

Farm statistical survey 2016

Dairy Owner/Operator – 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)	941	964	1,072	1,092	978	826	
Average Value of MS per Kg	\$6.49	\$6.26	\$7.68	\$5.63	\$3.85	\$4.08	
Milk Solids/ ACM (Kg)	441	433	437	443	448	463	
Milk Solids/ EGA (Kg)	1498	1499	1545	1560	1557	1633	
FWE per kg of MS	\$3.86	\$4.33	\$4.33	\$4.19	\$3.59	\$3.37	
Interest & Rent Paid per Kg MS	\$1.31	\$1.31	\$1.28	\$1.36	\$1.29	\$1.38	
Net Farm Profit (Loss)	\$623,919	\$409,001	\$910,833	\$169,247	(\$337,890)	\$13,672	
Total Term Debt	\$6,985,303	\$7,647,958	\$8,984,329	\$9,855,664	\$9,583,996	\$8,084,491	
Total Cost of Production per Kg MS	\$5.45	\$5.71	\$6.04	\$5.93	\$5.18	\$4.95	

Key features

1. Decrease in ACM by 114 head – or 10.4% - same stocking rate – effect perhaps of fodder beat grown on farm for winter grazing.
2. MS production at 436,474 – lower by 47,769 kgs (10% lower).
3. MS receipt of \$3.85 per kg/ms – a drop of \$1.78 per kg – or 31.6%.
4. MS production per ACM 448 kg – basically the same as the 4 previous years.
5. MS production per EGA at 1,557 kg is very similar to the 2 previous years.
6. FWE as a % of GFI is 81.6% - previous 4 year average was 59.3%.
7. FWE per kg/ms is \$3.59 – previous 4 year average was \$4.18 per kg (15% lower).
8. Interest + rent as % of GFI is 29.4% - previous 4 year average was 19.0%.
9. Interest + rent paid per kg/ms \$1.29 – previous 4 year average \$1.32 per kg/ms.
10. Overall cost of production per kg/ms (FWE + interest + rent + vehicle & plant depreciation) \$5.18 – previous 4 year average was \$5.48 per kg/ms.
11. Net farm loss of \$337,890 – previous 4 year average was a net profit of \$528,250.
12. Net capital plant purchases \$124,232 - previous 4 year average of \$196,600.
13. Substantial increase in Term Debt from 2012 to 2016 of \$2.6 million or 37% - but only an increase in production of 25,000 kgs/ms – a function of capital development re building, environment, cowshed etc but probably mainly irrigation extension and development. Saved by low interest rates.
14. The Benchmark Group (top 10% based on interest return on TFC employed) were:
 - ACM lower by 152 head or 15.5% - due to lower area – same stocking rate
 - MS production lower by 54,123 kgs or 12.4%
 - Very similar MS production per ACM
 - Slightly higher MS per EGA - 4.9%
 - Lower FWE per kg/ms - 22 cents lower or 6%
 - Lower interest + rent payments - 15.4% lower
 - Small net profit of \$13,672 as opposed to a loss of \$337,890 in the average group
 - Lower net capital plant purchases
 - Higher average value of livestock sales
 - Lower overall costs per kg/ms (\$4.95 compared with \$5.18)

Average value of milk solids receipt was almost the same at

\$3.85

Cost of production per kg/ms

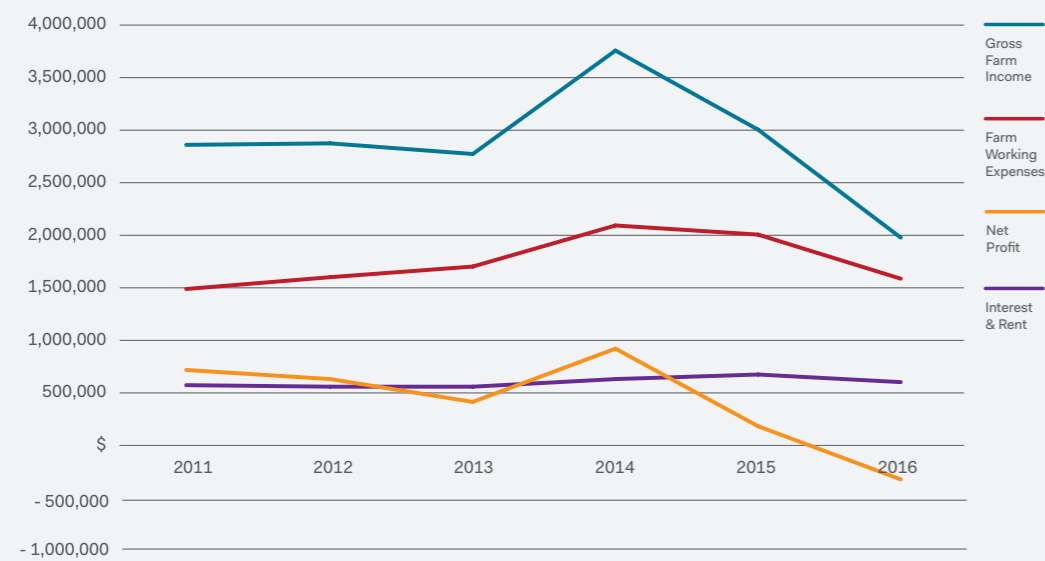
\$5.18 overall

\$4.95 top 10%

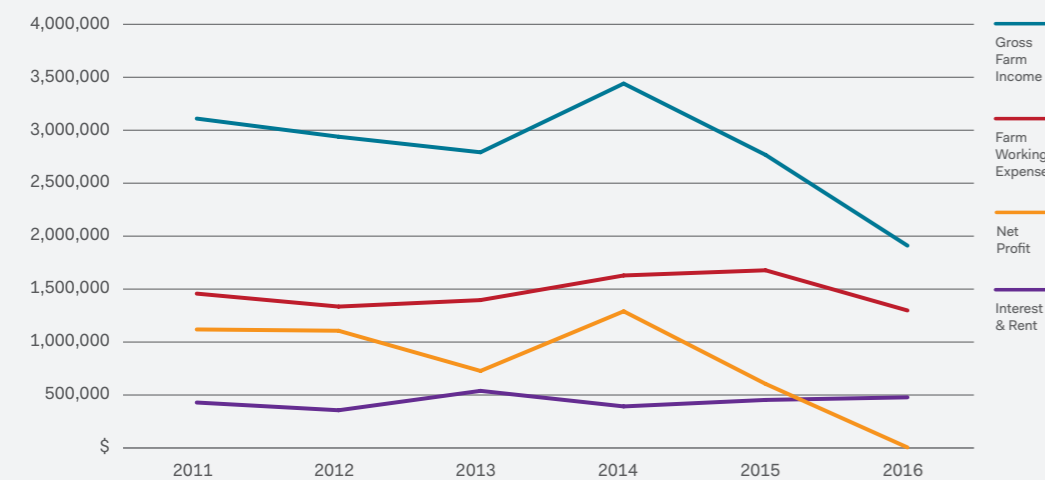
Survey

	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)	275	275	297	306	276	238	
Average Cows Milked (ACM)	941	964	1,072	1,092	978	826	
ACM/EGA	3.4	3.5	3.5	3.5	3.5	3.5	
Milk Revenue	\$2,674,192	\$2,595,434	\$3,574,839	\$2,773,556	\$1,718,698	\$1,561,769	
Milk Solids Production (Kg)	411,569	415,891	466,490	484,243	436,474	382,351	
Average Value of Milk Solid Sales/Kg	\$6.49	\$6.26	\$7.68	\$5.63	\$3.85	\$4.08	
Milk Solid Revenue/ACM	\$2,856	\$2,707	\$3,358	\$2,487	\$1,727	\$1,894	
Milk Solid Revenue/EGA	\$9,670	\$9,341	\$11,849	\$8,726	\$5,978	\$6,632	
Milk Solids/ACM (Kg)	441	433	437	443	448	463	
Milk Solids/EGA (Kg)	1,498	1,499	1,545	1,560	1,557	1,633	
Milk Solids as a % of GFI	92.7%	92.9%	94.2%	91.4%	87.7%	87.0%	
Gross Farm Income (GFI)	\$2,882,723	\$2,786,843	\$3,776,554	\$3,019,471	\$1,972,820	\$1,904,942	
Farm Working Expenses (FWE)	\$1,600,786	\$1,702,592	\$2,098,981	\$2,004,222	\$1,592,845	\$1,303,089	
FWE as a % of GFI	54.9%	60.3%	54.1%	68.0%	81.6%	68.0%	
FWE/ACM	\$1,705	\$1,769	\$1,935	\$1,845	\$1,609	\$1,571	
FWE per kg of Milk Solids	\$3.86	\$4.33	\$4.33	\$4.19	\$3.59	\$3.37	
Wages/ACM	\$243	\$247	\$272	\$291	\$300	\$271	
Animal Health/ACM	\$98	\$101	\$106	\$96	\$85	\$78	
Livestock Improvement/ACM	\$44	\$52	\$55	\$54	\$48	\$44	
Stockfood/ACM	\$575	\$575	\$670	\$615	\$497	\$538	
Fertiliser/ACM	\$249	\$239	\$235	\$219	\$188	\$185	
R & M/ACM	\$135	\$120	\$149	\$138	\$102	\$83	
Vehicle Expenses & Fuel/ACM	\$68	\$72	\$75	\$62	\$58	\$44	
Dairy Shed Expenses/ACM	\$19	\$19	\$21	\$17	\$18	\$18	
Interest & Rent Paid	\$550,320	\$549,498	\$624,795	\$660,916	\$590,603	\$499,763	
Interest & Rent Paid as a % of GFI	18.9%	19.4%	15.7%	22.0%	29.4%	28.4%	
Interest & Rent Paid/Kg MS	\$1.31	\$1.31	\$1.28	\$1.36	\$1.29	\$1.38	
Cost of Prodn per Kg MS (excl Interest & Rent)	\$4.14	\$4.41	\$4.76	\$4.59	\$3.89	\$3.50	
Net Farm Profit	\$623,919	\$409,001	\$910,833	\$169,247	(\$337,890)	\$13,672	
Net Farm Profit as a % of GFI	22.3%	17.7%	26.2%	6.3%	(17.9%)	0.6%	
Net Plant Purchases	\$175,442	\$203,174	\$219,788	\$187,996	\$124,232	\$73,820	
Personal Drawings/Family (excl Allowances)	\$87,027	\$76,573	\$87,358	\$68,617	\$72,980	\$59,371	
Est Total Farm Capital (TFC)	\$14,350,412	\$16,092,159	\$19,738,243	\$19,625,817	\$17,732,007	\$14,309,625	
Est TFC per Kg Milk Solids	\$36.64	\$40.18	\$43.87	\$42.02	\$41.72	\$38.08	
Est TFC per Ha	\$53,615	\$58,347	\$66,045	\$63,367	\$63,200	\$60,852	
Est Interest on TFC	7.2%	5.5%	7.3%	3.5%	3.5%	4.5%	
Total Term Debt	\$6,985,303	\$7,647,958	\$8,984,329	\$9,855,664	\$9,583,996	\$8,084,491	
Term Debt as % TFC	46.1%	44.6%	42.0%	46.7%	52.3%	52.6%	
GFI to Plant Ownership Ratio	6.4	5.4	6.2	4.7	3.1	3.5	
Earnings Before Interest, Rent & Tax (EBIT)	\$1,174,239	\$956,369	\$1,535,072	\$827,483	\$250,345	\$440,964	
EBIT/ACM	\$1,273	\$1,021	\$1,494	\$710	\$241	\$544	
EBIT/EGA	\$4,341	\$3,527	\$5,294	\$2,526	\$827	\$1,932	
EBIT/Kg Milk Solids	\$2.88	\$2.37	\$3.41	\$1.59	\$0.53	\$1.23	
Net Profit / Kg Milk Solids	\$1.57	\$1.07	\$2.14	\$0.25	(\$0.75)	\$0.03	
Total Cost of Production per Kg MS	\$5.45	\$5.71	\$6.04	\$5.93	\$5.18	\$4.95	
MS Margin over and above MS Payout (/Kg MS)	\$1.04	\$0.56	\$1.65	\$0.71	(\$1.33)	(\$0.87)	
"Misery Index"	74%	80%	70%	80%	111%	93%	

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



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



Interest/Rent paid per kg/ms

\$1.29

overall

\$1.38

top 10%

Farm working expenses per kg/ms

\$3.59

overall

\$3.37

top 10%

Glossary

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.

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