

# Farm statistical survey 2019

Dairy Owner/Operator – Irrigated

## 2019 Farm statistical survey

Produced by Alexanders in association with Brown Glassford

#### Background

- The survey data has been taken from the two Practices' clients' actual Financial Statements
  for the 2019 year. As in previous years, we have combined the survey so that all farm sector
  groups have a reasonably sound sample size.
- All financial data is GST exclusive.
- Most of the balance dates are 31/3/2019, 31/5/2019 or 30/6/2019.
- The averages referred to are per farm and as per that farm's actual Financial Statements for the 2019 year the averages are not weighted averages which would produce slightly different data again as a result of this there is some rounding of data.
- Benchmark. On the right hand side of each survey summary for each sector, we have shown the average figures for the top 10% based on the interest return on total farm capital employed. Figures in the right column are the average of those top farms for each statistic. We could have chosen other benchmarks or several benchmarks but the interest return on total farm capital employed means we can compare farmers with differing levels of debt, scale and production and also make a comparison between sectors. This approach also means we are looking at both the income and expense side of the equation, and the net farm profit, whereas some benchmarks and ratios look at specific areas and issues very well but many are only looking at one side of the equation. We readily acknowledge though that there could be other benchmark approaches equally meaningful.

## Key statistics

|  | Overall<br>Average<br>2015 | Overall<br>Average<br>2016 | Overall<br>Average<br>2017 | Overall<br>Average<br>2018 | Overall<br>Average<br>2019 | Benchmark<br>Group<br>2019 | Your<br>Figures |
|--|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|-----------------|
| Average Cows<br>Milked (ACM)             | 1,092                      | 978                        | 1,019                      | 1,061                      | 1,004                      | 732                        |                 |
| Average Value<br>of MS per Kg            | \$5.63                     | \$3.85                     | \$5.80                     | \$6.65                     | \$6.30                     | \$6.39                     |                 |
| Milk Solids/<br>ACM (Kg)                 | 443                        | 448                        | 444                        | 441                        | 455                        | 512                        |                 |
| Milk Solids/<br>EGA (Kg)                 | 1560                       | 1557                       | 1486                       | 1,528                      | 1,580                      | 1,850                      |                 |
| FWE per kg                               | \$4.19                     | \$3.59                     | \$3.78                     | \$4.24                     | \$4.27                     | \$3.66                     |                 |
| Interest &<br>Rent Paid<br>per Kg MS     | \$1.36                     | \$1.29                     | \$1.35                     | \$1.34                     | \$1.23                     | \$1.31                     |                 |
| Net Farm<br>Profit (Loss)                | \$169,247                  | (\$337,890)                | \$365,146                  | \$555,676                  | \$414,049                  | \$631,020                  |                 |
| Total Term<br>Debt                       | \$9,855,664                | \$9,583,996                | \$10,818,876               | \$10,280,128               | \$10,388,863               | \$8,816,340                |                 |
| Total Cost of<br>Production per<br>Kg MS | \$5.93                     | \$5.18                     | \$5.47                     | \$5.85                     | \$5.81                     | \$5.28                     |                 |

## Key features

- 1. Average cows milked for the five years 1,031 head.
- 2. Average milksolid production over the five years of 460,934 kg.
- 3. Average milksolid receipt over the five years \$5.65 kg/ms.
- 4. Average milksolid production over the five years per Average Cows Milked 446 kg/ms.
- 5. Average milksolid production per Effective Grazing Area over the five years 1,542 kg/ms.
- 6. Average Farm Working Expenses as a percentage of Gross Farm Income over the five years 66.3%.
- 7. Average Farm Working Expenses per kg/ms over the five years \$4.01 per kg/ms.
- 8. Average wages cost per Average Cows Milked over the five years \$298.
- 9. Average Stockfood cost per Average Cows Milked over the five years \$550.
- 10. Average interest and rent paid per kg/ms over the five years \$1.31 kg/ms.
- 11. Average net farm profit over the five years \$233,246.
- 12. Average net farm profit per kg/ms over the five years 53.6 cents per kg/ms.
- 13. Average net capital plant purchases over the five years \$146,265.
- 14. Average Economic Farm Surplus per Effective Grazing Area over the five years \$2,830.
- 15. Average overall cost of production over the five years per kg/ms \$5.65.
- 16. The areas where the benchmark group in the 2019 year show up strongly were:
  - Higher production per Effective Grazing Area at 1,850 kg;
  - Lower Farm Working Expenses per kg/ms at \$3.66;
  - Lower overall cost of production at \$5.28 per kg/ms.

## Key data for the 2019 year

Average value of milk solids receipt was almost the same

\$6.30

overall

\$6.39

top 10%

Cost of production per kg/ms

\$5.81

overall

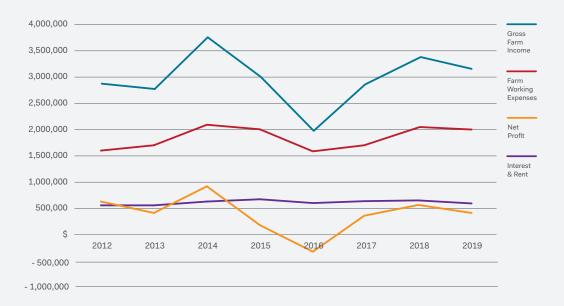
\$5.28

top 10%

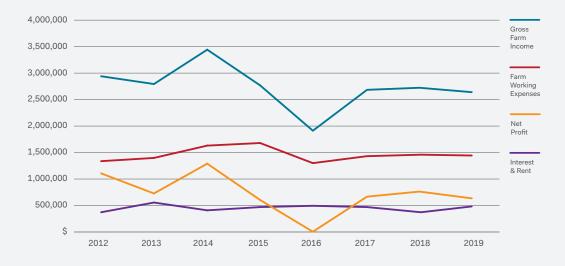
## Survey

|   | Overall      | Overall      | Overall      | Overall      | Overall      | Benchmark    | Your    |
|---|--------------|--------------|--------------|--------------|--------------|--------------|---------|
|   | Average      | Average      | Average      | Average      | Average      | Group        | Figures |
|   | 2015         | 2016         | 2017         | 2018         | 2019         | 2019         |         |
| Effective Grazing Area (Ha) (EGA)           | 306          | 276          | 300          | 301          | 287          | 207          |         |
| Average Cows Milked (ACM)                   | 1,092        | 978          | 1,019        | 1,061        | 1,004        | 732          |         |
| ACM/EGA                                     | 3.5          | 3.5          | 3.4          | 3.5          | 3            | 3.6          |         |
| Milk Revenue                                | \$2,773,556  | \$1,718,698  | \$2,617,946  | \$3,079,589  | \$2,898,485  | \$2,456,531  |         |
| Milk Solids Production (Kg)                 | 484,243      | 436,474      | 453,118      | 468,536      | 462,303      | 384,258      |         |
| Average Value of Milk Solid Sales/Kg        | \$5.63       | \$3.85       | \$5.80       | \$6.65       | \$6.30       | \$6.39       |         |
| Milk Solid Revenue/ACM                      | \$2,487      | \$1,727      | \$2,576      | \$2,903      | 2,865        | \$3,278      |         |
| Milk Solid Revenue/EGA                      | \$8,726      | \$5,978      | \$8,688      | \$10,047     | 9,955        | \$11,839     |         |
| Milk Solids/ACM (Kg)                        | 443          | 448          | 444          | 441          | 455          | 512          |         |
| Milk Solids/EGA (Kg)                        | 1,560        | 1,557        | 1,486        | 1,528        | 1,580        | 1,850        |         |
| Milk Solids as a % of GFI                   | 91.4%        | 87.7%        | 91.5%        | 92.1%        | 93%          | 93%          |         |
| Gross Farm Income (GFI)                     | \$3,019,471  | \$1,972,820  | \$2,856,235  | \$3,353,269  | \$3,152,510  | \$2,643,787  |         |
| Farm Working Expenses (FWE)                 | \$2,004,222  | \$1,592,845  | \$1,718,323  | \$2,006,183  | \$1,993,547  | \$1,437,260  |         |
| FWE as a % of GFI                           | 68.0%        | 81.6%        | 60.0%        | 59.3%        | 62.6%        | 53.1%        |         |
| FWE/ACM                                     | \$1,845      | \$1,609      | \$1,682      | \$1,868      | \$1,946      | \$1,885      |         |
| FWE/Kg of Milk Solids                       | \$4.19       | \$3.59       | \$3.78       | \$4.24       | \$4.27       | \$3.66       |         |
| Wages/ACM                                   | \$291        | \$300        | \$288        | \$307        | \$303        | \$288        |         |
| Animal Health/ACM                           | \$96         | \$85         | \$95         | \$102        | \$108        | \$89         |         |
| Livestock Improvement/ACM                   | \$54         | \$48         | \$51         | \$59         | \$64         | \$69         |         |
| Stockfood/ACM                               | \$615        | \$497        | \$470        | \$586        | \$583        | \$635        |         |
| Fertiliser/ACM                              | \$219        | \$188        | \$194        | \$190        | \$214        | \$174        |         |
| R & M/ACM                                   | \$138        | \$102        | \$118        | \$154        | \$161        | \$131        |         |
| Vehicle Expenses & Fuel/ACM                 | \$62         | \$58         | \$66         | \$64         | \$70         | \$74         |         |
| Dairy Shed Expenses/ACM                     | \$17         | \$18         | \$23         | \$23         | \$19         | \$21         |         |
| Interest & Rent Paid                        | \$660,916    | \$590,603    | \$627,270    | \$645,285    | \$592,773    | \$461,015    |         |
| Interest & Rent Paid as a % of GFI          | 22.0%        | 29.4%        | 21.4%        | 18.6%        | 18.0%        | 19.0%        |         |
| Interest & Rent Paid/Kg MS                  | \$1.36       | \$1.29       | \$1.35       | \$1.34       | \$1.23       | \$1.31       |         |
| Cost of Prodn/Kg MS (excl Interest & Rent)  | \$4.59       | \$3.89       | \$4.12       | \$4.51       | \$4.58       | \$3.98       |         |
| Net Farm Profit                             | \$169,247    | (\$337,890)  | \$365,146    | \$555,676    | \$414,049    | \$631,020    |         |
| Net Farm Profit as a % of GFI               | 6.3%         | (17.9%)      | 13.3%        | 18.3%        | 14.8%        | 23.2%        |         |
| Net Plant Purchases                         | \$187,996    | \$124,232    | \$131,730    | \$161,241    | \$126,125    | \$100,249    |         |
| Personal Drawings/Family (excl Allowances)  | \$68,617     | \$72,980     | \$90,475     | \$86,067     | \$74,416     | \$72,339     |         |
| Est Total Farm Capital (TFC)                | \$19,625,817 | \$17,732,007 | \$20,229,820 | \$20,656,430 | \$18,779,519 | \$12,355,500 |         |
| Est TFC/Kg Milk Solids                      | \$42.02      | \$41.72      | \$45.84      | \$43.70      | \$43.07      | \$33.25      |         |
| Est TFC/Ha                                  | \$63,367     | \$63,200     | \$64,108     | \$66,719     | \$65,354     | \$60,861     |         |
| Est Interest on TFC                         | 3.5%         | 3.5%         | 4.1%         | 5.4%         | 4.7%         | 8.1%         |         |
| Total Term Debt                             | \$9,855,664  | \$9,583,996  | \$10,818,876 | \$10,280,128 | \$10,388,863 | \$8,816,340  |         |
| Term Debt as % TFC                          | 46.7%        | 52.3%        | 52.7%        | 54.0%        | 53.0%        | 73.4%        |         |
| GFI to Plant Ownership Ratio                | 4.7          | 3.1          | 4.4          | 5.3          | 5.0          | 4.6          |         |
| Earnings Before Interest, Rent & Tax (EBIT) | \$827,483    | \$250,345    | \$991,272    | \$1,200,960  | \$1,006,821  | \$1,092,034  |         |
| EBIT/ACM                                    | \$710        | \$241        | \$976        | \$1,170      | \$1,016      | \$1,485      |         |
| EBIT/EGA                                    | \$2,526      | \$827        | \$3,262      | \$4,035      | \$3,502      | \$5,366      |         |
| EBIT/Kg Milk Solids                         | \$1.59       | \$0.53       | \$2.19       | \$2.66       | \$2.24       | \$2.92       |         |
| Net Profit/Kg Milk Solids                   | \$0.25       | (\$0.75)     | \$0.85       | \$1.32       | \$1.01       | \$1.61       |         |
| Total Cost of Production/Kg MS              | \$5.93       | \$5.18       | \$5.47       | \$5.85       | \$5.81       | \$5.28       |         |
| MS Margin over and above MS Payout /Kg MS   | \$0.71       | (\$1.33)     | \$0.33       | \$0.55       | \$0.49       | \$1.11       |         |
| "Misery Index"                              | 80%          | 111%         | 81%          | 78%          | 81%          | 72%          |         |
| IVIIOGI y IIIUGX                            | UU70         | ±±±70        | O170         | / 070        | O±70         | / Z 70       |         |

#### Average GFI, FWE, Interest + Rent & Net Profit 2012-2019



#### Benchmark GFI, FWE, Interest + Rent & Net Profit 2012-2019



Interest/Rent paid per kg/ms

Farm working expenses per kg/ms

\$1.23 \$1.31 top 10%

\$4.27 \$3.66 top 10%

### Glossary

Stock Units (or Ewe Equivalents).

**GFI** Gross Farm Income.

**FWE** Farm Working Expenses.

Personal Drawings (excluding allowances)

Personal Drawings but excluding:

Life Assurance Personal Insurances Superannuation

Taxation

Personal Insurance, Electricity & Car Allowances

School Fees

Health & Sickness Insurance Personal ACC Levies.

Net Plant Purchases Gross Capital Plant Purchases less Capital Plant Sales/Trade-ins.

TFC Estimated Total Farm Capital Employed in the farming operation in the form of Land, Stock & All Plant (+ Dairy

Shares where relevant).

**EGA** Effective Grazing or Milking Area (in hectares).

ACM Average Cows Milked (usually taken at or around early to mid January each year).

MS (kg) Milk Solids (kg).

**EBIT** Gross Earnings before interest and tax = Gross Farm Income less all expenses except Interest and/or Rent and

Income Tax

Net Farm Profit True Net Farm Profit (calculated after allowing for and adjusting for any livestock number and class number

changes and being reflected at the current year's Herd Scheme Values and after deducting FWE, interest, rent

and depreciation).

GFI to Plant Ownership

The relationship of the Gross Farm Income to the book value of plant at year's end. The lower the number the

more the exercise has excess plant or insufficient GFI or a combination of the two.

**Total Term Debt** Includes all external debt and family debt. Some family debt may involve a low to nil interest cost.

Interest Earned on Total Farm Capital Employed (TFC) The net farm profit plus added back interest and/or rent paid less a wages of management figure for one or both spouses as is appropriate, divided by the estimated value of the total assets employed re land, buildings, stock and plant. Where land is rented from external parties its value in general is not included in the TFC.

Farm Sector Groups It is fair comment that some farms could fit either in whole or in part into several different farm sector groups

but this would generally only apply to about 5% of the total. The comment applies to several downlands and

several hill country farms.

'Misery Index' The sum of the FWE to GFI ratio and the interest and/or rent paid to GFI ratio. Where the sum is above 80%

unless the scale is significant it almost invariably means trouble because it could well mean that more than one

key benchmark is being broken at any one point in time.

BG Benchmark Group.



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