

# Farm statistical survey 2016

Dairy Owner/Operator – Non Irrigated

# 2016 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 2016 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 31/3/2016, 31/5/2016 or 30/6/2016.
- The averages referred to are per farm and as per that farm's actual Financial Statements for the 2016 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 Average 2012	Overall Average 2013	Overall Average 2014	Overall Average 2015	Overall Average 2016	Benchmark Group 2016	Your Figures
Average Cows Milked (ACM)	579	540	530	531	510	599	
Average Value of MS per Kg	\$6.69	\$5.98	\$7.41	\$5.42	\$3.83	\$3.91	
Milk Solids/ ACM (kg)	407	403	401	404	391	412	
Milk Solids/ EGA (kg)	1005	992	982	965	923	1005	
FWE per kg of MS	\$4.01	\$3.88	\$4.22	\$3.86	\$3.33	\$2.74	
Interest & Rent Paid per Kg of MS	\$1.24	\$1.18	\$1.13	\$1.18	\$1.22	\$1.28	
Net Farm Profit (Loss)	\$322,019	\$214,804	\$451,186	\$61,916	(\$126,472)	(\$28,751)	
Total Term Debt	\$3,748,195	\$3,590,059	\$3,573,431	\$3,924,616	\$4,055,210	\$5,260,971	
Total Cost of Production per Kg of MS	\$5.54	\$5.39	\$5.66	\$5.34	\$4.80	\$4.26	

# Key features

1. Slight drop in ACM – 5 year average is 538 head.
2. MS production at 199,632 kgs – lower by 17,139 kgs or 7.9%.
3. Average MS receipt \$3.83 per kg – 5 year average \$5.87 per kg.
4. MS production per ACM 391 kg – 5 year average 401 kgs.
5. MS production per EGA 923 kg – 5 year average 973 kg.
6. FWE as % of GFI 78% – 5 year average 62.3%.
7. FWE per kg/ms \$3.33 – 5 year average \$3.86 per kg/ms (lower by 14%).
8. Interest + rent as % of GFI 28.7% – 5 year average 19.8%.
9. Interest + rent paid per kg/ms \$1.22 – 5 year average \$1.19 per kg/ms.
10. Overall cost of production per kg/ms (FWE + interest + rent + vehicle and plant depreciation) \$4.80 – 5 year average \$5.35 per kg/ms.
11. Net farm loss \$126,472 – previous 4 year average is a net profit of \$262,481.
12. Net capital plant purchases \$33,854 – 5 year average \$53,344.
13. The Benchmark Group (top 10% based on interest return on TFC employed) were:
  - ACM 17% lower – less area – same stocking rate
  - Slightly higher MS production per ACM + EGA
  - Lower FWE per kg/ms (17.5% lower)
  - Higher interest + rent paid (30% higher)
  - Smaller loss by \$97,721
  - Higher net plant purchases by \$38,104
  - Lower overall costs per kg/ms by 54c (11%)

Average value of milk solids receipt was almost the same at

**\$3.83**

Cost of production per kg/ms

**\$4.80** overall

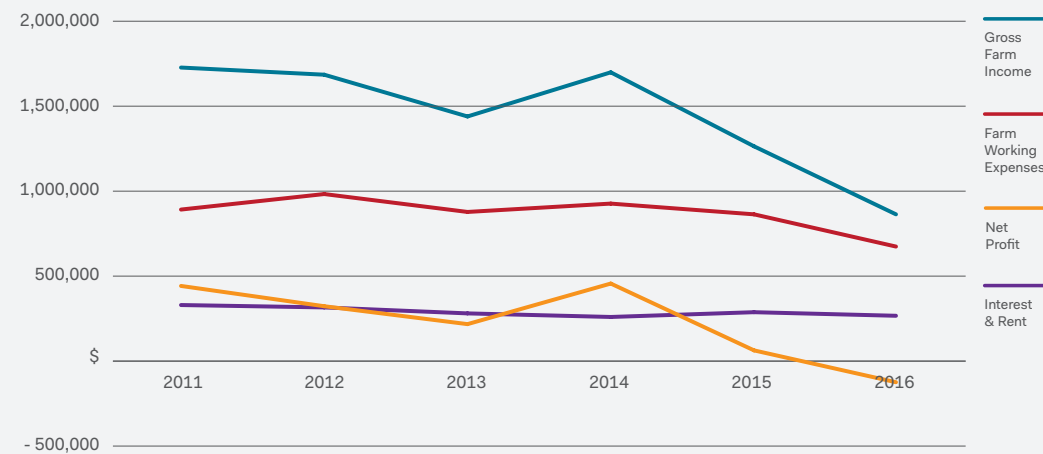
**\$4.26** top 10%

# Survey

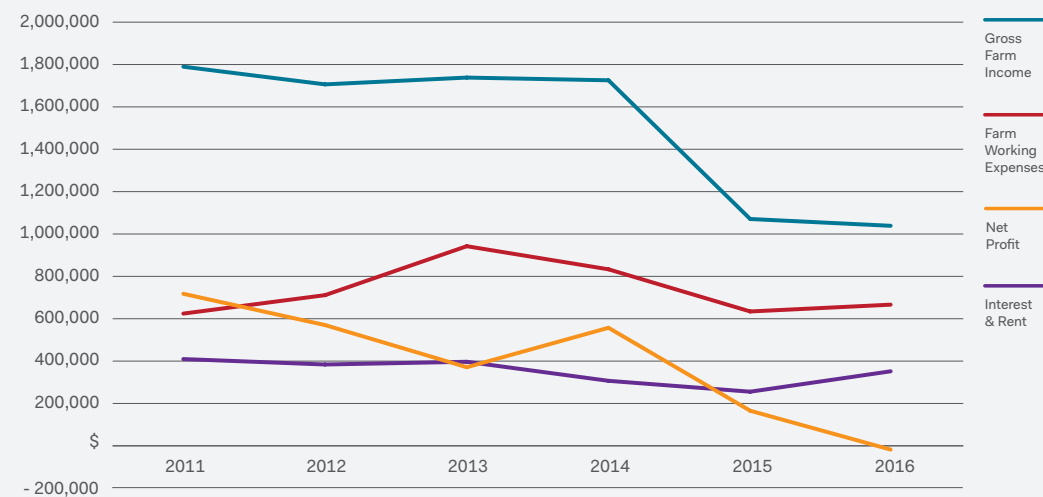
	Overall Average 2012	Overall Average 2013	Overall Average 2014	Overall Average 2015	Overall Average 2016	Benchmark Group 2016	Your Figures
Effective Grazing Area (ha) (EGA)	233	220	218	223	216	255	
Average Cows Milked (ACM)	579	540	530	531	510	599	
ACM/EGA	2.5	2.5	2.4	2.4	2.4	2.4	
Milk Solids Revenue	\$1,549,404	\$1,311,719	\$1,576,591	\$1,160,125	\$758,037	\$886,597	
Milk Solids Production (kg)	230,566	217,897	213,500	216,771	199,632	240,484	
Average Value of Milk Solid Sales (Kg)	\$6.69	\$5.98	\$7.41	\$5.42	\$3.83	\$3.91	
Milk Solid Revenue/ACM	\$2,731	\$2,430	\$2,980	\$2,188	\$1,505	\$1,554	
Milk Solid Revenue/EGA	\$6,723	\$5,999	\$7,318	\$5,259	\$3,545	\$3,797	
Milk Solids/ACM (kg)	407	403	401	404	391	412	
Milk Solids/EGA (kg)	1005	992	982	965	923	1,005	
Milk Solids as a % of GFI	93.0%	92.3%	93.6%	93.4%	89.6%	90.5%	
Gross Farm Income (GFI)	\$1,674,748	\$1,427,767	\$1,689,140	\$1,257,208	\$855,770	\$1,030,868	
Farm Working Expenses (FWE)	\$973,247	\$872,505	\$922,169	\$855,987	\$667,290	\$662,404	
FWE as a % of GFI	55.2%	59.3%	52.8%	66.4%	78.0%	63.1%	
FWE/ACM	\$1,659	\$1,590	\$1,705	\$1,562	\$1,298	\$1,130	
FWE per kg of Milk Solids	\$4.01	\$3.88	\$4.22	\$3.86	\$3.33	\$2.74	
Wages/ACM	\$221	\$237	\$233	\$242	\$241	\$142	
Animal Health/ACM	\$85	\$84	\$82	\$80	\$68	\$48	
Livestock Improvement/ACM	\$47	\$47	\$45	\$47	\$42	\$34	
Stockfood/ACM	\$490	\$469	\$526	\$455	\$359	\$409	
Fertiliser/ACM	\$318	\$294	\$330	\$295	\$241	\$252	
R & M/ACM	\$119	\$110	\$113	\$131	\$88	\$62	
Vehicle Expenses & Fuel/ACM	\$104	\$95	\$95	\$81	\$74	\$52	
Dairy Shed Expenses/ACM	\$16	\$20	\$24	\$19	\$16	\$14	
Interest & Rent Paid	\$314,064	\$278,483	\$254,115	\$280,493	\$262,934	\$340,746	
Interest & Rent Paid as a % of GFI	17.3%	18.2%	14.4%	20.4%	28.7%	29.6%	
Interest & Rent Paid/KG MS	\$1.24	\$1.18	\$1.13	\$1.18	\$1.22	\$1.28	
Cost of Prodn per KG MS (excl Interest & Rent)	\$4.30	\$4.18	\$4.54	\$4.16	\$3.58	\$2.98	
Net Farm Profit	\$322,019	\$214,804	\$451,186	\$61,916	(\$126,472)	(\$28,751)	
Net Farm Profit as a % of GFI	24.8%	19.5%	28.9%	8.6%	(12.7%)	(1.2%)	
Net Plant Purchases	\$73,336	\$61,611	\$60,668	\$62,250	\$33,854	\$71,958	
Personal Drawings (excl Allowances)	\$63,277	\$63,205	\$58,022	\$50,337	\$49,100	\$56,101	
Est Total Farm Capital (TFC)	\$8,359,310	\$8,097,749	\$8,508,160	\$8,546,091	\$7,792,038	\$8,830,667	
Est TFC per kg Milk Solids	\$37.39	\$38.77	\$41.11	\$41.04	\$40.33	\$36.62	
Est TFC per Ha	\$37,778	\$38,518	\$39,796	\$38,800	\$36,637	\$36,571	
Est Interest on TFC	6.9%	4.8%	7.2%	2.8%	1.1%	2.7%	
Total Term Debt	\$3,748,195	\$3,590,059	\$3,573,431	\$3,924,616	\$4,055,210	\$5,260,971	
Total Term Debt as % TFC	44.8%	41.8%	40.1%	41.9%	45.4%	41.7%	
GFI to Plant Ownership Ratio	6.3	6.4	5.7	4.6	3.2	3.0	
Earnings Before Interest, Rent & Tax (EBIT)	\$636,083	\$493,287	\$705,301	\$342,408	\$136,461	\$311,995	
EBIT/ACM	\$1,196	\$943	\$1,376	\$672	\$290	\$569	
EBIT/EGA	\$2,922	\$2,297	\$3,305	\$1,587	\$654	\$1,417	
EBIT/kg Milk Solids	\$2.93	\$2.32	\$3.42	\$1.67	\$0.71	\$1.37	
Total Cost of Production/Kg	\$5.54	\$5.39	\$5.66	\$5.34	\$4.80	\$4.26	
Margin/Kg MS	\$1.15	\$0.60	\$1.75	\$0.08	(\$0.97)	(\$1.01)	
"Misery Index"	73%	77%	67%	87%	107%	93%	

# Glossary

Average GFI, FWE, Interest + Rent & Net Profit 2011-2016



Benchmark GFI, FWE, Interest + Rent & Net Profit 2011-2016



Interest/Rent paid per kg/ms

**\$1.22**

overall

**\$1.28**

top 10%

Farm working expenses per kg/ms

**\$3.33**

overall

**\$2.74**

top 10%

**SU**

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.

**Alexanders**  
Accountancy & Advice for Agribusiness

03 365 8400  
admin@alexanders.net.nz

Unit 1, Level 1, Amuri Park  
25 Churchill Street  
Christchurch 8013

**alexanders.net.nz**