 3). There is an increasing trend in Northern Victoria to look towards more intensive feeding systems. The Gippsland region is the most reliant on low to moderate bail feeding systems. South West Victoria have a few hybrid systems but was predominantly moderate to high bail feeding.

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 Victoria 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 one to manage adverse seasonal conditions in a given year, i.e., wet soils management.

### Fertiliser application

Nutrient application on the milking area was reduced considerably in 2021-22. The substantial increase in fertiliser prices and adverse (wet) seasonal conditions saw farmers decide to apply lower quantities of fertiliser.

In comparison to the previous year, Figure 4 shows that in 2021-22:

* Nitrogen applied was 137 kg/ha, an 18 per cent reduction
* Phosphorous applied was 13 kg/ha, a 32 per cent reduction
* Potassium applied was 23 kg/ha, a 31 per cent reduction
* Sulphur applied was 16 kg/ha, a 23 per cent reduction.

FIGURE 4. NUTRIENT APPLICATION

### Milk solids sold

Milk production reflects the seasonal nature of calving in the respective regions. Calving pattern determines milk production and is therefore reflective of participants’ decision to seek milk payment systems that suits their management (Figure 5).

Victorian participants on average increased the level of milk production due to increased herd size. Milk production on average remained stable per cow.

FIGURE 5. MONTHLY DISTRIBUTION OF MILK SOLD

### Calving pattern

Calving pattern for participant farms will determine feed requirements. Northern Victorian participants were characterised by split calving (spring and autumn), South West Victorian participants are predominantly autumn calving and Gippsland predominantly spring calving (Figure 6).

FIGURE 6. MONTHLY DISTRIBUTION OF CALVING

## Whole farm analysis

* On average, farm profitability at a statewide level decreased in 2021-22, with distinct variation among the regions. Earnings before Interest and Tax (EBIT) was positive on 77 out of the 80 participating farms (96 per cent).
* High milk price did not necessarily lead to increased profitability across all Victorian participants. Statewide, milk income and gross farm income was higher.
* Variable costs increased by 20 per cent (primarily due to feed costs), with overhead costs higher by 11 per cent.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Physical parameters | | | | | | | | |  | | Financial parameters | | | | | | | | | | | | | | | | |
|  | 2020-21 | 2021-22 |  |  |  |  |  |  |  |  | 2020-21 | | | | | | 2021-22 | | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | | | | | | **Income ($/kg MS)** | | | | | | | | | | |
|  | 427 | **428** | | | | |  |  |  |  | $7.02 | | | | | | **$7.54** | | | | | | | | | | |
|  | 373 | **390** | | | | |  |  |  |  | $6.68 | | | | | | **$7.39** | | | | | | | | | | |
|  | 308 | **320** | | | | |  |  |  |  | $6.54 | | | | | | **$7.15** | | | | | | | | | | |
|  |  | Number of milkers (hd) | | | | | |  |  |  |  |  |  |  |  |  | Milk income (net) | | | | | | | | | | |
|  | 0.9 | **0.8** | | | |  |  |  |  |  |  |  | $0.91 | | | | **$1.07** | | |  |  |  |  |  |  |  |  |
|  | 0.7 | **0.7** | | | |  |  |  |  |  |  |  | $1.12 | | | | **$1.35** | | |  |  |  |  |  |  |  |  |
|  | 0.7 | **0.8** | | | |  |  |  |  |  |  |  | $0.70 | | | | **$0.86** | | |  |  |  |  |  |  |  |  |
|  |  | WUE (t DM/100mm/ha) | | | | | |  |  |  |  | | | | | | Livestock trading profit and other income | | | | | | | | | | |
|  | 307 | **335** | | | | |  |  |  |  | $7.93 | | | | | | **$8.72** | | | | | | | | | | |
|  | 335 | **341** | | | | |  |  |  |  | $7.79 | | | | | | **$8.74** | | | | | | | | | | |
|  | 186 | **187** | | | | |  |  |  |  | $7.24 | | | | | | **$8.00** | | | | | | | | | | |
|  |  | Usable area (ha) | | | | | |  |  |  |  |  |  |  |  |  | Gross farm income | | | | | | | | | | |
|  | 1.7 | **1.4** | | | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1.1 | **1.2** | | | | | |  |  |  |  |  |  |  |  |  | **Costs ($/kg MS)** | | | | | | | | | | |
|  | 1.9 | **1.9** | | | | | |  |  |  |  |  | $3.86 | | | | **$4.20** | | |  |  |  |  |  |  |  |  |
|  |  | Milking cows per usable ha | | | | | |  |  |  |  |  | $3.06 | | | | **$4.12** | | |  |  |  |  |  |  |  |  |
|  | 572 | **578** | | | | |  |  |  |  |  |  | $3.23 | | | | **$3.99** | | |  |  |  |  |  |  |  |  |
|  | 526 | **527** | | | | |  |  |  |  |  |  |  |  |  |  | Variable Costs | | | | | | | | | | |
|  | 485 | **471** | | | | |  |  |  |  |  |  | $2.30 | | | | **$2.54** | | | | | | | | | |  |
|  |  | Milk solids sold (kg MS/cow) | | | | | |  |  |  |  |  | $2.70 | | | | **$2.90** | | | | | | | | | |  |
|  | 923 | **830** | | | | | |  |  |  |  |  | $2.24 | | | | **$2.59** | | | | | | | | | |  |
|  | 602 | **636** | | | | | |  |  |  |  | | | | | | Overhead costs |  |  |  |  |  |  |  |  |  |  |
|  | 924 | **920** | | | | | |  |  |  | $1.76 | | | | | | **$1.98** | | | | | | |  |  |  |  |
|  |  | Milk solids sold (kg MS/ha) | | | | | |  |  |  | $2.04 | | | | | | **$1.71** | | | | | | |  |  |  |  |
|  | 55% | **56%** | |  |  |  |  |  |  |  | $1.78 | | | | | | **$1.43** | | | | | | |  |  |  |  |
|  | 68% | **62%** | |  |  |  |  |  |  |  |  | | | | | | Earnings before interest and tax | | | | | | | | |  |  |
|  | 66% | **63%** | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Homegrown feed as % of ME consumed | | | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 103 | **100** |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Northern Victoria |  |  |  |  |  |  |  |  |  |  |
|  | 99 | **103** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 122 | **119** |  |  |  |  |  |  |  |  |  |  |  |  |  |  | South West Victoria | |  |  |  |  |  |  |  |  |  |
|  |  | Labour efficiency (cows / FTE) | | | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 58,041 | **57,300** | | | | | |  |  |  |  |  |  |  |  |  | Gippsland |  |  |  |  |  |  |  |  |  |  |
|  | 51,787 | **54,054** | | | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 59,174 | **55,929** | | | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Labour efficiency (kg MS / FTE) | | | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

#### Earnings before interest and tax

Higher costs and variable seasonal conditions contributed to the lower average farm profitability (measured by earnings before interest and tax, EBIT) in 2021-22, compared to the previous year. In Northern Victoria labour constrained some farmers’ ability to take advantage of the high milk price. In Gippsland and South West Victoria it was the challenging seasonal conditions leading to increased feed costs that had the greatest influence on profitability (Figure 7).

FIGURE 7. DISTRIBUTION OF FARMS BY EBIT

#### Return on total assets

A positive return on total assets (ROTA) was recorded for 77 of the 80 participants. In 2021-22 ROTA reduced to 4.6 per cent (Figure 8) mainly due to a lower EBIT over a greater asset value. Land values increased considerably across the state. This change in land value has in some part reduced the ROTA.

FIGURE 8. DISTRIBUTION OF FARMS BY ROTA

#### Return on equity

Strong return on equity (ROE) performance was observed across all three regions (Figure 9), with 70 of the 80 participants achieving a positive ROE. Average ROE was 6.3 per cent in 2021-22, down from the 8.2 per cent high in 2020-21.

On average, dairy businesses improved their equity levels in 2021-22 (75 per cent on average, up from 71 per cent equity).

FIGURE 9. DISTRIBUTION OF FARMS BY ROE

# Part Two: Northern Victoria

## Northern VictorIa – performance

#### Dairying in Northern Victoria

|  |  |
| --- | --- |
| Icon coloured red showing a milk bottle. | Approximately **874** dairy farm businesses in Northern Victoria produced **1.59 billion litres** of milk in 2021-22, accounting for **29 per cent** of Victoria’s milk production output and **19 per cent** of Australia's milk production. |

#### Physical farm characteristics

Stable herd size at slightly higher production per cow delivered an increase in total milk production compared to last year in Northern Victoria.

Northern Victoria typically has larger herds and irrigation infrastructure that supports more intensive production systems. Non-irrigated farms in Northern Victoria tend to be larger scale but are reliant on rainfall. While perennial pastures dominate in the other regions, annual pastures dominate in Northern Victoria and on average the milking cows consume less homegrown pasture.

|  |  |  |
| --- | --- | --- |
| **Stable** | **1%** | **2%** |
| Icon coloured red to showing a milking cow. | Icon coloured red showing a milk bottle with two overlapping squares. | Icon coloured red showing two overlapping plant stems. |
| **Average herd size 428 cows** | **Milk solids sold 578 kg MS/cow** | **Homegrown feed  56% of metabolisable energy consumed** |

#### In 2021-22 all 30 participants recorded a positive return on total assets

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | 2020-21 | 2021-22 |  |  |
|  |  | $1.76 | | **$1.98** | |  |
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|  |  |  |  | Average net farm income |  |  |
|  |  |  | 6.0% | **5.6%** |  |  |
|  |  |  |  | Average return on total assets | |  |
|  | 7.5% | | | **7.2%** | |  |
|  |  |  |  | Average return on equity |  |  |

#### In 2021-22 farm profitability has been influenced by:

**7%** increase in average milk price to **$7.54/kg MS**

**16%** in herd and shed costs to **$0.61/kg MS**

**9%** in total feed costs to **$3.59/kg MS**

**10%**  in overhead costs to **$2.54/kg MS**

#### Return on total assets and milk price

#### Future expectations 2022-23

|  |  |
| --- | --- |
| Icon coloured red showing a milk bottle with a dollar sign and dairy cow on the label. | Northern Victorian participants are optimistic with 87 per cent expecting business returns to improve and 10 per cent expecting business returns to remain stable. |

#### Concerns as reported by farm businesses

|  |  |  |  |
| --- | --- | --- | --- |
| Icon coloured red showing a dollar sign. | Icon coloured red showing a person. | Icon coloured red showing a sun. | Icon coloured red showing a hay bale. |
| **Input costs**  **19%** | **Labour**  **16%** | **Climate/seasonal conditions**  **15%** | **Pasture/fodder**  **15%** |

## Whole farm analysis

* Gross farm income increased from the previous year with higher milk income (increased milk production at a higher milk price) and increased livestock trading income.
* Favourable seasonal and economic conditions, including higher milk income, good livestock trading conditions, lower irrigation costs and low interest rates helped offset higher input costs.
* Participants used the favourable conditions to expand and improve their business – by purchasing land, investing in infrastructure and machinery – resulting in increased business equity.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Physical parameters** | | | | | | | | |  | | **Financial parameters** | | | | | | | | | | | | | | | | |
| 2020-21 | | 2021-22 | | | | | | |  |  | 2020-21 | | | | | | 2021-22 | | | | | | | | | | |
|  |  | **Rainfall, area and cows** | | | | | |  |  |  |  |  |  |  |  |  | **Income ($/kg MS)** | | | | |  |  |  |  |  |  |
|  | 435 | **536** |  |  |  |  |  |  |  |  | $7.02 | | | | | | **$7.54** | | | | | | | | | | |
|  |  | Annual rainfall (mm) | | | | | | | |  |  | | | | | | Milk income (net) | | | | | | | | | | |
|  | 427 | **428** |  |  |  |  |  |  |  |  |  |  | $0.79 | | | | **$1.07** | | |  |  |  |  |  |  |  |  |
|  |  | Herd size | | | | | | | |  |  | | | | | | Livestock trading profit | | | | | | | | | | |
|  | 0.9 | **0.8** |  |  |  |  |  |  |  |  |  |  |  |  |  | $0.13 | **$0.12** | |  |  |  |  |  |  |  |  |  |
|  |  | WUE (t DM/100mm/ha) | | | | | | | |  |  | | | | | | Other farm income | | | | | | | | | | |
|  | 307 | **335** |  |  |  |  |  |  |  |  | $7.93 | | | | | | **$8.72** | | | | | | | | | | |
|  |  | Usable area (ha) | | | | | | |  |  |  | | | | | | Gross farm income | | | | | | | | | | |
|  | 1.7 | **1.4** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Milking cows per usable ha | | | | | | | |  |  |  |  |  |  |  | **Costs ($/kg MS)** | | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  | | | | | | **Variable costs** | | | | | | | | | | |
|  |  | **Milk production** | | | | | | |  |  |  |  | $0.32 | | | | **$0.40** | | |  |  |  |  |  |  |  |  |
|  | 572 | **578** |  |  |  |  |  |  |  |  |  | | | | | | Herd costs | | | | | | | | | | |
|  |  | Milk solids sold (kg MS/cow) | | | | | | | |  |  |  |  |  |  | $0.20 | **$0.22** | |  |  |  |  |  |  |  |  |  |
|  | 923 | **830** |  |  |  |  |  |  |  |  |  | | | | | | Shed costs | | | | | | | | | | |
|  |  | Milk solids sold (kg MS/ha) | | | | | | | |  |  | $1.49 | | | | | **$1.46** | | | | |  |  |  |  |  |  |
|  | 55% | **56%** |  |  |  |  |  |  |  |  |  | | | | | | Home grown feed cost | | | | | | | | | | |
|  |  | Homegrown feed as % of ME consumed | | | | | | | |  | $2.20 | | | | | | **$2.27** | | | | | | | |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | | | | | | Purchased feed and agistment | | | | | | | | | | |
|  |  | **Pasture production** | | | | | | |  |  |  | -$0.23 | | | | | **-$0.17** | |  |  |  |  |  |  |  |  |  |
|  | 8.3 | **7.5** |  |  |  |  |  |  |  |  |  | | | | | | Feed inventory change | | | | | | | | | | |
|  |  | Homegrown feed removed (t DM/ milking ha) | | | | | | | |  |  | -$0.13 | | | | | **$0.03** | |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | | | | | | Water inventory change | | | | | | | | | | |
|  |  | **Labour use and efficiency** | | | | | | | |  |  |  | $3.34 | | | | **$3.59** | | | | | | | | | |  |
|  | 4.2 | **4.3** |  |  |  |  |  |  |  |  |  | | | | | | Total feed costs | | | | | | | | | | |
|  |  | Total FTE | | | | | | | |  |  |  |  |  |  |  | **Overhead costs** |  |  |  |  |  |  |  |  |  |  |
|  | 103 | **100** |  |  |  |  |  |  |  |  |  |  |  |  | $0.64 | | **$0.70** | | | | | |  |  |  |  |  |
|  |  | Labour efficiency (cows / FTE) | | | | | | | |  |  | | | | | | Employed labour | | | | | | | | | | |
|  | 58,041 | **57,300** |  |  |  |  |  |  |  |  |  |  |  |  |  | $0.38 | **$0.45** | | | |  |  |  |  |  |  |  |
|  |  | Labour efficiency (kg MS / FTE) | | | | | | |  |  |  | | | | | | Repairs and maintenance | | | | | | | | | | |
|  | |  | | | | | | | |  |  |  |  |  |  | $0.29 | **$0.31** | |  |  |  |  |  |  |  |  |  |
|  | |  | | | | | | | |  |  | | | | | | All other overheads | | | | | | | | | | |
|  | |  | | | | | | | |  |  |  |  | $0.75 | | | **$0.77** | | | | | | | |  |  |  |
|  | |  | | | | | | | |  |  | | | | | | Imputed labour | | | | | | | | | | |
|  | |  | | | | | | | |  |  |  |  |  | $0.24 | | **$0.32** | | | | | |  |  |  |  |  |
|  | |  | | | | | | | |  |  | | | | | | Depreciation | | | | | | | | | | |
|  | |  | | | | | | | |  | $2.30 | | | | | | **$2.54** | | | | | | | | |  |  |
|  | |  | | | | | | | |  |  | | | | | | Total overhead costs | | | | | | | | | | |
|  | |  | | | | | | | |  |  |  |  |  |  |  | **Profit ($/kg MS)** |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  | $1.76 | | | | | | **$1.98** | | | | | | |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | | | | | | Earnings before interest and tax | | | | | | | | | | |

### Gross farm income

Higher income was recorded in 2021-22 than the previous year and was the second highest for Northern Victoria over the 16 years of the DFMP, accounting for inflation. The key drivers were increased milk production (sold at a higher milk price) and increased livestock trading income.

### Variable costs

Variable costs increased by $0.34/kg MS, with higher feed costs being the largest component.

Feed costs increased by $0.25/kg MS. While the cost of purchased fodder was lower, there was an increase in the cost of concentrates. Although fertiliser use reduced significantly (by 25 per cent), the total money spent on fertiliser increased by around 25 per cent – reflecting the historically high prices for fertilisers per unit of product.

Herd and shed costs accounted for the remaining $0.09/kg MS increase in variable costs. Higher herd costs included increased spending in calf rearing and herd genomics. Shed costs increased due to increased power use and costs. Energy efficient technology (mostly solar) was adopted on some farms to mitigate increasing grid energy costs.

The annual median price for allocation water was $60-$75/ML for the major trading zones (1A, 6, and 7). Irrigation costs declined (by around 40 per cent) and there was a positive increase in the value of water inventories.

### Overhead costs

Overhead costs increased on average by 10 per cent in Northern Victoria in 2021-22. Repairs and maintenance, labour and depreciation were the largest factors in this increase.

Increased spending on repairs and maintenance and on employed labour were the two largest components of the increase in cash costs. Almost all farms increased the hourly rate for employed labour. The strong milk price signals (and good seasonal conditions) saw a general trend to invest in repairs and maintenance.

The high value of assets on some farms has seen an increase in the non-cash cost of depreciation.

### Earnings before interest and tax

In 2021-22, all participants in Northern Victoria had a positive EBIT (Figure 10). Average EBIT per farm was the second highest in the 16 years of the DFMP, accounting for inflation. Average EBIT ($/kg MS) was higher year-on-year, and was the third highest on record, accounting for inflation.

FIGURE 10. AVERAGE EBIT PER KG MS – NORTHERN VICTORIA

### Return on total assets and equity

Average ROTA decreased slightly to 5.6 per cent in 2021-22 from 6.0 per cent 2020-21. The lower returns were a function of slightly lower total EBIT and an increase in the value of assets under management. Asset values increased due to growth in the value of land and building assets; farmers holding on to more livestock and increased capital expenditure on infrastructure and machinery.

Average ROE in 2021-22 also decreased relative to the previous year. Equity levels increased on most farms during the last 12 months.

With the cost of financing lower than the returns from accessing additional assets (e.g., land, dairy upgrades, and major infrastructure), 24 of the 30 participants recorded higher ROE than ROTA (Figure 11). These farmers have been able to grow their business.

FIGURE 11. 2021-22 AVERAGE RETURNS – NORTHERN VICTORIA

## Feed consumption and fertiliser

### Feed consumption, pasture harvested and water use efficiency

Direct grazing on the milking area (on average) reduced by around 0.7 t DM/milking ha. This reflects that the size (ha) of the milking area increased. The amount of pasture conserved was similar to the previous year, as was the total tonnes of dry matter (Figure 12).

With above average rainfall, and similar total t DM harvested, water use efficiency (irrigation plus rainfall) per hectare was lower than 2020-21. Efficiency for targeted water use (irrigation) remained stable.

Favourable seasonal conditions saw a decrease in the use of purchased hay and silage. As a proportion of the diet, homegrown feed (grazed and conserved pasture) accounted for 56 per cent of the metabolisable energy consumed, slightly higher than last year's average.

FIGURE 12. AVERAGE HOMEGROWN FEED REMOVED – NORTHERN VICTORIA

### Feeding system

Twenty-three farms (77 per cent) in Northern Victoria employed a moderate to high bail feeding system. The remaining seven farms were comprised of total mixed ration, hybrid, partial mixed ration or low bail feeding systems in 2021-22 (Figure 13).

Annual pasture constituted 74 per cent of the feedbase on average, with the remaining made up of perennials. There was a range of 15 to 100 per cent for annual pasture across farms.

FIGURE 13. FEEDING SYSTEM TYPES – NORTHERN VICTORIA

### Fertiliser

While seasonal conditions were good in Northern Victoria, the amount of fertiliser applied (Figure 14) was the lowest in the past five years in this region. This reflected the higher cost of fertiliser (per unit of nutrient) and farmers assessment on the returns from fertliser applications.

The amount of money spent on fertiliser in 2021-22 increased by 26 per cent despite applying 26 per cent less of each nutrient on average per hectare.

FIGURE 14. AVERAGE NUTRIENT APPLICATION – NORTHERN VICTORIA

# Part Three: South West Victoria

## South West Victoria – Performance

#### Dairying in South West Victoria

|  |  |
| --- | --- |
| Icon showing milk bottle to represent milk production | Approximately **1,030** dairy farm businesses in South West Victoria produced **1.91 billion litres** of milk in 2021-22, accounting for **35 per cent** of Victorian milk production output and **22 per cent** of Australia's milk production. |

#### Physical farm characteristics

More cows were milked at similar production per cow leading to an increase in average total milk production. Greater quantities of supplements were fed as lower quantities of homegrown feed were harvested.

|  |  |  |
| --- | --- | --- |
| **4%** | **Stable** | **8%** |
| Icon coloured green showing a milking cow | Icon coloured green showing milk bottle with two overlapping squares on the label. | Icon coloured green showing 2 stems of a plant |
| **Average herd size** 390 cows | **Milk solids sold** 527 kg MS/cow | **Homegrown feed** 62% of metabolisable energy consumed |

#### In 2021-22, nearly all participants (24 of the 25) recorded a positive return on total assets

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | 2020-21 | | 2021-22 |  |  |
|  | $2.04 | | | **$1.71** | |  |
|  |  |  |  | Average EBIT ($/kg MS) | | |
| $449k | | | | **$376k** | | |
|  |  |  |  | Average EBIT (total $/farm) | | |
|  |  |  | $355k | **$287k** | |  |
|  |  |  |  | Average net farm income (total $/farm) | | |
|  | 5.5% | | | **3.9%** |  |  |
|  |  |  |  | Average return on total assets | | |
| 9.1% | | | | **5.5%** | |  |
|  |  |  |  | Average return on equity | | |

**In 2021-22 farm profitability has been influenced by**:

**11%** increase in average milk price to **$7.39/kg MS**

**13%**  in herd and shed costs to **$0.65/kg MS**

**40%**  in total feed costs to **$3.47/kg MS**

**8%** in overhead costs to **$2.90/kg MS**

|  |  |
| --- | --- |
| Icon coloured green showing three rectangles to represent homegrown feed. | 14% decrease in homegrown pasture and conserved feed due to adverse (wet) seasonable conditions |
| Icon coloured green showing a grain silo. | 0.7 t DM/ha increase in average supplements fed (total 4.4 t DM/cow) |
| Icon coloured green with a dollar sign to represent costs. | Highest total costs (variable and overhead) in 16 years of DFMP |

#### Return on total assets and milk price

#### Future expectations 2022-23

|  |  |
| --- | --- |
| Icon coloured green showing a milk bottle with a dollar sign on the front. | **Two-thirds** of farmers expect business returns to improve |

Concerns as reported by farm businesses:

|  |  |  |
| --- | --- | --- |
| Icon coloured green showing a dollar sign. | Icon coloured green with a hay bale. | Icon coloured green showing a glove to represent labour. |
| **Input Costs**  **18%** | **Pasture/Fodder**  **17%** | **Succession planning**  **16%** |

## Whole farm analysis

* Gross farm income increased in South West Victoria from the previous year with a higher milk price and increased livestock trading income.
* Highest total costs in 16 years were not fully offset by higher (average) income in 2021-22.
* Increased use of supplements (concentrates, silage and hay) at higher per unit prices to manage challenging (wet) seasonal conditions and lower homegrown feed production, especially between July and December.
* South West Victorian participants still took the opportunity to expand and improve their businesses through land purchases and undertaking significant capital works.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Physical parameters** | | | | | | | | |  | | | **Financial parameters** | | | | | | | | | | | | | | | | | | |  |
| 2020-21 | | 2021-22 | | | | | | |  | | | 2020-21 | | | | | | | 2021-22 | | | | | | | | | | | |  |
|  |  | **Rainfall, area and cows** | | | | | | | |  | |  | | | | | | | **Income ($/kg MS)** | | | | | | | | | | | |  |
|  | 878 | **783** |  | | | | | | |  | | $6.68 | | | | | | | **$7.39** | | | | | | | | | | | |  |
|  |  | Annual rainfall (mm) | | | | | | | |  | |  | | | | | | | Milk income (net) | | | | | | | | | | | |  |
|  | 373 | **390** | | | | |  | | |  | | | | | $1.04 | | | | **$1.27** | | |  | | | | | | | | | |
|  |  | Herd size | | | | | | | |  | |  | | | | | | | Livestock trading profit | | | | | | | | | | | |  |
|  | 0.7 | **0.7** | | | |  | | | |  | | | | | | | | $0.08 | **$0.08** | |  | | | | | | | | | | |
|  | | WUE (t DM/100mm/ha) | | | | | | | |  | |  | | | | | | | Other farm income | | | | | | | | | | | |  |
|  | 335 | **341** | | | | |  | | |  | | $7.79 | | | | | | | **$8.74** | | | | | | | | | | | |  |
|  | | Usable area (ha) | | | | | | | |  | |  | | | | | | | Gross farm income | | | | | | | | | | | |  |
|  | 1.1 | **1.2** | | | | | | |  |  | |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |  |
|  | | Milking cows per usable ha | | | | | | | |  | |  | |  |  |  |  |  | **Costs ($/kg MS)** | | | | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  | |  | | | | | | | **Variable costs** | | | | | | | | | | | |  |
|  | | **Milk production** | | | | | | | |  | |  | |  | $0.31 | | | | **$0.37** | | |  |  |  |  |  |  | |  |  |  |
|  | 526 | **527** | | | | |  | | |  | |  | | | | | | | Herd costs | | | | | | | | | | | |  |
|  | | Milk solids sold (kg MS/cow) | | | | | | | |  | |  | |  |  |  |  | $0.26 | **$0.28** | |  |  |  |  |  |  |  | |  |  |  |
|  | 602 | **636** | | | | | |  | |  | |  | | | | | | | Shed costs | | | | | | | | | | | |  |
|  | | Milk solids sold (kg MS/ha) | | | | | | | |  | |  | | $1.02 | | | | | **$1.23** | | | | |  |  |  |  | |  |  |  |
|  | 68% | **62%** | |  | | | | | |  | |  | | | | | | | Home grown feed cost | | | | | | | | | | | |  |
|  | | Homegrown feed as % of ME consumed | | | | | | | |  | | $1.65 | | | | | | | **$2.25** | | | | | | | |  | |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  | |  | | | | | | | Purchased feed and agistment | | | | | | | | | | | |  |
|  |  | **Pasture production** | | | | | | | |  | |  | | -$0.19 | | | | | **-$0.01** |  |  |  |  |  |  |  |  | |  |  |  |
|  | 7.1 | **6.0** | | |  | | | | | | |  | | | | | | | Feed inventory change | | | | | | | | | | | |  |
|  |  | Homegrown feed removed (t DM/ milking ha) | | | | | | | |  | |  | |  | $2.48 | | | | **$3.47** | | | | | | | | | | |  |  |
|  |  |  |  |  |  |  |  |  |  |  | |  | | | | | | | Total feed costs | | | | | | | | | | | |  |
|  |  | **Labour use and efficiency** | | | | | | | |  | |  | | | | | | | **Overhead costs** | | | | | | | | | | | |  |
|  | 3.8 | **3.9** | | | | | | |  |  | |  | |  |  |  | $0.63 | | **$0.71** | | | | | |  |  |  | |  |  |  |
|  |  | Total FTE | | | | | | | |  | |  | | | | | | | Employed labour | | | | | | | | | | | |  |
|  | 98.7 | **103** | | |  | | | | |  | |  | |  |  |  |  | $0.49 | **$0.59** | | | |  |  |  |  |  | |  |  |  |
|  | | Labour efficiency (cows / FTE) | | | | | | | |  | |  | | | | | | | Repairs and maintenance | | | | | | | | | | | |  |
|  | 51,786.7 | **54,054** | | | | | |  | |  | |  | |  |  |  |  | $0.33 | **$0.38** | |  |  |  |  |  |  |  | |  |  |  |
|  | | Labour efficiency (kg MS / FTE) | | | | | | | |  | |  | | | | | | | All other overheads | | | | | | | | | | | |  |
|  | |  | | | | | | | |  | |  | |  |  | $0.90 | | | **$0.86** | | | | | | | |  | |  |  |  |
|  | |  | | | | | | | |  | |  | | | | | | | Imputed labour | | | | | | | | | | | |  |
|  | |  | | | | | | | |  | |  | |  |  |  | $0.35 | | **$0.38** | | | | | |  |  |  | |  |  |  |
|  | |  | | | | | | | |  | |  | | | | | | | Depreciation | | | | | | | | | | | |  |
|  | |  | | | | | | | |  | | $2.70 | | | | | | | **$2.90** | | | | | | | | | |  |  |  |
|  | |  | | | | | | | |  | |  | | | | | | | Total overhead costs | | | | | | | | | | | |  |
|  | |  | | | | | | | | |  | |  | |  |  |  |  | **Profit ($/kg MS)** | | | | | | | | |
|  | |  | | | | | | | |  | | $2.04 | | | | | | | **$1.71** | | | | | | |  |  | |  |  |  |
|  | |  | | | | | | | |  | |  | | | | | | | Earnings before interest and tax | | | | | | | | | | | |  |

### Gross farm income

Higher income was recorded in 2021-22 than the previous year and was the third highest on record in the 16-year history of DFMP ($/kg MS), accounting for inflation. This was due to increased milk income and livestock trading profit. Increased income did not fully offset higher costs.

### Variable costs

Higher purchased feed costs was the key reason for the increased variable costs in 2021-22 (a $0.61/kg MS increase from 2020-21). On average, greater quantities of concentrates, silage and fodder (at a higher per unit price) were fed to supplement lower homegrown feed.

While the amount of fertiliser applied decreased, high fertiliser prices meant the per unit cost of homegrown feed increased. There were also general increases in costs across pasture improvements, fuel and oil, and irrigation (on those farms with irrigation).

Fodder conservation and use was mixed in South West Victoria in 2021-22. Half of the farms used their fodder reserves to manage the challenging seasonal conditions, while others took advantage of timely rain to build reserves.

There were higher costs for calf rearing and for using herd genomics. Shed power also increased on average. Energy efficient technology (mostly solar) was adopted on some farms to mitigate increasing grid energy costs.

### Overhead costs

Increased spending on employed labour and repairs and maintenance contributed to $0.21/kg MS increase in overhead costs. Labour issues were often raised, with some farmers opting to reduce their production while others invested in labour productivity technologies. Almost all farms increased the hourly rate for employed labour. The strong milk price signals and cashflows resulted in most attending to repairs and maintenance.

### Earnings before interest and tax

In 2021-22, average EBIT (per farm) was lower on South West Victorian farms than the previous year, but nearly all (24 of the 25) were positive (Figure 15).

The average South West Victorian EBIT/kg MS remains above the long-term average and ranks seventh in the 16 years of the DFMP, accounting for inflation.

FIGURE 15. AVERAGE EBIT PER KG MS – SOUTH WEST VICTORIA

### Return on total assets and equity

The lower EBIT performance, combined with the higher asset values observed on all farms, contributed to the lower ROTA in 2021-22. Asset values increased due to growth in the value of land and building assets; farmers holding onto more livestock and increased capital expenditure on infrastructure and machinery.

Equity levels also increased on all farms during the last 12 months. The higher asset valuations were greater than the increased liabilities resulting in higher equity levels (total $ and percentage terms).

The cost of financing was lower than the returns from accessing the additional assets (e.g., land), and 17 of the 25 participants recorded higher ROE than ROTA (Figure 16). These farmers have been able to grow their business.

FIGURE 16. 2021-22 AVERAGE RETURNS – SOUTH WEST VICTORIA

## Feed consumption and fertiliser

### Feed consumption and pasture harvested

The challenging seasonal conditions for the majority of farms across South West Victoria saw reduced pasture harvested and increased use of supplements.

Most farms had lower pasture removed on the milking area (19 of the same 22 participants between years), as both the directly grazed and conserved feed were lower. On average, pasture removed decreased by 1 t DM/ hectare (Figure 17).

As a proportion of the diet, homegrown feed (grazed and conserved pasture) accounted for 62 per cent of the metabolisable energy consumed, compared to 68 per cent in the previous year.

FIGURE 17. AVERAGE HOMEGROWN FEED REMOVED – SOUTH WEST VICTORIA

The region experienced very wet conditions during winter 2021. The usual period for silage harvest in October was delayed to November, resulting in a lower silage yield and quality, and for some farmers lowering their milk production due to poorer quality pasture and lower availability.

Farmers utilised their feed reserves and increased fodder purchases due to a dry summer and extended dry period into autumn. Some farms also increased the quantity of concentrates purchased to maintain milk production during this period.

Some farmers chose to maintain milk production during the wet and dry periods experienced in South West Victoria, through purchasing additional concentrates or fodder at higher prices, but felt it was justified while milk was attracting a higher price than last year.

### Feeding system

Moderate to high bail was the dominant feeding system (22 farms) of surveyed South West Victorian farms. The remaining three farms were hybrid, partial mixed ration and a low bail feeding system (Figure 18).

South West Victoria is predominantly reliant on perennial pasture species however comprising approximately 85 per cent of pastures on average, with the remaining made up of annuals.

FIGURE 18. FEEDING SYSTEM TYPES – SOUTH WEST VICTORIA

### Fertiliser

The amount of fertiliser applied per hectare (Figure 19) was 27 percent lower than the previous year as the drier spring 2021 and autumn 2022. The cost of fertiliser per unit of nutrient increased, and participants responded by using less fertiliser but the amount spent still increased by 29 per cent compared to the previous year.

FIGURE 19. AVERAGE NUTRIENT APPLICATION – SOUTH WEST VICTORIA

# Part Four: Gippsland

## 

## Gippsland – performance

#### 

#### Dairying in Gippsland

|  |  |
| --- | --- |
| Icon coloured dark blue showing a milk bottle. | Approximately **1,085** dairy farm businesses in Gippsland produced **1.92 billion litres** of milk in 2021-22 accounting for **35 per cent** of Victoria’s milk production output and **23 per cent** of Australia's milk production. |

#### Physical farm characteristics

On average, herd size increased and per farm milk production increased, despite milk production decreasing per cow as participants were challenged to manage adverse seasonal conditions (predominantly in south and west Gippsland). Wet conditions resulted in decreased homegrown grazed pasture and poorer quality conserved feed, resulting in lower profitability in 2021-22. Irrigation water use in the Macalister Irrigation District was significantly lower (59 per cent) than the previous year due to adequate rainfall.

|  |  |  |
| --- | --- | --- |
| **4%** | **3%** | **5%** |
| Icon coloured blue showing a milking cow. | Icon coloured blue showing a milk factory representing milk production. | Icon coloured dark blue showing two overlapping plant stems. |
| **Average herd size** | **Milk solids sold** | **Homegrown feed** |
| **320 cows** | **471 kg MS/cow** | **63% of metabolisable energy consumed** |

#### In 2021-22, 21 of the 25 Gippsland participants (84 per cnet) had a positive return on total assets

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | 2020-21 | 2021-22 |  |  |
|  | $1.78 | | | **$1.43** |  |  |
|  |  |  |  | Average EBIT ($/kg MS) |  |  |
| $300k | | | | **$273k** |  |  |
|  |  |  |  | Average EBIT (total $/farm) |  |  |
|  |  |  | $220k | **$188k** |  |  |
|  |  |  |  | Average net farm income (total $/farm) | |  |
|  | 5.4% | | | **4.2%** |  |  |
|  |  |  |  | Average return on total assets |  |  |
| 8.0% | | | | **6.2%** |  |  |
|  |  |  |  | Average return on equity |  |  |

#### In 2021-22 farm profitability has been influenced by:

9% increase in average milk price to $7.15/kg MS.

**20%**  in herd costs to **$0.40/kg MS**

**2%** in shed costs to **$0.24/kg MS**

**26%**  in total feed costs to **$3.34/kg MS**

**16%** in overhead costs to **$2.59/kg MS**

|  |  |
| --- | --- |
| Icon coloured dark blue showing three rectangles to represent a hay bale. | 10% decrease in homegrown pasture while homegrown conserved feed was around the same. |
| Icon coloured dark blue showing a silo to represent supplementary feed. | 0.8 t DM/ha increase in average supplements fed (total 4.4 t DM/cow) |
| Icon coloured dark blue showing a dollar sign to represent costs. | Highest total costs (variable and overhead) in 16 years of DFMP |

#### Return on total assets and milk price

#### Future expectations 2022-23

|  |  |
| --- | --- |
| Icon coloured dark blue showing a milk bottle with a dollar sign on the label. | Of the farmers who responded, **80 per cent** of farmers expect business returns to improve or remain stable |

#### Concerns as reported by farm businesses:

|  |  |  |  |
| --- | --- | --- | --- |
| Icon coloured dark blue showing a dollar sign to represent costs. | Icon coloured dark blue showing a milk bottle with a dollar sign on the front. | Icon coloured dark blue showing three rectangles to represent a hay bale. | Icon coloured dark blue showing a sun. |
| **Input costs**  **20%** | **Milk price**  **15%** | **Pasture/fodder**  **15%** | **Climate/seasonal conditions 15%** |

## Whole farm performance

* Gross farm income increased from the previous year with a higher milk price and increased livestock trading income.
* Highest total costs in 16 years were not fully offset by higher incomes in 2021-22.
* Increased use of supplements at higher per unit price (concentrates, silage and hay) to manage challenging seasonal conditions and lower homegrown feed production.
* Despite lower returns, Gippsland participants focussed on using embryo transfer and sexed semen, investing in their future herds.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Physical parameters** | | | | | | | | |  | | **Financial parameters** | | | | | | | | | | | | | | | | |  |
| 2020-21 | | 2021-22 | | | | | | |  | | 2020-21 | | | | | | 2021-22 | | | | | | | | | | |  |
|  |  | **Rainfall, area and cows** | | | | | | | |  |  | | | | | | **Income ($/kg MS)** | | | | | | | | | | |  |
|  | 936 | **937** |  | | | | | | |  | $6.54 | | | | | | **$7.15** | | | | | | | | | | |  |
|  |  | Annual rainfall (mm) | | | | | | | |  |  | | | | | | Milk income (net) | | | | | | | | | | |  |
|  | 308 | **320** | | | | |  | | |  | | | $0.67 | | | | **$0.83** | | |  | | | | | | | | |
|  |  | Herd size | | | | | | | |  |  | | | | | | Livestock trading profit | | | | | | | | | | |  |
|  | 0.7 | **0.8** | | | |  | | | |  | | | | | | $0.03 | **$0.02** | |  | | | | | | | | | |
|  | | WUE (t DM/100mm/ha) | | | | | | | |  |  | | | | | | Other farm income | | | | | | | | | | |  |
|  | 186 | **187** | | | | |  | | |  | $7.24 | | | | | | **$8.00** | | | | | | | | | | |  |
|  | | Usable area (ha) | | | | | | | |  |  | | | | | | Gross farm income | | | | | | | | | | |  |
|  | 1.9 | **1.9** | | | | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | | Milking cows per usable ha | | | | | | | |  |  |  |  |  |  |  | **Costs ($/kg MS)** | | | | | | | | | | |  |
|  |  |  |  |  |  |  |  |  |  |  |  | | | | | | **Variable costs** | | | | | | | | | | |  |
|  | | **Milk production** | | | | | | | |  |  |  | $0.33 | | | | **$0.40** | | |  |  |  |  |  |  |  |  |  |
|  | 485 | **471** | | | | |  | | |  |  | | | | | | Herd costs | | | | | | | | | | |  |
|  | | Milk solids sold (kg MS/cow) | | | | | | | |  |  |  |  |  |  | $0.24 | **$0.24** | |  |  |  |  |  |  |  |  |  |  |
|  | 924 | **920** | | | | | |  | |  |  | | | | | | Shed costs | | | | | | | | | | |  |
|  | | Milk solids sold (kg MS/ha) | | | | | | | |  |  | $0.95 | | | | | **$1.09** | | | | |  |  |  |  |  |  |  |
|  | 66% | **63%** | |  | | | | | |  |  | | | | | | Home grown feed cost | | | | | | | | | | |  |
|  | | Homegrown feed as % of ME consumed | | | | | | | |  | $1.76 | | | | | | **$2.19** | | | | | | | |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | | | | | | Purchased feed and agistment | | | | | | | | | | |  |
|  |  | **Pasture production** | | | | | | | |  |  | -$0.05 | | | | | **$0.06** |  |  |  |  |  |  |  |  |  |  |  |
|  | 9.3 | **8.4** | | |  |  |  |  |  |  |  | | | | | | Feed inventory change | | | | | | | | | | |  |
|  |  | Homegrown feed removed / milking ha | | | | | | | |  |  |  | $2.66 | | | | **$3.34** | | | | | | | | | |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | | | | | | Total feed costs | | | | | | | | | | |  |
|  |  | **Labour use and efficiency** | | | | | | | |  |  | | | | | | **Overhead costs** | | | | | | | | | | |  |
|  | 2.6 | **2.8** | | | | | | |  |  |  |  |  |  | $0.57 | | **$0.63** | | | | | |  |  |  |  |  |  |
|  |  | Total FTE | | | | | | | |  |  | | | | | | Employed labour | | | | | | | | | | |  |
|  | 122 | **119** | | |  | | | | |  |  |  |  |  |  | $0.33 | **$0.42** | | | |  |  |  |  |  |  |  |  |
|  |  | Labour efficiency (cows / FTE) | | | | | | | |  |  | | | | | | Repairs and maintenance | | | | | | | | | | |  |
|  | 59,174 | **55,929** | | | | | |  | |  |  |  |  |  |  | $0.29 | **$0.36** | |  |  |  |  |  |  |  |  |  |  |
|  |  | Labour efficiency (kg MS / FTE) | | | | | | | |  |  | | | | | | All other overheads | | | | | | | | | | |  |
|  |  |  | | | | | | | |  |  |  |  | $0.87 | | | **$0.97** | | | | | | | |  |  |  |  |
|  |  |  | | | | | | | |  |  | | | | | | Imputed labour | | | | | | | | | | |  |
|  |  |  | | | | | | | |  |  |  |  |  | $0.17 | | **$0.21** | | | | | |  |  |  |  |  |  |
|  |  |  | | | | | | | |  |  | | | | | | Depreciation | | | | | | | | | | |  |
|  |  |  | | | | | | | |  | $2.24 | | | | | | **$2.59** | | | | | | | | |  |  |  |
|  |  |  | | | | | | | |  |  | | | | | | Total overhead costs | | | | | | | | | | |  |
|  |  |  | | | | | | | |  |  |  |  |  |  |  | **Profit ($/kg MS)** | | | | | | | | | | |  |
|  |  |  | | | | | | | |  | $1.78 | | | | | | **$1.43** | | | | | | |  |  |  |  |  |
|  |  |  | | | | | | | |  |  | | | | | | Earnings before interest and tax | | | | | | | | | | |  |

### Gross farm income

Higher income (11 per cent increase) was recorded in 2021-22 than the previous year. Increased milk income (9 per cent) and livestock trading profit (24 per cent) contributed to higher income. Increased income did not (on average) fully offset higher costs for Gippsland farms.

### Variable costs

Feed costs increased by 26 per cent with the largest contributor being an increase of $0.43/kg MS in purchased feed and agistment. Greater quantities of concentrates, silage and fodder were fed to supplement lower homegrown feed, at higher per unit price.

Homegrown feed costs increased by 15 per cent which was related to high fertiliser prices. There were also increases in costs for fuel and oil, hay and silage making.

Just over half of the farms used their feed inventory reserves to manage the challenging seasonal conditions, however overall conserved volumes remained similar.

Herd and shed costs increased with a strong focus on herd genetics this year – with investment in sexed semen and embryo transfer – showing evidence of farm investment in their future herds. Shed power costs were slightly lower, reflecting investments in energy efficient technology (mostly solar).

### Overhead costs

Rates and farm insurance increased significantly since last year with a 17 per cent and 31 per cent increase respectively. Increased spending on repairs and maintenance was primarily a catch up to delayed repairs or in response to storm damage on farm.

Suitable labour availability was a great challenge to farmers in Gippsland during the second year of COVID operating environments. Some farmers purchased housing to attract labour and/or invested in technologies to ease labour pressures (such as automatic calf feeders, dairy upgrades and cow collars). Employed labour costs increased by 11 per cent as well as imputed labour (owner/operator/family /sharefarmer).

### Earnings before interest and tax

In 2021-22, 23 of the Gippsland participants recorded a positive EBIT (Figure 20). Average EBIT per farm was the sixth highest in the 16 years of the DFMP, accounting for inflation.

Gippsland recorded a significant (22 per cent) decline in average EBIT ($/kg MS) performance in 2021-22. Profitability for the Gippsland DFMP participants was strongly influenced by wet seasonal conditions from July to December. The inability to direct graze pasture and harvesting of lower quantities of poorer quality forage impacted on cow performance. Lower milk production with high costs strongly impacted profitability despite a strong milk price.

FIGURE 20. AVERAGE EBIT PER KG MS – GIPPSLAND

### Return on total assets and equity

The lower EBIT performance, combined with the higher asset values observed on all farms, contributed to the lower returns in 2021-22.

The average ROTA was 4.2 per cent and was the eighth highest in the 16-year history of DFMP. Higher land values and other assets contributed to the reduction in ROTA, with the decline in EBIT being the major contributor.

The average return on equity for Gippsland participants was 6.2 per cent (Figure 21). While down from 8.0 per cent last year, this was the sixth highest performance over the history of the DFMP in Gippsland.

Equity levels increased on 18 of the 25 farms during 2021-22. Decreases in equity were generally where there were land purchases and increased borrowings for substantive improvements such as dairy upgrades and major infrastructure.

FIGURE 21. 2021-22 AVERAGE RETURNS – GIPPSLAND

## Feed consumption and fertiliser

### Feed consumption and pasture harvested

The region experienced very wet conditions during 2021, with two major storm events in June and September 2021. The wet conditions reduced the ability of farmers in west and south Gippsland to directly graze pasture with some reduction in pasture quality.

Less pasture was grown and consumed due to waterlogged soils from July to December, followed by very dry soils from January to May, which saw increased use of supplements.

Most farms had lower pasture removed on the milking area. The exception was the Macalister Irrigation District where water was not limiting, having next to ideal growing conditions – and the ability to graze or conserve pasture was optimal. On average, pasture removed decreased by 0.9 t DM/ha to 8.4 t DM/ha, with conservation quantities remaining stable at 0.9 t DM/ha on average (Figure 22).

FIGURE 22. AVERAGE HOMEGROWN FEED REMOVED – GIPPSLAND

Feed reserves were used to reduce the impact of grazing on pastures. This supplementary feeding continued through the remainder of summer and autumn 2022 with drier conditions, and no ideal autumn break. Increased quantities of concentrates were purchased to maintain milk production on some farms during summer and autumn 2022.

On average, greater quantities of concentrates, silage and fodder were fed to supplement lower homegrown feed. These supplements were sourced from either purchased feed (some purchasing fodder for the first time in recent years) fed out during the year, or fodder reserves were utilised.

### Feeding system

Gippsland farms are characterised by a high reliance on direct grazed pasture systems with moderate-high bail feeding (Figure 23).

FIGURE 23. FEEDING SYSTEM TYPES – GIPPSLAND

### Fertiliser

Fertiliser application was significantly reduced by Gippsland participants in 2021-22 (Figure 24).

All macro nutrients declined; nitrogen (by 22 per cent), phosphorous (by 46 per cent), potassium (by 39 per cent) and sulphur (by 40 per cent).

Despite fertiliser quantities being reduced in response to fertiliser prices climbing sharply, the cost increased by 10 per cent. The seasonal conditions also did not allow spreading at optimal times (too wet or too dry).

FIGURE 24. AVERAGE NUTRIENT APPLICATION – GIPPSLAND

# Part Five: Business Confidence

* Participant farmers were confident in their outlook for farm business returns in the coming 12 months (2022-23)
* Milk price was expected to increase or remain stable on all Victorian participant farms.
* About 80 per cent of Victorian participants were expecting to increase or keep milk production at the same level.
* In 2022-23 costs were expected to increase or remain at the same elevated level, especially for fertiliser and labour

### Expectations for business profit 2022-23

The participant survey considers different aspects of farming, from climate outlook to expectations about market conditions for dairy products. While expectations for business profit in the coming year were generally positive, there were slight regional differences (Figure 25). Northern Victorian participants were the most optimistic, likely to be underpinned by a favourable outlook for irrigation water availability and allocation price.

FIGURE 25. EXPECTED CHANGE TO FARM BUSINESS PROFIT IN 2022-23

### Price and production expectations – milk

Participants were confident in their outlook for milk price, and milk production for 2022-23. This is mainly due to the timing of milk price announcements (1 June), with farmers having more informed choices on their milk factory at the time of the DFMP survey (July 2022). Around 85 per cent of respondents were expecting milk price to increase or to remain the same in 2022-23 (Figure 26). None were expecting a decrease. About 80 per cent were expecting to increase or keep milk production at the same level.

FIGURE 26. PRODUCER EXPECTATIONS OF MILK PRICES AND PRODUCTION IN 2022-23

### Production expectations – fodder

The expectations for fodder production in 2022-23 were positive. Over one third (37 per cent) of participants expected fodder production to increase while 40 per cent were expected to maintain production (Figure 27).

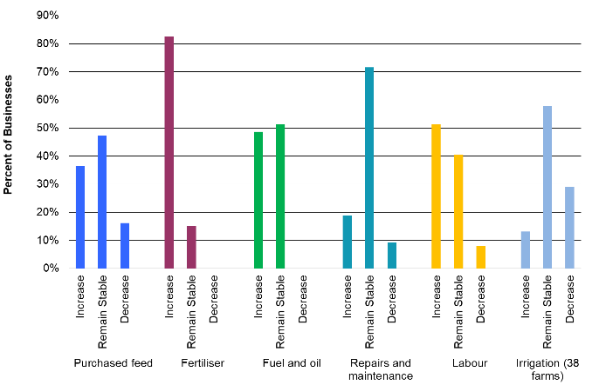
Despite farmer intentions, as was seen in 2021-22, the ability for farmers to reach their goals of increasing fodder is highly seasonal dependent.

FIGURE 27. PRODUCER EXPECTATIONS OF FODDER PRODUCTION IN 22-23

### Cost expectations

The cost category that was expected to be the most likely to increase in 2022-23 was fertiliser (Figure 28), on the back of increases seen last year. There was a strong sentiment that costs will either increase or remain stable for the majority of farm cost categories.

FIGURE 28. PRODUCER EXPECTATIONS OF COSTS FOR THE DAIRY INDUSTRY IN 2021-22



### Comments from participants

There appeared to be considerable concern for biosecurity in 2022-23. This was prompted by Indonesia’s confirmed cases of Foot and Mouth Disease and Lumpy Skin Disease around the time of data collection. Farmers indicated they were unsure of the impacts on their individual business.

A key concern was the availability of labour and farmers not being able to attract and retain labour on farm. Farmers had indicated they would be investing in accommodation to reduce the barrier for appropriately skilled workers.

An emerging issue of concern was the impact of rising borrowing costs, with recent interest rate rises – and concern over managing increased financing costs.

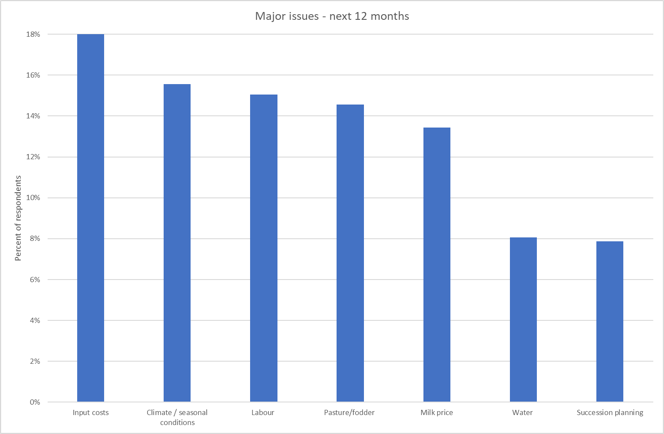
## Issues of importance to dairy businesses

Participants were asked to rank issues based on the level of importance to their business – with a ranking of (1) being most important and (7) being least important. The results are shown in Figure 29 for the short-term issues and Figure 30 for medium term issues.

#### Short term issues – next 12 months

The most important issue in the coming 12 months was input costs, with 18 per cent of respondents ranking this as number 1, which was very similar to last year’s results. Managing climatic conditions (ranked number 2 by 16 per cent) was only marginally ahead of labour (at 15 per cent) as being a major issue.

FIGURE 29. MAJOR ISSUES FOR INDIVIDUAL BUSINESSES – 12-MONTH OUTLOOK

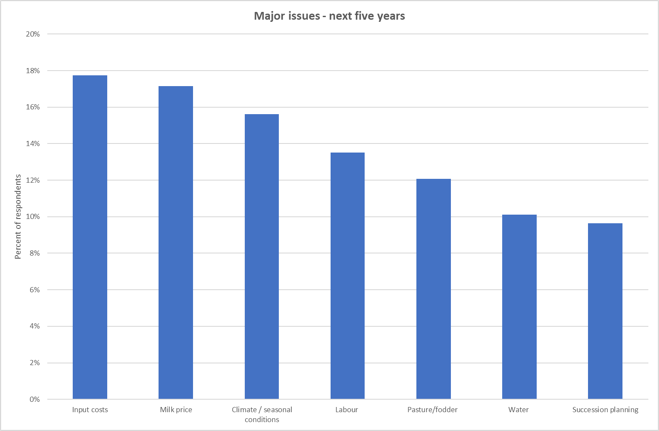


#### Medium to long-term issues – next five years

The ranking order for concerns over the medium term (five years) has changed between 2021-22 and 2022-23 with rising costs and the sustainability of milk price escalating in importance.

Input costs were ranked as the greatest concern with 18 per cent ranking this number 1, followed closely by milk price (17 per cent) and climate/seasonal conditions (16 per cent). Input costs being ranked as number 1 was consistent at the state and regional level. There were variances at the regional level for the second most important issue; with labour in Northern Victoria and climate for participants in South West Victoria. Whereas Gippsland had milk price, pasture and climate all sitting equal second.

FIGURE 30. MAJOR ISSUES FOR INDIVIDUAL BUSINESSES – 5-YEAR OUTLOOK



# 

# Part Six: 2021-22 Greenhouse Gas Emissions

* The average carbon footprint for Victorian dairy farms was 3,000 tonnes of carbon dioxide equivalents (t CO2-e) per farm in 2021-22.
* Methane from cow rumination (enteric) accounted for an average of 62 per cent of on-farm emissions.
* Larger herd sizes and greater milk production have contributed to the trend of increased greenhouse gas (GHG) emitted per farm over the last five years.

#### Total emissions

Over the last five years, average GHG emissions have been increasing, mostly due to larger herd sizes and greater milk production per farm. In 2021-22, the average carbon footprint (net GHG emissions) was estimated at about 3,000 t CO2-e/farm in 2021-22 (Figure 31).

In 2021-22, the slight increase in GHG emissions compared to the previous year was mostly due to an increase in methane from cow rumination (enteric methane). Enteric methane accounted for approximately 62 per cent of emissions and is sensitive to changes in livestock weights and numbers on individual farms.

The other sources of farm GHG emissions (fertiliser and energy) decreased between the last two years. Decreased use of fertiliser and energy sourced from the grid, as well as increased carbon captured and stored from trees contributed to lower emissions. However, this was not enough to offset the higher emissions from methane sources, leading to an overall increase in 2021-22 emissions per farm compared to the previous year.

#### Emissions intensity

The emissions intensity allocated to milk production (once meat production is considered), has decreased since 2018-19 (Table 1). Although GHG emissions have increased over this period, emissions intensity has declined as average milk production has increased. Regional and farm variation was also observed over this period. These averages reflect the profiles of the participating farms and should not be taken as representative of the dairy industry.

FIGURE 31. ESTIMATED AVERAGE GHG EMISSIONS BETWEEN 2017-18 AND 2021-22 (CO2 EQUIVALENT)

NOTE: Greenhouse gas emission estimates are calculated using the [Australian Dairy Carbon Calculator](https://www.dairyaustralia.com.au/resource-repository/2020/07/09/australian-dairy-carbon-calculator-website#.YwMPouFBxaQ) embedded within DairyBase.

Changes to the emission accounting framework in 2021-22 include new factors for methane, nitrous oxide, fertiliser, purchased feeds, electricity and fuel, the scope considered other livestock on dairy farms (dairy beef) and the allocated proportion of GHG to meat production. Carbon capture and storage from trees was recorded. Data from all five years was analysed using the 2021-22 accounting framework.

TABLE 1. ESTIMATED AVERAGE GHG EMISSIONS AND INTENSITY BETWEEN 2017-18 AND 2021-22 (CO2 EQUIVALENT)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Emission sources** | **17-18** | **18-19** | **19-20** | **20-21** | **21-22** |
| Sample size | 75 | 75 | 80 | 80 | 80 |
| Methane (t CO2-e/farm) | 1,865 | 1,929 | 1,990 | 2,019 | 2,110 |
| Pre-farm gate (t CO2-e/farm) | 312 | 328 | 362 | 377 | 367 |
| Nitrous oxide (t CO2-e/farm) | 302 | 325 | 327 | 340 | 328 |
| Carbon dioxide (t CO2-e/farm) | 219 | 243 | 242 | 257 | 231 |
| Carbon from trees (t CO2-e/farm) | -37 | -4 | -4 | -15 | -41 |
| Net emissions (t CO2-e/farm) | 2,661 | 2,820 | 2,917 | 2,978 | 2,995 |
| Emissions intensity (t CO2-e/t MS) | 12.7 | 13.3 | 12.7 | 12.5 | 12.3 |
| Emissions intensity (t CO2-e/FPCM) | 0.91 | 0.95 | 0.92 | 0.90 | 0.88 |
| Emissions intensity (t CO2-e/kg live weight) | 4.3 | 4.4 | 4.3 | 4.2 | 4.3 |

# Part Seven: How does 2021-22 compare?

* Higher milk price in 2020-21 and favourable livestock trading conditions helped buffer the impact of higher costs.
* Strong profit results per farm (average $384,000) across the state was well above the 16-year long-term average of $264,000.
* The comparatively lower EBIT (compared to 2020-21) over a larger asset base decreased the resulting return on total assets in all three regions.
* Return on equity performing strongly across the regions for DFMP participants; well above the negative returns on investment in Australian Shares for 2021-22 and long-term average for Australian Bonds.

## NorthERN VICTORIA

Farm profit (EBIT) in Northern Victoria in 2021-22 was the second highest (accounting for inflation) since the start of the DFMP in 2006-07 (Figure 32). Average EBIT was $483,000 in 2021-22, compared to the long-term average of $235,000. Net farm income was $391,000 in 2021-22, compared to the long-term average of $127,000.

Average ROTA was 5.6 per cent in 2021-22, decreasing from 6 per cent the previous year (Figure 33), remaining considerably higher than the long-term average of 3.8 per cent. The average ROE in Northern Victoria decreased to 7.2 per cent in 2021-22 from 7.5 per cent in 2020-21; compared to the long-term average of 2.3 per cent

FIGURE 32. FARM PROFITABILITY BETWEEN 2006-07 AND 2021-22 – NORTHERN VICTORIA

FIGURE 33. WHOLE FARM PERFORMANCE BETWEEN 2006-07 AND 2021-22 – NORTHERN VICTORIA

## SOUTH WEST VICTORIA

Farm profit (EBIT) in South West Victoria in 2021-22 was the seventh highest (accounting for inflation) since the start of the DFMP in 2006-07 (Figure 34). Average EBIT was $376,000 in 2021-22, compared to the long-term average of $326,000. Net farm income was $287,000 in 2021-22, compared to the long-term average of $161,000.

Average ROTA was 3.9 per cent in 2021-22, decreasing from 5.5 per cent the previous year (Figure 35), compared to the long-term average of 4.1 per cent. The average ROE in South West Victoria decreased to 5.5 per cent in 2021-22 from 9.1 per cent in 2020-21, compared to the long-term average of 3.1 per cent.

FIGURE 34. FARM PROFITABILITY BETWEEN 2006-07 AND 2021-22 – SOUTH WEST VICTORIA

FIGURE 35. WHOLE FARM PERFORMANCE BETWEEN 2006-07 AND 2021-22 – SOUTH WEST VICTORIA

## Gippsland

Farm profit (EBIT) in Gippsland in 2021-22 was the sixth highest (accounting for inflation) since the start of the project in 2006-07 (Figure 36). Average EBIT was $273,000 in 2021-22, compared to the long-term average of $227,000. Net farm income was $188,000 in 2021-22, compared to the long-term average of $121,000.

Average ROTA was 4.2 per cent in 2021-22, decreasing from 5.4 per cent the previous year (Figure 37), compared to the long-term average of 3.9 per cent. The average ROE in Gippsland decreased to 6.2 per cent in 2021-22 from 8 per cent in 2020-21, compared to the long-term average of 4 per cent.

FIGURE 36. FARM PROFITABILITY BETWEEN 2006-07 AND 2021-22 – GIPPSLAND

FIGURE 37. WHOLE FARM PERFORMANCE BETWEEN 2006-07 AND 2021-22 – GIPPSLAND

# Appendices

# Appendix A: Statewide summary tables

### Table A1

#### Main financial indicators – Statewide

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Milk income (net)  ($/ kg MS) | All other farm income  ($/ kg MS) | Gross farm income  ($/ kg MS) | Total variable costs  ($/ kg MS) | Total overhead costs  ($/ kg MS) | Cost structure (variable costs / total costs) (%) | Earnings Before Interest & Tax  ($/ kg MS) | Return on total assets (%) | Interest & lease charges  ($/ kg MS) | Debt servicing ratio  (% of income) | Net farm income (  $/ kg MS) | Return on equity  (%) |
| Average | $7.37 | $1.13 | $8.50 | $4.11 | $2.67 | 61% | $1.72 | 4.6% | $0.46 | 5.4% | $1.27 | 6.3% |
| Top 25% | $7.46 | $1.04 | $8.50 | $3.61 | $2.17 | 62% | $2.72 | 8.5% | $0.33 | 3.9% | $2.39 | 12.4% |

### Table A2

#### Physical information – Statewide

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Total usable area  (ha) | Milking area (ha) | Total water use efficiency (t DM/100mm) | Number of milking cows (cows) | Milking cows per usable area (cows/ha) | Milk sold  (kg MS/ cow) | Milk sold  (kg MS/ ha) | Fat  (%) | Protein  (%) |
| Average | 290 | 183 | 0.8 | 382 | 1.5 | 529 | 798 | 4.3% | 3.5% |
| Top 25% | 246 | 173 | 1.0 | 399 | 2.0 | 566 | 1071 | 4.3% | 3.5% |

### Table A2

#### Physical information – Statewide (continued)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Estimated grazed pasture\*\*  (t DM/ ha) | Estimated conserved feed\*\*  (t DM/ ha) | Homegrown feed as % of ME consumed  (% of ME) | Nitrogen application\*\*  (kg/ ha) | Phosphorous application\*\*  (kg/ ha) | Potassium application\*\*  (kg/ ha) | Sulphur application\*\*  (kg/ ha) | Labour efficiency  (cows/ FTE) | Labour efficiency  (kg MS/ FTE) |
| Average | 5.7 | 1.7 | 60% | 138.3 | 13.5 | 23.4 | 16.6 | 107 | 55,857 |
| Top 25% | 7.7 | 1.9 | 58% | 142.8 | 16.6 | 26.2 | 19.1 | 117 | 64,343 |

\*\*on milking area

### Table A3

#### Purchased feed – Statewide

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Purchased feed per milker\*\*  (t DM/ cow) | Concentrate price  ($/ t DM) | Silage price  ($/ t DM) | Hay price  ($/ t DM) | Other feed price  ($/ t DM) | Average purchased feed price  ($/ t DM) | Purchased feed as % of ME consumed  (% of ME) |
| Average | 2.8 | $483 | $261 | $247 | $163 | $419 | 40% |
| Top 25% | 3.0 | $457 |  |  |  | $396 | 42% |

 \*\* All purchased feed including concentrates, hay, silage, and other feed fed on the usable area to all classes of livestock divided by the number of cows

Calculation of average price of silage, hay and other feed excludes zero values

### Table A4

#### Variable costs – Statewide

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | AI and herd test  ($/ kg MS) | Animal health ($/ kg MS) | Calf rearing ($/ kg MS) | Shed power  ($/ kg MS) | Dairy supplies ($/ kg MS) | Total herd and shed costs  ($/ kg MS) | Fertiliser  ($/ kg MS) | Irrigation \*\*  ($/ kg MS) | Hay and silage making  ($/ kg MS) |
| Average | $0.16 | $0.15 | $0.08 | $0.13 | $0.11 | $0.63 | $0.55 | $0.25 | $0.24 |
| Top 25% | $0.14 | $0.13 | $0.06 | $0.10 | $0.10 | $0.53 | $0.43 | $0.26 | $0.23 |

\*\* Calculation of average cost of irrigation excludes zero values

### Table A4

#### Variable costs – Statewide (continued)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Fuel and oil  ($/ kg MS) | Pasture improvement/ cropping  ($/ kg MS) | Other feed costs  ($/ kg MS) | Fodder purchases  ($/ kg MS) | Grain/ concentrates/ other  ($/ kg MS) | Agistment costs ($/ kg MS) | Feed and water inventory change  ($/ kg MS) | Total feed costs ($/ kg MS) | Total variable costs  ($/ kg MS) |
| Average | $0.12 | $0.21 | $0.02 | $0.35 | $1.79 | $0.08 | -$0.03 | $3.48 | $4.11 |
| Top 25% | $0.08 | $0.19 | $0.01 | $0.35 | $1.61 | $0.09 | -$0.15 | $3.07 | $3.61 |

### Table A5

#### Overhead costs – Statewide

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Rates  ($/ kg MS) | Farm Insurance  ($/ kg MS) | Motor vehicle expenses  ($/ kg MS) | Repairs and maintenance ($/ kg MS) | Other overheads  ($/ kg MS) | Employed labour  ($/ kg MS) | Total cash overheads  ($/ kg MS) | Depreciation ($/ kg MS) | Imputed labour cost  ($/ kg MS) | Total overheads  ($/ kg MS) |
| Average | $0.06 | $0.10 | $0.04 | $0.48 | $0.15 | $0.68 | $1.51 | $0.31 | $0.86 | $2.67 |
| Top 25% | $0.05 | $0.08 | $0.03 | $0.38 | $0.14 | $0.65 | $1.32 | $0.26 | $0.59 | $2.17 |

### Table A6

#### Capital structure – Statewide

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Farm assets\* Land value ($/ha) | Farm assets\* Land value ($/cow) | Farm assets\* Permanent water value ($/ha) | Farm assets\* Permanent water value ($/cow) | Other farm assets (per usable hectare) Plant and equipment ($/ha) | Other farm assets (per usable hectare) Livestock ($/ha) | Other farm assets (per usable hectare) Hay and grain ($/ha) | Other farm assets (per usable hectare) Other assets ($/ha) | Total assets ($/ha) |
| Average | $16,326 | $12,308 | $6,474 | $3,887 |  | $1,645 | $4,373 | $455 | $699 |
| Top 25% | $15,658 | $8,599 | $5,631 | $3,110 |  | $1,902 | $5,547 | $525 | $749 |

\*Calculation of average values of land, water asset and equity exclude zero values.

### Table A6

#### Capital structure – Statewide (continued)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Liabilities per usable hectare ($/ha) | Liabilities per milking cow ($/cow) | Equity per usable hectare ($/ha) | Average equity (%) |
| Average | $6,316 | $4,751 | $19,463 | 75% |
| Top 25% | $7,791 | $3,960 | $22,221 | 74% |

### Table A7

#### Historical data – Statewide

#### Main financial indicators

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Income  Milk income (net) Nominal ($/kg MS) | Income  Milk income (net) Real  ($/kg MS) | Income  Gross farm income Nominal ($/kg MS) | Income  Gross farm income Real  ($/kg MS) | Variable costs  Herd costs Nominal ($/kg MS) | Variable costs  Herd costs Real  ($/kg MS) | Variable costs  Shed costs Nominal ($/kg MS) | Variable costs  Shed costs Real  ($/kg MS) | Variable costs  Feed costs Nominal ($/kg MS) | Variable costs  Feed costs Real  ($/kg MS) | Total variable costs Nominal ($/kg MS) | Total variable costs  Real  ($/kg MS) |
| 2006-07 | $4.46 | $6.48 | $5.23 | $7.58 | $0.21 | $0.30 | $0.15 | $0.22 | $2.83 | $4.11 | $3.23 | $4.69 |
| 2007-08 | $6.57 | $9.09 | $7.80 | $10.80 | $0.24 | $0.33 | $0.14 | $0.20 | $3.39 | $4.69 | $3.79 | $5.25 |
| 2008-09 | $5.35 | $7.11 | $6.08 | $8.08 | $0.23 | $0.30 | $0.15 | $0.20 | $2.85 | $3.79 | $3.23 | $4.29 |
| 2009-10 | $4.46 | $5.75 | $5.17 | $6.65 | $0.22 | $0.28 | $0.16 | $0.21 | $2.20 | $2.83 | $2.58 | $3.32 |
| 2010-11 | $5.64 | $7.05 | $6.47 | $8.09 | $0.26 | $0.33 | $0.18 | $0.23 | $2.27 | $2.84 | $2.71 | $3.40 |
| 2011-12 | $5.52 | $6.78 | $5.97 | $7.34 | $0.26 | $0.32 | $0.19 | $0.23 | $2.33 | $2.86 | $2.78 | $3.41 |
| 2012-13 | $4.90 | $5.86 | $5.25 | $6.28 | $0.27 | $0.32 | $0.22 | $0.27 | $2.59 | $3.09 | $3.08 | $3.68 |
| 2013-14 | $6.79 | $7.91 | $7.44 | $8.68 | $0.28 | $0.32 | $0.22 | $0.25 | $2.90 | $3.38 | $3.39 | $3.95 |
| 2014-15 | $6.04 | $6.89 | $6.61 | $7.53 | $0.29 | $0.33 | $0.20 | $0.23 | $2.90 | $3.31 | $3.39 | $3.86 |
| 2015-16 | $5.40 | $6.08 | $5.90 | $6.64 | $0.28 | $0.32 | $0.19 | $0.21 | $3.15 | $3.55 | $3.62 | $4.07 |
| 2016-17 | $5.07 | $5.60 | $5.80 | $6.41 | $0.29 | $0.32 | $0.20 | $0.22 | $2.40 | $2.66 | $2.89 | $3.20 |
| 2017-18 | $5.81 | $6.30 | $6.41 | $6.95 | $0.31 | $0.34 | $0.22 | $0.24 | $2.93 | $3.18 | $3.46 | $3.76 |
| 2018-19 | $6.13 | $6.56 | $6.76 | $7.23 | $0.32 | $0.34 | $0.23 | $0.24 | $3.62 | $3.88 | $4.17 | $4.46 |
| 2019-20 | $7.15 | $7.56 | $7.87 | $8.32 | $0.32 | $0.34 | $0.23 | $0.24 | $3.33 | $3.53 | $3.88 | $4.10 |
| 2020-21 | $6.76 | $7.05 | $7.67 | $7.99 | $0.32 | $0.34 | $0.23 | $0.24 | $2.86 | $2.98 | $3.41 | $3.55 |
| 2021-22 | $7.37 | $7.37 | $8.50 | $8.50 | $0.39 | $0.39 | $0.24 | $0.24 | $3.48 | $3.48 | $4.11 | $4.11 |
| Average |  | $6.84 |  | $7.69 |  | $0.33 |  | $0.23 |  | $3.38 |  | $3.94 |

Notes: 'Real' dollar values are the nominal values converted to 2021-22-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 A7

#### Historical data – Statewide

#### Main financial indicators (continued)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Year | Overhead costs Cash overhead costs Nominal ($/kg MS) | Overhead costs Cash overhead costs Real  ($/kg MS) | Overhead costs Non-cash overhead costs Nominal ($/kg MS) | Overhead costs Non-cash overhead costs Real  ($/kg MS) | Overhead costs Total overhead costs Nominal ($/kg MS) | Overhead costs Total overhead costs Real ($/kg MS) |
| 2006-07 | $0.77 | $1.11 | $1.17 | $1.70 | $1.94 | $2.81 |
| 2007-08 | $0.84 | $1.16 | $0.88 | $1.22 | $1.62 | $2.25 |
| 2008-09 | $0.82 | $1.09 | $0.88 | $1.17 | $1.70 | $2.26 |
| 2009-10 | $0.84 | $1.08 | $1.05 | $1.35 | $1.89 | $2.43 |
| 2010-11 | $1.00 | $1.25 | $1.02 | $1.27 | $2.02 | $2.53 |
| 2011-12 | $0.99 | $1.21 | $1.07 | $1.31 | $2.06 | $2.53 |
| 2012-13 | $0.99 | $1.19 | $1.09 | $1.30 | $2.08 | $2.48 |
| 2013-14 | $1.05 | $1.23 | $0.97 | $1.14 | $2.03 | $2.36 |
| 2014-15 | $1.08 | $1.23 | $0.90 | $1.02 | $1.97 | $2.25 |
| 2015-16 | $1.07 | $1.20 | $1.03 | $1.16 | $2.10 | $2.36 |
| 2016-17 | $1.09 | $1.21 | $1.06 | $1.17 | $2.16 | $2.38 |
| 2017-18 | $1.18 | $1.28 | $1.11 | $1.20 | $2.29 | $2.48 |
| 2018-19 | $1.22 | $1.30 | $1.12 | $1.20 | $2.34 | $2.50 |
| 2019-20 | $1.24 | $1.32 | $1.07 | $1.13 | $2.31 | $2.45 |
| 2020-21 | $1.32 | $1.37 | $1.09 | $1.13 | $2.40 | $2.51 |
| 2021-22 | $1.51 | $1.51 | $1.16 | $1.16 | $2.67 | $2.67 |
| Average |  | $1.23 |  | $1.23 |  | $2.45 |

### Table A7

#### Historical data – Statewide

#### Main financial indicators (continued)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Profit Earnings before interest and tax  Nominal ($/kg MS) | Profit Earnings before interest and tax  Real  ($/kg MS) | Profit Interest & lease charges  Nominal  ($/kg MS) | Profit Interest & lease charges  Real  ($/kg MS) | Profit Net farm income  Nominal  ($/kg MS) | Profit Net farm income  Real  ($/kg MS) | Profit Return on total assets  % | Profit Return on equity  % |
| 2006-07 | $0.06 | $0.08 | $0.58 | $0.84 | -$0.52 | -$0.76 | 0.1% | -4.1% |
| 2007-08 | $2.39 | $3.30 | $0.63 | $0.88 | $1.75 | $2.43 | 9.8% | 12.4% |
| 2008-09 | $1.08 | $1.44 | $0.59 | $0.78 | $0.49 | $0.66 | 3.8% | 2.2% |
| 2009-10 | $0.65 | $0.84 | $0.68 | $0.87 | -$0.03 | -$0.04 | 2.2% | -0.3% |
| 2010-11 | $1.73 | $2.17 | $0.76 | $0.95 | $0.98 | $1.22 | 6.2% | 7.8% |
| 2011-12 | $1.14 | $1.40 | $0.71 | $0.87 | $0.43 | $0.53 | 5.0% | 4.4% |
| 2012-13 | $0.09 | $0.11 | $0.70 | $0.83 | -$0.60 | -$0.72 | 0.7% | -7.3% |
| 2013-14 | $2.02 | $2.36 | $0.65 | $0.75 | $1.38 | $1.60 | 8.5% | 11.6% |
| 2014-15 | $1.25 | $1.42 | $0.60 | $0.69 | $0.64 | $0.73 | 5.3% | 5.2% |
| 2015-16 | $0.18 | $0.21 | $0.59 | $0.67 | -$0.41 | -$0.46 | 0.6% | -3.2% |
| 2016-17 | $0.75 | $0.83 | $0.63 | $0.70 | $0.12 | $0.13 | 2.5% | 1.0% |
| 2017-18 | $0.66 | $0.71 | $0.61 | $0.67 | $0.05 | $0.05 | 2.5% | 0.4% |
| 2018-19 | $0.25 | $0.27 | $0.64 | $0.69 | -$0.39 | -$0.41 | 0.7% | -3.5% |
| 2019-20 | $1.68 | $1.77 | $0.54 | $0.57 | $1.14 | $1.20 | 5.4% | 8.3% |
| 2020-21 | $1.86 | $1.93 | $0.46 | $0.48 | $1.39 | $1.45 | 5.7% | 8.2% |
| 2021-22 | $1.72 | $1.72 | $0.46 | $0.46 | $1.27 | $1.27 | 4.6% | 6.3% |
| Average |  | $1.29 |  | $0.73 |  | $0.56 | 4.0% | 3.1% |

### Table A8

#### Historical data – Statewide

#### Average farm physical information

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Total usable area (ha) | Milking area (ha) | Total water use efficiency (t DM/100mm/ha) | Number of milking cows (cows) | Milking cows per usable area (cows/ha) | Milk sold (kg MS/ cow) | Milk sold (kg MS/ ha) |
| 2006-07 | 271 | 268 | 0.8 | 345 | 1.4 | 447 | 636 |
| 2007-08 | 265 | 250 | 0.8 | 332 | 1.3 | 489 | 612 |
| 2008-09 | 256 | 237 | 0.8 | 330 | 1.5 | 498 | 741 |
| 2009-10 | 232 | 219 | 0.8 | 307 | 1.5 | 496 | 752 |
| 2010-11 | 236 | 227 | 0.7 | 305 | 1.4 | 493 | 719 |
| 2011-12 | 237 | 160 | 0.7 | 328 | 1.6 | 508 | 800 |
| 2012-13 | 232 | 154 | 0.8 | 323 | 1.6 | 495 | 781 |
| 2013-14 | 242 | 157 | 0.8 | 335 | 1.6 | 498 | 810 |
| 2014-15 | 248 | 160 | 0.9 | 350 | 1.6 | 514 | 845 |
| 2015-16 | 252 | 162 | 0.7 | 345 | 1.6 | 511 | 818 |
| 2016-17 | 268 | 166 | 0.7 | 342 | 1.5 | 503 | 748 |
| 2017-18 | 264 | 166 | 0.7 | 352 | 1.5 | 503 | 752 |
| 2018-19 | 261 | 162 | 0.9 | 357 | 1.6 | 495 | 757 |
| 2019-20 | 277 | 161 | 0.8 | 369 | 1.5 | 525 | 794 |
| 2020-21 | 278 | 170 | 0.8 | 373 | 1.6 | 530 | 823 |
| 2021-22 | 290 | 183 | 0.8 | 382 | 1.5 | 529 | 798 |
| Average | 257 | 188 | 0.8 | 342 | 1.5 | 502 | 762 |

### Table A8

#### Historical data – Statewide

#### Average farm physical information (continued)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | Estimated grazed pasture\*  (t DM/ ha) | Estimated conserved feed\*  (t DM/ ha) | Homegrown feed as % of ME consumed  (% of ME) | Concentrate price Nominal  ($/T DM) | Concentrate price  Real  ($/ T DM) |
| 2006-07 | 4.9 | 1.0 | 60% | $329 | $477 |
| 2007-08 | 4.8 | 1.0 | 64% | $425 | $589 |
| 2008-09 | 5.6 | 0.9 | 62% | $375 | $498 |
| 2009-10 | 6.2 | 0.8 | 66% | $273 | $352 |
| 2010-11 | 5.8 | 1.9 | 65% | $301 | $377 |
| 2011-12 | 6.2 | 1.0 | 57% | $296 | $364 |
| 2012-13 | 6.2 | 1.2 | 58% | $336 | $402 |
| 2013-14 | 6.6 | 1.4 | 62% | $388 | $452 |
| 2014-15 | 6.5 | 1.2 | 59% | $405 | $461 |
| 2015-16 | 5.8 | 1.2 | 53% | $402 | $452 |
| 2016-17 | 6.5 | 1.6 | 65% | $335 | $371 |
| 2017-18 | 6.1 | 1.5 | 62% | $373 | $405 |
| 2018-19 | 6.4 | 1.7 | 65% | $514 | $550 |
| 2019-20 | 6.3 | 1.4 | 61% | $495 | $523 |
| 2020-21 | 6.5 | 1.7 | 62% | $430 | $448 |
| 2021-22 | 5.7 | 1.7 | 60% | $483 | $483 |
| Average | 6.0 | 1.3 | 61% |  | $450 |

\* From 2006-07 to 2010-11 estimated grazed pasture and conserved feed was calculated per usable hectare

From 2011-12 estimated grazed pasture and conserved feed was calculated per hectare of milking area

# Appendix B: Northern Victoria summary tables

### Table B1

#### Main financial indicators – Northern Victoria

| Farm number | Milk income (net)  ($/ kg MS) | All other farm income  ($/ kg MS) | Gross farm income  ($/ kg MS) | Total variable costs  ($/ kg MS) | Total overhead costs  ($/ kg MS) | Cost structure (variable costs / total costs) (%) | Earnings Before Interest & Tax  ($/ kg MS) | Return on total assets  (%) | Interest & lease charges  ($/ kg MS) | Debt servicing ratio  (% of income) | Net farm income  ($/ kg MS) | Return on equity  (%) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NO0012 | $7.04 | $1.19 | $8.23 | $4.73 | $2.00 | 70% | $1.50 | 4.6% | $0.05 | 0.6% | $1.45 | 4.9% |
| NO0014 | $7.39 | $2.07 | $9.46 | $4.22 | $3.05 | 58% | $2.19 | 2.8% | $0.56 | 5.9% | $1.63 | 2.7% |
| ***NO0015*** | ***$7.84*** | ***$1.36*** | ***$9.20*** | ***$4.11*** | ***$2.05*** | ***67%*** | ***$3.04*** | ***8.4%*** | ***$0.41*** | ***4.5%*** | ***$2.63*** | ***10.4%*** |
| ***NO0022*** | ***$7.73*** | ***$1.03*** | ***$8.75*** | ***$3.06*** | ***$1.96*** | ***61%*** | ***$3.74*** | ***8.0%*** | ***$0.07*** | ***0.8%*** | ***$3.67*** | ***9.0%*** |
| NO0023 | $7.60 | $0.65 | $8.25 | $4.64 | $2.13 | 69% | $1.48 | 5.3% | $0.29 | 3.5% | $1.19 | 5.9% |
| NO0027 | $7.22 | $6.09 | $13.31 | $6.91 | $3.92 | 64% | $2.49 | 6.4% | $0.28 | 2.1% | $2.21 | 8.9% |
| NO0035 | $7.56 | $0.25 | $7.80 | $3.63 | $2.66 | 58% | $1.52 | 2.7% | $0.24 | 3.1% | $1.28 | 2.5% |
| NO0041 | $7.56 | $1.22 | $8.77 | $4.46 | $1.91 | 70% | $2.41 | 6.5% | $0.29 | 3.4% | $2.12 | 9.8% |
| NO0043 | $8.55 | $0.18 | $8.73 | $3.41 | $3.98 | 46% | $1.33 | 2.1% | $1.41 | 16.1% | -$0.07 | -0.2% |
| NO0054 | $7.87 | $1.17 | $9.04 | $5.50 | $2.29 | 71% | $1.25 | 5.2% | $0.34 | 3.8% | $0.91 | 6.7% |
| NO0056 | $7.36 | $0.67 | $8.03 | $3.84 | $2.30 | 63% | $1.89 | 3.9% | $0.69 | 8.7% | $1.19 | 4.6% |
| NO0059 | $8.33 | $0.55 | $8.87 | $4.71 | $1.94 | 71% | $2.23 | 6.3% | $0.71 | 7.9% | $1.52 | 8.2% |
| NO0064 | $7.74 | $0.89 | $8.63 | $5.27 | $2.80 | 65% | $0.56 | 1.7% | $0.29 | 3.4% | $0.27 | 1.2% |
| ***NO0065*** | ***$7.77*** | ***$2.42*** | ***$10.19*** | ***$5.39*** | ***$2.50*** | ***68%*** | ***$2.30*** | ***7.1%*** | ***$0.94*** | ***9.2%*** | ***$1.36*** | ***12.5%*** |
| NO0069 | $8.56 | $0.58 | $9.14 | $3.18 | $3.15 | 50% | $2.82 | 4.8% | $0.39 | 4.3% | $2.43 | 5.0% |
| NO0072 | $7.15 | $1.41 | $8.56 | $3.31 | $4.09 | 45% | $1.16 | 1.5% | $0.00 | 0.0% | $1.16 | 1.6% |
| NO0073 | $6.82 | $1.82 | $8.64 | $3.87 | $2.58 | 60% | $2.18 | 3.5% | $0.32 | 3.7% | $1.86 | 3.7% |
| ***NO0075*** | ***$6.81*** | ***$0.90*** | ***$7.71*** | ***$3.23*** | ***$2.29*** | ***59%*** | ***$2.18*** | ***7.0%*** | ***$0.33*** | ***4.2%*** | ***$1.86*** | ***8.2%*** |
| ***NO0078*** | ***$7.61*** | ***$1.32*** | ***$8.93*** | ***$4.11*** | ***$1.92*** | ***68%*** | ***$2.90*** | ***7.1%*** | ***$0.36*** | ***4.0%*** | ***$2.54*** | ***8.5%*** |
| NO0079 | $6.90 | $1.25 | $8.15 | $3.56 | $2.73 | 57% | $1.85 | 5.6% | $0.39 | 4.8% | $1.46 | 7.4% |
| ***NO0080*** | ***$7.59*** | ***$0.70*** | ***$8.28*** | ***$4.41*** | ***$1.78*** | ***71%*** | ***$2.10*** | ***11.8%*** | ***$0.16*** | ***1.9%*** | ***$1.94*** | ***14.2%*** |
| ***NO0081*** | ***$7.51*** | ***$0.69*** | ***$8.21*** | ***$4.01*** | ***$1.83*** | ***69%*** | ***$2.36*** | ***8.1%*** | ***$0.06*** | ***0.8%*** | ***$2.30*** | ***8.6%*** |
| NO0082 | $7.48 | $1.14 | $8.62 | $5.07 | $2.24 | 69% | $1.32 | 4.7% | $0.51 | 5.9% | $0.81 | 6.4% |
| NO0083 | $7.33 | $1.38 | $8.71 | $3.86 | $2.87 | 57% | $1.98 | 5.1% | $1.43 | 16.4% | $0.56 | 4.5% |
| NO0085 | $7.34 | $0.61 | $7.95 | $4.48 | $2.90 | 61% | $0.56 | 1.7% | $0.21 | 2.6% | $0.36 | 1.2% |
| NO0086 | $8.10 | $0.75 | $8.85 | $4.59 | $2.08 | 69% | $2.18 | 6.8% | $0.27 | 3.1% | $1.91 | 7.5% |
| ***NO0087*** | ***$7.47*** | ***$0.82*** | ***$8.30*** | ***$2.79*** | ***$2.89*** | ***49%*** | ***$2.62*** | ***10.5%*** | ***$0.44*** | ***5.3%*** | ***$2.18*** | ***21.4%*** |
| NO0088 | $7.18 | $1.08 | $8.26 | $3.08 | $3.02 | 51% | $2.16 | 5.9% | $0.59 | 7.1% | $1.57 | 15.3% |
| NO0089 | $7.25 | $0.87 | $8.12 | $3.90 | $2.30 | 63% | $1.91 | 6.9% | $0.22 | 2.7% | $1.69 | 9.0% |
| NO0090 | $7.40 | $0.65 | $8.05 | $4.71 | $2.11 | 69% | $1.22 | 4.8% | $0.03 | 0.4% | $1.19 | 5.0% |
| Average | $7.54 | $1.19 | $8.72 | $4.20 | $2.54 | 62% | $1.98 | 5.6% | $0.41 | 4.7% | $1.57 | 7.2% |
| Top 25%\* | $7.54 | $1.15 | $8.70 | $3.89 | $2.15 | 64% | $2.66 | 8.5% | $0.35 | 3.8% | $2.31 | 11.6% |

\* Top 25% are bold and italicised

### Table B2

#### Physical information – Northern Victoria

| Farm number | Total usable area  (ha) | Milking area (ha) | Total water use efficiency (t DM/100mm) | Number of milking cows (cows) | Milking cows per usable area (cows/ha) | Milk sold  (kg MS/ cow) | Milk sold  (kg MS/ ha) | Fat  (%) | Protein  (%) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NO0012 | 472 | 372 | 0.8 | 820 | 1.7 | 634 | 1,101 | 4.3% | 3.5% |
| NO0014 | 561 | 437 | 0.6 | 510 | 0.9 | 505 | 459 | 3.9% | 3.3% |
| NO0015 | ***247*** | ***92*** | ***0.8*** | ***390*** | ***1.6*** | ***504*** | ***795*** | ***4.5%*** | ***3.6%*** |
| NO0022 | ***226*** | ***105*** | ***0.8*** | ***340*** | ***1.5*** | ***515*** | ***775*** | ***4.7%*** | ***3.5%*** |
| NO0023 | 342 | 342 | 0.8 | 530 | 1.5 | 553 | 856 | 4.0% | 3.4% |
| NO0027 | 1212 | 1 | 1.1 | 715 | 0.6 | 665 | 392 | 4.3% | 3.1% |
| NO0035 | 109 | 66 | 0.5 | 191 | 1.8 | 607 | 1,063 | 3.9% | 3.5% |
| NO0041 | 217 | 153 | 0.7 | 330 | 1.5 | 612 | 931 | 4.1% | 3.5% |
| NO0043 | 144 | 144 | 0.7 | 127 | 0.9 | 397 | 350 | 4.3% | 3.3% |
| NO0054 | 1111 | 290 | 1.4 | 2,036 | 1.8 | 704 | 1,290 | 4.2% | 3.4% |
| NO0056 | 424 | 90 | 0.8 | 295 | 0.7 | 622 | 433 | 4.0% | 3.2% |
| NO0059 | 311 | 75 | 0.7 | 273 | 0.9 | 517 | 454 | 4.5% | 3.6% |
| NO0064 | 435 | 254 | 0.9 | 750 | 1.7 | 507 | 874 | 4.7% | 3.6% |
| NO0065 | ***218*** | ***218*** | ***1.1*** | ***450*** | ***2.1*** | ***603*** | ***1,244*** | ***4.1%*** | ***3.4%*** |
| NO0069 | 162 | 100 | 0.8 | 200 | 1.2 | 462 | 570 | 4.9% | 3.8% |
| NO0072 | 195 | 57 | 0.6 | 179 | 0.9 | 504 | 462 | 4.4% | 3.5% |
| NO0073 | 389 | 230 | 0.5 | 470 | 1.2 | 596 | 721 | 3.9% | 3.3% |
| NO0075 | ***373*** | ***190*** | ***1.1*** | ***540*** | ***1.4*** | ***635*** | ***919*** | ***4.2%*** | ***3.6%*** |
| NO0078 | ***269*** | ***100*** | ***0.7*** | ***335*** | ***1.2*** | ***708*** | ***882*** | ***4.1%*** | ***3.3%*** |
| NO0079 | 118 | 118 | 0.5 | 178 | 1.5 | 467 | 705 | 4.7% | 3.7% |
| NO0080 | ***80*** | ***80*** | ***0.8*** | ***236*** | ***3.0*** | ***631*** | ***1,860*** | ***4.0%*** | ***3.4%*** |
| NO0081 | ***345*** | ***345*** | ***1.3*** | ***535*** | ***1.6*** | ***650*** | ***1,008*** | ***4.2%*** | ***3.3%*** |
| NO0082 | 565 | 565 | 0.9 | 480 | 0.8 | 631 | 536 | 4.2% | 3.4% |
| NO0083 | 184 | 184 | 0.7 | 300 | 1.6 | 506 | 825 | 4.2% | 3.3% |
| NO0085 | 207 | 84 | 0.5 | 220 | 1.1 | 605 | 643 | 4.4% | 3.5% |
| NO0086 | 433 | 315 | 0.7 | 490 | 1.1 | 629 | 711 | 4.3% | 3.5% |
| NO0087 | ***197*** | ***70*** | ***0.6*** | ***220*** | ***1.1*** | ***574*** | ***641*** | ***4.2%*** | ***3.5%*** |
| NO0088 | 29 | 29 | 1.0 | 87 | 3.0 | 576 | 1,727 | 4.7% | 3.6% |
| NO0089 | 351 | 351 | 1.2 | 451 | 1.3 | 643 | 827 | 3.9% | 3.6% |
| NO0090 | 113 | 113 | 0.5 | 167 | 1.5 | 575 | 850 | 4.6% | 3.6% |
| Average | 335 | 186 | 0.8 | 428 | 1.4 | 578 | 830 | 4.3% | 3.5% |
| Top 25%\* | 244 | 150 | 0.9 | 381 | 1.7 | 602 | 1,016 | 4.2% | 3.4% |

### Table B2

#### Physical information – Northern Victoria (continued)

| Farm number | Estimated grazed pasture\*\*  (t DM/ ha) | Estimated conserved feed\*\*  (t DM/ ha) | Homegrown feed as % of ME consumed  (% of ME) | Nitrogen application\*\* (kg/ ha) | Phosphorous application\*\* (kg/ ha) | Potassium application\*\* (kg/ ha) | Sulphur application\*\* (kg/ ha) | Labour efficiency (cows/ FTE) | Labour efficiency  (kg MS/ FTE) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NO0012 | 0.0 | 4.7 | 34% | 130.8 | 16.7 | 4.3 | 7.0 | 132 | 83,778 |
| NO0014 | 4.8 | 1.6 | 66% | 174.5 | 82.5 | 29.7 | 40.3 | 92 | 46,353 |
| ***NO0015*** | ***6.8*** | ***1.9*** | ***53%*** | ***120.4*** | ***26.1*** | ***3.4*** | ***40.3*** | ***135*** | ***67,962*** |
| ***NO0022*** | ***10.0*** | ***0.0*** | ***72%*** | ***0.0*** | ***0.0*** | ***0.0*** | ***1.1*** | ***148*** | ***76,174*** |
| NO0023 | 2.9 | 3.3 | 38% | 47.8 | 13.1 | 2.8 | 6.3 | 116 | 64,073 |
| NO0027 | 0.0 | 0.0 | 63% | 0.0 | 0.0 | 0.0 | 0.0 | 68 | 45,443 |
| NO0035 | 5.7 | 1.1 | 42% | 5.0 | 2.2 | 1.1 | 10.2 | 80 | 48,608 |
| NO0041 | 6.8 | 0.7 | 46% | 51.8 | 8.7 | 4.4 | 4.0 | 102 | 62,527 |
| NO0043 | 2.7 | 3.5 | 93% | 0.0 | 3.1 | 0.0 | 3.8 | 102 | 40,640 |
| NO0054 | 1.8 | 0.0 | 48% | 57.0 | 10.3 | 0.0 | 5.7 | 108 | 75,817 |
| NO0056 | 8.4 | 0.3 | 69% | COP | 15.2 | 56.3 | 25.7 | 97 | 60,574 |
| NO0059 | 11.8 | 0.0 | 73% | 33.3 | 23.7 | 33.3 | 25.5 | 108 | 55,914 |
| NO0064 | 4.4 | 1.0 | 58% | 174.3 | 44.4 | 26.6 | 6.0 | 115 | 58,221 |
| ***NO0065*** | ***4.6*** | ***6.1*** | ***45%*** | ***171.2*** | ***14.8*** | ***7.8*** | ***12.6*** | ***93*** | ***55,845*** |
| NO0069 | 6.9 | 1.4 | 77% | 0.0 | 6.2 | 0.1 | 7.7 | 91 | 42,035 |
| NO0072 | 8.4 | 0.8 | 73% | 65.4 | 3.5 | 11.4 | 4.4 | 62 | 31,032 |
| NO0073 | 5.0 | 3.7 | 57% | 231.1 | 31.9 | 30.7 | 31.6 | 108 | 64,375 |
| ***NO0075*** | ***6.3*** | ***3.6*** | ***63%*** | ***104.1*** | ***25.3*** | ***0.0*** | ***2.0*** | ***97*** | ***61,455*** |
| ***NO0078*** | ***9.7*** | ***0.0*** | ***48%*** | ***27.6*** | ***0.0*** | ***0.0*** | ***0.0*** | ***96*** | ***68,087*** |
| NO0079 | 3.0 | 1.7 | 44% | 50.7 | 0.0 | 0.0 | 0.0 | 125 | 58,639 |
| ***NO0080*** | ***8.9*** | ***0.7*** | ***43%*** | ***256.4*** | ***4.8*** | ***0.0*** | ***7.5*** | ***93*** | ***58,666*** |
| ***NO0081*** | ***3.0*** | ***6.1*** | ***52%*** | ***62.2*** | ***15.0*** | ***1.2*** | ***19.5*** | ***112*** | ***72,768*** |
| NO0082 | 2.1 | 3.5 | 61% | 21.4 | 14.7 | 6.1 | 16.3 | 94 | 59,444 |
| NO0083 | 4.9 | 1.3 | 51% | 39.3 | 0.0 | 0.0 | 0.9 | 91 | 45,960 |
| NO0085 | 4.6 | 1.8 | 41% | 95.2 | 17.5 | 0.0 | 32.4 | 79 | 47,761 |
| NO0086 | 3.9 | 2.3 | 57% | 67.7 | 21.7 | 16.3 | 28.0 | 92 | 57,915 |
| ***NO0087*** | ***6.7*** | ***0.0*** | ***46%*** | ***13.1*** | ***0.0*** | ***0.0*** | ***3.8*** | ***81*** | ***46,239*** |
| NO0088 | 11.8 | 0.4 | 62% | 0.0 | 34.0 | 0.0 | 42.5 | 71 | 40,682 |
| NO0089 | 3.3 | 5.6 | 63% | 115.5 | 10.0 | 2.9 | 13.3 | 90 | 57,636 |
| NO0090 | 3.8 | 0.3 | 43% | 21.1 | 4.4 | 0.0 | 0.4 | 112 | 64,374 |
| Average | 5.6 | 1.9 | 56% | 76.3 | 15.5 | 8.2 | 13.8 | 100 | 57,300 |
| Top 25%\* | 7.0 | 2.3 | 53% | 94.4 | 10.7 | 1.5 | 10.9 | 107 | 63,400 |

\*\*on milking area

### Table B3

#### Purchased feed – Northern Victoria

| Farm number | Purchased feed per milker\*\*  (t DM/ cow) | Concentrate price  ($/ t DM) | Silage price  ($/ t DM) | Hay price  ($/ t DM) | Other feed price ($/ t DM) | Average purchased feed price  ($/ t DM) | Purchased feed as % of ME consumed (% of ME) |
| --- | --- | --- | --- | --- | --- | --- | --- |
| NO0012 | 5.4 | $421 | $194 | $169 | $123 | $326 | 66% |
| NO0014 | 3.0 | $467 |  | $279 |  | $396 | 34% |
| NO0015 | 3.2 | $343 |  | $319 |  | $334 | 47% |
| NO0022 | 1.8 | $526 |  |  |  | $526 | 28% |
| NO0023 | 4.7 | $370 | $258 | $265 |  | $315 | 62% |
| NO0027 | 4.2 | $435 |  | $96 | $232 | $248 | 37% |
| NO0035 | 4.1 | $391 |  | $237 |  | $343 | 58% |
| NO0041 | 4.6 | $526 | $215 | $228 |  | $348 | 54% |
| NO0043 | 0.4 | $626 |  |  |  | $626 | 7% |
| NO0054 | 4.4 | $492 |  | $293 |  | $404 | 52% |
| NO0056 | 2.6 | $549 |  | $212 |  | $390 | 31% |
| NO0059 | 2.0 | $760 | $350 | $375 |  | $618 | 27% |
| NO0064 | 3.1 | $529 | $210 | $315 |  | $422 | 42% |
| ***NO0065*** | ***4.7*** | ***$539*** | ***$297*** | ***$290*** |  | ***$420*** | ***55%*** |
| NO0069 | 1.4 | $698 | $220 | $282 |  | $540 | 23% |
| NO0072 | 1.8 | $394 |  | $412 |  | $396 | 27% |
| NO0073 | 2.8 | $392 |  | $222 |  | $359 | 43% |
| ***NO0075*** | ***2.5*** | ***$351*** |  | ***$212*** |  | ***$342*** | ***37%*** |
| ***NO0078*** | ***5.2*** | ***$360*** | ***$240*** | ***$301*** |  | ***$321*** | ***52%*** |
| NO0079 | 3.5 | $342 | $253 | $86 |  | $245 | 56% |
| ***NO0080*** | ***4.1*** | ***$523*** | ***$262*** | ***$264*** |  | ***$450*** | ***57%*** |
| ***NO0081*** | ***4.0*** | ***$543*** | ***$204*** | ***$334*** |  | ***$395*** | ***48%*** |
| NO0082 | 3.0 | $518 |  | $120 |  | $492 | 39% |
| NO0083 | 4.5 | $437 | $143 | $123 |  | $215 | 49% |
| NO0085 | 4.2 | $447 | $341 | $257 |  | $320 | 59% |
| NO0086 | 3.1 | $497 | $254 | $157 |  | $387 | 43% |
| ***NO0087*** | ***4.5*** | ***$536*** |  | ***$285*** |  | ***$263*** | ***54%*** |
| NO0088 | 2.5 | $520 |  | $210 |  | $381 | 38% |
| NO0089 | 2.7 | $395 | $187 |  |  | $382 | 37% |
| NO0090 | 5.1 | $460 |  | $265 |  | $332 | 57% |
| Average | 3.4 | $479 | $242 | $245 | $178 | $384 | 44% |
| Top 25%\* | 3.7 | $465 |  |  |  | $381 | 47% |

\*\* All purchased feed including concentrates, hay, silage, and other feed fed on the usable area to all classes of livestock divided by the number of cows

Calculation of average price of silage, hay and other feed excludes zero values

### Table B4

#### Variable costs – Northern Victoria

| Farm number | AI and herd test ($/ kg MS) | Animal health ($/ kg MS) | Calf rearing  ($/ kg MS) | Shed power  ($/ kg MS) | Dairy supplies ($/ kg MS) | Total herd and shed costs  ($/ kg MS) | Fertiliser  ($/ kg MS) | Irrigation \*\*  ($/ kg MS) | Hay and silage making  ($/ kg MS) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NO0012 | $0.17 | $0.15 | $0.07 | $0.10 | $0.12 | $0.61 | $0.67 | $0.16 | $0.52 |
| NO0014 | $0.13 | $0.23 | $0.22 | $0.15 | $0.14 | $0.87 | $0.71 | $0.01 | $0.20 |
| ***NO0015*** | ***$0.12*** | ***$0.11*** | ***$0.02*** | ***$0.14*** | ***$0.07*** | ***$0.46*** | ***$0.41*** | ***$0.30*** | ***$0.44*** |
| ***NO0022*** | ***$0.12*** | ***$0.11*** | ***$0.06*** | ***$0.16*** | ***$0.06*** | ***$0.51*** | ***$0.09*** | ***$0.35*** | ***$0.13*** |
| NO0023 | $0.24 | $0.17 | $0.02 | $0.13 | $0.10 | $0.67 | $0.32 | $0.29 | $0.42 |
| NO0027 | $0.23 | $0.22 | $0.00 | $0.16 | $0.08 | $0.70 | $0.81 | $0.22 | $0.48 |
| NO0035 | $0.13 | $0.16 | $0.02 | $0.09 | $0.09 | $0.49 | $0.17 | $0.33 | $0.17 |
| NO0041 | $0.15 | $0.21 | $0.03 | $0.08 | $0.04 | $0.51 | $0.20 | $0.32 | $0.10 |
| NO0043 | $0.30 | $0.18 | $0.09 | $0.28 | $0.19 | $1.04 | $0.09 | $0.91 | $0.10 |
| NO0054 | $0.15 | $0.20 | $0.51 | $0.12 | $0.22 | $1.21 | $0.52 | $0.11 | $0.56 |
| NO0056 | $0.29 | $0.17 | $0.02 | $0.12 | $0.05 | $0.65 | $0.72 | $0.48 | $0.37 |
| NO0059 | $0.17 | $0.02 | $0.02 | $0.16 | $0.09 | $0.46 | $0.39 | $1.06 | $0.37 |
| NO0064 | $0.16 | $0.31 | $0.05 | $0.09 | $0.08 | $0.68 | $0.58 | $0.37 | $0.38 |
| ***NO0065*** | ***$0.14*** | ***$0.32*** | ***$0.07*** | ***$0.11*** | ***$0.12*** | ***$0.76*** | ***$0.39*** | ***$0.32*** | ***$0.63*** |
| NO0069 | $0.15 | $0.15 | $0.10 | $0.06 | $0.09 | $0.55 | $0.22 | $0.49 | $0.52 |
| NO0072 | $0.16 | $0.16 | $0.14 | $0.13 | $0.06 | $0.64 | $0.18 | $0.14 | $0.50 |
| NO0073 | $0.24 | $0.15 | $0.11 | $0.11 | $0.14 | $0.75 | $0.75 | $0.07 | $0.30 |
| ***NO0075*** | ***$0.15*** | ***$0.07*** | ***$0.03*** | ***$0.09*** | ***$0.08*** | ***$0.42*** | ***$0.50*** | ***$0.20*** | ***$0.60*** |
| ***NO0078*** | ***$0.12*** | ***$0.10*** | ***$0.00*** | ***$0.09*** | ***$0.11*** | ***$0.42*** | ***$0.10*** | ***$0.19*** | ***$0.07*** |
| NO0079 | $0.00 | $0.14 | $0.00 | $0.20 | $0.08 | $0.42 | $0.20 | $0.38 | $0.09 |
| ***NO0080*** | ***$0.10*** | ***$0.11*** | ***$0.02*** | ***$0.07*** | ***$0.08*** | ***$0.38*** | ***$0.37*** | ***$0.27*** | ***$0.04*** |
| ***NO0081*** | ***$0.11*** | ***$0.11*** | ***$0.00*** | ***$0.09*** | ***$0.12*** | ***$0.44*** | ***$0.26*** | ***$0.27*** | ***$0.50*** |
| NO0082 | $0.16 | $0.14 | $0.01 | $0.12 | $0.08 | $0.50 | $0.54 | $0.37 | $0.65 |
| NO0083 | $0.24 | $0.21 | $0.31 | $0.08 | $0.03 | $0.87 | $0.14 | $0.21 | $0.03 |
| NO0085 | $0.14 | $0.21 | $0.12 | $0.15 | $0.10 | $0.73 | $0.32 | $0.25 | $0.33 |
| NO0086 | $0.18 | $0.10 | $0.09 | $0.08 | $0.10 | $0.54 | $0.73 | $0.54 | $0.45 |
| ***NO0087*** | ***$0.14*** | ***$0.12*** | ***$0.07*** | ***$0.11*** | ***$0.09*** | ***$0.54*** | ***$0.07*** | ***$0.16*** | ***$0.07*** |
| NO0088 | $0.13 | $0.12 | $0.00 | $0.11 | $0.11 | $0.46 | $0.17 | $0.18 | $0.01 |
| NO0089 | $0.14 | $0.17 | $0.09 | $0.09 | $0.11 | $0.60 | $0.44 | $0.50 | $0.69 |
| NO0090 | $0.12 | $0.15 | $0.04 | $0.07 | $0.10 | $0.47 | $0.09 | $0.21 | $0.06 |
| Average | $0.16 | $0.16 | $0.08 | $0.12 | $0.10 | $0.61 | $0.37 | $0.32 | $0.33 |
| Top 25%\* | $0.13 | $0.13 | $0.03 | $0.11 | $0.09 | $0.49 | $0.27 | $0.26 | $0.31 |

\*\* Calculation of average cost of irrigation excludes zero values

### Table B4

#### Variable costs – Northern Victoria (continued)

| Farm number | Fuel and oil  ($/ kg MS) | Pasture improvement/ cropping  ($/ kg MS) | Other feed costs  ($/ kg MS) | Fodder purchases  ($/ kg MS) | Grain/ concentrates/ other  ($/ kg MS) | Agistment costs  ($/ kg MS) | Feed and water inventory change  ($/ kg MS) | Total feed costs  ($/ kg MS) | Total variable costs  ($/ kg MS) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NO0012 | $0.11 | $0.28 | $0.00 | $0.50 | $2.27 | $0.04 | -$0.42 | $4.12 | $4.73 |
| NO0014 | $0.23 | $0.16 | $0.00 | $0.67 | $1.85 | $0.00 | -$0.48 | $3.35 | $4.22 |
| ***NO0015*** | ***$0.13*** | ***$0.35*** | ***$0.00*** | ***$0.80*** | ***$1.30*** | ***$0.07*** | ***-$0.15*** | ***$3.65*** | ***$4.11*** |
| ***NO0022*** | ***$0.05*** | ***$0.33*** | ***$0.00*** | ***$0.00*** | ***$1.63*** | ***$0.02*** | ***-$0.04*** | ***$2.55*** | ***$3.06*** |
| NO0023 | $0.09 | $0.32 | $0.00 | $1.28 | $1.84 | $0.22 | -$0.81 | $3.97 | $4.64 |
| NO0027 | $0.21 | $1.23 | $0.01 | $0.55 | $2.17 | $0.00 | $0.52 | $6.21 | $6.91 |
| NO0035 | $0.12 | $0.14 | $0.00 | $0.44 | $1.61 | $0.09 | $0.07 | $3.14 | $3.63 |
| NO0041 | $0.10 | $0.24 | $0.00 | $1.18 | $1.94 | $0.09 | -$0.23 | $3.94 | $4.46 |
| NO0043 | $0.38 | $0.38 | $0.00 | $0.00 | $0.58 | $0.00 | -$0.08 | $2.37 | $3.41 |
| NO0054 | $0.08 | $0.36 | $0.00 | $0.57 | $1.96 | $0.19 | -$0.06 | $4.29 | $5.50 |
| NO0056 | $0.17 | $0.29 | $0.00 | $0.47 | $1.35 | $0.00 | -$0.65 | $3.19 | $3.84 |
| NO0059 | $0.05 | $0.34 | $0.00 | $0.44 | $1.74 | $0.00 | -$0.16 | $4.24 | $4.71 |
| NO0064 | $0.13 | $0.32 | $0.00 | $0.81 | $1.72 | $0.02 | $0.26 | $4.59 | $5.27 |
| ***NO0065*** | ***$0.13*** | ***$0.66*** | ***$0.00*** | ***$1.09*** | ***$2.16*** | ***$0.10*** | ***-$0.85*** | ***$4.63*** | ***$5.39*** |
| NO0069 | $0.19 | $0.10 | $0.00 | $0.28 | $1.35 | $0.10 | -$0.62 | $2.63 | $3.18 |
| NO0072 | $0.11 | $0.25 | $0.00 | $0.18 | $1.28 | $0.00 | $0.02 | $2.66 | $3.31 |
| NO0073 | $0.12 | $0.16 | $0.03 | $0.21 | $1.51 | $0.22 | -$0.23 | $3.12 | $3.87 |
| ***NO0075*** | ***$0.10*** | ***$0.34*** | ***$0.00*** | ***$0.04*** | ***$1.11*** | ***$0.18*** | ***-$0.27*** | ***$2.81*** | ***$3.23*** |
| ***NO0078*** | ***$0.10*** | ***$0.20*** | ***$0.01*** | ***$1.22*** | ***$0.94*** | ***$0.00*** | ***$0.86*** | ***$3.69*** | ***$4.11*** |
| NO0079 | $0.23 | $0.19 | $0.00 | $0.50 | $1.39 | $0.34 | -$0.19 | $3.15 | $3.56 |
| ***NO0080*** | ***$0.06*** | ***$0.35*** | ***$0.00*** | ***$0.41*** | ***$2.11*** | ***$0.15*** | ***$0.26*** | ***$4.02*** | ***$4.41*** |
| ***NO0081*** | ***$0.08*** | ***$0.27*** | ***$0.00*** | ***$0.62*** | ***$1.66*** | ***$0.15*** | ***-$0.24*** | ***$3.57*** | ***$4.01*** |
| NO0082 | $0.09 | $0.41 | $0.03 | $0.04 | $2.32 | $0.04 | $0.09 | $4.57 | $5.07 |
| NO0083 | $0.23 | $0.23 | $0.00 | $1.10 | $1.14 | $0.11 | -$0.20 | $2.99 | $3.86 |
| NO0085 | $0.12 | $0.32 | $0.00 | $0.56 | $1.57 | $0.19 | $0.09 | $3.76 | $4.48 |
| NO0086 | $0.04 | $0.18 | $0.00 | $0.38 | $2.01 | $0.00 | -$0.28 | $4.05 | $4.59 |
| ***NO0087*** | ***$0.08*** | ***$0.22*** | ***$0.00*** | ***$0.02*** | ***$1.74*** | ***$0.00*** | ***-$0.09*** | ***$2.26*** | ***$2.79*** |
| NO0088 | $0.14 | $0.01 | $0.00 | $0.54 | $1.65 | $0.12 | -$0.19 | $2.62 | $3.08 |
| NO0089 | $0.21 | $0.42 | $0.00 | $0.05 | $1.49 | $0.13 | -$0.62 | $3.30 | $3.90 |
| NO0090 | $0.09 | $0.21 | $0.00 | $1.52 | $1.41 | $0.07 | $0.58 | $4.24 | $4.71 |
| Average | $0.13 | $0.31 | $0.00 | $0.55 | $1.63 | $0.09 | -$0.14 | $3.59 | $4.20 |
| Top 25%\* | $0.09 | $0.34 | $0.00 | $0.53 | $1.58 | $0.08 | -$0.07 | $3.40 | $3.89 |

### Table B5

#### Overhead costs – Northern Victoria

| Farm number | Rates  ($/ kg MS) | Farm Insurance ($/ kg MS) | Motor vehicle expenses ($/ kg MS) | Repairs and maintenance ($/ kg MS) | Other overheads ($/ kg MS) | Employed labour ($/ kg MS) | Total cash overheads ($/ kg MS) | Depreciation ($/ kg MS) | Imputed labour cost ($/ kg MS) | Total overheads ($/ kg MS) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| NO0012 | $0.05 | $0.01 | $0.02 | $0.37 | $0.10 | $1.08 | $1.63 | $0.35 | $0.02 | $2.00 |
| NO0014 | $0.08 | $0.12 | $0.09 | $0.48 | $0.10 | $0.67 | $1.54 | $0.43 | $1.08 | $3.05 |
| ***NO0015*** | ***$0.05*** | ***$0.08*** | ***$0.01*** | ***$0.38*** | ***$0.08*** | ***$0.49*** | ***$1.07*** | ***$0.23*** | ***$0.75*** | ***$2.05*** |
| ***NO0022*** | ***$0.07*** | ***$0.07*** | ***$0.02*** | ***$0.57*** | ***$0.10*** | ***$0.33*** | ***$1.15*** | ***$0.19*** | ***$0.62*** | ***$1.96*** |
| NO0023 | $0.05 | $0.09 | $0.03 | $0.33 | $0.18 | $0.57 | $1.26 | $0.21 | $0.66 | $2.13 |
| NO0027 | $0.09 | $0.13 | $0.01 | $0.67 | $0.19 | $1.61 | $2.69 | $0.83 | $0.40 | $3.92 |
| NO0035 | $0.05 | $0.12 | $0.05 | $0.29 | $0.14 | $0.00 | $0.66 | $0.32 | $1.68 | $2.66 |
| NO0041 | $0.03 | $0.04 | $0.02 | $0.28 | $0.10 | $0.70 | $1.16 | $0.22 | $0.53 | $1.91 |
| NO0043 | $0.09 | $0.28 | $0.07 | $0.88 | $0.29 | $0.39 | $2.00 | $0.50 | $1.48 | $3.98 |
| NO0054 | $0.02 | $0.03 | $0.03 | $0.51 | $0.22 | $1.19 | $2.00 | $0.29 | $0.00 | $2.29 |
| NO0056 | $0.09 | $0.12 | $0.03 | $0.46 | $0.05 | $0.46 | $1.20 | $0.17 | $0.93 | $2.30 |
| NO0059 | $0.05 | $0.07 | $0.02 | $0.22 | $0.08 | $0.64 | $1.06 | $0.22 | $0.65 | $1.94 |
| NO0064 | $0.03 | $0.13 | $0.02 | $0.81 | $0.18 | $0.90 | $2.06 | $0.28 | $0.46 | $2.80 |
| ***NO0065*** | ***$0.05*** | ***$0.05*** | ***$0.10*** | ***$0.49*** | ***$0.07*** | ***$0.94*** | ***$1.70*** | ***$0.41*** | ***$0.38*** | ***$2.50*** |
| NO0069 | $0.09 | $0.19 | $0.03 | $0.48 | $0.18 | $0.76 | $1.75 | $0.36 | $1.04 | $3.15 |
| NO0072 | $0.11 | $0.10 | $0.00 | $0.45 | $0.16 | $1.80 | $2.63 | $0.52 | $0.94 | $4.09 |
| NO0073 | $0.05 | $0.09 | $0.01 | $0.43 | $0.07 | $0.94 | $1.58 | $0.61 | $0.39 | $2.58 |
| ***NO0075*** | ***$0.05*** | ***$0.05*** | ***$0.02*** | ***$0.52*** | ***$0.09*** | ***$0.92*** | ***$1.65*** | ***$0.27*** | ***$0.38*** | ***$2.29*** |
| ***NO0078*** | ***$0.05*** | ***$0.08*** | ***$0.01*** | ***$0.24*** | ***$0.06*** | ***$0.51*** | ***$0.95*** | ***$0.32*** | ***$0.65*** | ***$1.92*** |
| NO0079 | $0.07 | $0.05 | $0.03 | $0.90 | $0.11 | $0.20 | $1.35 | $0.18 | $1.20 | $2.73 |
| ***NO0080*** | ***$0.03*** | ***$0.03*** | ***$0.03*** | ***$0.19*** | ***$0.13*** | ***$0.42*** | ***$0.81*** | ***$0.14*** | ***$0.83*** | ***$1.78*** |
| ***NO0081*** | ***$0.05*** | ***$0.10*** | ***$0.00*** | ***$0.28*** | ***$0.11*** | ***$0.52*** | ***$1.06*** | ***$0.28*** | ***$0.49*** | ***$1.83*** |
| NO0082 | $0.04 | $0.04 | $0.03 | $0.46 | $0.07 | $1.05 | $1.69 | $0.25 | $0.30 | $2.24 |
| NO0083 | $0.04 | $0.03 | $0.09 | $0.52 | $0.15 | $0.84 | $1.67 | $0.30 | $0.90 | $2.87 |
| NO0085 | $0.05 | $0.09 | $0.02 | $0.56 | $0.20 | $0.51 | $1.44 | $0.34 | $1.12 | $2.90 |
| NO0086 | $0.05 | $0.08 | $0.04 | $0.30 | $0.07 | $0.70 | $1.25 | $0.15 | $0.68 | $2.08 |
| ***NO0087*** | ***$0.03*** | ***$0.11*** | ***$0.20*** | ***$0.21*** | ***$0.11*** | ***$0.72*** | ***$1.39*** | ***$0.57*** | ***$0.92*** | ***$2.89*** |
| NO0088 | $0.04 | $0.04 | $0.18 | $0.40 | $0.17 | $0.33 | $1.16 | $0.23 | $1.63 | $3.02 |
| NO0089 | $0.04 | $0.05 | $0.03 | $0.42 | $0.11 | $0.50 | $1.16 | $0.30 | $0.84 | $2.30 |
| NO0090 | $0.04 | $0.08 | $0.11 | $0.37 | $0.06 | $0.25 | $0.91 | $0.19 | $1.02 | $2.11 |
| Average | $0.05 | $0.08 | $0.04 | $0.45 | $0.12 | $0.70 | $1.45 | $0.32 | $0.77 | $2.54 |
| Top 25%\* | $0.05 | $0.07 | $0.05 | $0.36 | $0.09 | $0.61 | $1.22 | $0.30 | $0.63 | $2.15 |

\*Calculation of average values of land, water asset and equity exclude zero values.

### Table B6

#### Capital structure – Northern Victoria

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Farm assets\* Land value ($/ha) | Farm assets\* Land value ($/cow) | Farm assets\* Permanent water value ($/ha) | Farm assets\* Permanent water value ($/cow) | Other farm assets (per usable hectare) Plant and equipment ($/ha) | Other farm assets (per usable hectare) Livestock ($/ha) | Other farm assets (per usable hectare) Hay and grain ($/ha) | Other farm assets (per usable hectare) Other assets ($/ha) | Total assets ($/ha) |
| Average | $13,262 | $10,799 | $6,816 | $4,623 |  | $1,722 | $4,272 | $635 | $571 |
| Top 25%\* | $11,829 | $7,409 | $7,353 | $4,833 |  | $2,096 | $5,120 | $770 | $1,214 |

### Table B6

#### Capital structure – Northern Victoria (continued)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Liabilities per usable hectare ($/ha) | Liabilities per milking cow ($/cow) | Equity per usable hectare ($/ha) | Average equity (%) |
| Average | $6,175 | $4,719 | $20,629 | 74% |
| Top 25%\* | $6,989 | $4,399 | $21,394 | 73% |

## Historical data – NorthERN VICTORIA

### Table B7

#### Main financial indicators

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Income  Milk income (net) Nominal ($/kg MS) | Income  Milk income (net) Real  ($/kg MS) | Income  Gross farm income Nominal ($/kg MS) | Income  Gross farm income Real  ($/kg MS) | Variable costs  Herd costs Nominal ($/kg MS) | Variable costs  Herd costs Real  ($/kg MS) | Variable costs  Shed costs Nominal ($/kg MS) | Variable costs  Shed costs Real  ($/kg MS) | Variable costs  Feed costs Nominal ($/kg MS) | Variable costs  Feed costs Real  ($/kg MS) | Total variable costs Nominal ($/kg MS) | Total variable costs  Real  ($/kg MS) |
| 2006-07 | $4.64 | $6.73 | $5.48 | $7.95 | $0.21 | $0.31 | $0.17 | $0.24 | $3.60 | $5.22 | $4.03 | $5.85 |
| 2007-08 | $6.53 | $9.04 | $7.86 | $10.88 | $0.23 | $0.31 | $0.15 | $0.21 | $4.37 | $6.06 | $4.70 | $6.50 |
| 2008-09 | $5.32 | $7.07 | $6.06 | $8.05 | $0.21 | $0.28 | $0.13 | $0.18 | $3.47 | $4.61 | $3.81 | $5.06 |
| 2009-10 | $4.46 | $5.74 | $5.19 | $6.69 | $0.23 | $0.30 | $0.15 | $0.19 | $2.71 | $3.49 | $3.09 | $3.98 |
| 2010-11 | $5.69 | $7.13 | $6.74 | $8.43 | $0.31 | $0.39 | $0.19 | $0.23 | $2.66 | $3.33 | $3.16 | $3.95 |
| 2011-12 | $5.64 | $6.93 | $6.06 | $7.44 | $0.26 | $0.32 | $0.18 | $0.22 | $2.52 | $3.09 | $2.95 | $3.63 |
| 2012-13 | $5.05 | $6.03 | $5.53 | $6.61 | $0.25 | $0.30 | $0.24 | $0.28 | $2.85 | $3.40 | $3.34 | $3.99 |
| 2013-14 | $6.83 | $7.96 | $7.46 | $8.70 | $0.27 | $0.31 | $0.21 | $0.24 | $3.13 | $3.65 | $3.61 | $4.21 |
| 2014-15 | $6.09 | $6.94 | $6.62 | $7.55 | $0.30 | $0.34 | $0.19 | $0.22 | $3.20 | $3.64 | $3.69 | $4.20 |
| 2015-16 | $5.46 | $6.15 | $5.98 | $6.73 | $0.30 | $0.33 | $0.18 | $0.20 | $3.59 | $4.04 | $4.06 | $4.57 |
| 2016-17 | $5.13 | $5.67 | $5.92 | $6.54 | $0.34 | $0.38 | $0.20 | $0.22 | $2.87 | $3.17 | $3.41 | $3.77 |
| 2017-18 | $5.87 | $6.37 | $6.55 | $7.10 | $0.34 | $0.37 | $0.20 | $0.22 | $3.21 | $3.48 | $3.75 | $4.07 |
| 2018-19 | $6.28 | $6.72 | $6.81 | $7.29 | $0.32 | $0.34 | $0.23 | $0.24 | $4.40 | $4.71 | $4.95 | $5.30 |
| 2019-20 | $7.31 | $7.73 | $8.01 | $8.47 | $0.32 | $0.34 | $0.23 | $0.24 | $4.08 | $4.32 | $4.61 | $4.88 |
| 2020-21 | $7.02 | $7.31 | $7.93 | $8.26 | $0.32 | $0.34 | $0.23 | $0.24 | $3.34 | $3.48 | $3.86 | $4.02 |
| 2021-22 | $7.54 | $7.54 | $8.72 | $8.72 | $0.39 | $0.39 | $0.24 | $0.24 | $3.59 | $3.59 | $4.20 | $4.20 |
| Average |  | $6.94 |  | $7.84 |  | $0.33 |  | $0.23 |  | $3.96 |  | $4.51 |

Notes: 'Real' dollar values are the nominal values converted to 2021-22-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 B7

#### Historical data – Northern Victoria

#### Main financial indicators (continued)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Year | Overhead costs Cash overhead costs Nominal ($/kg MS) | Overhead costs Cash overhead costs Real ($/kg MS) | Overhead costs Non-cash overhead costs  Nominal ($/kg MS) | Overhead costs Non-cash overhead costs  Real ($/kg MS) | Overhead costs Total overhead costs Nominal ($/kg MS) | Overhead costs Total overhead costs Real ($/kg MS) |
| 2006-07 | $0.82 | $1.19 | $1.10 | $1.60 | $1.92 | $2.79 |
| 2007-08 | $0.78 | $1.08 | $0.90 | $1.24 | $1.57 | $2.18 |
| 2008-09 | $0.74 | $0.99 | $0.82 | $1.09 | $1.56 | $2.08 |
| 2009-10 | $0.82 | $1.06 | $1.01 | $1.30 | $1.83 | $2.36 |
| 2010-11 | $1.01 | $1.27 | $1.05 | $1.31 | $2.06 | $2.58 |
| 2011-12 | $0.90 | $1.11 | $0.85 | $1.04 | $1.75 | $2.15 |
| 2012-13 | $0.94 | $1.13 | $0.87 | $1.04 | $1.81 | $2.16 |
| 2013-14 | $0.99 | $1.15 | $0.85 | $0.99 | $1.83 | $2.14 |
| 2014-15 | $1.03 | $1.18 | $0.81 | $0.93 | $1.84 | $2.10 |
| 2015-16 | $1.02 | $1.14 | $0.87 | $0.98 | $1.89 | $2.12 |
| 2016-17 | $1.13 | $1.25 | $1.01 | $1.12 | $2.14 | $2.36 |
| 2017-18 | $1.13 | $1.23 | $1.01 | $1.10 | $2.14 | $2.32 |
| 2018-19 | $1.23 | $1.31 | $1.08 | $1.16 | $2.31 | $2.47 |
| 2019-20 | $1.20 | $1.27 | $0.98 | $1.03 | $2.18 | $2.30 |
| 2020-21 | $1.31 | $1.36 | $0.99 | $1.03 | $2.30 | $2.40 |
| 2021-22 | $1.45 | $1.45 | $1.09 | $1.09 | $2.54 | $2.54 |
| Average |  | $1.20 |  | $1.13 |  | $2.32 |

### Table B7

#### Historical data – Northern Victoria

#### Main financial indicators (continued)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Profit Earnings before interest and tax Nominal ($/kg MS) | Profit Earnings before interest and tax Real ($/kg MS) | Profit Interest & lease charges Nominal ($/kg MS) | Profit Interest & lease charges Real ($/kg MS) | Profit Net farm income Nominal ($/kg MS) | Profit Net farm income Real ($/kg MS) | Profit Return on total assets  % | Profit Return on equity  % |
| 2006-07 | -$0.47 | -$0.68 | $0.57 | $0.82 | -$1.04 | -$1.50 | -1.6% | -6.9% |
| 2007-08 | $1.59 | $2.20 | $0.55 | $0.76 | $1.04 | $1.44 | 7.9% | 7.6% |
| 2008-09 | $0.59 | $0.78 | $0.54 | $0.72 | $0.05 | $0.06 | 2.7% | -0.7% |
| 2009-10 | $0.20 | $0.26 | $0.51 | $0.66 | -$0.31 | -$0.40 | 0.8% | -3.1% |
| 2010-11 | $1.52 | $1.90 | $0.65 | $0.81 | $0.87 | $1.09 | 7.0% | 7.6% |
| 2011-12 | $1.36 | $1.67 | $0.57 | $0.71 | $0.78 | $0.96 | 7.6% | 8.4% |
| 2012-13 | $0.39 | $0.46 | $0.58 | $0.69 | -$0.19 | -$0.23 | 2.2% | -2.9% |
| 2013-14 | $2.02 | $2.35 | $0.56 | $0.65 | $1.46 | $1.70 | 11.3% | 14.7% |
| 2014-15 | $1.10 | $1.25 | $0.50 | $0.57 | $0.59 | $0.67 | 6.1% | 4.9% |
| 2015-16 | $0.03 | $0.03 | $0.46 | $0.52 | -$0.43 | -$0.49 | -0.1% | -4.4% |
| 2016-17 | $0.37 | $0.41 | $0.59 | $0.65 | -$0.22 | -$0.24 | 1.0% | -2.0% |
| 2017-18 | $0.65 | $0.71 | $0.55 | $0.60 | $0.10 | $0.11 | 2.5% | 1.2% |
| 2018-19 | -$0.45 | -$0.48 | $0.56 | $0.60 | -$1.01 | -$1.08 | -1.7% | -7.4% |
| 2019-20 | $1.22 | $1.29 | $0.45 | $0.48 | $0.77 | $0.82 | 4.1% | 3.7% |
| 2020-21 | $1.76 | $1.84 | $0.44 | $0.46 | $1.32 | $1.38 | 6.0% | 7.5% |
| 2021-22 | $1.98 | $1.98 | $0.41 | $0.41 | $1.57 | $1.57 | 5.6% | 7.2% |
| Average |  | $1.00 |  | $0.63 |  | $0.37 | 3.8% | 2.2% |

### Table B8

#### Historical data – Northern Victoria

#### Average farm physical information

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Total usable area (ha) | Milking area (ha) | Total water use efficiency (t DM/100mm/ha) | Number of milking cows (cows) | Milking cows per usable area (cows/ha) | Milk sold (kg MS/ cow) | Milk sold (kg MS/ ha) |
| 2006-07 | 336 | 331 | 0.7 | 365 | 1.4 | 430 | 636 |
| 2007-08 | 294 | 258 | 0.8 | 321 | 1.1 | 511 | 559 |
| 2008-09 | 245 | 195 | 0.8 | 322 | 1.6 | 500 | 784 |
| 2009-10 | 216 | 195 | 0.7 | 282 | 1.6 | 515 | 806 |
| 2010-11 | 196 | 171 | 0.7 | 261 | 1.5 | 495 | 762 |
| 2011-12 | 193 | 128 | 0.7 | 304 | 1.9 | 516 | 957 |
| 2012-13 | 193 | 123 | 0.8 | 300 | 1.8 | 518 | 961 |
| 2013-14 | 210 | 130 | 0.8 | 332 | 1.9 | 522 | 995 |
| 2014-15 | 222 | 135 | 0.9 | 356 | 1.9 | 537 | 1020 |
| 2015-16 | 234 | 142 | 0.7 | 367 | 1.9 | 527 | 992 |
| 2016-17 | 274 | 152 | 0.7 | 370 | 1.7 | 499 | 827 |
| 2017-18 | 269 | 149 | 0.7 | 383 | 1.6 | 535 | 838 |
| 2018-19 | 271 | 149 | 0.9 | 399 | 1.6 | 524 | 829 |
| 2019-20 | 304 | 145 | 0.8 | 418 | 1.5 | 566 | 867 |
| 2020-21 | 307 | 162 | 0.9 | 427 | 1.7 | 572 | 923 |
| 2021-22 | 335 | 186 | 0.8 | 428 | 1.4 | 578 | 830 |
| Average | 256 | 172 | 0.8 | 352 | 1.6 | 522 | 849 |

### Table B8

#### Historical data – Northern Victoria

#### Average farm physical information (continued)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | Estimated grazed pasture\* (t DM/ ha) | Estimated conserved feed\* (t DM/ ha) | Homegrown feed as % of ME consumed (% of ME) | Concentrate price Nominal ($/t DM) | Concentrate price  Real  ($/ t DM) |
| 2006-07 | 4.3 | 0.5 | 48% | $316 | $459 |
| 2007-08 | 3.1 | 0.7 | 47% | $398 | $551 |
| 2008-09 | 4.3 | 0.7 | 46% | $347 | $461 |
| 2009-10 | 5.0 | 0.6 | 51% | $256 | $330 |
| 2010-11 | 5.1 | 2.6 | 58% | $286 | $358 |
| 2011-12 | 7.1 | 1.1 | 53% | $267 | $328 |
| 2012-13 | 8.1 | 1.4 | 55% | $311 | $372 |
| 2013-14 | 7.6 | 1.6 | 57% | $366 | $427 |
| 2014-15 | 7.6 | 1.2 | 54% | $387 | $441 |
| 2015-16 | 7.1 | 1.1 | 50% | $389 | $437 |
| 2016-17 | 6.8 | 1.1 | 58% | $311 | $344 |
| 2017-18 | 7.0 | 1.4 | 59% | $352 | $381 |
| 2018-19 | 7.1 | 1.6 | 60% | $513 | $549 |
| 2019-20 | 5.7 | 0.9 | 50% | $494 | $522 |
| 2020-21 | 6.3 | 1.9 | 55% | $433 | $451 |
| 2021-22 | 5.6 | 1.9 | 56% | $479 | $479 |
| Average | 6.1 | 1.3 | 53% |  | $431 |

\* From 2006-07 to 2010-11 estimated grazed pasture and conserved feed was calculated per usable hectare

From 2011-12 estimated grazed pasture and conserved feed was calculated per hectare of milking area

# Appendix C: South West Victoria summary tables

### Table C1

#### Main financial indicators - South West Victoria

| Farm number | Milk income (net)  ($/ kg MS) | All other farm income  ($/ kg MS) | Gross farm income  ($/ kg MS) | Total variable costs  ($/ kg MS) | Total overhead costs  ($/ kg MS) | Cost structure (variable costs / total costs) (%) | Earnings Before Interest & Tax  ($/ kg MS) | Return on total assets  (%) | Interest & lease charges  ($/ kg MS) | Debt servicing ratio  (% of income) | Net farm income  ($/ kg MS) | Return on equity  (%) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SW0001 | $7.79 | $1.54 | $9.32 | $4.61 | $2.46 | 65% | $2.25 | 5.0% | $0.34 | 3.7% | $1.91 | 6.4% |
| SW0007 | $7.11 | $0.25 | $7.36 | $3.24 | $3.25 | 50% | $0.87 | 2.4% | $0.00 | 0.0% | $0.87 | 2.4% |
| SW0008 | $7.32 | $1.36 | $8.68 | $3.16 | $3.05 | 51% | $2.46 | 5.5% | $0.40 | 4.6% | $2.07 | 6.2% |
| SW0022 | $6.88 | $1.58 | $8.46 | $4.68 | $3.24 | 59% | $0.54 | 1.3% | $0.17 | 2.0% | $0.37 | 1.1% |
| ***SW0025*** | ***$7.59*** | ***$1.26*** | ***$8.85*** | ***$3.80*** | ***$2.32*** | ***62%*** | ***$2.73*** | ***9.2%*** | ***$0.09*** | ***1.0%*** | ***$2.64*** | ***10.6%*** |
| ***SW0030*** | ***$8.48*** | ***$2.05*** | ***$10.53*** | ***$3.77*** | ***$2.41*** | ***61%*** | ***$4.36*** | ***5.7%*** | ***$0.86*** | ***8.2%*** | ***$3.50*** | ***7.4%*** |
| ***SW0035*** | ***$7.40*** | ***$1.18*** | ***$8.57*** | ***$4.14*** | ***$2.02*** | ***67%*** | ***$2.42*** | ***6.3%*** | ***$1.03*** | ***12.0%*** | ***$1.39*** | ***15.0%*** |
| SW0036 | $7.30 | $1.00 | $8.30 | $4.31 | $3.01 | 59% | $0.98 | 1.7% | $0.19 | 2.3% | $0.78 | 1.6% |
| SW0037 | $7.63 | $1.28 | $8.91 | $5.30 | $3.41 | 61% | $0.21 | 0.5% | $0.36 | 4.1% | -$0.16 | -0.7% |
| SW0040 | $7.23 | $1.83 | $9.06 | $4.06 | $2.88 | 59% | $2.12 | 4.4% | $0.74 | 8.2% | $1.38 | 6.7% |
| SW0042 | $7.11 | $1.84 | $8.95 | $5.36 | $3.09 | 63% | $0.51 | 0.9% | $0.40 | 4.5% | $0.10 | 0.3% |
| SW0043 | $7.00 | $0.84 | $7.84 | $4.83 | $3.96 | 55% | -$0.94 | -1.9% | $0.27 | 3.5% | -$1.21 | -3.5% |
| ***SW0045*** | ***$7.68*** | ***$2.05*** | ***$9.73*** | ***$2.93*** | ***$2.98*** | ***50%*** | ***$3.83*** | ***9.2%*** | ***$0.03*** | ***0.3%*** | ***$3.80*** | ***9.5%*** |
| SW0046 | $7.37 | $0.88 | $8.25 | $4.46 | $3.04 | 59% | $0.75 | 1.7% | $0.44 | 5.4% | $0.31 | 1.3% |
| SW0047 | $7.69 | $0.85 | $8.54 | $4.17 | $2.29 | 65% | $2.09 | 5.0% | $0.45 | 5.3% | $1.64 | 8.6% |
| SW0049 | $7.09 | $1.57 | $8.66 | $3.91 | $2.95 | 57% | $1.80 | 3.8% | $0.74 | 8.6% | $1.06 | 3.8% |
| SW0050 | $7.52 | $0.93 | $8.45 | $4.45 | $2.63 | 63% | $1.36 | 3.5% | $0.21 | 2.5% | $1.15 | 3.6% |
| ***SW0051*** | ***$7.52*** | ***$1.52*** | ***$9.04*** | ***$4.45*** | ***$2.11*** | ***68%*** | ***$2.48*** | ***6.0%*** | ***$0.40*** | ***4.4%*** | ***$2.08*** | ***16.2%*** |
| ***SW0053*** | ***$7.48*** | ***$0.83*** | ***$8.31*** | ***$2.56*** | ***$3.05*** | ***46%*** | ***$2.71*** | ***5.7%*** | ***$0.30*** | ***3.6%*** | ***$2.41*** | ***11.2%*** |
| SW0054 | $7.54 | $1.69 | $9.23 | $4.39 | $3.04 | 59% | $1.79 | 3.9% | $0.65 | 7.0% | $1.15 | 4.7% |
| SW0055 | $7.20 | $1.59 | $8.79 | $5.00 | $3.00 | 63% | $0.79 | 1.4% | $0.95 | 10.8% | -$0.17 | -0.6% |
| SW0056 | $7.47 | $2.34 | $9.81 | $3.66 | $4.58 | 44% | $1.56 | 2.3% | $0.01 | 0.1% | $1.55 | 2.3% |
| SW0057 | $7.12 | $0.86 | $7.97 | $3.17 | $3.26 | 49% | $1.55 | 4.8% | $0.52 | 6.5% | $1.03 | 10.8% |
| SW0058 | $7.02 | $0.73 | $7.76 | $3.38 | $2.45 | 58% | $1.93 | 4.2% | $0.14 | 1.8% | $1.79 | 4.3% |
| SW0059 | $7.14 | $1.87 | $9.01 | $5.19 | $2.16 | 71% | $1.66 | 4.0% | $0.78 | 8.6% | $0.88 | 7.4% |
| Average | $7.39 | $1.35 | $8.74 | $4.12 | $2.90 | 59% | $1.71 | 3.9% | $0.42 | 4.7% | $1.29 | 5.5% |
| Top 25%\* | $7.69 | $1.48 | $9.17 | $3.61 | $2.48 | 59% | $3.09 | 7.0% | $0.45 | 4.9% | $2.64 | 11.7% |

\* Top 25% are bold and italicised

### Table C2

#### Physical information – South West Victoria

| Farm number | Total usable area (ha) | Milking area (ha) | Total water use efficiency (t DM/100mm) | Number of milking cows (cows) | Milking cows per usable area (cows/ha) | Milk sold  (kg MS/ cow) | Milk sold  (kg MS/ ha) | Fat  (%) | Protein  (%) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SW0001 | 523 | 250 | 0.8 | 530 | 1.0 | 553 | 561 | 4.0% | 3.4% |
| SW0007 | 116 | 116 | 0.4 | 105 | 0.9 | 438 | 396 | 5.2% | 4.0% |
| SW0008 | 332 | 332 | 1.2 | 580 | 1.7 | 558 | 975 | 4.3% | 3.4% |
| SW0022 | 759 | 410 | 0.9 | 675 | 0.9 | 605 | 538 | 4.1% | 3.6% |
| ***SW0025*** | ***229*** | ***164*** | ***1.3*** | ***420*** | ***1.8*** | ***651*** | ***1193*** | ***3.9%*** | ***3.4%*** |
| ***SW0030*** | ***279*** | ***180*** | ***0.6*** | ***230*** | ***0.8*** | ***434*** | ***358*** | ***4.7%*** | ***3.6%*** |
| ***SW0035*** | ***149*** | ***135*** | ***0.8*** | ***215*** | ***1.4*** | ***531*** | ***769*** | ***3.9%*** | ***3.3%*** |
| SW0036 | 333 | 220 | 0.5 | 324 | 1.0 | 457 | 445 | 4.4% | 3.5% |
| SW0037 | 431 | 252 | 0.6 | 500 | 1.2 | 600 | 696 | 3.6% | 3.3% |
| SW0040 | 409 | 307 | 0.7 | 380 | 0.9 | 523 | 486 | 4.1% | 3.4% |
| SW0042 | 209 | 157 | 0.4 | 220 | 1.1 | 454 | 478 | 4.3% | 3.5% |
| SW0043 | 129 | 86 | 0.5 | 140 | 1.1 | 489 | 531 | 4.6% | 3.6% |
| ***SW0045*** | ***635*** | ***505*** | ***1.2*** | ***720*** | ***1.1*** | ***574*** | ***650*** | ***3.8%*** | ***3.5%*** |
| SW0046 | 419 | 290 | 0.8 | 545 | 1.3 | 460 | 598 | 4.4% | 3.6% |
| SW0047 | 596 | 305 | 0.4 | 660 | 1.1 | 630 | 698 | 4.7% | 3.6% |
| SW0049 | 567 | 305 | 0.5 | 525 | 0.9 | 554 | 513 | 4.5% | 3.5% |
| SW0050 | 341 | 341 | 0.6 | 430 | 1.3 | 539 | 680 | 4.3% | 3.4% |
| ***SW0051*** | ***165*** | ***120*** | ***0.6*** | ***225*** | ***1.4*** | ***499*** | ***680*** | ***3.9%*** | ***3.2%*** |
| ***SW0053*** | ***302*** | ***240*** | ***0.7*** | ***350*** | ***1.2*** | ***504*** | ***584*** | ***4.2%*** | ***3.4%*** |
| SW0054 | 206 | 115 | 0.6 | 280 | 1.4 | 557 | 757 | 4.5% | 3.6% |
| SW0055 | 728 | 728 | 0.8 | 830 | 1.1 | 527 | 601 | 4.3% | 3.4% |
| SW0056 | 118 | 80 | 0.9 | 107 | 0.9 | 469 | 425 | 4.0% | 3.3% |
| SW0057 | 106 | 106 | 0.9 | 190 | 1.8 | 521 | 934 | 4.7% | 3.7% |
| SW0058 | 262 | 159 | 0.7 | 330 | 1.3 | 503 | 634 | 4.9% | 3.7% |
| SW0059 | 170 | 170 | 0.9 | 230 | 1.4 | 537 | 727 | 4.7% | 3.7% |
| Average | 341 | 243 | 0.7 | 390 | 1.2 | 527 | 636 | 4.3% | 3.5% |
| Top 25%\* | 293 | 224 | 0.9 | 360 | 1.3 | 532 | 706 | 4.1% | 3.4% |

### Table C2

#### Physical information – South West Victoria (continued)

| Farm number | Estimated grazed pasture\*\*  (t DM/ ha) | Estimated conserved feed\*\*  (t DM/ ha) | Homegrown feed as % of ME consumed  (% of ME) | Nitrogen application\*\* (kg/ ha) | Phosphorous application\*\* (kg/ ha) | Potassium application\*\* (kg/ ha) | Sulphur application\*\* (kg/ ha) | Labour efficiency (cows/ FTE) | Labour efficiency  (kg MS/ FTE) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SW0001 | 3.1 | 3.4 | 65% | 119.2 | 0.0 | 0.0 | 0.0 | 129 | 71,259 |
| SW0007 | 2.5 | 0.0 | 54% | 0.0 | 0.0 | 0.0 | 0.0 | 50 | 21,865 |
| SW0008 | 7.5 | 3.3 | 72% | 263.6 | 0.0 | 131.2 | 35.6 | 118 | 65,828 |
| SW0022 | 2.3 | 3.3 | 48% | 210.2 | 9.5 | 10.2 | 6.1 | 121 | 73,296 |
| ***SW0025*** | ***7.3*** | ***2.2*** | ***60%*** | ***336.6*** | ***6.4*** | ***0.0*** | ***8.0*** | ***72*** | ***47,140*** |
| ***SW0030*** | ***6.0*** | ***0.0*** | ***76%*** | ***3.8*** | ***1.2*** | ***6.3*** | ***0.0*** | ***140*** | ***60,835*** |
| ***SW0035*** | ***5.6*** | ***1.3*** | ***66%*** | ***120.4*** | ***21.6*** | ***61.2*** | ***35.0*** | ***142*** | ***75,318*** |
| SW0036 | 2.7 | 2.0 | 74% | 149.8 | 10.4 | 29.5 | 11.5 | 96 | 43,714 |
| SW0037 | 3.1 | 1.9 | 48% | 181.2 | 15.9 | 38.4 | 35.7 | 80 | 47,974 |
| SW0040 | 2.1 | 3.6 | 72% | 96.2 | 7.6 | 35.4 | 14.3 | 94 | 48,923 |
| SW0042 | 2.9 | 0.0 | 54% | 60.6 | 13.4 | 25.1 | 28.0 | 82 | 37,209 |
| SW0043 | 1.6 | 2.2 | 64% | 86.6 | 14.7 | 21.0 | 45.6 | 63 | 30,896 |
| ***SW0045*** | ***3.9*** | ***2.3*** | ***60%*** | ***94.2*** | ***23.3*** | ***46.2*** | ***11.0*** | ***124*** | ***71,195*** |
| SW0046 | 4.5 | 1.5 | 62% | 198.3 | 9.0 | 25.2 | 11.1 | 120 | 54,991 |
| SW0047 | 2.2 | 2.2 | 36% | 121.6 | 5.2 | 17.2 | 6.8 | 97 | 61,372 |
| SW0049 | 2.1 | 4.5 | 60% | 175.5 | 4.9 | 31.2 | 6.3 | 95 | 52,888 |
| SW0050 | 4.0 | 1.1 | 58% | 127.4 | 20.0 | 8.6 | 13.1 | 88 | 47,424 |
| ***SW0051*** | ***4.0*** | ***1.3*** | ***59%*** | ***228.6*** | ***0.0*** | ***0.0*** | ***0.0*** | ***145*** | ***72,091*** |
| ***SW0053*** | ***4.5*** | ***1.8*** | ***73%*** | ***146.1*** | ***3.3*** | ***0.0*** | ***6.2*** | ***97*** | ***49,051*** |
| SW0054 | 7.2 | 0.6 | 57% | 272.6 | 12.0 | 84.2 | 46.9 | 90 | 49,912 |
| SW0055 | 3.7 | 1.9 | 60% | 182.1 | 0.6 | 1.1 | 20.2 | 95 | 50,060 |
| SW0056 | 3.5 | 3.4 | 74% | 102.1 | 11.3 | 0.0 | 0.9 | 66 | 31,129 |
| SW0057 | 6.3 | 0.9 | 70% | 174.8 | 15.2 | 66.4 | 28.6 | 69 | 35,773 |
| SW0058 | 4.3 | 2.5 | 70% | 216.2 | 47.3 | 90.0 | 88.0 | 146 | 73,562 |
| SW0059 | 3.3 | 3.3 | 67% | 203.4 | 9.3 | 30.1 | 28.7 | 145 | 77,648 |
| Average | 4.0 | 2.0 | 62% | 154.8 | 10.5 | 30.3 | 19.5 | 103 | 54,054 |
| Top 25%\* | 5.2 | 1.5 | 66% | 155.0 | 9.3 | 18.9 | 10.0 | 120 | 62,605 |

\*\*on milking area

### Table C3

#### Purchased feed – South West Victoria

| Farm number | Purchased feed per milker\*\*  (t DM/ cow) | Concentrate price  ($/ t DM) | Silage price  ($/ t DM) | Hay price  ($/ t DM) | Other feed price ($/ t DM) | Average purchased feed price  ($/ t DM) | Purchased feed as % of ME consumed (% of ME) |
| --- | --- | --- | --- | --- | --- | --- | --- |
| SW0001 | 2.4 | $513 | $0 | $0 | $0 | $513 | 35% |
| SW0007 | 2.4 | $537 | $0 | $163 | $0 | $343 | 46% |
| SW0008 | 1.8 | $432 | $0 | $171 | $0 | $411 | 28% |
| SW0022 | 4.0 | $483 | $0 | $314 | $0 | $461 | 52% |
| ***SW0025*** | ***3.0*** | ***$497*** | ***$204*** | ***$168*** | ***$0*** | ***$427*** | ***40%*** |
| ***SW0030*** | ***2.1*** | ***$420*** | ***$0*** | ***$298*** | ***$0*** | ***$366*** | ***24%*** |
| ***SW0035*** | ***2.4*** | ***$465*** | ***$392*** | ***$0*** | ***$0*** | ***$457*** | ***34%*** |
| SW0036 | 1.5 | $530 | $392 | $135 | $0 | $518 | 26% |
| SW0037 | 3.9 | $470 | $0 | $0 | $0 | $470 | 52% |
| SW0040 | 1.9 | $491 | $0 | $0 | $0 | $491 | 28% |
| SW0042 | 3.2 | $562 | $387 | $191 | $0 | $466 | 46% |
| SW0043 | 2.3 | $644 | $0 | $315 | $0 | $578 | 36% |
| ***SW0045*** | ***2.8*** | ***$441*** | ***$0*** | ***$142*** | ***$0*** | ***$424*** | ***40%*** |
| SW0046 | 2.4 | $406 | $0 | $309 | $122 | $385 | 38% |
| SW0047 | 5.3 | $429 | $0 | $353 | $124 | $293 | 64% |
| SW0049 | 2.7 | $547 | $200 | $301 | $0 | $498 | 40% |
| SW0050 | 3.0 | $463 | $0 | $0 | $124 | $403 | 42% |
| ***SW0051*** | ***2.4*** | ***$469*** | ***$0*** | ***$0*** | ***$0*** | ***$469*** | ***41%*** |
| ***SW0053*** | ***1.6*** | ***$429*** | ***$0*** | ***$306*** | ***$0*** | ***$421*** | ***27%*** |
| SW0054 | 2.9 | $484 | $153 | $294 | $0 | $426 | 43% |
| SW0055 | 2.8 | $491 | $0 | $340 | $0 | $476 | 40% |
| SW0056 | 1.7 | $488 | $0 | $0 | $0 | $488 | 26% |
| SW0057 | 1.6 | $511 | $0 | $188 | $0 | $446 | 30% |
| SW0058 | 1.6 | $508 | $0 | $0 | $0 | $508 | 30% |
| SW0059 | 2.5 | $514 | $0 | $314 | $0 | $479 | 33% |
| Average | 2.6 | $489 | $288 | $253 | $123 | $449 | 38% |
| Top 25%\* | 2.4 | $453 |  |  |  | $427 | 34% |

\*\* All purchased feed including concentrates, hay, silage, and other feed fed on the usable area to all classes of livestock divided by the number of cows

Calculation of average price of silage, hay and other feed excludes zero values

### Table C4

#### Variable costs – South West Victoria

| Farm number | AI and herd test ($/ kg MS) | Animal health ($/ kg MS) | Calf rearing  ($/ kg MS) | Shed power  ($/ kg MS) | Dairy supplies ($/ kg MS) | Total herd and shed costs  ($/ kg MS) | Fertiliser  ($/ kg MS) | Irrigation \*\*  ($/ kg MS) | Hay and silage making  ($/ kg MS) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SW0001 | $0.12 | $0.11 | $0.13 | $0.13 | $0.10 | $0.59 | $0.67 | $0.04 | $0.42 |
| SW0007 | $0.10 | $0.19 | $0.02 | $0.14 | $0.10 | $0.55 | $0.00 | $0.00 | $0.00 |
| SW0008 | $0.10 | $0.10 | $0.10 | $0.17 | $0.04 | $0.51 | $0.86 | $0.13 | $0.06 |
| SW0022 | $0.12 | $0.16 | $0.36 | $0.09 | $0.10 | $0.83 | $0.65 | $0.00 | $0.39 |
| ***SW0025*** | ***$0.14*** | ***$0.15*** | ***$0.13*** | ***$0.09*** | ***$0.09*** | ***$0.60*** | ***$0.63*** | ***$0.18*** | ***$0.13*** |
| ***SW0030*** | ***$0.15*** | ***$0.00*** | ***$0.03*** | ***$0.27*** | ***$0.30*** | ***$0.75*** | ***$0.15*** | ***$0.00*** | ***$0.00*** |
| ***SW0035*** | ***$0.10*** | ***$0.09*** | ***$0.02*** | ***$0.13*** | ***$0.05*** | ***$0.39*** | ***$0.81*** | ***$0.00*** | ***$0.13*** |
| SW0036 | $0.08 | $0.17 | $0.04 | $0.16 | $0.10 | $0.56 | $0.98 | $0.06 | $0.34 |
| SW0037 | $0.21 | $0.18 | $0.03 | $0.16 | $0.19 | $0.78 | $0.87 | $0.05 | $0.23 |
| SW0040 | $0.21 | $0.13 | $0.11 | $0.23 | $0.15 | $0.82 | $0.62 | $0.00 | $0.14 |
| SW0042 | $0.15 | $0.11 | $0.00 | $0.06 | $0.20 | $0.52 | $0.79 | $0.00 | $0.05 |
| SW0043 | $0.16 | $0.13 | $0.06 | $0.21 | $0.10 | $0.66 | $0.75 | $0.00 | $0.10 |
| ***SW0045*** | ***$0.11*** | ***$0.08*** | ***$0.10*** | ***$0.10*** | ***$0.27*** | ***$0.66*** | ***$1.02*** | ***$0.00*** | ***$0.22*** |
| SW0046 | $0.22 | $0.15 | $0.19 | $0.19 | $0.11 | $0.85 | $0.86 | $0.03 | $0.35 |
| SW0047 | $0.18 | $0.12 | $0.01 | $0.10 | $0.11 | $0.52 | $0.58 | $0.00 | $0.30 |
| SW0049 | $0.16 | $0.03 | $0.15 | $0.09 | $0.06 | $0.49 | $0.15 | $0.01 | $0.27 |
| SW0050 | $0.12 | $0.19 | $0.04 | $0.18 | $0.11 | $0.64 | $0.70 | $0.00 | $0.24 |
| ***SW0051*** | ***$0.17*** | ***$0.13*** | ***$0.09*** | ***$0.21*** | ***$0.11*** | ***$0.70*** | ***$0.64*** | ***$0.00*** | ***$0.44*** |
| ***SW0053*** | ***$0.19*** | ***$0.16*** | ***$0.00*** | ***$0.08*** | ***$0.18*** | ***$0.61*** | ***$0.31*** | ***$0.05*** | ***$0.09*** |
| SW0054 | $0.11 | $0.23 | $0.06 | $0.14 | $0.11 | $0.65 | $1.15 | $0.00 | $0.12 |
| SW0055 | $0.25 | $0.30 | $0.08 | $0.18 | $0.16 | $0.97 | $0.93 | $0.13 | $0.21 |
| SW0056 | $0.28 | $0.04 | $0.10 | $0.38 | $0.08 | $0.88 | $0.72 | $0.00 | $0.08 |
| SW0057 | $0.08 | $0.15 | $0.04 | $0.05 | $0.16 | $0.48 | $0.57 | $0.00 | $0.07 |
| SW0058 | $0.07 | $0.12 | $0.13 | $0.12 | $0.14 | $0.59 | $0.82 | $0.00 | $0.04 |
| SW0059 | $0.15 | $0.15 | $0.04 | $0.07 | $0.09 | $0.50 | $0.94 | $0.00 | $0.32 |
| Average | $0.15 | $0.14 | $0.08 | $0.15 | $0.13 | $0.65 | $0.69 | $0.08 | $0.19 |
| Top 25%\* | $0.14 | $0.10 | $0.06 | $0.15 | $0.17 | $0.62 | $0.59 | $0.11 | $0.17 |

\*\* Calculation of average cost of irrigation excludes zero values

### Table C4

#### Variable costs – South West Victoria

| Farm number | Fuel and oil  ($/ kg MS) | Pasture improvement/ cropping  ($/ kg MS) | Other feed costs  ($/ kg MS) | Fodder purchases  ($/ kg MS) | Grain/ concentrates/ other  ($/ kg MS) | Agistment costs  ($/ kg MS) | Feed and water inventory change  ($/ kg MS) | Total feed costs  ($/ kg MS) | Total variable costs  ($/ kg MS) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SW0001 | $0.13 | $0.20 | $0.01 | $0.00 | $2.21 | $0.04 | $0.32 | $4.03 | $4.61 |
| SW0007 | $0.08 | $0.05 | $0.00 | $0.58 | $1.77 | $0.45 | -$0.23 | $2.69 | $3.24 |
| SW0008 | $0.31 | $0.13 | $0.00 | $0.05 | $1.36 | $0.00 | -$0.26 | $2.65 | $3.16 |
| SW0022 | $0.14 | $0.27 | $0.00 | $0.27 | $2.83 | $0.00 | -$0.71 | $3.84 | $4.68 |
| ***SW0025*** | ***$0.12*** | ***$0.07*** | ***$0.01*** | ***$0.13*** | ***$1.99*** | ***$0.00*** | ***-$0.05*** | ***$3.20*** | ***$3.80*** |
| ***SW0030*** | ***$0.26*** | ***$0.86*** | ***$0.00*** | ***$0.59*** | ***$1.04*** | ***$0.00*** | ***$0.11*** | ***$3.01*** | ***$3.77*** |
| ***SW0035*** | ***$0.08*** | ***$0.12*** | ***$0.00*** | ***$0.20*** | ***$1.90*** | ***$0.00*** | ***$0.50*** | ***$3.74*** | ***$4.14*** |
| SW0036 | $0.14 | $0.18 | $0.01 | $0.01 | $1.76 | $0.00 | $0.26 | $3.76 | $4.31 |
| SW0037 | $0.22 | $0.16 | $0.03 | $0.00 | $3.05 | $0.00 | -$0.09 | $4.52 | $5.30 |
| SW0040 | $0.17 | $0.14 | $0.24 | $0.00 | $1.82 | $0.00 | $0.11 | $3.24 | $4.06 |
| SW0042 | $0.15 | $0.23 | $0.00 | $0.59 | $2.85 | $0.00 | $0.17 | $4.84 | $5.36 |
| SW0043 | $0.17 | $0.15 | $0.00 | $0.29 | $2.37 | $0.00 | $0.34 | $4.17 | $4.83 |
| ***SW0045*** | ***$0.14*** | ***$0.01*** | ***$0.00*** | ***$0.04*** | ***$2.01*** | ***$0.00*** | ***-$1.18*** | ***$2.27*** | ***$2.93*** |
| SW0046 | $0.14 | $0.19 | $0.00 | $0.27 | $1.95 | $0.00 | -$0.18 | $3.61 | $4.46 |
| SW0047 | $0.12 | $0.18 | $0.00 | $0.22 | $2.30 | $0.00 | -$0.05 | $3.65 | $4.17 |
| SW0049 | $0.20 | $0.14 | $0.00 | $0.18 | $2.09 | $0.22 | $0.15 | $3.42 | $3.91 |
| SW0050 | $0.07 | $0.25 | $0.00 | $0.00 | $2.21 | $0.00 | $0.34 | $3.80 | $4.45 |
| ***SW0051*** | ***$0.10*** | ***$0.16*** | ***$0.00*** | ***$0.00*** | ***$2.25*** | ***$0.00*** | ***$0.16*** | ***$3.75*** | ***$4.45*** |
| ***SW0053*** | ***$0.11*** | ***$0.11*** | ***$0.00*** | ***$0.06*** | ***$1.37*** | ***$0.00*** | ***-$0.15*** | ***$1.94*** | ***$2.56*** |
| SW0054 | $0.14 | $0.24 | $0.00 | $0.21 | $1.99 | $0.05 | -$0.14 | $3.74 | $4.39 |
| SW0055 | $0.12 | $0.12 | $0.03 | $0.17 | $2.33 | $0.00 | -$0.01 | $4.03 | $5.00 |
| SW0056 | $0.19 | $0.22 | $0.00 | $0.00 | $1.82 | $0.00 | -$0.24 | $2.79 | $3.66 |
| SW0057 | $0.06 | $0.00 | $0.00 | $0.14 | $1.48 | $0.43 | -$0.06 | $2.68 | $3.17 |
| SW0058 | $0.11 | $0.06 | $0.00 | $0.00 | $1.60 | $0.00 | $0.15 | $2.79 | $3.38 |
| SW0059 | $0.17 | $0.24 | $0.19 | $0.27 | $2.02 | $0.00 | $0.52 | $4.69 | $5.19 |
| Average | $0.15 | $0.18 | $0.02 | $0.17 | $2.02 | $0.05 | -$0.01 | $3.47 | $4.12 |
| Top 25%\* | $0.13 | $0.22 | $0.00 | $0.17 | $1.76 | $0.00 | -$0.10 | $2.98 | $3.61 |

### Table C5

#### Overhead costs – South West Victoria

| Farm number | Rates  ($/ kg MS) | Farm Insurance ($/ kg MS) | Motor vehicle expenses ($/ kg MS) | Repairs and maintenance ($/ kg MS) | Other overheads ($/ kg MS) | Employed labour ($/ kg MS) | Total cash overheads ($/ kg MS) | Depreciation ($/ kg MS) | Imputed labour cost ($/ kg MS) | Total overheads ($/ kg MS) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| SW0001 | $0.05 | $0.12 | $0.05 | $0.51 | $0.09 | $0.69 | $1.52 | $0.52 | $0.42 | $2.46 |
| SW0007 | $0.08 | $0.12 | $0.08 | $0.30 | $0.20 | $2.11 | $2.89 | $0.18 | $0.18 | $3.25 |
| SW0008 | $0.03 | $0.08 | $0.01 | $1.02 | $0.07 | $0.66 | $1.88 | $0.65 | $0.52 | $3.05 |
| SW0022 | $0.12 | $0.07 | $0.02 | $0.97 | $0.29 | $0.80 | $2.28 | $0.28 | $0.68 | $3.24 |
| ***SW0025*** | ***$0.04*** | ***$0.07*** | ***$0.02*** | ***$0.35*** | ***$0.08*** | ***$0.95*** | ***$1.51*** | ***$0.34*** | ***$0.48*** | ***$2.32*** |
| ***SW0030*** | ***$0.13*** | ***$0.04*** | ***$0.02*** | ***$0.36*** | ***$0.26*** | ***$0.62*** | ***$1.43*** | ***$0.26*** | ***$0.72*** | ***$2.41*** |
| ***SW0035*** | ***$0.01*** | ***$0.05*** | ***$0.01*** | ***$0.44*** | ***$0.15*** | ***$0.06*** | ***$0.73*** | ***$0.29*** | ***$1.01*** | ***$2.02*** |
| SW0036 | $0.08 | $0.12 | $0.04 | $0.46 | $0.09 | $0.38 | $1.17 | $0.45 | $1.39 | $3.01 |
| SW0037 | $0.06 | $0.12 | $0.01 | $0.97 | $0.05 | $1.14 | $2.36 | $0.55 | $0.49 | $3.41 |
| SW0040 | $0.08 | $0.15 | $0.09 | $0.42 | $0.44 | $0.78 | $1.96 | $0.27 | $0.65 | $2.88 |
| SW0042 | $0.06 | $0.08 | $0.05 | $0.45 | $0.15 | $1.04 | $1.83 | $0.22 | $1.04 | $3.09 |
| SW0043 | $0.05 | $0.12 | $0.11 | $0.49 | $0.23 | $0.09 | $1.09 | $0.26 | $2.61 | $3.96 |
| ***SW0045*** | ***$0.05*** | ***$0.10*** | ***$0.01*** | ***$0.73*** | ***$0.49*** | ***$0.56*** | ***$1.94*** | ***$0.51*** | ***$0.53*** | ***$2.98*** |
| SW0046 | $0.04 | $0.08 | $0.03 | $1.08 | $0.09 | $0.74 | $2.06 | $0.44 | $0.54 | $3.04 |
| SW0047 | $0.05 | $0.07 | $0.01 | $0.43 | $0.17 | $1.00 | $1.72 | $0.26 | $0.31 | $2.29 |
| SW0049 | $0.05 | $0.13 | $0.03 | $0.41 | $0.41 | $0.95 | $1.98 | $0.28 | $0.69 | $2.95 |
| SW0050 | $0.06 | $0.09 | $0.04 | $0.56 | $0.12 | $1.08 | $1.94 | $0.20 | $0.49 | $2.63 |
| ***SW0051*** | ***$0.00*** | ***$0.16*** | ***$0.02*** | ***$0.41*** | ***$0.20*** | ***$0.12*** | ***$0.90*** | ***$0.23*** | ***$0.97*** | ***$2.11*** |
| ***SW0053*** | ***$0.05*** | ***$0.08*** | ***$0.02*** | ***$0.44*** | ***$0.22*** | ***$0.85*** | ***$1.65*** | ***$0.53*** | ***$0.86*** | ***$3.05*** |
| SW0054 | $0.08 | $0.13 | $0.03 | $0.63 | $0.08 | $0.81 | $1.77 | $0.49 | $0.78 | $3.04 |
| SW0055 | $0.06 | $0.12 | $0.01 | $0.88 | $0.08 | $1.39 | $2.53 | $0.27 | $0.19 | $3.00 |
| SW0056 | $0.08 | $0.15 | $0.07 | $0.89 | $0.12 | $0.01 | $1.32 | $0.66 | $2.60 | $4.58 |
| SW0057 | $0.00 | $0.08 | $0.01 | $0.52 | $0.16 | $0.04 | $0.81 | $0.26 | $2.19 | $3.26 |
| SW0058 | $0.07 | $0.11 | $0.06 | $0.51 | $0.15 | $0.52 | $1.42 | $0.63 | $0.39 | $2.45 |
| SW0059 | $0.00 | $0.15 | $0.03 | $0.42 | $0.15 | $0.34 | $1.09 | $0.39 | $0.69 | $2.16 |
| Average | $0.05 | $0.10 | $0.04 | $0.59 | $0.18 | $0.71 | $1.67 | $0.38 | $0.86 | $2.90 |
| Top 25%\* | $0.05 | $0.08 | $0.02 | $0.45 | $0.23 | $0.53 | $1.36 | $0.36 | $0.76 | $2.48 |

\*Calculation of average values of land, water asset and equity exclude zero values.

### Table C6

#### Capital structure – South West Victoria

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Farm assets\* Land value ($/ha) |  | Farm assets\* Land value ($/cow) | Farm assets\* Permanent water value ($/ha) | Farm assets\* Permanent water value ($/cow) | Other farm assets (per usable hectare) Plant and equipment ($/ha) | Other farm assets (per usable hectare) Livestock ($/ha) | Other farm assets (per usable hectare) Hay and grain ($/ha) | Other farm assets (per usable hectare) Other assets ($/ha) | Total assets ($/ha) |
| Average | $17,235 |  | $15,289 | $2,849 | $2,225 |  | $1,719 | $3,755 | $431 | $763 |
| Top 25%\* | $14,546 |  | $12,208 |  |  |  | $1,759 | $4,333 | $394 | $476 |

### Table C6

#### Capital structure – South West Victoria

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Liabilities per usable hectare ($/ha) | Liabilities per milking cow ($/cow) | Equity per usable hectare ($/ha) | Average equity (%) |
| Average | $5,257 | $4,603 | $17,365 | 77% |
| Top 25%\* | $4,697 | $4,124 | $16,809 | 76% |

## Historical data - South West Victoria

### Table C7

#### Main financial indicators – South West Victoria

| Year | Income  Milk income (net) Nominal ($/kg MS) | Income  Milk income (net) Real  ($/kg MS) | Income  Gross farm income Nominal ($/kg MS) | Income  Gross farm income Real  ($/kg MS) | Variable costs  Herd costs Nominal ($/kg MS) | Variable costs  Herd costs Real  ($/kg MS) | Variable costs  Shed costs Nominal ($/kg MS) | Variable costs  Shed costs Real  ($/kg MS) | Variable costs  Feed costs Nominal ($/kg MS) | Variable costs  Feed costs Real  ($/kg MS) | Total variable costs Nominal ($/kg MS) | Total variable costs  Real  ($/kg MS) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2006-07 | $4.31 | $6.25 | $5.05 | $7.33 | $0.19 | $0.27 | $0.13 | $0.19 | $2.61 | $3.79 | $2.97 | $4.31 |
| 2007-08 | $6.56 | $9.09 | $7.91 | $10.95 | $0.21 | $0.29 | $0.14 | $0.20 | $2.95 | $4.09 | $3.32 | $4.60 |
| 2008-09 | $5.40 | $7.18 | $6.13 | $8.15 | $0.22 | $0.29 | $0.15 | $0.21 | $2.55 | $3.39 | $2.93 | $3.89 |
| 2009-10 | $4.55 | $5.86 | $5.23 | $6.74 | $0.21 | $0.27 | $0.16 | $0.21 | $2.00 | $2.57 | $2.37 | $3.05 |
| 2010-11 | $5.62 | $7.04 | $6.34 | $7.94 | $0.21 | $0.26 | $0.18 | $0.22 | $2.10 | $2.62 | $2.48 | $3.11 |
| 2011-12 | $5.56 | $6.82 | $5.97 | $7.34 | $0.23 | $0.28 | $0.21 | $0.26 | $2.35 | $2.89 | $2.79 | $3.43 |
| 2012-13 | $4.90 | $5.86 | $5.24 | $6.26 | $0.24 | $0.29 | $0.21 | $0.26 | $2.60 | $3.11 | $3.06 | $3.66 |
| 2013-14 | $6.91 | $8.05 | $7.54 | $8.79 | $0.25 | $0.29 | $0.23 | $0.26 | $2.90 | $3.38 | $3.37 | $3.93 |
| 2014-15 | $6.16 | $7.02 | $6.70 | $7.63 | $0.25 | $0.29 | $0.20 | $0.23 | $2.88 | $3.29 | $3.34 | $3.81 |
| 2015-16 | $5.47 | $6.15 | $5.95 | $6.69 | $0.24 | $0.27 | $0.19 | $0.22 | $3.14 | $3.53 | $3.57 | $4.02 |
| 2016-17 | $5.25 | $5.80 | $5.98 | $6.61 | $0.25 | $0.28 | $0.20 | $0.22 | $2.14 | $2.36 | $2.59 | $2.86 |
| 2017-18 | $5.80 | $6.29 | $6.42 | $6.96 | $0.29 | $0.31 | $0.24 | $0.26 | $2.90 | $3.14 | $3.43 | $3.72 |
| 2018-19 | $6.15 | $6.58 | $6.99 | $7.48 | $0.32 | $0.34 | $0.23 | $0.24 | $3.20 | $3.42 | $3.74 | $4.00 |
| 2019-20 | $7.16 | $7.57 | $7.98 | $8.44 | $0.32 | $0.34 | $0.23 | $0.24 | $2.95 | $3.12 | $3.52 | $3.72 |
| 2020-21 | $6.68 | $6.96 | $7.79 | $8.12 | $0.32 | $0.34 | $0.23 | $0.24 | $2.48 | $2.59 | $3.06 | $3.18 |
| 2021-22 | $7.39 | $7.39 | $8.74 | $8.74 | $0.39 | $0.39 | $0.24 | $0.24 | $3.47 | $3.47 | $4.12 | $4.12 |
| Average |  | $6.87 |  | $7.76 |  | $0.30 |  | $0.23 |  | $3.17 |  | $3.71 |

Notes: 'Real' dollar values are the nominal values converted to 2021-22-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 C7

#### Historical data – South West Victoria

#### Main financial indicators (continued)

| Year | Overhead costs Cash overhead costs Nominal ($/kg MS) | Overhead costs Cash overhead costs Real ($/kg MS) | Overhead costs Non-cash overhead costs  Nominal ($/kg MS) | Overhead costs Non-cash overhead costs  Real ($/kg MS) | Overhead costs Total overhead costs Nominal ($/kg MS) | Overhead costs Total overhead costs Real ($/kg MS) |
| --- | --- | --- | --- | --- | --- | --- |
| 2006-07 | $0.79 | $1.15 | $0.99 | $1.43 | $1.78 | $2.58 |
| 2007-08 | $0.95 | $1.31 | $0.84 | $1.17 | $1.69 | $2.35 |
| 2008-09 | $0.92 | $1.22 | $0.89 | $1.18 | $1.81 | $2.40 |
| 2009-10 | $0.89 | $1.15 | $1.03 | $1.33 | $1.92 | $2.48 |
| 2010-11 | $1.06 | $1.33 | $1.08 | $1.36 | $2.14 | $2.68 |
| 2011-12 | $1.11 | $1.36 | $1.29 | $1.59 | $2.40 | $2.95 |
| 2012-13 | $0.95 | $1.13 | $1.20 | $1.44 | $2.15 | $2.57 |
| 2013-14 | $1.14 | $1.33 | $1.00 | $1.17 | $2.14 | $2.50 |
| 2014-15 | $1.15 | $1.31 | $0.92 | $1.05 | $2.08 | $2.36 |
| 2015-16 | $1.10 | $1.23 | $1.10 | $1.23 | $2.19 | $2.46 |
| 2016-17 | $1.11 | $1.23 | $1.12 | $1.23 | $2.23 | $2.46 |
| 2017-18 | $1.30 | $1.40 | $1.22 | $1.32 | $2.51 | $2.72 |
| 2018-19 | $1.28 | $1.37 | $1.27 | $1.36 | $2.55 | $2.73 |
| 2019-20 | $1.38 | $1.45 | $1.26 | $1.33 | $2.63 | $2.78 |
| 2020-21 | $1.45 | $1.51 | $1.25 | $1.30 | $2.70 | $2.81 |
| 2021-22 | $1.67 | $1.67 | $1.23 | $1.23 | $2.90 | $2.90 |
| Average |  | $1.32 |  | $1.30 |  | $2.61 |

### Table C7

#### Historical data – South West Victoria

#### Main financial indicators (continued)

| Year | Profit Earnings before interest and tax Nominal ($/kg MS) | Profit Earnings before interest and tax Real ($/kg MS) | Profit Interest & lease charges Nominal ($/kg MS) | Profit Interest & lease charges Real ($/kg MS) | Profit Net farm income Nominal ($/kg MS) | Profit Net farm income Real ($/kg MS) | Profit Return on total assets  % | Profit Return on equity  % |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2006-07 | $0.30 | $0.44 | $0.59 | $0.86 | -$0.29 | -$0.43 | 1.0% | -3.3% |
| 2007-08 | $2.89 | $4.00 | $0.72 | $1.00 | $2.17 | $3.00 | 11.2% | 14.8% |
| 2008-09 | $1.32 | $1.76 | $0.69 | $0.92 | $0.63 | $0.84 | 4.5% | 3.7% |
| 2009-10 | $0.91 | $1.17 | $0.80 | $1.04 | $0.10 | $0.13 | 3.0% | 1.3% |
| 2010-11 | $1.71 | $2.14 | $0.95 | $1.18 | $0.77 | $0.96 | 5.5% | 5.8% |
| 2011-12 | $0.78 | $0.96 | $0.90 | $1.10 | -$0.12 | -$0.14 | 3.3% | -0.2% |
| 2012-13 | $0.03 | $0.03 | $0.78 | $0.93 | -$0.75 | -$0.90 | 0.2% | -12.7% |
| 2013-14 | $2.03 | $2.36 | $0.69 | $0.81 | $1.33 | $1.55 | 7.9% | 9.9% |
| 2014-15 | $1.28 | $1.46 | $0.62 | $0.71 | $0.66 | $0.75 | 5.2% | 6.2% |
| 2015-16 | $0.18 | $0.21 | $0.68 | $0.76 | -$0.49 | -$0.55 | 0.6% | -2.8% |
| 2016-17 | $1.16 | $1.28 | $0.63 | $0.70 | $0.53 | $0.58 | 4.2% | 4.3% |
| 2017-18 | $0.48 | $0.52 | $0.60 | $0.65 | -$0.12 | -$0.13 | 1.9% | -1.1% |
| 2018-19 | $0.71 | $0.76 | $0.67 | $0.72 | $0.03 | $0.04 | 2.3% | -0.8% |
| 2019-20 | $1.83 | $1.93 | $0.54 | $0.57 | $1.29 | $1.36 | 5.8% | 9.6% |
| 2020-21 | $2.04 | $2.13 | $0.43 | $0.45 | $1.61 | $1.68 | 5.5% | 9.1% |
| 2021-22 | $1.71 | $1.71 | $0.42 | $0.42 | $1.29 | $1.29 | 3.9% | 5.5% |
| Average |  | $1.43 |  | $0.80 |  | $0.63 | 4.1% | 3.1% |

### Table C8

#### Historical data – South West Victoria

#### Average farm physical information

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Total usable area (ha) | Milking area (ha) | Total water use efficiency  (t DM/100mm/ha) | Number of milking cows (cows) | Milking cows per usable area (cows/ha) | Milk sold  (kg MS/ cow) | Milk sold  (kg MS/ ha) |
| 2006-07 | 286 | 285 | 0.8 | 386 | 1.4 | 500 | 688 |
| 2007-08 | 320 | 317 | 0.8 | 387 | 1.2 | 489 | 591 |
| 2008-09 | 330 | 328 | 0.8 | 384 | 1.3 | 510 | 649 |
| 2009-10 | 302 | 298 | 0.8 | 366 | 1.3 | 503 | 665 |
| 2010-11 | 322 | 319 | 0.7 | 369 | 1.2 | 491 | 585 |
| 2011-12 | 327 | 225 | 0.7 | 387 | 1.2 | 507 | 605 |
| 2012-13 | 308 | 205 | 0.8 | 369 | 1.2 | 506 | 601 |
| 2013-14 | 330 | 214 | 0.8 | 390 | 1.2 | 503 | 600 |
| 2014-15 | 333 | 223 | 0.9 | 389 | 1.2 | 525 | 627 |
| 2015-16 | 320 | 222 | 0.7 | 378 | 1.2 | 523 | 625 |
| 2016-17 | 326 | 224 | 0.7 | 368 | 1.1 | 525 | 595 |
| 2017-18 | 333 | 225 | 0.6 | 378 | 1.1 | 502 | 569 |
| 2018-19 | 325 | 215 | 0.8 | 364 | 1.1 | 492 | 553 |
| 2019-20 | 333 | 215 | 0.8 | 369 | 1.1 | 516 | 577 |
| 2020-21 | 335 | 235 | 0.7 | 373 | 1.1 | 526 | 602 |
| 2021-22 | 341 | 243 | 0.7 | 390 | 1.2 | 527 | 636 |
| Average | 323 | 250 | 0.8 | 378 | 1.2 | 509 | 610 |

### Table C8

#### Historical data – South West Victoria

#### Average farm physical information (continued)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | Estimated grazed pasture\* (t DM/ ha) | Estimated conserved feed\*  (t DM/ ha) | Homegrown feed as % of ME consumed (% of ME) | Concentrate price Nominal ($/t DM) | Concentrate price Real  ($/ t DM) |
| 2006-07 | 4.8 | 1.1 | 61% | $332 | $482 |
| 2007-08 | 5.1 | 1.3 | 71% | $425 | $589 |
| 2008-09 | 5.3 | 1.2 | 68% | $390 | $518 |
| 2009-10 | 6.0 | 1.0 | 71% | $287 | $370 |
| 2010-11 | 5.1 | 1.6 | 67% | $302 | $378 |
| 2011-12 | 4.2 | 1.0 | 55% | $309 | $379 |
| 2012-13 | 4.0 | 1.5 | 58% | $342 | $409 |
| 2013-14 | 4.6 | 1.5 | 62% | $395 | $460 |
| 2014-15 | 4.5 | 1.2 | 59% | $408 | $465 |
| 2015-16 | 3.4 | 1.5 | 51% | $400 | $450 |
| 2016-17 | 4.8 | 2.2 | 67% | $345 | $381 |
| 2017-18 | 3.9 | 1.9 | 62% | $377 | $409 |
| 2018-19 | 4.3 | 2.2 | 68% | $512 | $548 |
| 2019-20 | 4.7 | 2.2 | 68% | $491 | $519 |
| 2020-21 | 4.8 | 2.3 | 68% | $422 | $440 |
| 2021-22 | 4.0 | 2.0 | 62% | $489 | $489 |
| Average | 4.6 | 1.6 | 64% |  | $455 |

\* From 2006-07 to 2010-11 estimated grazed pasture and conserved feed was calculated per usable hectare

From 2011-12 estimated grazed pasture and conserved feed was calculated per hectare of milking area

# Appendix D: Gippsland summary tables

### Table D1

#### Main financial indicators – Gippsland

| Farm number | Milk income (net)  ($/ kg MS) | All other farm income  ($/ kg MS) | Gross farm income  ($/ kg MS) | Total variable costs  ($/ kg MS) | Total overhead costs  ($/ kg MS) | Cost structure (variable costs / total costs) (%) | Earnings Before Interest & Tax  ($/ kg MS) | Return on total assets  (%) | Interest & lease charges  ($/ kg MS) | Debt servicing ratio  (% of income) | Net farm income  ($/ kg MS) | Return on equity  (%) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| GI0004 | $6.90 | $0.71 | $7.61 | $4.10 | $6.73 | 38% | -$3.23 | -2.7% | $1.54 | 20.2% | -$4.76 | -5.6% |
| GI0005 | $6.86 | -$0.50 | $6.36 | $2.98 | $4.50 | 40% | -$1.13 | -1.9% | $0.35 | 5.4% | -$1.47 | -2.8% |
| GI0012 | $7.16 | $1.14 | $8.31 | $3.18 | $3.16 | 50% | $1.96 | 3.0% | $0.40 | 4.8% | $1.57 | 3.9% |
| GI0021 | $6.94 | $0.79 | $7.73 | $3.80 | $2.53 | 60% | $1.40 | 3.5% | $0.88 | 11.4% | $0.51 | 4.5% |
| GI0025 | $7.05 | $1.03 | $8.09 | $4.04 | $1.87 | 68% | $2.18 | 5.4% | $0.30 | 3.8% | $1.88 | 7.0% |
| GI0028 | $7.08 | $1.66 | $8.74 | $5.08 | $2.55 | 67% | $1.11 | 2.8% | $0.54 | 6.1% | $0.57 | 3.2% |
| ***GI0029*** | ***$7.08*** | ***$1.01*** | ***$8.08*** | ***$2.81*** | ***$2.49*** | ***53%*** | ***$2.79*** | ***8.3%*** | ***$0.18*** | ***2.2%*** | ***$2.61*** | ***9.4%*** |
| GI0031 | $7.22 | $0.55 | $7.76 | $5.21 | $2.03 | 72% | $0.52 | 1.8% | $0.18 | 2.3% | $0.35 | 1.4% |
| GI0032 | $7.03 | $0.97 | $8.00 | $4.90 | $3.03 | 62% | $0.07 | 0.2% | $0.12 | 1.5% | -$0.05 | -0.1% |
| GI0037 | $7.38 | $1.01 | $8.39 | $4.64 | $2.08 | 69% | $1.68 | 4.2% | $0.34 | 4.0% | $1.34 | 5.0% |
| GI0039 | $7.18 | $0.73 | $7.91 | $4.10 | $2.49 | 62% | $1.32 | 3.0% | $0.76 | 9.7% | $0.55 | 3.6% |
| ***GI0046*** | ***$7.09*** | ***$0.97*** | ***$8.05*** | ***$3.61*** | ***$2.35*** | ***61%*** | ***$2.10*** | ***4.6%*** | ***$0.93*** | ***11.6%*** | ***$1.17*** | ***6.9%*** |
| ***GI0048*** | ***$7.35*** | ***$1.29*** | ***$8.64*** | ***$3.30*** | ***$1.72*** | ***66%*** | ***$3.62*** | ***9.0%*** | ***$0.24*** | ***2.8%*** | ***$3.38*** | ***13.4%*** |
| GI0049 | $7.39 | $0.93 | $8.33 | $3.68 | $2.16 | 63% | $2.49 | 9.5% | $0.37 | 4.5% | $2.12 | 14.4% |
| GI0051 | $7.38 | $0.85 | $8.23 | $5.42 | $2.09 | 72% | $0.72 | 1.6% | $1.09 | 13.2% | -$0.37 | -5.6% |
| GI0053 | $7.16 | $0.59 | $7.75 | $3.22 | $1.91 | 63% | $2.63 | 7.9% | $0.18 | 2.3% | $2.45 | 9.8% |
| ***GI0055*** | ***$7.51*** | ***$0.79*** | ***$8.30*** | ***$3.72*** | ***$1.87*** | ***67%*** | ***$2.71*** | ***9.5%*** | ***$0.58*** | ***6.9%*** | ***$2.13*** | ***19.8%*** |
| GI0056 | $6.91 | $0.18 | $7.08 | $2.49 | $2.00 | 55% | $2.60 | 6.7% | $0.13 | 1.9% | $2.47 | 8.0% |
| GI0057 | $7.24 | $0.42 | $7.66 | $4.30 | $1.75 | 71% | $1.61 | 5.1% | $0.88 | 11.5% | $0.73 | 13.4% |
| ***GI0058*** | ***$7.42*** | ***$1.44*** | ***$8.87*** | ***$3.30*** | ***$2.28*** | ***59%*** | ***$3.29*** | ***10.9%*** | ***$0.88*** | ***10.0%*** | ***$2.41*** | ***32.9%*** |
| ***GI0061*** | ***$7.43*** | ***$0.34*** | ***$7.76*** | ***$3.31*** | ***$2.07*** | ***61%*** | ***$2.38*** | ***8.1%*** | ***$0.72*** | ***9.3%*** | ***$1.67*** | ***10.5%*** |
| GI0063 | $6.98 | $0.80 | $7.77 | $4.83 | $2.79 | 63% | $0.15 | 0.3% | $0.24 | 3.1% | -$0.09 | -0.3% |
| GI0064 | $7.01 | $0.89 | $7.90 | $3.88 | $2.69 | 59% | $1.33 | 2.6% | $0.88 | 11.1% | $0.45 | 2.2% |
| GI0066 | $7.03 | $1.88 | $8.91 | $6.02 | $2.35 | 72% | $0.53 | 1.1% | $0.27 | 3.0% | $0.27 | 0.6% |
| GI0067 | $6.91 | $0.94 | $7.85 | $3.75 | $3.22 | 54% | $0.88 | 1.5% | $0.95 | 12.1% | -$0.06 | -0.6% |
| Average | $7.15 | $0.86 | $8.00 | $3.99 | $2.59 | 61% | $1.43 | 4.2% | $0.56 | 7.0% | $0.87 | 6.2% |
| Top 25%\* | $7.36 | $0.97 | $8.33 | $3.35 | $2.10 | 61% | $2.88 | 9.2% | $0.49 | 5.9% | $2.39 | 16.8% |

\* Top 25% are bold and italicised

### Table D2

#### Physical information – Gippsland

| Farm number | Total usable area (ha) | Milking area (ha) | Total water use efficiency (t DM/100mm) | Number of milking cows (cows) | Milking cows per usable area (cows/ha) | Milk sold  (kg MS/ cow) | Milk sold  (kg MS/ ha) | Fat  (%) | Protein  (%) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| GI0004 | 143 | 135 | 0.5 | 130 | 0.9 | 238 | 216 | 4.4% | 3.5% |
| GI0005 | 91 | 84 | 0.6 | 142 | 1.6 | 317 | 494 | 4.0% | 3.2% |
| GI0012 | 97 | 70 | 0.8 | 165 | 1.7 | 496 | 844 | 4.1% | 3.4% |
| GI0021 | 368 | 188 | 0.8 | 430 | 1.2 | 461 | 539 | 5.1% | 3.9% |
| GI0025 | 189 | 102 | 0.7 | 360 | 1.9 | 453 | 864 | 4.5% | 3.6% |
| GI0028 | 162 | 104 | 0.7 | 260 | 1.6 | 513 | 821 | 4.1% | 3.4% |
| *GI0029* | *106* | *99* | *1.0* | *285* | *2.7* | *506* | *1,360* | *4.6%* | *3.5%* |
| GI0031 | 73 | 73 | 0.9 | 326 | 4.5 | 442 | 1,973 | 4.2% | 3.6% |
| GI0032 | 160 | 120 | 0.7 | 300 | 1.9 | 546 | 1,024 | 4.4% | 3.3% |
| GI0037 | 341 | 220 | 0.8 | 520 | 1.5 | 512 | 781 | 4.1% | 3.4% |
| GI0039 | 193 | 125 | 0.8 | 290 | 1.5 | 512 | 770 | 4.2% | 3.5% |
| ***GI0046*** | ***188*** | ***108*** | ***0.7*** | ***192*** | ***1.0*** | ***516*** | ***527*** | ***4.1%*** | ***3.4%*** |
| ***GI0048*** | ***342*** | ***180*** | ***0.7*** | ***510*** | ***1.5*** | ***552*** | ***823*** | ***4.1%*** | ***3.5%*** |
| GI0049 | 72 | 72 | 1.2 | 280 | 3.9 | 450 | 1,749 | 4.5% | 3.5% |
| GI0051 | 358 | 162 | 0.7 | 605 | 1.7 | 481 | 813 | 3.9% | 3.3% |
| ***GI0053*** | ***123*** | ***123*** | ***1.0*** | ***320*** | ***2.6*** | ***492*** | ***1,279*** | ***4.4%*** | ***3.6%*** |
| ***GI0055*** | ***263*** | ***120*** | ***0.9*** | ***460*** | ***1.7*** | ***572*** | ***1,001*** | ***4.6%*** | ***3.7%*** |
| GI0056 | 182 | 135 | 1.0 | 333 | 1.8 | 408 | 746 | 5.5% | 3.8% |
| GI0057 | 174 | 174 | 0.7 | 396 | 2.3 | 465 | 1,059 | 4.5% | 3.5% |
| ***GI0058*** | ***147*** | ***100*** | ***0.8*** | ***360*** | ***2.4*** | ***597*** | ***1,463*** | ***4.0%*** | ***3.5%*** |
| ***GI0061*** | ***89*** | ***89*** | ***1.1*** | ***310*** | ***3.5*** | ***429*** | ***1,494*** | ***4.5%*** | ***3.5%*** |
| GI0063 | 177 | 130 | 0.5 | 250 | 1.4 | 542 | 765 | 4.6% | 3.5% |
| GI0064 | 235 | 155 | 0.6 | 330 | 1.4 | 430 | 604 | 4.8% | 3.8% |
| GI0066 | 226 | 73 | 0.4 | 215 | 1.0 | 395 | 376 | 4.0% | 3.1% |
| GI0067 | 181 | 82 | 0.7 | 240 | 1.3 | 457 | 608 | 4.6% | 3.6% |
| Average | 187 | 121 | 0.8 | 320 | 1.9 | 471 | 920 | 4.4% | 3.5% |
| Top 25%\* | 170 | 110 | 0.9 | 368 | 2.6 | 518 | 1,315 | 4.4% | 3.5% |

### Table D2

#### Physical information – Gippsland (continued)

| Farm number | Estimated grazed pasture\*\*  (t DM/ ha) | Estimated conserved feed\*\*  (t DM/ ha) | Homegrown feed as % of ME consumed  (% of ME) | Nitrogen application\*\* (kg/ ha) | Phosphorous application\*\* (kg/ ha) | Potassium application\*\* (kg/ ha) | Sulphur application\*\* (kg/ ha) | Labour efficiency (cows/ FTE) | Labour efficiency  (kg MS/ FTE) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| GI0004 | 2.3 | 1.7 | 77% | 4.4 | 0.7 | 2.4 | 0.9 | 92 | 21,822 |
| GI0005 | 4.7 | 0.8 | 64% | 11.6 | 0.0 | 0.0 | 0.0 | 71 | 22,572 |
| GI0012 | 9.6 | 0.5 | 72% | 175.5 | 19.9 | 38.3 | 28.5 | 74 | 36,550 |
| GI0021 | 5.6 | 1.3 | 62% | 96.9 | 8.8 | 28.4 | 11.0 | 107 | 49,338 |
| GI0025 | 7.1 | 2.0 | 58% | 186.0 | 0.0 | 43.0 | 3.0 | 159 | 72,261 |
| GI0028 | 5.9 | 0.4 | 52% | 280.2 | 17.5 | 41.8 | 21.3 | 83 | 42,365 |
| ***GI0029*** | ***11.8*** | ***0.3*** | ***73%*** | ***75.7*** | ***0.0*** | ***0.0*** | ***15.5*** | ***97*** | ***48,857*** |
| GI0031 | 11.0 | 0.0 | 49% | 279.2 | 30.0 | 36.7 | 30.9 | 176 | 77,598 |
| GI0032 | 8.0 | 0.5 | 63% | 289.0 | 11.9 | 28.8 | 11.9 | 112 | 61,206 |
| GI0037 | 6.1 | 3.4 | 58% | 287.8 | 0.0 | 0.0 | 0.0 | 105 | 53,971 |
| GI0039 | 8.3 | 0.9 | 64% | 274.3 | 1.8 | 52.7 | 1.3 | 106 | 54,489 |
| GI0046 | 7.0 | 0.7 | 72% | 115.8 | 9.5 | 17.1 | 0.2 | 116 | 60,014 |
| ***GI0048*** | ***7.6*** | ***1.4*** | ***57%*** | ***225.6*** | ***2.7*** | ***9.3*** | ***2.0*** | ***130*** | ***71,705*** |
| ***GI0049*** | ***11.0*** | ***0.6*** | ***55%*** | ***166.5*** | ***34.4*** | ***121.0*** | ***38.2*** | ***169*** | ***75,858*** |
| GI0051 | 7.1 | 0.0 | 62% | 264.2 | 6.2 | 20.1 | 7.7 | 126 | 60,658 |
| GI0053 | 10.1 | 1.0 | 69% | 223.6 | 0.0 | 20.3 | 13.8 | 124 | 60,855 |
| ***GI0055*** | ***11.5*** | ***0.8*** | ***66%*** | ***319.0*** | ***82.0*** | ***130.0*** | ***86.4*** | ***142*** | ***81,491*** |
| GI0056 | 9.1 | 1.1 | 85% | 197.3 | 29.4 | 40.7 | 38.0 | 196 | 79,895 |
| GI0057 | 5.8 | 0.6 | 50% | 186.6 | 8.2 | 4.9 | 15.2 | 118 | 54,831 |
| ***GI0058*** | ***8.2*** | ***0.0*** | ***44%*** | ***150.4*** | ***3.6*** | ***11.7*** | ***4.5*** | ***97*** | ***57,836*** |
| ***GI0061*** | ***9.6*** | ***1.1*** | ***56%*** | ***129.0*** | ***32.4*** | ***113.9*** | ***35.9*** | ***161*** | ***69,276*** |
| GI0063 | 6.0 | 0.8 | 58% | 283.1 | 18.4 | 51.7 | 22.7 | 80 | 43,461 |
| GI0064 | 5.6 | 1.1 | 68% | 168.4 | 0.0 | 0.0 | 0.0 | 111 | 47,593 |
| GI0066 | 1.3 | 1.8 | 73% | 113.8 | 26.6 | 33.1 | 14.1 | 136 | 53,690 |
| GI0067 | 7.2 | 0.0 | 67% | 238.5 | 9.5 | 2.4 | 18.8 | 88 | 40,028 |
| Average | 7.5 | 0.9 | 63% | 189.7 | 14.1 | 33.9 | 16.9 | 119 | 55,929 |
| Top 25%\* | 10.0 | 0.7 | 59% | 177.7 | 25.9 | 64.3 | 30.4 | 133 | 67,504 |

\*\*on milking area

### Table D3

#### Purchased feed – Gippsland

| Farm number | Purchased feed per milker\*\*  (t DM/ cow) | Concentrate price  ($/ t DM) | Silage price  ($/ t DM) | Hay price  ($/ t DM) | Other feed price ($/ t DM) | Average purchased feed price  ($/ t DM) | Purchased feed as % of ME consumed (% of ME) |
| --- | --- | --- | --- | --- | --- | --- | --- |
| GI0004 | 1.2 | $490 |  |  |  | $490 | 23% |
| GI0005 | 2.1 | $411 |  | $36 |  | $263 | 36% |
| GI0012 | 1.7 | $450 | $236 | $284 |  | $437 | 28% |
| GI0021 | 2.0 | $552 |  | $315 |  | $539 | 38% |
| GI0025 | 2.7 | $443 |  | $295 | $190 | $378 | 42% |
| GI0028 | 3.6 | $474 | $249 | $360 |  | $415 | 48% |
| ***GI0029*** | ***1.6*** | ***$484*** |  | ***$267*** |  | ***$423*** | ***27%*** |
| GI0031 | 2.3 | $475 | $468 | $210 |  | $410 | 51% |
| GI0032 | 2.6 | $590 |  | $252 |  | $479 | 37% |
| GI0037 | 2.7 | $488 |  | $386 |  | $478 | 42% |
| GI0039 | 2.5 | $404 |  |  |  | $404 | 36% |
| GI0046 | 1.7 | $537 |  |  |  | $537 | 28% |
| ***GI0048*** | ***3.5*** | ***$352*** | ***$208*** | ***$321*** |  | ***$302*** | ***43%*** |
| ***GI0049*** | ***2.4*** | ***$442*** | ***$251*** | ***$159*** | ***$189*** | ***$374*** | ***45%*** |
| GI0051 | 2.4 | $517 | $220 | $254 |  | $486 | 38% |
| GI0053 | 1.7 | $487 | $250 |  |  | $478 | 31% |
| ***GI0055*** | ***2.1*** | ***$558*** |  | ***$170*** |  | ***$532*** | ***34%*** |
| GI0056 | 0.8 | $421 |  |  |  | $421 | 15% |
| GI0057 | 2.7 | $535 | $227 | $240 | $173 | $391 | 50% |
| ***GI0058*** | ***4.1*** | ***$395*** | ***$223*** | ***$228*** |  | ***$336*** | ***56%*** |
| ***GI0061*** | ***2.3*** | ***$456*** | ***$196*** | ***$159*** | ***$189*** | ***$374*** | ***44%*** |
| GI0063 | 3.4 | $627 | $227 | $312 |  | $454 | 42% |
| GI0064 | 1.7 | $435 |  |  |  | $435 | 32% |
| GI0066 | 1.6 | $558 | $592 |  |  | $563 | 27% |
| GI0067 | 2.0 | $430 | $254 | $185 |  | $374 | 33% |
| Average | 2.3 | $480 | $277 | $246 | $185 | $431 | 37% |
| Top 25%\* | 2.7 | $448 |  |  |  | $390 | 41% |

\*\* All purchased feed including concentrates, hay, silage, and other feed fed on the usable area to all classes of livestock divided by the number of cows

Calculation of average price of silage, hay and other feed excludes zero values

### Table D4

#### Variable costs – Gippsland

| Farm number | AI and herd test ($/ kg MS) | Animal health ($/ kg MS) | Calf rearing  ($/ kg MS) | Shed power  ($/ kg MS) | Dairy supplies ($/ kg MS) | Total herd and shed costs  ($/ kg MS) | Fertiliser  ($/ kg MS) | Irrigation \*\*  ($/ kg MS) | Hay and silage making  ($/ kg MS) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| GI0004 | $0.02 | $0.20 | $0.08 | $0.34 | $0.25 | $0.90 | $0.09 | $0.00 | $0.10 |
| GI0005 | $0.14 | $0.04 | $0.02 | $0.25 | $0.14 | $0.58 | $0.29 | $0.00 | $0.19 |
| GI0012 | $0.11 | $0.14 | $0.13 | $0.12 | $0.22 | $0.73 | $0.59 | $0.00 | $0.05 |
| GI0021 | $0.11 | $0.13 | $0.03 | $0.19 | $0.16 | $0.62 | $0.44 | $0.00 | $0.31 |
| GI0025 | $0.00 | $0.16 | $0.08 | $0.08 | $0.16 | $0.49 | $0.65 | $0.00 | $0.19 |
| GI0028 | $0.16 | $0.14 | $0.04 | $0.08 | $0.11 | $0.55 | $1.01 | $0.00 | $0.13 |
| ***GI0029*** | ***$0.10*** | ***$0.17*** | ***$0.01*** | ***$0.10*** | ***$0.12*** | ***$0.51*** | ***$0.15*** | ***$0.22*** | ***$0.03*** |
| GI0031 | $0.25 | $0.38 | $0.07 | $0.08 | $0.07 | $0.85 | $0.81 | $0.45 | $0.00 |
| GI0032 | $0.22 | $0.12 | $0.29 | $0.13 | $0.07 | $0.82 | $1.02 | $0.00 | $0.22 |
| GI0037 | $0.12 | $0.21 | $0.03 | $0.05 | $0.11 | $0.52 | $0.87 | $0.00 | $0.32 |
| GI0039 | $0.16 | $0.14 | $0.06 | $0.17 | $0.14 | $0.66 | $0.89 | $0.00 | $0.32 |
| GI0046 | $0.15 | $0.14 | $0.06 | $0.11 | $0.04 | $0.51 | $0.69 | $0.01 | $0.37 |
| ***GI0048*** | ***$0.16*** | ***$0.13*** | ***$0.02*** | ***$0.08*** | ***$0.07*** | ***$0.46*** | ***$0.45*** | ***$0.00*** | ***$0.13*** |
| ***GI0049*** | ***$0.15*** | ***$0.12*** | ***$0.24*** | ***$0.15*** | ***$0.10*** | ***$0.76*** | ***$0.28*** | ***$0.21*** | ***$0.05*** |
| GI0051 | $0.52 | $0.30 | $0.09 | $0.08 | $0.11 | $1.10 | $0.74 | $0.00 | $0.54 |
| GI0053 | $0.15 | $0.10 | $0.05 | $0.11 | $0.14 | $0.56 | $0.52 | $0.27 | $0.11 |
| GI0055 | $0.14 | $0.09 | $0.05 | $0.08 | $0.08 | $0.44 | $0.75 | $0.11 | $0.18 |
| GI0056 | $0.16 | $0.21 | $0.06 | $0.10 | $0.06 | $0.59 | $0.97 | $0.00 | $0.15 |
| GI0057 | $0.13 | $0.19 | $0.03 | $0.08 | $0.05 | $0.47 | $0.65 | $0.00 | $0.08 |
| ***GI0058*** | ***$0.19*** | ***$0.11*** | ***$0.04*** | ***$0.13*** | ***$0.08*** | ***$0.54*** | ***$0.19*** | ***$0.05*** | ***$0.00*** |
| ***GI0061*** | ***$0.13*** | ***$0.11*** | ***$0.03*** | ***$0.12*** | ***$0.08*** | ***$0.47*** | ***$0.30*** | ***$0.28*** | ***$0.00*** |
| GI0063 | $0.17 | $0.17 | $0.05 | $0.12 | $0.10 | $0.61 | $1.11 | $0.00 | $0.18 |
| GI0064 | $0.33 | $0.15 | $0.17 | $0.16 | $0.14 | $0.96 | $0.66 | $0.00 | $0.24 |
| GI0066 | $0.11 | $0.26 | $0.05 | $0.28 | $0.05 | $0.76 | $0.58 | $0.00 | $0.74 |
| GI0067 | $0.20 | $0.14 | $0.07 | $0.07 | $0.11 | $0.58 | $0.91 | $0.00 | $0.30 |
| Average | $0.16 | $0.16 | $0.07 | $0.13 | $0.11 | $0.64 | $0.62 | $0.18 | $0.20 |
| Top 25%\* | $0.14 | $0.12 | $0.07 | $0.11 | $0.09 | $0.53 | $0.35 | $0.17 | $0.06 |

\*\* Calculation of average cost of irrigation excludes zero values

### Table D4

#### Variable costs – Gippsland (continued)

| Farm number | Fuel and oil  ($/ kg MS) | Pasture improvement/ cropping  ($/ kg MS) | Other feed costs  ($/ kg MS) | Fodder purchases  ($/ kg MS) | Grain/ concentrates/ other  ($/ kg MS) | Agistment costs  ($/ kg MS) | Feed and water inventory change  ($/ kg MS) | Total feed costs  ($/ kg MS) | Total variable costs  ($/ kg MS) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| GI0004 | $0.30 | $0.04 | $0.01 | $0.00 | $2.40 | $0.00 | $0.27 | $3.20 | $4.10 |
| GI0005 | $0.15 | $0.01 | $0.00 | $0.08 | $1.37 | $0.11 | $0.21 | $2.40 | $2.98 |
| GI0012 | $0.13 | $0.02 | $0.10 | $0.07 | $1.28 | $0.00 | $0.22 | $2.45 | $3.18 |
| GI0021 | $0.15 | $0.14 | $0.07 | $0.08 | $2.25 | $0.00 | -$0.25 | $3.18 | $3.80 |
| GI0025 | $0.10 | $0.21 | $0.05 | $0.46 | $1.86 | $0.00 | $0.04 | $3.55 | $4.04 |
| GI0028 | $0.13 | $0.28 | $0.06 | $0.87 | $1.93 | $0.00 | $0.12 | $4.53 | $5.08 |
| ***GI0029*** | ***$0.08*** | ***$0.00*** | ***$0.03*** | ***$0.25*** | ***$1.19*** | ***$0.42*** | ***-$0.08*** | ***$2.30*** | ***$2.81*** |
| GI0031 | $0.06 | $0.16 | $0.00 | $0.57 | $1.97 | $0.61 | -$0.28 | $4.35 | $5.21 |
| GI0032 | $0.13 | $0.16 | $0.00 | $0.41 | $1.95 | $0.00 | $0.18 | $4.08 | $4.90 |
| GI0037 | $0.13 | $0.13 | $0.05 | $0.20 | $2.35 | $0.21 | -$0.14 | $4.11 | $4.64 |
| GI0039 | $0.08 | $0.04 | $0.00 | $0.00 | $2.01 | $0.00 | $0.11 | $3.44 | $4.10 |
| GI0046 | $0.07 | $0.18 | $0.00 | $0.00 | $1.80 | $0.00 | -$0.03 | $3.09 | $3.61 |
| ***GI0048*** | ***$0.08*** | ***$0.10*** | ***$0.16*** | ***$0.91*** | ***$0.90*** | ***$0.00*** | ***$0.10*** | ***$2.84*** | ***$3.30*** |
| ***GI0049*** | ***$0.04*** | ***$0.07*** | ***$0.00*** | ***$0.32*** | ***$1.87*** | ***$0.22*** | ***-$0.14*** | ***$2.92*** | ***$3.68*** |
| GI0051 | $0.09 | $0.09 | $0.01 | $0.13 | $2.25 | $0.00 | $0.47 | $4.32 | $5.42 |
| GI0053 | $0.08 | $0.03 | $0.00 | $0.03 | $1.53 | $0.14 | -$0.04 | $2.66 | $3.22 |
| ***GI0055*** | ***$0.06*** | ***$0.14*** | ***$0.00*** | ***$0.04*** | ***$2.04*** | ***$0.00*** | ***-$0.03*** | ***$3.28*** | ***$3.72*** |
| GI0056 | $0.02 | $0.08 | $0.01 | $0.00 | $0.78 | $0.00 | -$0.12 | $1.89 | $2.49 |
| GI0057 | $0.06 | $0.21 | $0.00 | $0.59 | $1.75 | $0.52 | -$0.03 | $3.83 | $4.30 |
| ***GI0058*** | ***$0.05*** | ***$0.01*** | ***$0.05*** | ***$0.54*** | ***$1.79*** | ***$0.08*** | ***$0.01*** | ***$2.75*** | ***$3.30*** |
| ***GI0061*** | ***$0.02*** | ***$0.00*** | ***$0.00*** | ***$0.18*** | ***$1.91*** | ***$0.14*** | ***$0.01*** | ***$2.84*** | ***$3.31*** |
| GI0063 | $0.08 | $0.08 | $0.01 | $0.96 | $1.63 | $0.00 | $0.18 | $4.22 | $4.83 |
| GI0064 | $0.05 | $0.07 | $0.00 | $0.00 | $1.68 | $0.11 | $0.11 | $2.92 | $3.88 |
| GI0066 | $0.14 | $0.40 | $0.26 | $0.33 | $1.93 | $0.00 | $0.88 | $5.26 | $6.02 |
| GI0067 | $0.09 | $0.10 | $0.07 | $0.29 | $1.59 | $0.00 | -$0.18 | $3.17 | $3.75 |
| Average | $0.09 | $0.11 | $0.04 | $0.29 | $1.76 | $0.10 | $0.06 | $3.34 | $3.99 |
| Top 25%\* | $0.06 | $0.05 | $0.04 | $0.37 | $1.61 | $0.14 | -$0.02 | $2.82 | $3.35 |

### Table D5

#### Overhead costs – Gippsland

| Farm number | Rates  ($/ kg MS) | Farm Insurance ($/ kg MS) | Motor vehicle expenses ($/ kg MS) | Repairs and maintenance ($/ kg MS) | Other overheads ($/ kg MS) | Employed labour ($/ kg MS) | Total cash overheads ($/ kg MS) | Depreciation ($/ kg MS) | Imputed labour cost ($/ kg MS) | Total overheads ($/ kg MS) |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| GI0004 | $0.22 | $0.40 | $0.10 | $1.23 | $0.52 | $0.00 | $2.48 | $0.51 | $3.74 | $6.73 |
| GI0005 | $0.17 | $0.15 | $0.03 | $0.34 | $0.11 | $0.00 | $0.80 | $0.09 | $3.62 | $4.50 |
| GI0012 | $0.12 | $0.09 | $0.03 | $0.34 | $0.19 | $0.58 | $1.35 | $0.32 | $1.50 | $3.16 |
| GI0021 | $0.14 | $0.10 | $0.00 | $0.26 | $0.21 | $1.15 | $1.86 | $0.21 | $0.46 | $2.53 |
| GI0025 | $0.07 | $0.06 | $0.01 | $0.41 | $0.06 | $0.05 | $0.66 | $0.22 | $0.99 | $1.87 |
| GI0028 | $0.08 | $0.07 | $0.01 | $0.25 | $0.17 | $1.11 | $1.69 | $0.13 | $0.73 | $2.55 |
| ***GI0029*** | ***$0.08*** | ***$0.07*** | ***$0.01*** | ***$0.43*** | ***$0.17*** | ***$0.85*** | ***$1.59*** | ***$0.10*** | ***$0.79*** | ***$2.49*** |
| GI0031 | $0.05 | $0.08 | $0.00 | $0.44 | $0.07 | $1.21 | $1.85 | $0.18 | $0.00 | $2.03 |
| GI0032 | $0.08 | $0.20 | $0.10 | $0.71 | $0.09 | $0.18 | $1.36 | $0.53 | $1.13 | $3.03 |
| GI0037 | $0.06 | $0.06 | $0.02 | $0.29 | $0.10 | $0.77 | $1.29 | $0.24 | $0.55 | $2.08 |
| GI0039 | $0.06 | $0.08 | $0.01 | $0.55 | $0.13 | $0.46 | $1.27 | $0.21 | $1.02 | $2.49 |
| GI0046 | $0.10 | $0.13 | $0.02 | $0.43 | $0.20 | $0.57 | $1.45 | $0.07 | $0.82 | $2.35 |
| ***GI0048*** | ***$0.07*** | ***$0.06*** | ***$0.02*** | ***$0.31*** | ***$0.05*** | ***$0.44*** | ***$0.95*** | ***$0.12*** | ***$0.65*** | ***$1.72*** |
| ***GI0049*** | ***$0.05*** | ***$0.14*** | ***$0.00*** | ***$0.38*** | ***$0.37*** | ***$1.16*** | ***$2.09*** | ***$0.07*** | ***$0.00*** | ***$2.16*** |
| GI0051 | $0.04 | $0.07 | $0.00 | $0.37 | $0.17 | $1.05 | $1.71 | $0.10 | $0.28 | $2.09 |
| GI0053 | $0.07 | $0.08 | $0.01 | $0.14 | $0.21 | $0.34 | $0.86 | $0.13 | $0.92 | $1.91 |
| ***GI0055*** | ***$0.04*** | ***$0.07*** | ***$0.00*** | ***$0.35*** | ***$0.06*** | ***$0.51*** | ***$1.04*** | ***$0.27*** | ***$0.56*** | ***$1.87*** |
| GI0056 | $0.05 | $0.09 | $0.01 | $0.49 | $0.05 | $0.00 | $0.69 | $0.29 | $1.02 | $2.00 |
| GI0057 | $0.00 | $0.02 | $0.00 | $0.21 | $0.04 | $1.34 | $1.61 | $0.07 | $0.07 | $1.75 |
| ***GI0058*** | ***$0.00*** | ***$0.04*** | ***$0.01*** | ***$0.40*** | ***$0.09*** | ***$1.00*** | ***$1.54*** | ***$0.43*** | ***$0.30*** | ***$2.28*** |
| ***GI0061*** | ***$0.06*** | ***$0.10*** | ***$0.00*** | ***$0.49*** | ***$0.25*** | ***$1.09*** | ***$1.99*** | ***$0.08*** | ***$0.00*** | ***$2.07*** |
| GI0063 | $0.08 | $0.10 | $0.05 | $0.62 | $0.06 | $0.86 | $1.77 | $0.22 | $0.80 | $2.79 |
| GI0064 | $0.14 | $0.11 | $0.01 | $0.26 | $0.27 | $0.57 | $1.36 | $0.19 | $1.14 | $2.69 |
| GI0066 | $0.08 | $0.13 | $0.10 | $0.23 | $0.14 | $0.00 | $0.68 | $0.16 | $1.52 | $2.35 |
| GI0067 | $0.00 | $0.03 | $0.08 | $0.48 | $0.13 | $0.49 | $1.21 | $0.41 | $1.60 | $3.22 |
| Average | $0.08 | $0.10 | $0.03 | $0.42 | $0.16 | $0.63 | $1.41 | $0.21 | $0.97 | $2.59 |
| Top 25%\* | $0.05 | $0.08 | $0.01 | $0.39 | $0.17 | $0.84 | $1.53 | $0.18 | $0.38 | $2.10 |

\*Calculation of average values of land, water asset and equity exclude zero values.

### Table D6

#### Capital structure – Gippsland

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Farm assets\* Land value ($/ha) | Farm assets\* Land value ($/cow) | Farm assets\* Permanent water value ($/ha) | Farm assets\* Permanent water value ($/cow) | Other farm assets (per usable hectare) Plant and equipment ($/ha) | Other farm assets (per usable hectare) Livestock ($/ha) | Other farm assets (per usable hectare) Hay and grain ($/ha) | Other farm assets (per usable hectare) Other assets ($/ha) | Total assets ($/ha) |
| Average | $19,415 | $11,295 | $6,619 | $2,151 | $1,479 | $5,112 | $263 | $844 | $27,707 |
| Top 25%\* | $18,222 | $7,388 | $0 | $0 | $1,601 | $7,211 | $208 | $550 | $33,273 |

### Table D6

#### Capital structure – Gippsland (continued)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Liabilities per usable hectare ($/ha) | Liabilities per milking cow ($/cow) | Equity per usable hectare ($/ha) | Average equity (%) |
| Average | $7,545 | $4,178 | $20,162 | 72% |
| Top 25%\* | $11,732 | $4,323 | $21,541 | 64% |

## Historical data - Gippsland

### Table D7

#### Main financial indicators – Gippsland

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Income  Milk income (net) Nominal ($/kg MS) | Income  Milk income (net) Real  ($/kg MS) | Income  Gross farm income Nominal ($/kg MS) | Income  Gross farm income Real  ($/kg MS) | Variable costs  Herd costs Nominal ($/kg MS) | Variable costs  Herd costs Real  ($/kg MS) | Variable costs  Shed costs Nominal ($/kg MS) | Variable costs  Shed costs Real  ($/kg MS) | Variable costs  Feed costs Nominal ($/kg MS) | Variable costs  Feed costs Real  ($/kg MS) | Total variable costs Nominal ($/kg MS) | Total variable costs  Real  ($/kg MS) |
| 2006-07 | $4.46 | $6.47 | $5.16 | $7.49 | $0.23 | $0.33 | $0.15 | $0.21 | $2.31 | $3.36 | $2.72 | $3.95 |
| 2007-08 | $6.62 | $9.17 | $7.58 | $10.50 | $0.27 | $0.38 | $0.13 | $0.18 | $2.80 | $3.88 | $3.30 | $4.57 |
| 2008-09 | $5.32 | $7.08 | $6.05 | $8.04 | $0.25 | $0.34 | $0.15 | $0.20 | $2.61 | $3.46 | $3.01 | $4.01 |
| 2009-10 | $4.38 | $5.65 | $5.07 | $6.53 | $0.22 | $0.28 | $0.17 | $0.21 | $1.95 | $2.51 | $2.33 | $3.00 |
| 2010-11 | $5.59 | $7.00 | $6.34 | $7.93 | $0.28 | $0.35 | $0.19 | $0.23 | $2.06 | $2.57 | $2.52 | $3.15 |
| 2011-12 | $5.37 | $6.59 | $5.89 | $7.24 | $0.29 | $0.35 | $0.18 | $0.23 | $2.12 | $2.60 | $2.59 | $3.18 |
| 2012-13 | $4.75 | $5.68 | $4.99 | $5.96 | $0.31 | $0.37 | $0.22 | $0.26 | $2.31 | $2.76 | $2.85 | $3.40 |
| 2013-14 | $6.62 | $7.72 | $7.33 | $8.54 | $0.31 | $0.36 | $0.21 | $0.25 | $2.67 | $3.12 | $3.19 | $3.72 |
| 2014-15 | $5.88 | $6.70 | $6.51 | $7.42 | $0.32 | $0.36 | $0.20 | $0.23 | $2.63 | $2.99 | $3.15 | $3.58 |
| 2015-16 | $5.28 | $5.94 | $5.79 | $6.51 | $0.30 | $0.34 | $0.20 | $0.22 | $2.73 | $3.08 | $3.24 | $3.64 |
| 2016-17 | $4.84 | $5.34 | $5.50 | $6.08 | $0.27 | $0.30 | $0.20 | $0.22 | $2.21 | $2.44 | $2.68 | $2.96 |
| 2017-18 | $5.74 | $6.23 | $6.26 | $6.79 | $0.31 | $0.33 | $0.21 | $0.23 | $2.69 | $2.91 | $3.21 | $3.48 |
| 2018-19 | $5.97 | $6.39 | $6.47 | $6.93 | $0.32 | $0.34 | $0.23 | $0.24 | $3.27 | $3.50 | $3.81 | $4.08 |
| 2019-20 | $6.95 | $7.35 | $7.59 | $8.02 | $0.32 | $0.34 | $0.23 | $0.24 | $2.81 | $2.98 | $3.36 | $3.55 |
| 2020-21 | $6.54 | $6.82 | $7.24 | $7.55 | $0.32 | $0.34 | $0.23 | $0.24 | $2.66 | $2.77 | $3.23 | $3.36 |
| 2021-22 | $7.15 | $7.15 | $8.00 | $8.00 | $0.39 | $0.39 | $0.24 | $0.24 | $3.34 | $3.34 | $3.99 | $3.99 |
| Average |  | $6.70 |  | $7.47 |  | $0.34 |  | $0.23 |  | $3.02 |  | $3.60 |

Notes: 'Real' dollar values are the nominal values converted to 2021-22-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 D7**

#### Historical data – Gippsland

#### Main financial indicators (continued)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Year | Overhead costs Cash overhead costs Nominal ($/kg MS) | Overhead costs Cash overhead costs Real ($/kg MS) | Overhead costs Non-cash overhead costs  Nominal ($/kg MS) | Overhead costs Non-cash overhead costs  Real ($/kg MS) | Overhead costs Total overhead costs Nominal ($/kg MS) | Overhead costs Total overhead costs Real ($/kg MS) |
| 2006-07 | $0.69 | $1.00 | $1.44 | $2.09 | $2.13 | $3.09 |
| 2007-08 | $0.80 | $1.10 | $0.90 | $1.24 | $1.59 | $2.21 |
| 2008-09 | $0.78 | $1.04 | $0.93 | $1.23 | $1.71 | $2.27 |
| 2009-10 | $0.80 | $1.04 | $1.09 | $1.40 | $1.90 | $2.44 |
| 2010-11 | $0.93 | $1.17 | $0.93 | $1.16 | $1.86 | $2.33 |
| 2011-12 | $0.95 | $1.17 | $1.05 | $1.29 | $2.01 | $2.46 |
| 2012-13 | $1.09 | $1.30 | $1.19 | $1.42 | $2.28 | $2.72 |
| 2013-14 | $1.04 | $1.21 | $1.07 | $1.25 | $2.11 | $2.46 |
| 2014-15 | $1.05 | $1.19 | $0.96 | $1.09 | $2.00 | $2.28 |
| 2015-16 | $1.09 | $1.23 | $1.13 | $1.27 | $2.22 | $2.49 |
| 2016-17 | $1.03 | $1.14 | $1.07 | $1.18 | $2.10 | $2.32 |
| 2017-18 | $1.11 | $1.20 | $1.10 | $1.19 | $2.21 | $2.40 |
| 2018-19 | $1.14 | $1.23 | $1.01 | $1.08 | $2.15 | $2.30 |
| 2019-20 | $1.16 | $1.23 | $0.99 | $1.05 | $2.16 | $2.28 |
| 2020-21 | $1.19 | $1.24 | $1.04 | $1.09 | $2.24 | $2.33 |
| 2021-22 | $1.41 | $1.41 | $1.18 | $1.18 | $2.59 | $2.59 |
| Average |  | $1.18 |  | $1.26 |  | $2.44 |

### Table D7

#### Historical data – Gippsland

#### Main financial indicators (continued)

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Profit Earnings before interest and tax Nominal ($/kg MS) | Profit Earnings before interest and tax Real ($/kg MS) | Profit Interest & lease charges Nominal ($/kg MS) | Profit Interest & lease charges Real ($/kg MS) | Profit Net farm income Nominal ($/kg MS) | Profit Net farm income Real ($/kg MS) | Profit Return on total assets  % | Profit Return on equity  % |
| 2006-07 | $0.31 | $0.45 | $0.57 | $0.83 | -$0.26 | -$0.38 | 0.8% | -2.1% |
| 2007-08 | $2.69 | $3.73 | $0.61 | $0.85 | $2.08 | $2.88 | 9.7% | 14.9% |
| 2008-09 | $1.28 | $1.70 | $0.51 | $0.68 | $0.76 | $1.02 | 4.0% | 3.4% |
| 2009-10 | $0.80 | $1.02 | $0.70 | $0.90 | $0.10 | $0.13 | 2.6% | 0.7% |
| 2010-11 | $1.96 | $2.45 | $0.67 | $0.84 | $1.29 | $1.62 | 6.1% | 9.9% |
| 2011-12 | $1.30 | $1.59 | $0.65 | $0.80 | $0.64 | $0.79 | 4.4% | 5.1% |
| 2012-13 | -$0.14 | -$0.16 | $0.73 | $0.87 | -$0.86 | -$1.03 | -0.2% | -6.2% |
| 2013-14 | $2.03 | $2.36 | $0.69 | $0.80 | $1.34 | $1.56 | 6.4% | 10.2% |
| 2014-15 | $1.36 | $1.55 | $0.68 | $0.78 | $0.68 | $0.77 | 4.7% | 4.6% |
| 2015-16 | $0.33 | $0.38 | $0.64 | $0.72 | -$0.30 | -$0.34 | 1.3% | -2.3% |
| 2016-17 | $0.73 | $0.80 | $0.68 | $0.75 | $0.05 | $0.06 | 2.3% | 0.7% |
| 2017-18 | $0.84 | $0.92 | $0.69 | $0.75 | $0.15 | $0.16 | 3.0% | 1.0% |
| 2018-19 | $0.51 | $0.55 | $0.69 | $0.74 | -$0.18 | -$0.20 | 1.7% | -2.3% |
| 2019-20 | $2.07 | $2.19 | $0.65 | $0.68 | $1.43 | $1.51 | 6.6% | 12.4% |
| 2020-21 | $1.78 | $1.86 | $0.52 | $0.54 | $1.26 | $1.32 | 5.4% | 8.0% |
| 2021-22 | $1.43 | $1.43 | $0.56 | $0.56 | $0.87 | $0.87 | 4.2% | 6.2% |
| Average |  | $1.43 |  | $0.75 |  | $0.67 | 3.9% | 4.0% |

### Table D8

#### Historical data – Gippsland

#### Average farm physical information

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Total usable area (ha) | Milking area (ha) | Total water use efficiency  (t DM/100mm/ha) | Number of milking cows (cows) | Milking cows per usable area (cows/ha) | Milk sold  (kg MS/ cow) | Milk sold  (kg MS/ ha) |
| 2006-07 | 191 | 187 | 0.8 | 282 | 1.4 | 405 | 579 |
| 2007-08 | 181 | 174 | 0.9 | 289 | 1.6 | 464 | 741 |
| 2008-09 | 182 | 172 | 0.9 | 276 | 1.6 | 483 | 803 |
| 2009-10 | 172 | 160 | 0.8 | 268 | 1.7 | 472 | 792 |
| 2010-11 | 190 | 187 | 0.8 | 285 | 1.6 | 494 | 811 |
| 2011-12 | 189 | 126 | 0.6 | 291 | 1.7 | 501 | 843 |
| 2012-13 | 194 | 134 | 0.8 | 299 | 1.7 | 462 | 781 |
| 2013-14 | 186 | 126 | 0.8 | 284 | 1.8 | 468 | 835 |
| 2014-15 | 189 | 123 | 0.9 | 304 | 1.8 | 479 | 890 |
| 2015-16 | 201 | 122 | 0.7 | 291 | 1.7 | 482 | 836 |
| 2016-17 | 203 | 122 | 0.8 | 290 | 1.7 | 486 | 823 |
| 2017-18 | 189 | 124 | 0.9 | 294 | 1.8 | 471 | 849 |
| 2018-19 | 186 | 123 | 1.0 | 307 | 1.9 | 468 | 888 |
| 2019-20 | 187 | 124 | 0.8 | 310 | 1.9 | 486 | 925 |
| 2020-21 | 186 | 115 | 0.7 | 308 | 1.9 | 485 | 924 |
| 2021-22 | 187 | 121 | 0.8 | 320 | 1.9 | 471 | 920 |
| Average | 188 | 140 | 0.8 | 294 | 1.7 | 474 | 827 |

### Table D8

#### Historical data – Gippsland

#### Average farm physical information (continued)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | Estimated grazed pasture\* (t DM/ ha) | Estimated conserved feed\*  (t DM/ ha) | Homegrown feed as % of ME consumed (% of ME) | Concentrate price Nominal ($/t DM) | Concentrate price  Real  ($/ t DM) |
| 2006-07 | 5.6 | 1.2 | 71% | $339 | $492 |
| 2007-08 | 7.2 | 1.1 | 74% | $451 | $625 |
| 2008-09 | 7.2 | 0.8 | 71% | $385 | $512 |
| 2009-10 | 7.6 | 0.9 | 73% | $273 | $352 |
| 2010-11 | 7.1 | 1.7 | 69% | $315 | $394 |
| 2011-12 | 7.4 | 0.9 | 62% | $311 | $382 |
| 2012-13 | 6.9 | 0.6 | 62% | $356 | $425 |
| 2013-14 | 7.6 | 1.0 | 68% | $403 | $470 |
| 2014-15 | 7.4 | 1.1 | 66% | $419 | $478 |
| 2015-16 | 6.9 | 1.0 | 59% | $418 | $470 |
| 2016-17 | 7.8 | 1.4 | 70% | $350 | $387 |
| 2017-18 | 7.4 | 1.2 | 66% | $391 | $424 |
| 2018-19 | 7.9 | 1.1 | 66% | $518 | $554 |
| 2019-20 | 8.6 | 1.2 | 68% | $500 | $529 |
| 2020-21 | 8.4 | 0.9 | 66% | $435 | $453 |
| 2021-22 | 7.5 | 0.9 | 63% | $480 | $480 |
| Average | 7.4 | 1.1 | 67% |  | $464 |

\* From 2006-07 to 2010-11 estimated grazed pasture and conserved feed was calculated per usable hectare

From 2011-12 estimated grazed pasture and conserved feed was calculated per hectare of milking area

# Appendix E: Glossary of terms, abbreviations and standard values

## Glossary of terms

**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.

**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.

**Cost structure**

Variable costs as a percentage of total costs, where total costs equal variable costs plus overhead costs.

**Concentrates**

Refers to feeds with a concentrated source of energy such as grains, pellets and other grain mixes.

**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.

**Equity**

Total assets minus total liabilities. Equal to the total value of capital invested in the farm business by the owner/ operator(s).

**Equity per cent**

Total equity as a percentage of the total assets owned. The proportion of the total assets owned by the business.

**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.

**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.

**Finance costs**

See interest and lease 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.

**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)).

**Gross farm income**

Farm income including milk sales, livestock trading and other income such as income from grants and rebates.

**Gross margin**

Gross farm income minus total variable costs.

**Herd costs**

Cost of artificial insemination (AI) and herd tests, animal health and calf rearing.

**Imputed**

An estimated amount introduced into economic management analysis to allow reasonable comparisons between years and between other businesses.

**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.

**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 100 mm 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.

**Feeding Systems:**

**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.

**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.

**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.

**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.

**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.

## List of abbreviations

|  |  |
| --- | --- |
| AI | Artificial insemination |
| CH4 | Methane |
| CO2 | Carbon dioxide |
| CO2-e | Carbon dioxide equivalent |
| CoP | Cost of production |
| DFMP | Dairy Farm Monitor Project |
| DJPR | Department of Jobs, Precincts and Resources, Victoria |
| DM | Dry matter of feed stuffs |
| 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. 1 mm is equivalent to 4 points or |
|  | 1/25th of an inch of rainfall |
| MS | Milk solids (protein and fat) |
| N2O | 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 |
| ROE | Return on equity |
| ROTA | Return on total assets |
| t | Tonne = 1,000 kg |
|  |  |
|  |  |

## Standard values

#### Pasture consumption

The pasture consumption calculation assumes 11 ME for homegrown feed.

#### Irrigation values

The 2021-22 standard opening values used to estimate the inventory and capital values of irrigation water in the North and Gippsland were:

|  |  |  |  |
| --- | --- | --- | --- |
| Category | HRWS  ($/ML) 1 | LRWS  ($/ML) 2 | Allocation  ($/ML) 3 |
| Zone 1A Greater Goulburn | $4,000 | $550 | $60 |
| Zone 3 Lower Goulburn | $4,000 | $500 | $46 |
| Zone 6 Vic Murray - Dartmouth to Barmah Choke | $4,900 | $600 | $60 |
| Zone 6B Lower Broken Creek | $6,620 | $1,032 | $29 |
| Zone 7 Vic Murray - Barmah Choke to South Australian border | $5,500 | $1,450 | $75 |
| Zone 9 King and Ovens | $1,300 | $200 | $70 |
| Groundwater licence (permanent) | $1,200 |  | $43 |
| Zone 41 Macalister (Gippsland) | $2,500 | $200 |  |

Closing values were the weighted average of opening, allocation and the farm’s purchases and sales, if applicable.   
Source: waterregister.com.au and srw.org.au

#### 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 |
| 21-22 calves |  | $825 |
| Mature bulls | $3,300 | $3,300 |

#### Imputed owner/operator and family labour

In 2021-22, the imputed owner/operator and family labour rate was $34/hr based on a full time equivalent (FTE) working 48 hours/week for 50 weeks of the year.

