Dairy Farm Monitor Project

Victoria

Annual Report 2013/14

Dairy Australia
Your Levy at Work

Department of Environment and Primary Industries

State Government Victoria

Acknowledgements

The cooperation, patience and goodwill of the farmers who willingly supplied their farm information, either for the first time or eighth consecutive year, are gratefully acknowledged.

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To find out the latest information on the project visit the project website at *www.depi.vic.gov.au/dairyfarmmonitor*

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List of tables

Notes on the presentation of data in this report

This section of the report defines and explains the calculations used and the data presented throughout the report. The different sections of the report are discussed and the number of participant farms in the three dairying regions listed.

This section is not to be confused with II. Farm Monitor Method which discusses the methodology for the farm data analysis.

This report is presented in the following parts;

- Executive Summary
- Farm monitor method
- Statewide overview
- North region overview
- South West region overview
- Gippsland region overview
- Business confidence survey
- Greenhouse report
- Historical analysis
- Appendices

Participants were selected for the project in order to represent a distribution of farm sizes, herd sizes and geographical locations within each region. The results published in this report should not be taken to represent population averages as the participant farms were not selected via random population sampling.

The report presents visual descriptions of the data for the 2013/14 year. Data is presented for individual farms, regional averages and regional top 25% of farms ranked by return on assets. Reported averages are calculated as the mean. These averages should in no way be considered averages for the population of farms in that region given the small sample size and farms are not randomly selected.

The top 25% of farms are presented as lighter coloured bars in the regional overview figures. Return on assets is the determinant of the top producers as it provides an assessment of the performance of the whole farm while accounting for differences in location and production system.

The Q1 - Q3 data range for key indicators is also presented in the tables to give an indication of the variation in the data. The Q1 value is the quartile 1 value. That is, the value of which one quarter (25%) of data in that range is less than. The Q3 value is the quartile 3 value. That is, the value of which one quarter (25%) of data in that range is greater than. This means that the middle 50% of data sits between the Q1-Q3 data range. Given the differences in variation in the regional data, caution is highly recommended when comparing one region to another.

To reduce wordiness, this report will often refer to the group of participating farms in each region by their regional name;

- The 25 participating farms in the Northern Victoria region are referred to as ‘the North’.
- The 25 participating farms in the South Western Victoria region are referred to as ‘the South West’.
- The 25 participating farms in the Gippsland region are referred to as ‘Gippsland’.

The appendices include detailed data tables, a list of abbreviations and a glossary of terms.

Milk production data is presented in kilograms of milk solids as farms are paid according to milk solids.

The report will focus on measures on a per kilogram of milk solids basis, with occasional referral to measure on a per hectare or per cow basis. The appendix tables contain the majority of financial information in a per kilogram of milk solids basis.

The method used is a combination of that used in the Livestock Farm Monitor Project, and various other referenced sources. Attention should be paid to the method when directly comparing figures from this report with those generated via other means. More detail on the method is provided in Part II. Farm monitor method.

Percentage differences are calculated as [(new value – original value)/original value]. For example ‘costs went from $80/ha to $120/ha, a 50% increase’; [{(120-80)/80} x (100/1)] = [(40/80) x 100] = 0.5 x 100 = 50%, unless otherwise stated.

Top 25% consists of six farms from each of North, South West and Gippsland regions and 19 farms on a statewide basis. The 19 farms in the statewide top 25% are taken by considering all 75 as the one sample and not from combining the top farms from each region.

Discussion on ‘last year’ refers to the 2012/13 Dairy Farm Monitor Project report. Price and cost comparisons between years are nominal unless otherwise stated. It must be noted that not all of the participants from the 2012/13 report are in the 2013/14 report. There are also new participants in this year’s dataset, which have not been in previous years. It is important to keep this in mind when comparing datasets between years. Farms that were included in last years sample are noted at the start of each regional chapter.

Please note that text around explanations of terms will be repeated within the different chapters.

Keep an eye on the project website for further reports and updates on the project at:

www.depi.vic.gov.au/dairyfarmmonitor

or

www.dairyaustralia.com.au/dairyfarmmonitor

I.
Executive Summary

Summary

Data from 75 farms in Victoria reveal that in 2013/14 high milk prices and favourable seasonal conditions contributed to an increase in farm profitability. This resulted in average whole farm earnings before interest and tax (EBIT) of $367,765, a six-fold increase compared to the previous year while return on assets rose to 8.5 per cent, up from 0.7 per cent.

Now in its eighth year in Victoria, the Dairy Farm Monitor Project provides valuable farm level data relating to profitability and production.

In 2013/14, Victorian dairy farm profitability improved markedly on the previous year's performance as a result of favourable operating conditions. The milk price reached an average of $6.79/kg MS, its second highest level recorded in real terms in the eight year history of the project and while grain prices were above last year's high prices, marginal feeding decisions were attractive.

Following the challenging 2012/13 year, the last 12 months has enabled many farmers to consolidate their businesses and attend to delayed capital purchases and repairs. All farm participants recorded a positive return on assets, compared to only 43 of the 75 participants last year.

North

In 2013/14, the North experienced favourable seasonal conditions with above average rainfall, 100% allocation of high reliability water shares on all northern systems and good availability of temporary water. This saw irrigation costs increase 27% up to $0.47/kg MS as the cost of temporary water increased to an average of $74 per megalitre and 21 of the 25 farms purchased temporary water allocations again this year. Expenditure also increased on concentrates as a result of the higher grain price. This led to a higher average cost of production at $5.34/kg MS. Average milk price in the region increased 35% to $6.83/kg MS. These factors resulted in average whole farm earnings before interest and tax increasing five-fold to $393,700 while return on assets rose to 11.3%. Average net farm income was $303,825 and average return on equity was 14.7%.

South West

An improvement in operating conditions in the South West was a welcome change to the previous challenging 12 months. The region recorded the highest milk price of all the regions at $6.91/kg MS, increasing 41% from 2012/13. The better seasonal conditions meant farmers were able to directly graze more pasture per milking hectare and reduce their reliance on purchased fodder. Despite this decrease in fodder costs, overall feed costs rose in 2013/14. This was due to higher rates of fertiliser applied increasing fertiliser costs by 35% to $0.50/kg MS, and the higher grain prices increasing the cost of concentrates by 10% to $1.65/kg MS. Overhead costs remained stable, as the increase in repairs and maintenance costs and employed labour was counter balanced by a decrease in imputed labour, resulting in an overall increase in cost of production to $5.34/kg MS.

Average return on assets for farms in the South West rose to 7.9% in 2013/14 and earnings before interest and tax to $424,647. Average net farm income was $278,794 and return on equity was 9.9% with positive returns recorded by 24 of the 25 farms.

Gippsland

In 2013/14 south, west and north east Gippsland experienced variable growing conditions despite receiving average to above average rainfall. The Macalister Irrigation District (MID) had a good season finishing the year with 100% allocation of high and 5% allocation of low reliability water shares. Grazed and conserved pasture increased by 16% to 8.6 t DM/ha and incurred higher home grown feed costs. Purchased feed costs increased on the back of higher grain prices. Farmers controlled expenditure on overhead costs, particularly repairs and maintenance and imputed labour, thereby decreasing total cost of production to $5.16/kg MS.

Milk price increased 39% to $6.62/kg MS. These conditions resulted in a large improvement in farm returns with average earnings before interest and tax for Gippsland farms increasing six-fold to $284,948 and return on assets was 6.4%. The average return on equity was 10.2% with net farm income across the region reported at $188,387.

Farmer confidence

Following a positive 2013/14 year, expectations for the coming season are variable. Recognising the high milk price year, the majority of farmers across the state expect to see a decrease in milk price in 2014/15 and over 90% of farms are intending to increase or have no change to milk production. Cash flow was the main issue facing farmers over the next 12 months while succession planning for individual businesses or the industry in general was the major long term issue.

Greenhouse gas

A greenhouse gas emission audit showed the average level of greenhouse gases emitted increased by 10% to 12.3 tonnes per tonne of MS. This was mainly due to a statewide increase in livestock numbers and fertiliser use.

Historical analysis

A historical analysis over the past eight years of the project showed the marked improvement in farm profitability in 2013/14. Farms in the North recorded their strongest performance, while farms in the South West and Gippsland recorded their second highest.

II.
Farm monitor method

Farm monitor method

This section of the report explains the method behind the figures in the Dairy Farm Monitor Project and what they mean. It helps put farm business economic terminology into context.

The method employed to generate the profitability and production data in this report was adapted from that described in The Farming Game (Malcolm et al. 2005) and is consistent with that used in previous Dairy Farm Monitor Project reports. Readers should be aware that not all benchmarking programs use the same methodology or terminology for farm financial reporting. The allocation of items such as lease costs, overhead costs or imputed labour costs against the farm enterprises will vary between financial benchmarking programs. Standard dollar values for things such as stock and feed on hand and imputed labour rates may also vary. For this reason, the results from different benchmarking programs should be compared with caution.

FIGURE 1. DAIRY FARM MONITOR PROJECT METHOD

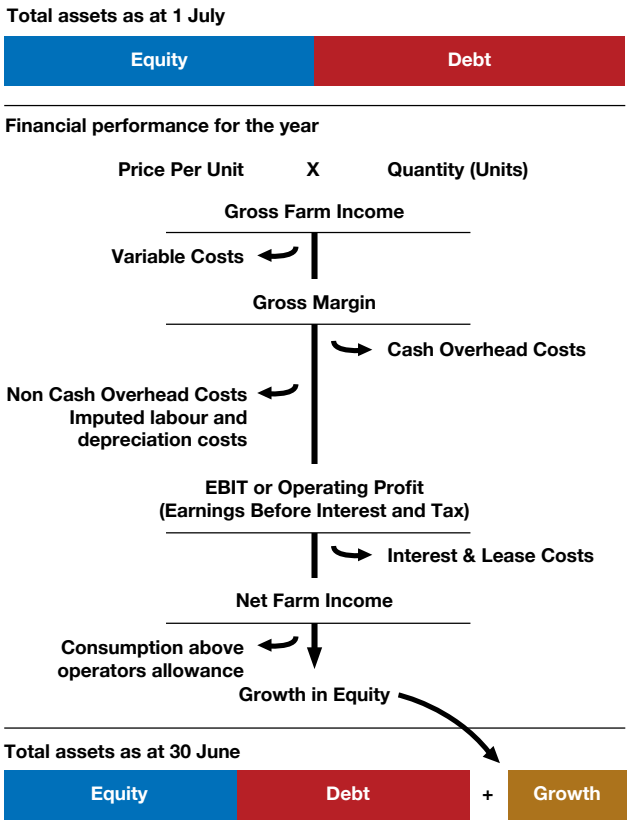


Figure 1 demonstrates how all of the different farm business economic terms come together and are calculated. It is adapted from an initial diagram obtained from Bill Malcolm (2008) at the University of Melbourne. The diagram shows the different profitability measures as certain costs deducted from total income. It also discusses capital and growth.

Growth is achieved by investing in assets which generate income. These assets can be owned with equity (one's own capital) and debt (borrowed capital), as shown in Figure 1 above. In order for the assets to generate income they need to be farmed and managed, which involves incurring costs. The amount of growth is dependant on the maximisation of income and minimisation of costs, or cost efficiency relative to income generation.

The method is also shown using the state average results in Figure 2. Production and economic data are identified to indicate how the terms are calculated and how they all fit together.

Gross farm income

The farming business generates a total income which can be from milk cash income (net), livestock trading profit, feed inventory change or other sources such as colostrum sales or milk share dividends. The main source of income, that from milk, is calculated simply by multiplying price received per unit by the number of units. For example dollars per kilogram milk solids multiplied by kilograms of milk solids. Subtracting certain costs from total income gives different profitability measures.

Variable costs

Variable costs are costs that are specific to an enterprise, such as herd, shed and feed costs. These costs vary directly in relation to the size of the enterprise. Subtracting variable costs from gross farm income, only for the dairy enterprise, gives a gross margin. Gross margins are a common method for comparing between similar enterprises and are commonly used in broad acre cropping and livestock enterprises. Gross margins are not generally referred to in economic analysis of dairy farming businesses.

Overhead costs

Overhead costs are costs that are not directly related to an enterprise as they are expenses incurred through the general operating of the business. The Dairy Farm Monitor Project separates overheads into cash overheads and non cash overheads, to distinguish between cash flows of the business. Cash overheads are those fixed costs such as rates, insurance, and repairs and maintenance. Non cash overheads include costs that are not actual cash receipts or expenditure; for example the amount of depreciation on a piece of equipment. Imputed operators allowance for labour and management is also a non cash overhead that must be costed and deducted from income if a realistic estimate of costs, profit and the return on the capital of the business is to be obtained.

Earnings before interest and tax

Earnings before interest and tax (EBIT) is calculated by subtracting variable and overhead costs from gross farm income. EBIT is sometimes referred to as operating profit and is the return from all the capital used in the business.

Net farm income

Net farm income is EBIT minus interest and lease costs and is the reward to the farmer's own capital. Interest and lease costs are viewed as financing expenses, either for borrowed money or leased land that is being utilised.

Net farm income is then used to pay tax and what is left over is net profit or surplus and therefore growth, as it can be invested into the business to expand the equity base; either by direct reinvestment or the payment of debt.

Return on assets and return on equity

Two commonly used economic indicators of whole farm performance are return on assets and return on equity. They measure the return to their respective capital base.

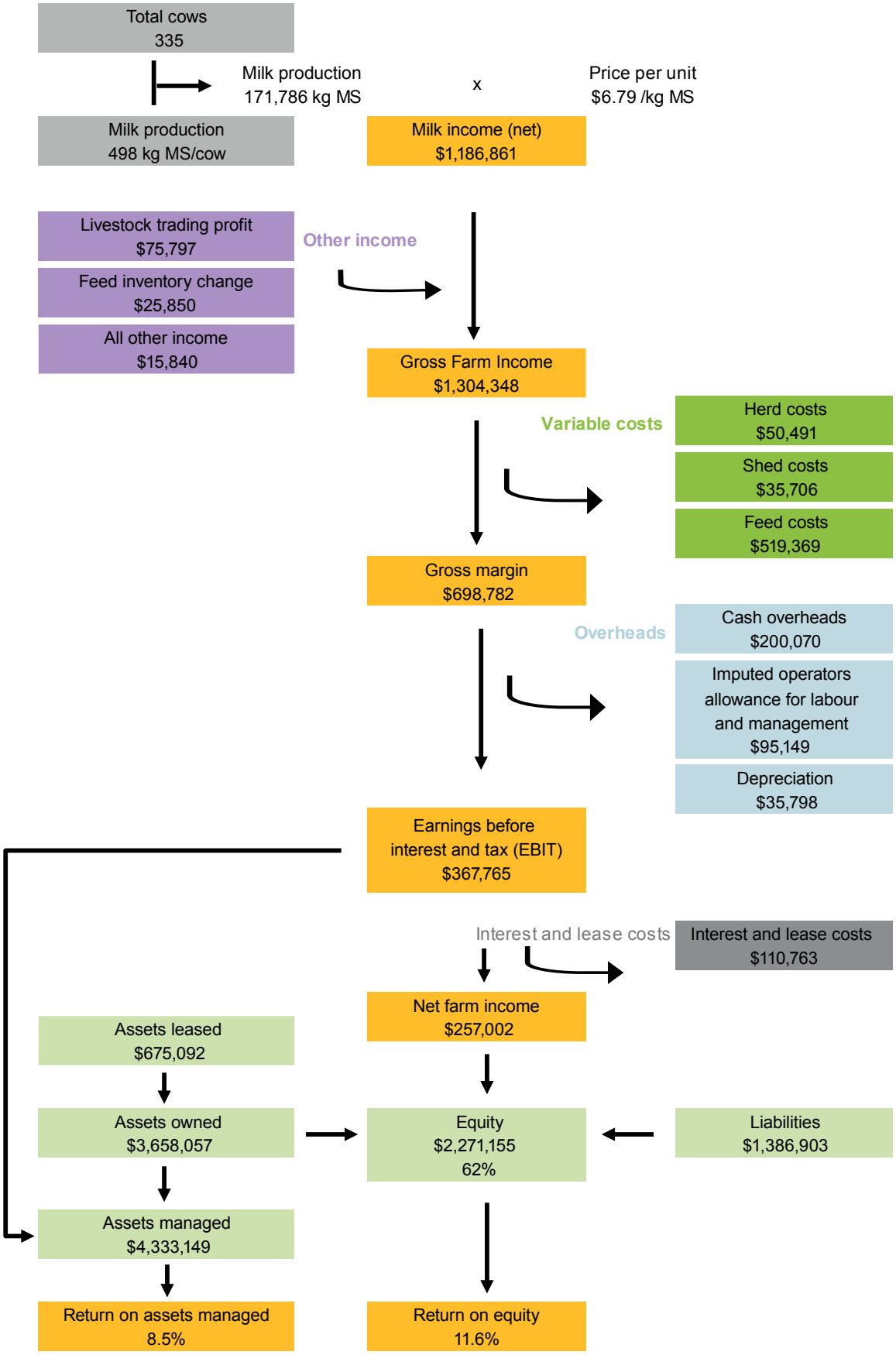
Return on assets indicates the overall earning of the total farm assets, irrespective of capital structure of the business. It is EBIT or operating profit expressed as a percentage of the total assets under management in the farm business, including the value of leased assets. EBIT expressed as a return on total assets is the return from farming. There is also a further return to the asset from any increase in the value of the assets over the year, such as land value. If land value goes up 5% over the year, this is added to the return from farming to give total return to the investment. This return to total assets can be compared with the performance of alternative investments with similar risk in the economy. Return on assets is sometimes referred to as return on capital.

In 2011/12 return on assets replaced EBIT as the final financial measure used to gauge the profitability of a farming business. Return on asset enables a more complete assessment to be made of individual and between different farming businesses as it ignores how the operation is financed while also accounting for the difference in the productive capacity of land in different areas and regions.

In Figure 1 total assets are visually represented by debt and equity. The debt:equity ratio, or equity percent of total capital varies depending on the detail of individual farm business and the situation of the owners, including their attitude towards risk.

Return on equity measures the owner's rate of return on their own capital investment in the business. It is net farm income expressed as a percentage of total equity (one's own capital). The Dairy Farm Monitor Project reports return on equity with and without capital appreciation. This is to distinguish between productivity gains (return on equity without capital appreciation) and capital gains (return on equity with capital appreciation).

FIGURE 2. DAIRY FARM MONITOR PROJECT METHOD PROFIT MAP – STATE AVERAGE DATA[1]



1 Profit map adapted from Queensland Dairy Accounting Scheme – 2010 with permission from Ray Murphy, Department of Agriculture, Fisheries and Forestry, Queensland.

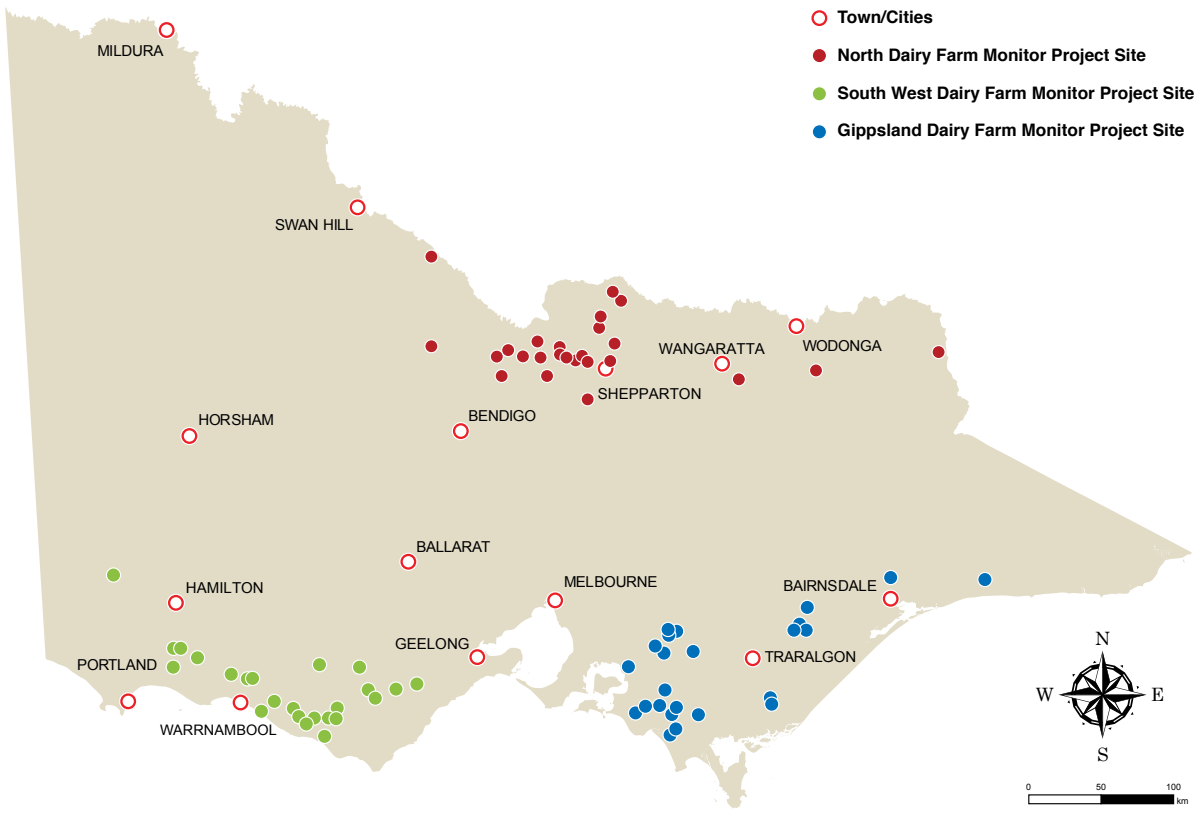
Part One:
Statewide overview

Statewide overview

This section of the report compares the average performance, in a range of physical and financial indicators, for all participant farms across Victoria, with the averages from the North, South West and Gippsland regions reported.

The approximate location of the participating farms is shown in Figure 3.

FIGURE 3. DISTRIBUTION OF PARTICIPANT FARMS ACROSS VICTORIA



2013/14 Seasonal conditions

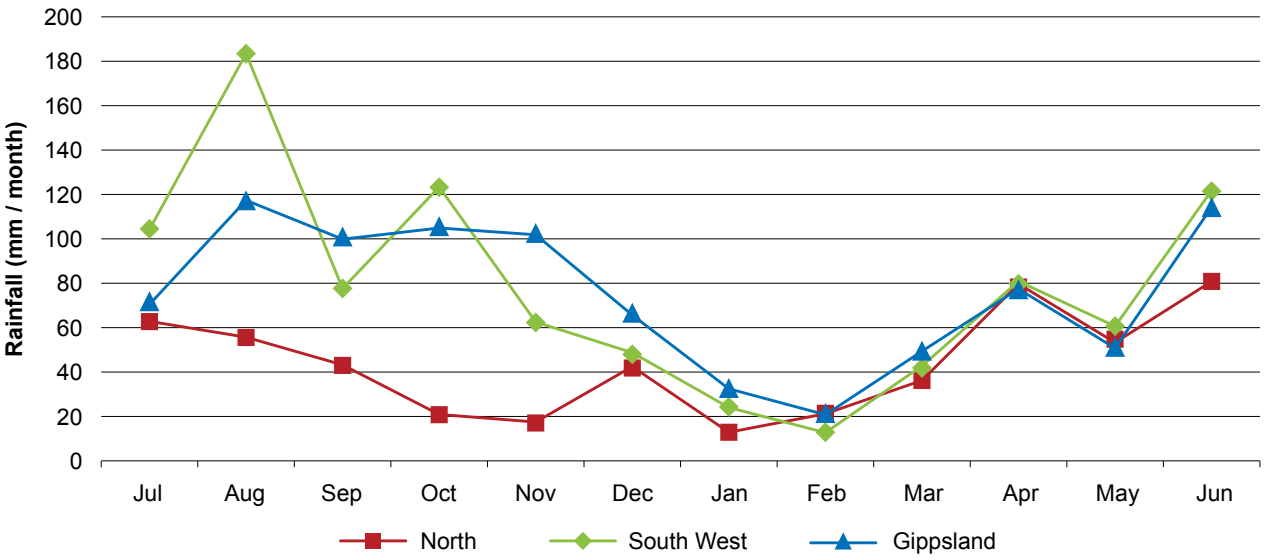
Seasonal conditions were favourable across Victoria in 2013/14, particularly in Northern Victoria. However, the timing of rainfall in the dairy regions south of the divide saw a wet winter and a hot summer interrupting fodder conservation and limiting pasture growth. The autumn break provided a good start to the season and plenty of good quality pasture heading back into winter.

The regional chapters provide more detail on the 2013/14 seasonal conditions.

Average rainfall across the farms in each region was mostly above long-term averages. This was a welcome change compared to the previous challenging 12 months. The North received 527mm over the year, approximately 109% of the long term average for these farms of 487mm. Farms in the South West received on average 943mm, or 116% of their long term average rainfall of 809mm.

Gippsland received an average of 905mm, which is equivalent to 102% of their long term average rainfall of 878mm. Figure 4 shows the rainfall pattern during the year and the variation that occurred.

FIGURE 4. 2013/14 MONTHLY RAINFALL



Whole farm analysis

On average, farms in the South West ran the largest herds over the largest area compared to the other two regions. Gippsland had a smaller average usable area compared to the other two regions at 186 hectares, but had higher water use than the other two regions at 1,044mm. Farms in the North had the highest average milk production across the year on both a per cow and per hectare basis and also had higher labour efficiency than farms in the other two regions.

Total water use per hectare in the North and Gippsland reflected the availability of irrigation in those regions, with all regions recording over 950mm of water used per hectare. The two main irrigation systems in the North; the Murray and the Goulburn, both closed at 100% allocation of high reliability water shares for the year. The Macalister Irrigation District in Gippsland also recorded a 100% allocation of high reliability water shares for the year in addition to a 5% allocation of low reliability water shares. Rainfall in the South West was above the long term average, a stark contrast to the previous two years.

Table 1 presents the average of some farm characteristics for each region. It shows the more intensive systems managed on farms in the North reflected by the higher stocking rate and milk production per cow and per hectare than the other two regions.

The farm physical parameters for individual farms can be found in Appendix Table 2 for each region.

TABLE 1. FARM PHYSICAL DATA – STATE OVERVIEW

Farm physical parameters	Statewide	North	South West	Gippsland
Number of farms in sample	75	25	25	25
Herd size (max no. cows milked for at least 3 months)	335	332	390	284
Annual rainfall 13/14	792	527	943	905
Water used (irrigation + rainfall) (mm/ha)	993	986	951	1,044
Total usable area (hectares)	242	210	330	186
Stocking rate (milking cows per usable hectares)	1.6	1.9	1.2	1.8
Milk solids sold (kg MS/cow)	498	522	503	468
Milk solids sold (kg MS/ha)	810	995	600	835
Milk price received ($/kg MS)	$6.79	$6.83	$6.91	$6.62
Labour efficiency (milking cows/FTE)	105	109	102	104
Labour efficiency (kg MS/FTE)	52,251	56,611	51,524	48,617

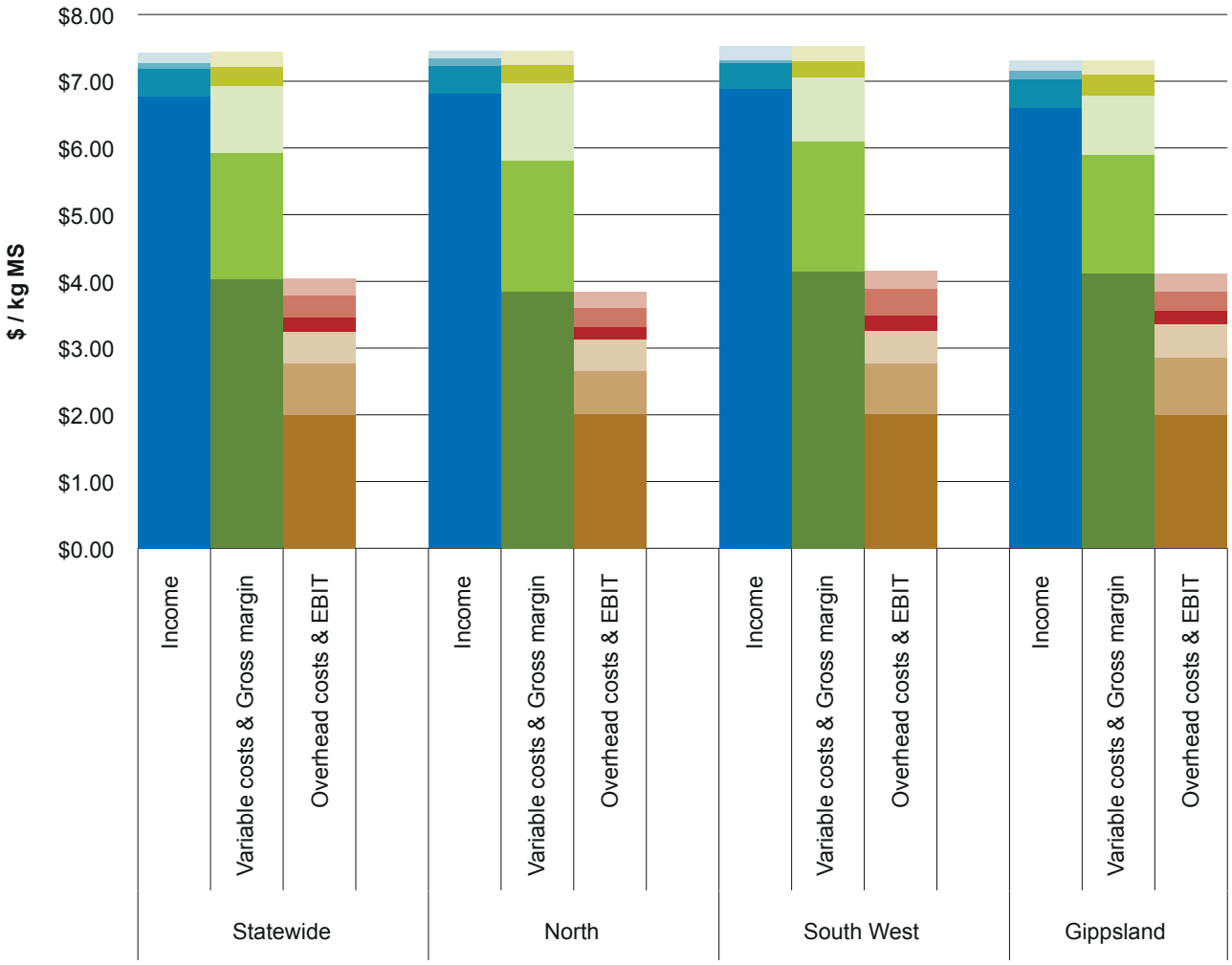
Figure 5 provides a visual representation of the average farm financial performance. The blue colours represent income per kilogram of milk solids added vertically to give gross farm income. From gross farm income, we can subtract the green variable costs, to give the grey gross margin values. From the gross margin we subtract the red/orange overhead costs to give us the yellow earnings before interest and tax. The legend for Figure 5 and the values for category can be found in Table 2.

Gross farm income

Gross farm income includes all farm income, whether that is income from milk sales, a change in inventories of stock or feed or cash income from livestock trading. Income from sources such as milk share dividends and colostrum sales is included in other farm income.

While Figure 5 shows just how much milk income dominates gross farm income, other sources are still important to the farm business. Across the state, income from sources other than milk accounted for 9% of gross farm income on average and as high as 22%. While milk income increased 39% across the state to $6.79/kg MS, other sources of income further contributed to gross farm income. Income from all other sources increased on average, with the two main categories of livestock trading profit and feed inventory change increasing in 2013/14, on the back of healthy livestock prices and an improvement in seasonal conditions.

FIGURE 5. AVERAGE FARM FINANCIAL PERFORMANCE PER KILOGRAM OF MILK SOLIDS



See Table 2 for the legend on Figure 5

Variable costs

Variable costs are costs directly associated with production. Examples include animal health, contract services, supplementary feeding, agistment and pasture costs. Figure 5 shows the large cost of purchased feed and agistment (seen as dark green), with the highest costs recorded by farms in the North. Home grown feed was the other major variable cost. The total cost of feed accounted for between 73 and 91% of total variable costs in all regions. See Appendix Table 6 for a breakdown of variable costs as a percentage of total (variable plus overhead) costs in each region.

The gross margin is equal to gross farm income minus total variable costs. While commonly used to compare enterprises that can use a similar capital structure like sheep or beef, it can be a useful measure in dairy to analyse changes on farm that don't require capital investment. The statewide average gross margin was $4.05/kg MS, almost double the $2.17/kg MS recorded in 2012/13, and 27% above $3.20/kg MS recorded in 2011/12.

Overhead costs

Overhead costs or 'fixed costs' are relatively unresponsive to small changes in the scale of operation of a business. Examples include depreciation, administration, repairs and maintenance and the cost of people's time. Imputed labour cost is an estimate of the cost of the time spent in the business by people with a share in the business such as the owner, the owner's family or a sharefarmer that owns assets in the business. The imputed labour cost is calculated as $25 per hour of imputed labour performed by either the owner operator or family members.

Average overhead costs for participant farms in the North and South West were the same over the last two years despite some small changes in individual categories. Gippsland farms controlled overhead expenditure in 2013/14, having recorded $0.17/kg MS lower overhead costs than the previous year.

Table 2 shows the North had the highest average variable costs as well as the lowest average overhead costs per kilogram of milk solids than the other two regions. Total labour costs were lowest in the North at $1.12/kg MS compared to $1.24/kg MS and $1.35/kg MS in the South West and Gippsland respectively.

TABLE 2. AVERAGE FARM FINANCIAL PERFORMANCE PER KILOGRAM OF MILK SOLIDS - STATEWIDE

Farm income and cost category	Statewide	North	South West	Gippsland
INCOME				
Feed inventory change	$0.15	$0.10	$0.21	$0.15
Other farm income	$0.10	$0.12	$0.05	$0.12
Livestock trading profit	$0.41	$0.41	$0.38	$0.43
Milk income (net)	$6.79	$6.83	$6.91	$6.62
Gross farm income	$7.44	$7.46	$7.54	$7.33
VARIABLE COSTS				
Shed cost	$0.22	$0.21	$0.23	$0.21
Herd cost	$0.28	$0.27	$0.25	$0.31
Home grown feed cost	$1.00	$1.17	$0.96	$0.88
Purchased feed and agistment	$1.90	$1.96	$1.94	$1.79
Total variable costs	$3.39	$3.61	$3.37	$3.19
GROSS MARGIN				
per kilogram of milk solids	$4.05	$3.85	$4.17	$4.13
OVERHEAD COSTS				
All other overheads	$0.25	$0.23	$0.26	$0.27
Repairs and maintenance	$0.33	$0.29	$0.41	$0.28
Depreciation	$0.21	$0.19	$0.24	$0.21
Employed labour	$0.48	$0.46	$0.47	$0.49
Imputed owner/operator and family labour	$0.76	$0.66	$0.77	$0.86
Total overhead costs	$2.03	$1.83	$2.14	$2.11
EARNINGS BEFORE INTEREST AND TAX				
per kilogram of milk solids	$2.02	$2.02	$2.03	$2.03

Earnings before interest and tax

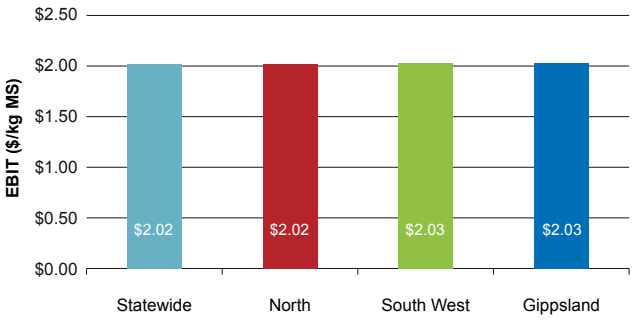
Earnings before interest and tax (EBIT) is the gross farm income, less variable costs and overhead costs including non-cash costs. As this figure excludes tax and interest and lease costs, it can be used to analyse the operational efficiency of the whole farm business.

Average EBIT was approximately $2.02/kg MS across all regions in 2013/14 (Figure 6). This was a considerable turn around compared to the average EBIT of $0.09/kg MS generated in 2012/13. It was the second highest EBIT recorded in the eight year history of the project surpassed by $2.76/kg MS (real) in 2007/08. The increase in farm profitability this year was a result of the favourable seasonal conditions and considerably higher milk price. The change in EBIT across the regions was:

- In the North, EBIT increased from $0.39/kg MS to $2.02/kg MS
- In the South West EBIT increased from $0.03/kg MS to $2.03/kg MS
- In Gippsland EBIT increased from -$0.14/kg MS to $2.03/kg MS.

Figures 19, 30 and 41 in the regional chapters provide a visual representation of the increase in EBIT between the samples this year and last.

FIGURE 6. AVERAGE EARNINGS BEFORE INTEREST AND TAX PER KILOGRAM OF MILK SOLIDS SOLD

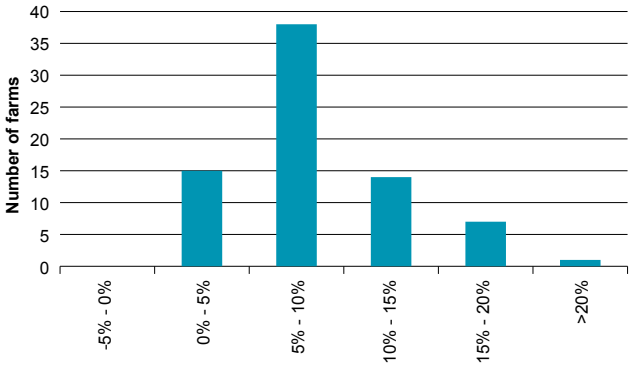


Return on assets and equity

Return on assets is the earnings before interest and tax expressed as a percentage of total farm assets under management and hence is an indicator of the earning power of total assets, irrespective of capital structure. Similarly, it can be considered as an indicator of the overall efficiency of use of the resources that are involved in this production system and not elsewhere in the economy.

The average return on assets for participants across the state was 8.5%, with a range from 1.5% to 20.7% and a median of 8.2% indicating that the data was skewed towards the upper end of the data range (Figure 7 and Appendix Tables 1). All farms recorded a positive EBIT compared to only 43 of the 75 participant farms last year.

FIGURE 7. DISTRIBUTION OF FARMS BY RETURN ON ASSETS

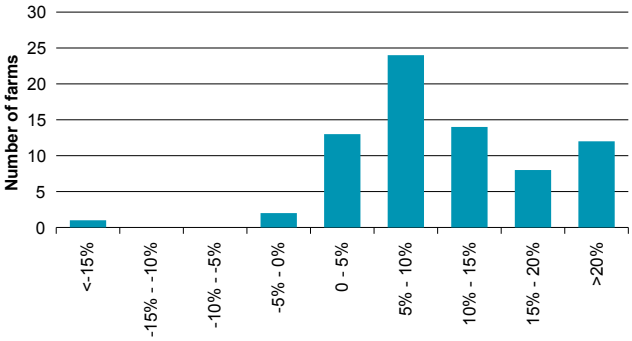


Return on equity is the net farm income (earnings before interest and tax less interest and lease charges) expressed as a percentage of owner equity. Items not accounted for in net farm income are capital expenditure, principal loan repayments and tax. Return on equity is a measure of the owner's rate of return on their investment.

The average return on equity for the 75 farms during 2013/14 was 11.6% with a range from -69% to 71% and a median of 9.2%; again indicating a skew towards the upper end of the range (Figure 8).

Further discussion of return on assets and return on equity occur in the risk section below and later in the regional chapters. Appendix Table 1 presents all the return on assets and return on equity for the individual farms.

FIGURE 8. DISTRIBUTION OF FARMS BY RETURN ON EQUITY



Risk

"Risk is conventionally classified into two types: business risk and financial risk. Business risk is the risk any business faces regardless of how it is financed. It comes from production and price risk, uncertainty and variability. 'Business risk' refers to variable yields of crops, reproduction rates, disease outbreaks, climatic variability, unexpected changes in markets and prices, fluctuations in inflation and interest rates, and personal mishap…. 'Financial risk' derives from the proportion of other people's money that is used in the business relative to the proportion of owner-operator's capital…" [2]

Table 3 presents some risk indicators. Refer to Appendix E for the definition of terms used in Table 3. The indicators in Table 3 can also be found in Appendix Tables 1, 3 and 8 for each region

TABLE 3. RISK INDICATORS - STATEWIDE

	State wide	North	South West	Gippsland
Cost structure (proportion of total costs that are variable costs)	63%	66%	61%	60%
Debt services ratio (percentage of income as finance costs)	9%	7%	9%	9%
Debt per cow	$3,977	$3,489	$4,476	$3,964
Equity percentage (ownership of total assets managed)	62%	59%	60%	66%
Percentage of feed imported (as a % of total ME)	38%	43%	38%	32%

Exposure to risk in business is entirely rational if not unavoidable. It is through managing risk that greater profits can be made. It is also the case that by accepting a level of risk in one area of business, a greater risk in another area can be avoided. With the example of feed sources, dairy farmers are generally better at dairy farming than they are at grain production. By allowing someone who is experienced in producing grain to supply them, they lessen the production and other business risks, as well as the financial risks they would have exposed themselves to by including extensive cropping in their business. The trade-off is that they are exposed to price and supply risks, which historically have been lower.

The trade-off between perceived risk and expected profitability will dictate the level of risk the individual is willing to take. It thus holds that in regions where production risk is higher, less risk is taken. While in good times this will result in lower returns, in bad times it will lessen the losses.

All farms in the sample source at least some of their metabolisable energy (ME) from imported feeds and are therefore somewhat exposed to the fluctuations in prices and supply in the market for feed. In 2013/14 all regions sourced a lower proportion of their diet from imported feed on average than in 2012/13, reflecting the better season.

Equity levels across all regions have remained steady with the state average consistent at 62%. Caution should be exercised when comparing equity between years as there has been a change of farms in the sample.

The cost structure ratio provides variable costs as a proportion of total costs. A lower ratio implies that overhead costs comprised a greater proportion of total costs which in turn indicates less flexibility in the business. Table 3 shows that across the state for every $1.00 spent, $0.63 was used to cover variable costs, however it is worth noting that the cost structure varies between regions and farms. One hundred minus this percentage gives the proportion of total costs that are overhead costs.

The debt services ratio shows interest and lease costs as a proportion of gross farm income. The ratio of 9% this year was lower than 13% recorded last year which was predominately a result of the higher milk price received in 2013/14. It indicates that on average farms repaid $0.09 of every dollar of gross farm income to their creditors.

The benefit of taking some risks and borrowing money can be seen when farm incomes yield a higher return on equity than on their return on assets. In 2007/08, 68% of participants were able to borrow money and generate a return on equity greater than their return on assets, a good result. In 2008/09 that number fell to 28% with only 19 of 68 farms able to generate a return from the extra capital greater than the cost of accessing that capital. In 2009/10 this number fell again, this time to 10%. In 2010/11 the buoyant milk price resulted in 88% of farms making return on equity above their return on assets. In the following year, 2011/12, declining income and higher costs resulted in only 36% of farms being able to borrow money or lease land and make a return off the extra available capital beyond the cost of having access to it, i.e. interest or lease charges. In 2012/13 only six of 75 farms reported a return on equity higher than their return on asset. An improvement in operating conditions this year saw 56 of 75 farms record a higher return on equity figure.

The data in Appendix Tables 4 and 5 are in cost per kilogram of milk solids sold and can also be used as risk indictors, given it is measured against the product produced and sold currently and not the capital invested

2 Malcolm, L.R., Makeham, J.P. and Wright, V. (2005), *The Farming Game, Agricultural Management and Marketing*, Cambridge University Press, New York. p180

Physical Measures

Feed consumption

Figure 9 presents the contribution of different feed sources to the total metabolisable energy (ME) consumed on the farm. This includes feed consumed by dry cows and young stock.

Grazed pasture is the major component of the cow's diet in all regions, however the dependence on supplements can also be seen. In the North and South West grazed pasture made up 49% and 53% of the diet respectively compared to 62% in Gippsland. This is an increase in all regions from 2012/13 reflecting the more favourable conditions for directly grazing pasture. Total home grown feed, whether grazed or conserved, accounted for over 50% of the total ME fed in each region.

Concentrates supply the greatest proportion of ME of all the supplements fed, accounting for approximately one-third of the diet. The average proportion of ME sourced from concentrates was 29% in the North, 33% in the South West and 27% in Gippsland.

Appendix Table 3 gives further information on purchased feed.

The amount of home grown feed produced per usable hectare will be dependent on numerous factors, with water availability, fertiliser application rates and grazing management being central.

The total home grown feed produced was greater in 2013/14 than the previous year across the regions. The average estimates were, as grazed feed and conserved feed, 7.6 and 1.6 t DM/ha for the North, 4.6 and 1.5 t DM/ha for the South West and 7.6 and 1.0 t DM/ha for Gippsland. Across the North total pasture harvested remained stable between years reflecting the good seasonal conditions and improved access to irrigation water. An improvement in seasonal conditions in the South West and Gippsland saw total pasture consumed increase by 13% and 16% respectively.

Appendix Table 2 gives estimates of individual tonnes of home grown feed produced per milking hectare. The graph below accounts only for the consumption of pasture that occurred on the milking area whether by milking, dry or young stock.

FIGURE 9. SOURCES OF WHOLE FARM METABOLISABLE ENERGY

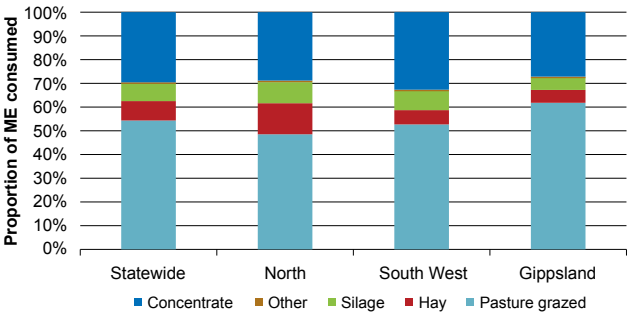


FIGURE 10. ESTIMATED TONNES OF HOME GROWN FEED CONSUMED PER MILKING HECTARE

Figure 10 shows the average estimated home grown feed production per milking hectare. Both Figures 9 and 10 were estimated using DEPI's Pasture Consumption Calculator. It involves first a calculation of the total energy required on the farm, which is a factor of stock numbers held on the farm, stock weights, distance stock walk to the dairy on average and also milk production. From the total farm energy requirements over the year, the energy imported to the farm as feed is subtracted. This leaves the estimate for total energy produced on farm, which is then divided into grazed and conserved feed depending on the amount of fodder production recorded.

Fertiliser application

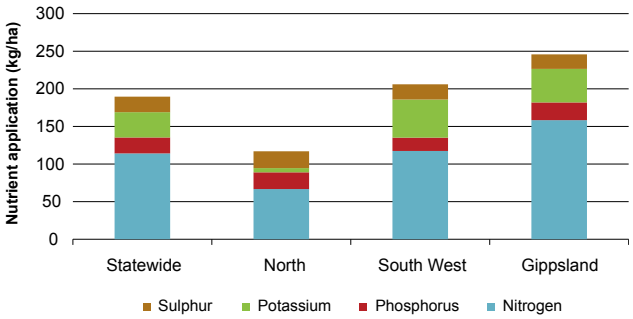
Figures 10 and 11 do not show a strong relationship between estimated home grown feed produced and fertiliser applied per hectare. While the North had the highest pasture production per hectare, they also had the lowest amount of nutrients applied. It should also be noted however that water availability, pasture species, soil type, pasture management, seasonal variation in response rates to fertilisers, variations in long-term fertiliser strategies plus other factors will all influence pasture growth and fertiliser application strategies.

The better seasonal conditions were reflected in the South West and Gippsland where applications of all macronutrients increased considerably. On average South West farms applied 117 kg of nitrogen per hectare (kg N/ha), up from 84 kg N/ha, and in Gippsland farms applied 158 kg N/ha up from 120 kg N/ha the previous year.

In the North, fertiliser applications reduced across all the macronutrients compared to the previous year. Nitrogen use decreased from 94 kg N/ha to 66 kg N/ha this year. All of the 22 farms in the irrigation region of the North applied fertiliser to the irrigated portion of their total usable area in 2013/14.

Appendix Table 2 gives further information on fertiliser application.

FIGURE 11. NUTRIENT APPLICATION PER HECTARE



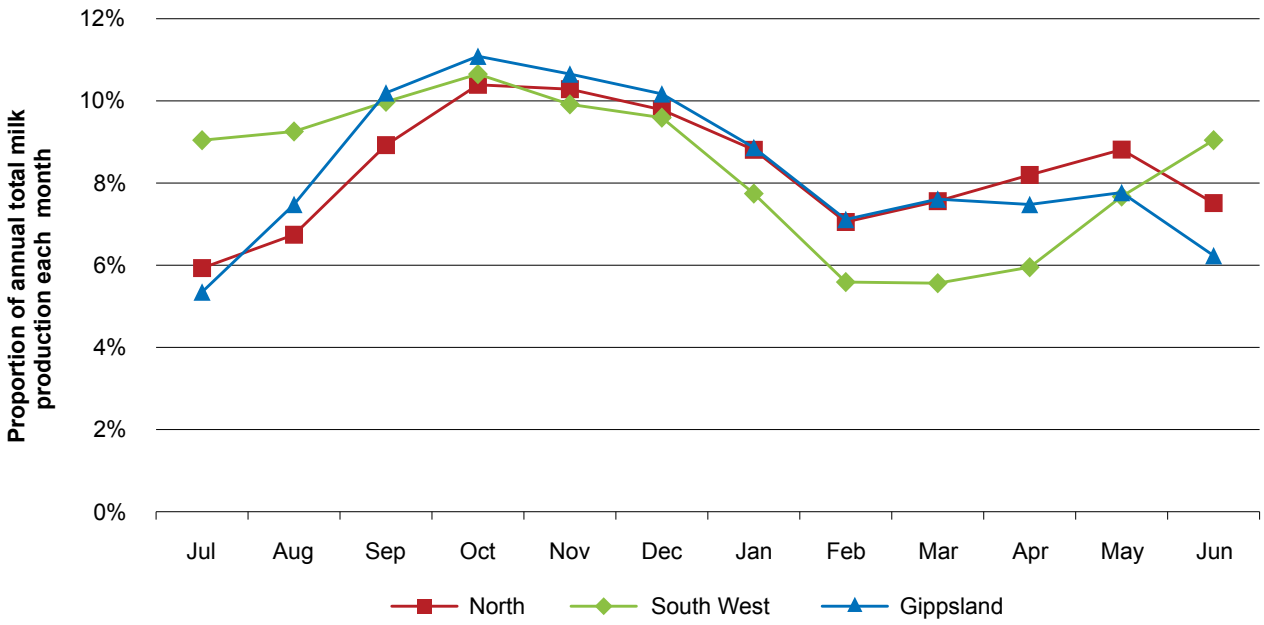
The digestion of feed in the rumen and the use of fertiliser are major sources of greenhouse gases on dairy farms. A summary of greenhouse gas emissions can be found on page 55 of this report.

Milk production

Average distribution of milk production in all regions saw the main production peak in spring (Figure 12). The North had another small peak in autumn 2014, and the South West started lifting milk production in May and June while the other regions were decreasing. The Gippsland region experienced the most rapid increase in production coming into the 2013 spring, going from 5.3% of total production in July to 11.1% by October. The seasonal nature of the milk production curve in Gippsland is reflected in the lower milk price of $6.62/kg MS compared to the other regions.

The better seasonal conditions were reflected in the South West and Gippsland where applications of all macronutrients increased considerably.

FIGURE 12. 2013/14 MONTHLY DISTRIBUTION OF MILK PRODUCTION



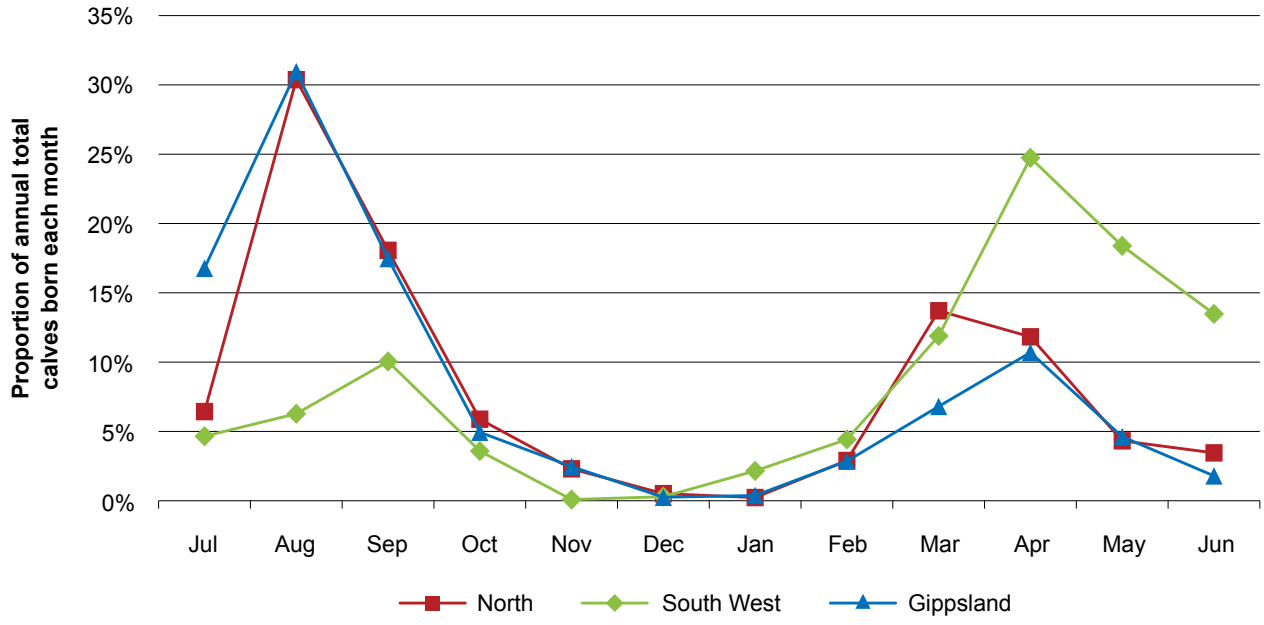
Calving pattern

Typically the milk production shown in Figure 12 would follow a similar pattern to the calving pattern shown in Figure 13 below, with a two to three month delay between calving and peak lactation. This can be seen best in the peak production and peak calving times, particularly in the North and Gippsland when milk production peaks one to two months after calving in August.

The North and Gippsland followed a similar calving pattern as shown by the brown and blue lines in Figure 13. Whereas the calving pattern in South West shows that the month with the greatest proportion of calves born was April.

There were two separate concentrated periods where 95% of calves were born between July and October and between March to May. Approximately 5% of calves were born in the summer months, between December and February across all regions.

FIGURE 13. 2013/14 MONTHLY DISTRIBUTION OF CALVES BORN



Part Two: North

North

Farms NO010 – NO052 were also included in last year's report and farms NO053 to NO055 were new to the sample this year. Please refer to page 3 for notes on the presentation of data.

2013/14 Seasonal conditions

2013/14 provided a supportive operating environment for farmers in the North. The season began with below average spring rainfall and a hot, dry summer, but an early true autumn break across the majority of northern Victoria gave a good start to the growing season. Most farmers received above average rainfall for the year as shown in Figure 14.

2013/14 saw the second highest northern Victoria milk price in real terms recorded in the history of the project; 35% higher than last year, increasing to $6.83/kg MS. Further strengthening the milk price, good demand and healthy prices for export heifers saw an increase in livestock trading profits this year.

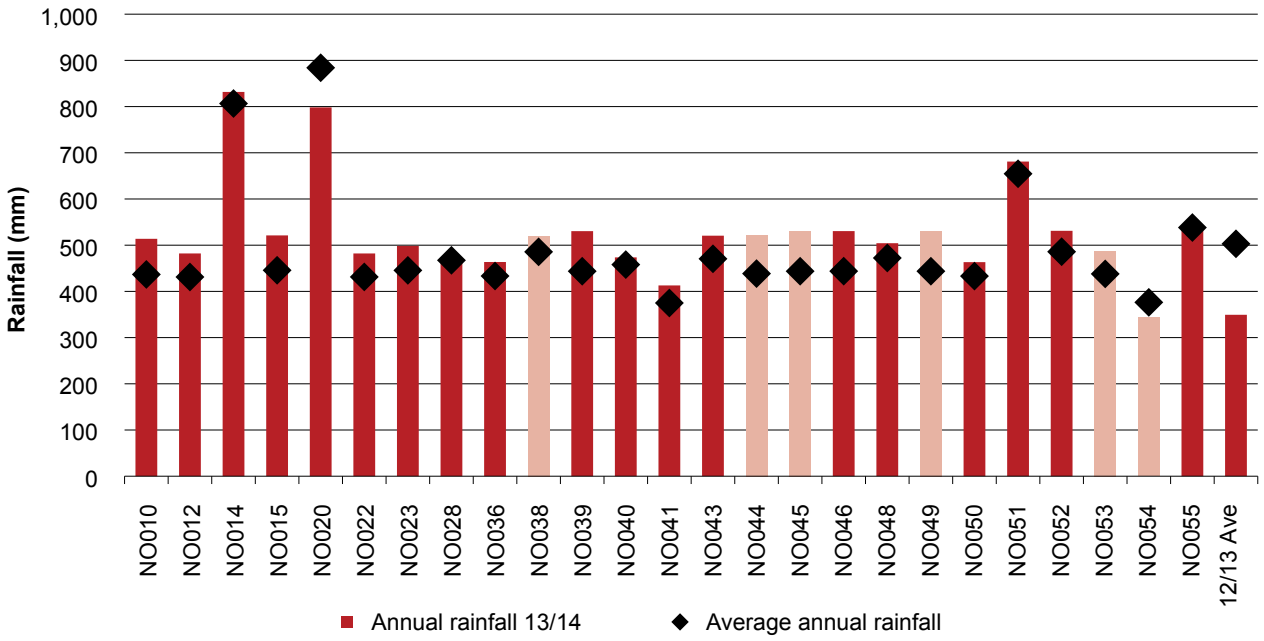
Across the northern irrigation region of northern Victoria, feed prices were considered reasonable, despite drier conditions further north in NSW and Queensland. The price of water, which is now considered a normal feed cost for many farmers, was firmer than in 2012/13 but was workable and closer to the long term average. Once irrigation began in the region, irrigation events continued through the year as rainfall was unreliable.

A significant heat spell in the northern irrigation region during February caused a decrease in production in the short term, yet farms readily recovered. Those farmers who sowed pastures early were rewarded by the good autumn break. While pastures and tracks became wet quickly, most had dried out in time for calving. Renovation of tracks and managing pugging were repairs that many farms expected this year.

The north east of the northern Victoria region experienced similar conditions to the northern irrigation region. The short spring saw those farms with irrigation begin watering earlier than usual. During the dry periods and heading into the hot summer, farmers continued to feed cows as the milk price was favourable. Autumn presented a fantastic start to the season in the north east, arriving early and allowing farmers to renovate pastures before a wet winter arrived.

*Top 25% * - The top 25% are shown as the lighter bars in all graphs as ranked by return on assets.*

FIGURE 14. 2013/14 ANNUAL RAINFALL AND LONG TERM AVERAGE RAINFALL – NORTH



Whole farm analysis

Key whole farm physical parameters for the North are presented below in Table 4. The Q1 – Q3 range shows the band in which the middle 50% of farms for each parameter sit.

The top 25% of farms (ranked by return on assets) lie within the middle 50% of the North dataset for all physical parameters except milking cows per usable hectare, kilograms of milk solids sold (per cow and per hectare) and kilograms of milk solids sold per full time equivalent of labour.

The top 25% had higher stocking rates of milking cows per usable hectare at 2.7 compared to the Q1-Q3 range of 1.3 - 2.1.

The top performers sold 573 kg MS/cow compared to the average of 522 kg MS/cow. More significantly, the top performers sold more milk solids per hectare at 1,534 compared to the Q1-Q3 range of 627 - 1,194 kg MS.

Labour efficiency was higher in the top 25% than the average, however the range of the entire North sample was very wide at 36,257 - 84,323 kg MS/FTE.

TABLE 4. FARM PHYSICAL DATA – NORTH

Farm physical parameters	North average	Q1 to Q3 range	Top 25% average
Annual rainfall 13/14	527	482 - 530	489
Water used (irrigation + rainfall) (mm/ha)	986	819 - 1,139	1,103
Total usable area (hectares)	210	129 - 226	188
Milking cows per usable hectares	1.9	1.3 - 2.1	2.7
Milk solids sold (kg MS/cow)	522	475 - 557	573
Milk solids sold (kg MS/ha)	995	625 - 1,194	1,534
Home grown feed as % of ME consumed	57%	50% - 69%	43%
Labour efficiency (milking cows/FTE)	109	93 - 126	121
Labour efficiency (kg MS/FTE)	56,611	45,691 - 62,935	69,618

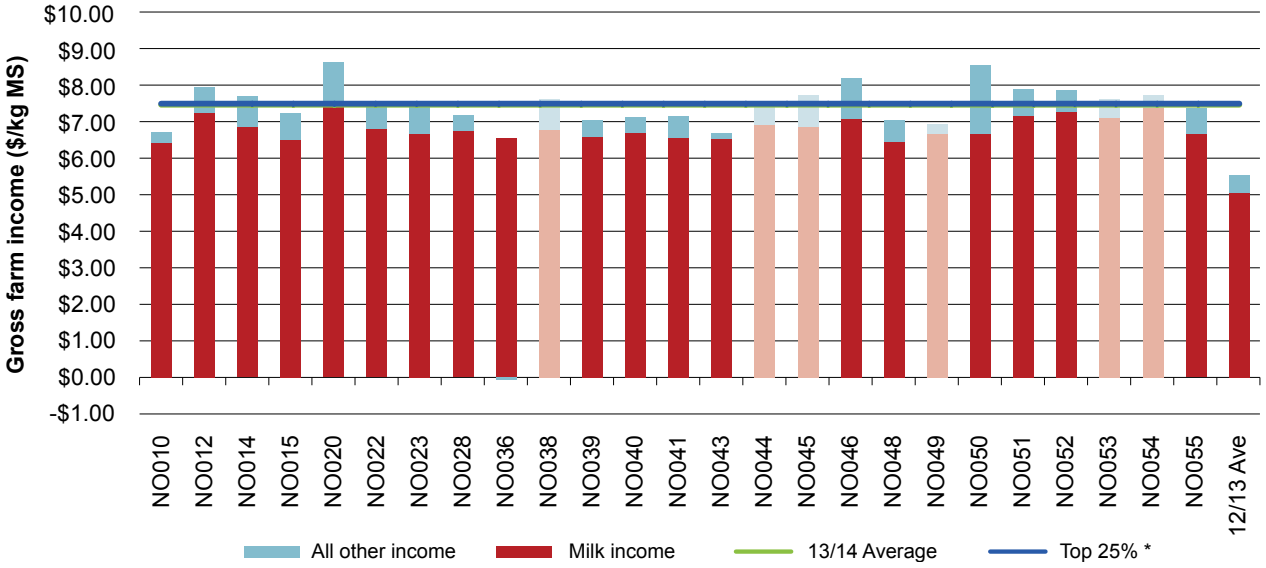
Gross farm income

Gross farm income includes all farm income, whether that is income from milk sales, changes in inventories of stock or feed, or cash income from livestock trading. The average gross farm income of $7.46/kg MS includes milk income ($6.83/kg MS), and all other income associated with the dairy business operation ($0.64/kg MS). The top 25% recorded $7.49/kg MS, very similar to the average result.

Figure 15 also shows last year's average gross farm income of $5.53/kg MS significantly lower than this year's average price and lower than the minimum milk price paid ($6.43/kg MS). Average milk price increased by 35% in the North from $5.05/kg MS in 2012/12 to $6.83/kg MS this year.

Changes in feed inventories were highly varied in the North this year, ranging from -$0.30/kg MS to $0.53/kg MS but the overall average increasing feed stored on farm by $0.10/kg MS this year.

FIGURE 15. GROSS FARM INCOME PER KILOGRAM OF MILK SOLIDS – NORTH

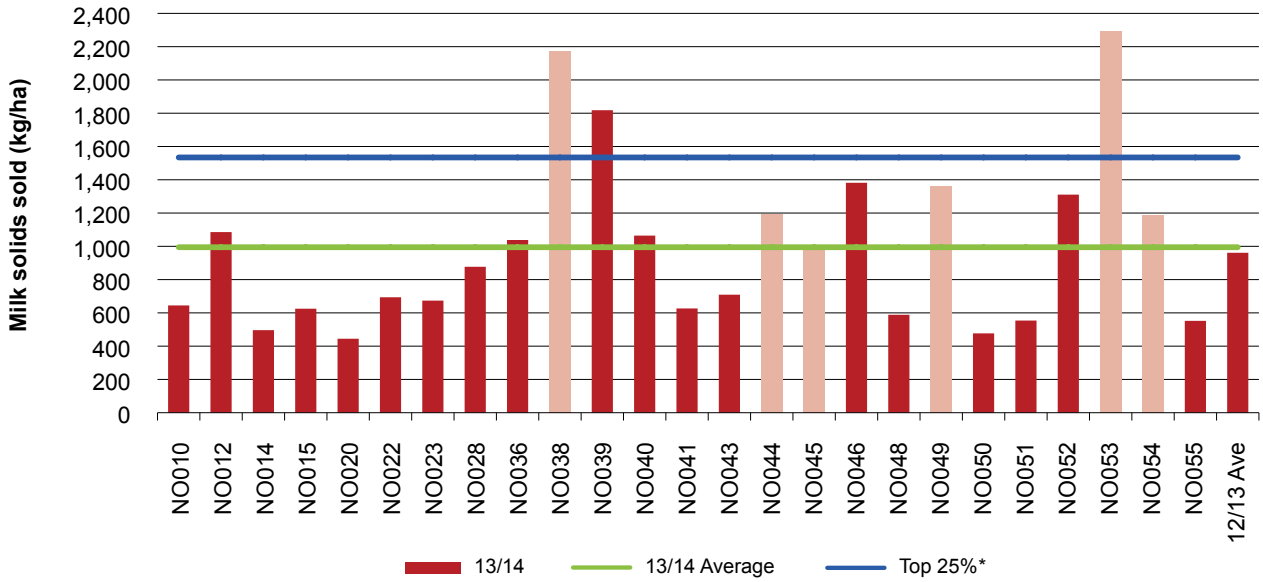


Milk solids production

Milk production per cow increased marginally from 518 to 522 kg MS/cow and stocking rate increased from 1.8 to 1.9 cows/ha on average in 2013/14. As a result average milk production per hectare increased from 961 to 995 kg MS/ha in 2013/14. This is shown by the red average line in Figure 16. The range of this year's dataset was wide-ranging from 445 to 2,295 kg MS/ha.

While the top 25% group average at 1,534 kg MS/ha was above the average of 995 kg MS/ha, not all farms in the top group were above the average for milk solids production per hectare. For example farm NO045 produced slightly below average milk production per hectare suggesting this farm had other attributes that contributed to its performance

FIGURE 16. MILK SOLIDS SOLD PER HECTARE – NORTH



Variable costs

Variable costs include herd, shed and feed costs. On average they increased in 2013/14 to $3.61, up from $3.34/kg MS last year. The wide range of $2.77/kg MS (NO053) to $4.79/kg MS (NO050) for farms in the North can be seen by the variation in maroon bars in Figure 17.

Home grown plus purchased feed costs were clearly the major variable cost accounting for 56% of total costs. The large increases in feed costs this year came from increases in irrigation and purchased feed.

Irrigation costs increased from $0.37/kg MS to $0.47/kg MS, as the cost of temporary water increased to an average of $74 per megalitre and 21 of the 25 farms purchased temporary water allocations again this year.

Fodder purchases remained relatively stable this year at $0.45/kg MS on average but, interestingly, the top performers purchased fodder at $0.55/kg MS this year compared to $0.36/kg MS in 2012/13. Concentrates increased from $1.23/kg MS up to $1.36/kg MS. This increase in concentrates was the result of an increase in grain price and total quantity purchased. While the concentrates fed was similar between years at 1.8 t DM/cow, farms on average increased their herd size.

A break down of variable costs for individual businesses on a $/kg MS basis can be seen in Appendix Table A4.

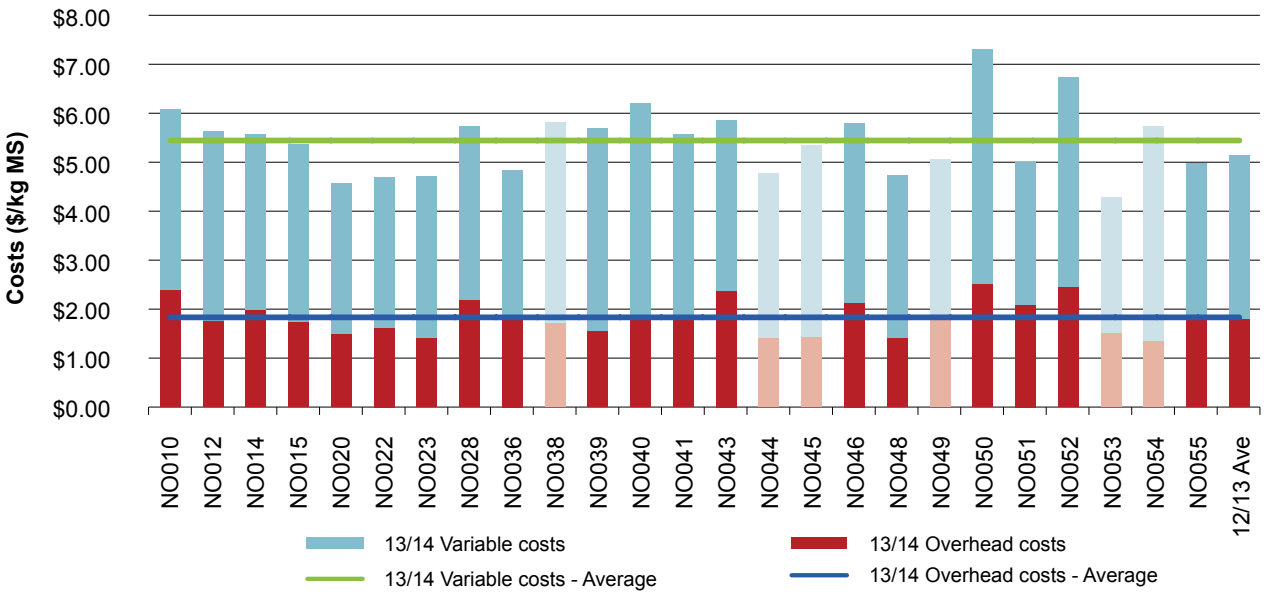
Overhead costs

Overhead costs are those that do not vary with the level of production. The Dairy Farm Monitor Project includes cash overheads such as rates and insurance as well as non cash costs such as imputed owner operator and family labour and depreciation of plant and equipment. Figure 17 illustrates the range spent on overhead costs, which was from $1.35/kg MS to $2.52/kg MS in 2013/14.

Average overhead costs for 2013/14 were $1.83/kg MS, up from $1.81/kg MS recorded last year. The average total labour units for North farms was 3.2 FTE; with owner operators contributing 1.5 FTE, employed labour 1.6 FTE and contract labour 0.1 FTE.

A breakdown of the overhead costs in $/kg MS is provided in Appendix Tables A5 and A7. The percentage breakdown of the individual totals expressed as percentages is presented in Appendix Table A6.

FIGURE 17. WHOLE FARM VARIABLE AND OVERHEAD COSTS PER KILOGRAM OF MILK SOLIDS – NORTH



Cost of production

Cost of production gives an indication of the average cost of producing a kilogram of milk solids. It is calculated as variable plus overhead costs and accounting for changes in fodder inventory and livestock trading losses. Considering the changes in inventory is important to establish the true costs to the business. The changes in fodder inventory count for the net cost of feed from what was fed out, conserved, purchased and stored over the year.

Livestock trading loss is also considered in the cost of production where there is a net livestock depreciation or reduced stock numbers.

Table 5 shows that the average cost of production was $5.34/kg MS and the top 25% of farms were 8% lower at $5.09/kg MS.

TABLE 5. COST OF PRODUCTION – NORTH

Farm costs ($/kg MS)	North average	Q1 to Q3 range	Top 25% average
Livestock trading loss	$0.00	$0.00 - $0.00	$0.00
Feed inventory change	-$0.10	-$0.17 - -$0.01	-$0.08
Changes in inventory ($/kg MS)	-$0.10	-$0.17 - -$0.01	-$0.08
VARIABLE COSTS			
Herd costs	$0.27	$0.22 - $0.32	$0.29
Shed costs	$0.21	$0.17 - $0.23	$0.20
Purchased feed and agistment	$1.96	$1.60 - $2.31	$2.20
Home grown feed cost	$1.17	$0.95 - $1.29	$0.92
Total variable costs ($/kg MS)	$3.61	$3.18 - $3.91	$3.62
OVERHEAD COSTS			
Rates	$0.04	$0.03 - $0.04	$0.03
Registration and insurance	$0.02	$0.01 - $0.02	$0.01
Farm insurance	$0.06	$0.03 - $0.06	$0.04
Repairs and maintenance	$0.29	$0.17 - $0.35	$0.29
Bank charges	$0.01	$0.00 - $0.01	$0.01
Other overheads	$0.11	$0.08 - $0.14	$0.08
Employed labour cost	$0.46	$0.22 - $0.62	$0.57
Total cash overheads ($/kg MS)	$0.99	$0.72 - $1.19	$1.02
Depreciation	$0.19	$0.13 - $0.24	$0.13
Imputed owner/operator and family labour	$0.66	$0.47 - $0.78	$0.40
Total overhead costs ($/kg MS)	$1.83	$1.52 - $2.09	$1.55
Total cost of production ($/kg MS)	$5.34	$4.87 - $5.73	$5.09

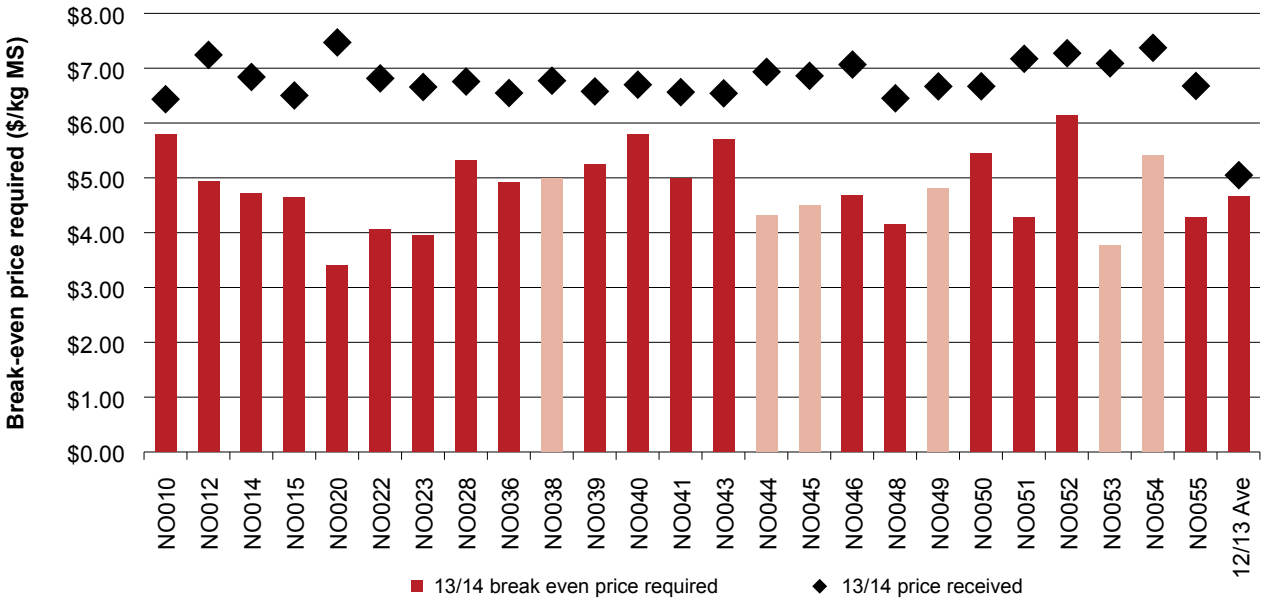
Break-even price required

The break-even price required for milk is calculated as variable and overhead costs less income other than milk (including livestock trading profit, changes in feed inventory or other income). The difference between the break-even price required and milk income is earnings before interest and tax per kilogram of milk solids.

Figure 18 shows that the break-even price required varied from $3.40/kg MS to $6.14/kg MS, and an average of $4.81/kg MS.

Milk price received varied from $6.43/kg MS to $7.47/kg MS, and had an average of $6.83/kg MS

FIGURE 18. BREAK-EVEN PRICE REQUIRED PER KILOGRAM OF MILK SOLIDS SOLD – NORTH



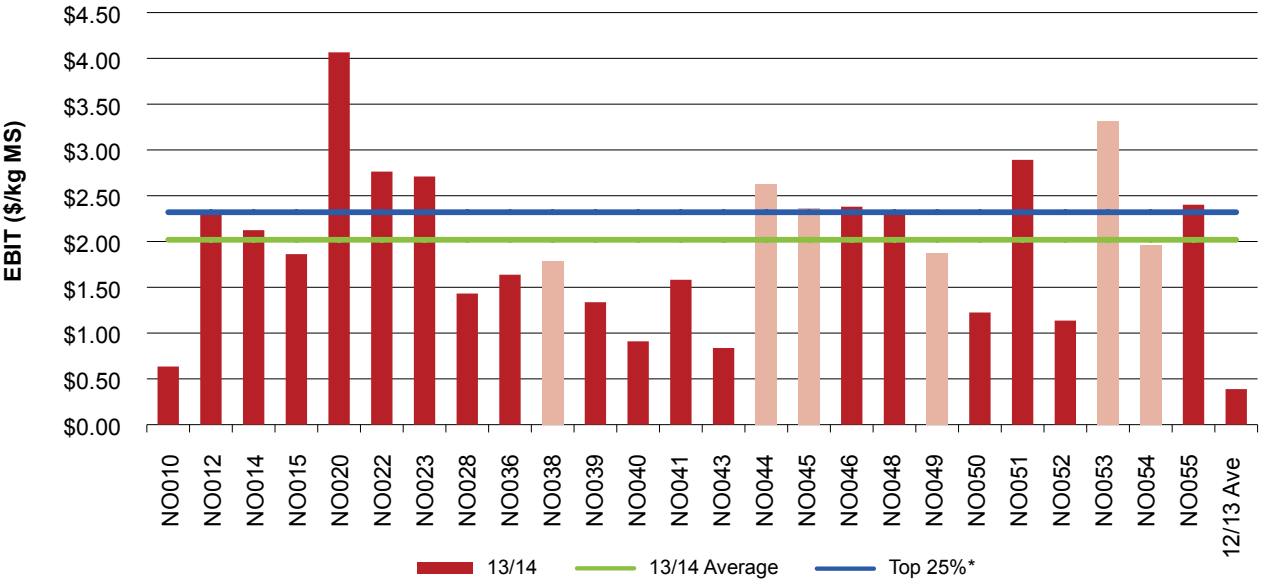
Earnings before interest and tax

Earnings before interest and tax (EBIT) is gross farm income less variable and overhead costs. Figure 19 shows a wide range of EBIT, from $0.63 to $4.07/kg MS. The average EBIT of all sample farms in the North was $2.02/kg MS and the top 25% farms recorded an average of $2.32/kg MS. Some of the farms who recorded lower levels of EBIT participated in the Farm Water Program and had large areas of usable land under development, influencing the performance their farm.

Other farms that have previously participated in the Farm Water Program and have developed their farm are seeing the improvement in their farm returns over time.

The figure also shows that having a high EBIT does not translate into high return on assets. Similarly farms with lower than the average EBIT are in the top 25% in terms of return on assets.

FIGURE 19. WHOLE FARM EARNINGS BEFORE INTEREST AND TAX PER KILOGRAM OF MILK SOLIDS – NORTH



Return on assets and equity

Return on assets is the earnings before interest and tax expressed as a percentage of total assets. It is an indicator of the overall earning power of total assets, irrespective of capital structure. Return on equity is the net farm income expressed as a percentage of owner equity. It is a measure of the owner's rate of return on investment.

Figures 20 and 21 were calculated excluding capital appreciation. For return on equity including capital appreciation refer to Appendix Table A1.

The return on assets of the top 25% in the North was 17.5% and the average for all sample farms is 11.3%. Twelve farms registered higher than the average return on assets, highlighting the strong performance of these farms in the North. The range for return on assets was 2.6% to 20.7%.

In 2013/14, return on assets is an improvement on the 2.2% recorded for the average last year and is the highest return on assets figure for the North region over the history of the project.

FIGURE 20. RETURN ON ASSETS – NORTH

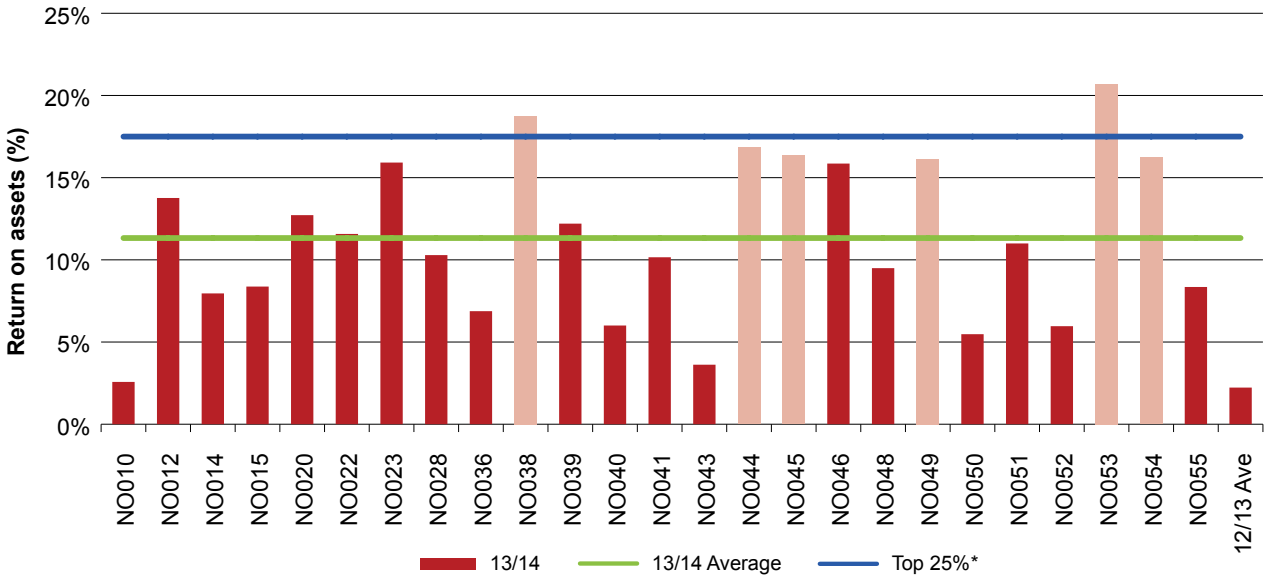
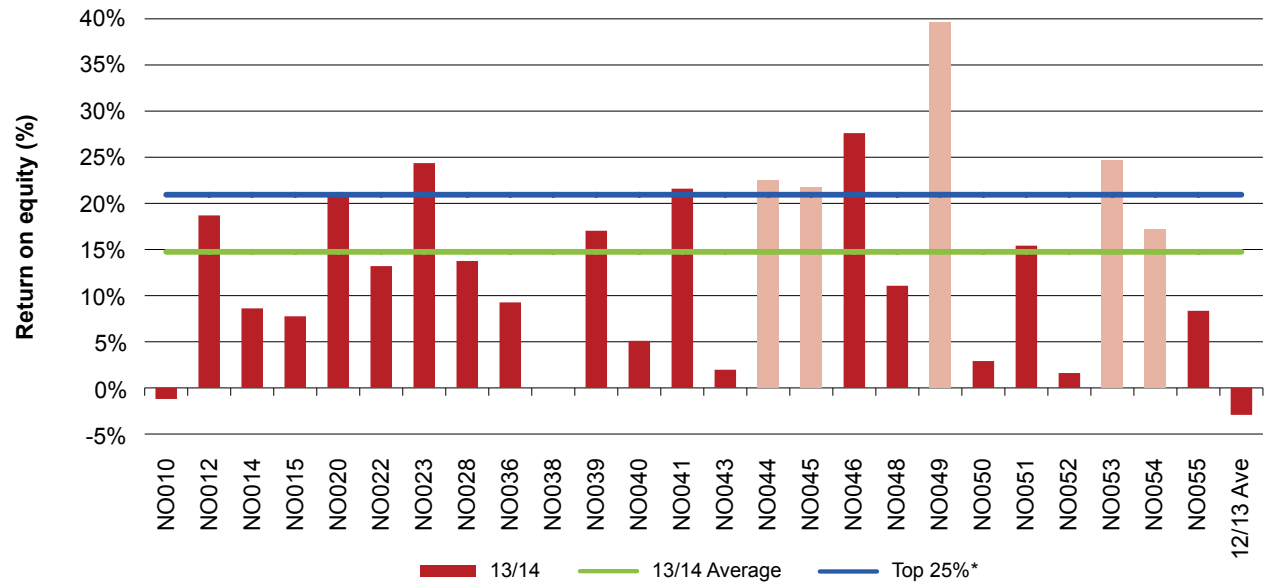


Figure 21 shows a significant turnaround in return on equity in 2013/14. The average of all sample farms was 14.8% compared to -2.9% in 2012/13. There is a wide range of return on equity with -1.2% as the lowest to as high as 39.6%.

The top performers achieved 20.9%, also up from that recorded last year of 8.7%.

FIGURE 21. RETURN ON EQUITY – NORTH



Feed consumption and fertiliser

Feed data was collected on a whole farm basis rather than determining which feeds went to each class of stock as this would have made the data collection process too difficult on many farms.

The relative contribution of each feed type to the metabolisable energy (ME) consumption on each farm is shown in Figure 22. The broad range of different sources of ME used on individual farms is evident. Ten of the 25 farms have more than half of the diet sourced directly from grazed pasture. Farms in the North sourced between 19% and 48% of the metabolisable energy from concentrates.

All farms source part of their ME requirements from hay, with the range between 2 and 25%. Silage accounts for between 0 and 36% of ME requirements on farms in the North.

Other sources of feed include those that are not commonly used by, or available to, dairy farmers.

FIGURE 22. SOURCES OF WHOLE FARM METABOLISABLE ENERGY – NORTH

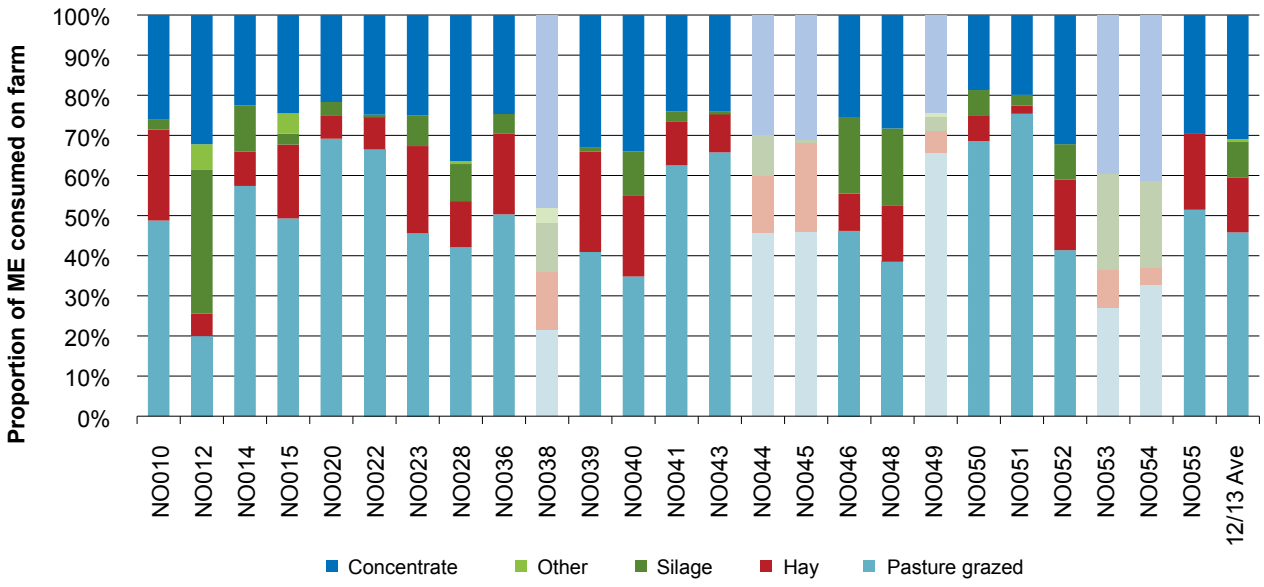


Figure 23 shows the estimated home grown feed consumed per milking hectare for farms in the North.

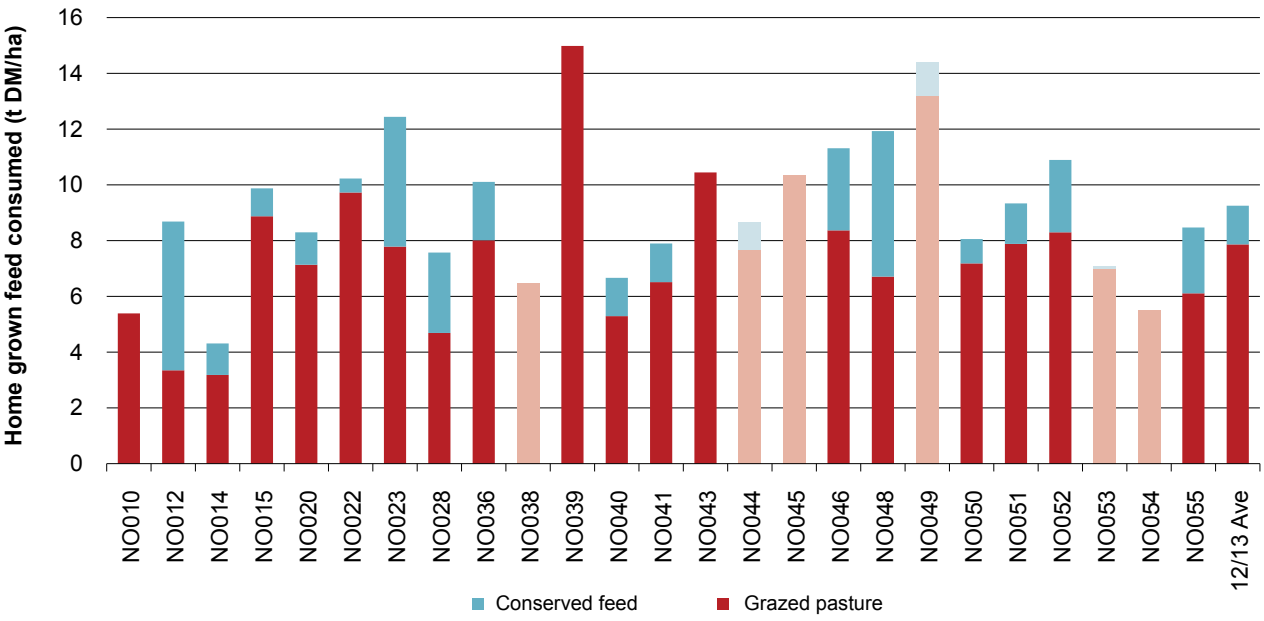
Total pasture harvest for the North on average remained stable in 2013/14 at 9.2 t DM/ha.

While pasture grazed decreased slightly from 7.9 t DM/ha in 2012/13 to 7.6 t DM/ha, conserved feed increased from 1.4 t DM/ha up to 1.6 t DM/ha.

The high amount of pasture grazed and conserved in 2013/14 for farms in the North reflects the good water determinations for high reliability water shares, access to carryover water and allocation (temporary) water.

Grazed pasture consumption is estimated by using a back calculation method. It should be noted that there can be a number of sources of error in the method used to calculate home pasture consumption. The errors include incorrect estimation of liveweight, amounts of fodder and concentrates fed, energy content of fodder and concentrate, energy content of pasture, wastage of feed and associative effects of feeds. Comparing pasture consumption estimated using the back calculation method between farms can lead to incorrect conclusions due to errors in each farm's estimate. It is best to compare pasture consumption on the same farm over time using the same method of estimation. More details on how pasture consumption was calculated can be found on page 16 of Part One – Statewide or in Appendix E.

FIGURE 23. ESTIMATED TONNES OF HOME GROWN FEED CONSUMED PER MILKING HECTARE – NORTH



Fertiliser application

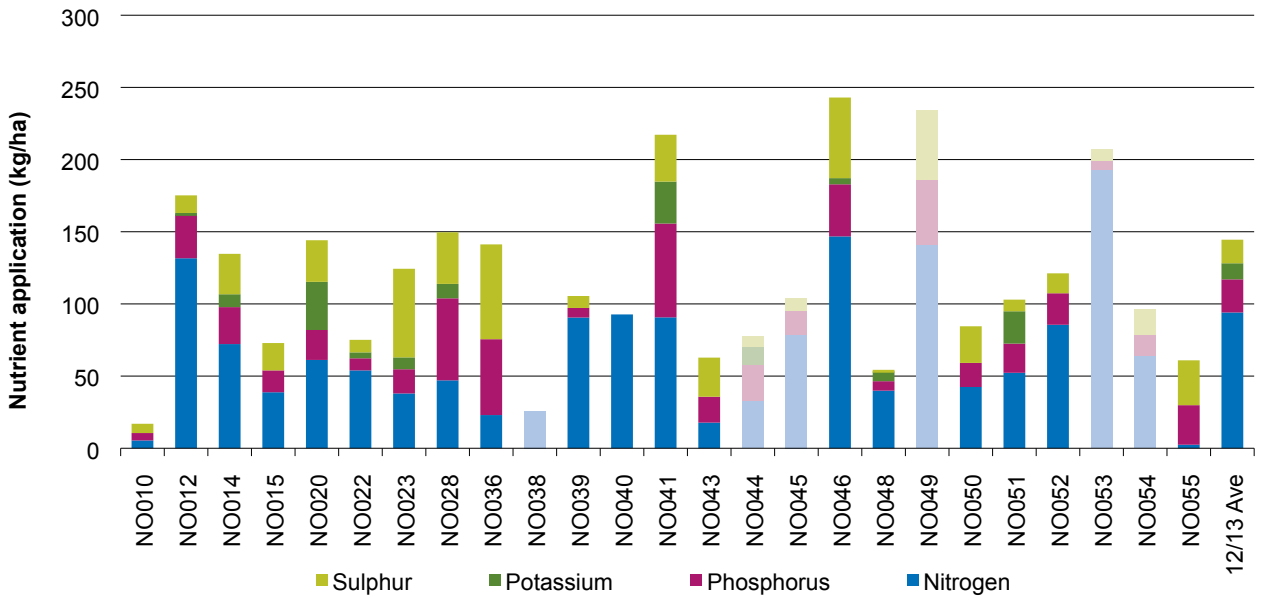
The relationship between fertiliser application per hectare and home grown feed consumed per hectare during 2013/14 is shown in Figures 23 and 24.

All farms in both the northern irrigation region and the north east applied fertiliser to their crops and pasture. On average farms in the North applied less fertiliser in 2013/14 at 130kg/ha compared to 166kg/ha last year.

Similar to last year, there are no clear trends between those farms that applied the greatest amount of fertiliser and those that had the greatest amount of home grown feed.

This could be due to a range of factors including soil type, irrigation scheduling, grazing management, and timing of rain events.

FIGURE 24. NUTRIENT APPLICATION PER HECTARE – NORTH



Part Three: South West

South West

Farms SW001 - SW020 have been involved in the project since 2006/07. Farms SW045 to SW046 were new to the project this year. Please refer to page 3 for notes on the presentation of data.

2013/14 Seasonal conditions

There was a turnaround in seasonal conditions across South West Victoria for 2013/14 compared to drier springs of the preceding two seasons. The high milk price received and above average rainfall for the 12 month period (Figure 25) was a stark contrast to 2012/13. These conditions meant farm returns improved markedly and farms had more feed on hand at the end of the year.

Over the 12 month period, rainfall was above average (decile 8-10) for the South West region, a much welcomed change from the previous two years, with spring rainfall continuing even into November - December.

With long term fodder storages depleted during 2011/12 and 2012/13 many farmers were able to capitalise on the improved seasonal conditions, resulting in a greater amount of fodder available on hand at the end of the year. However, fodder quality was compromised due to intermittent rains late into spring interrupting silage making.

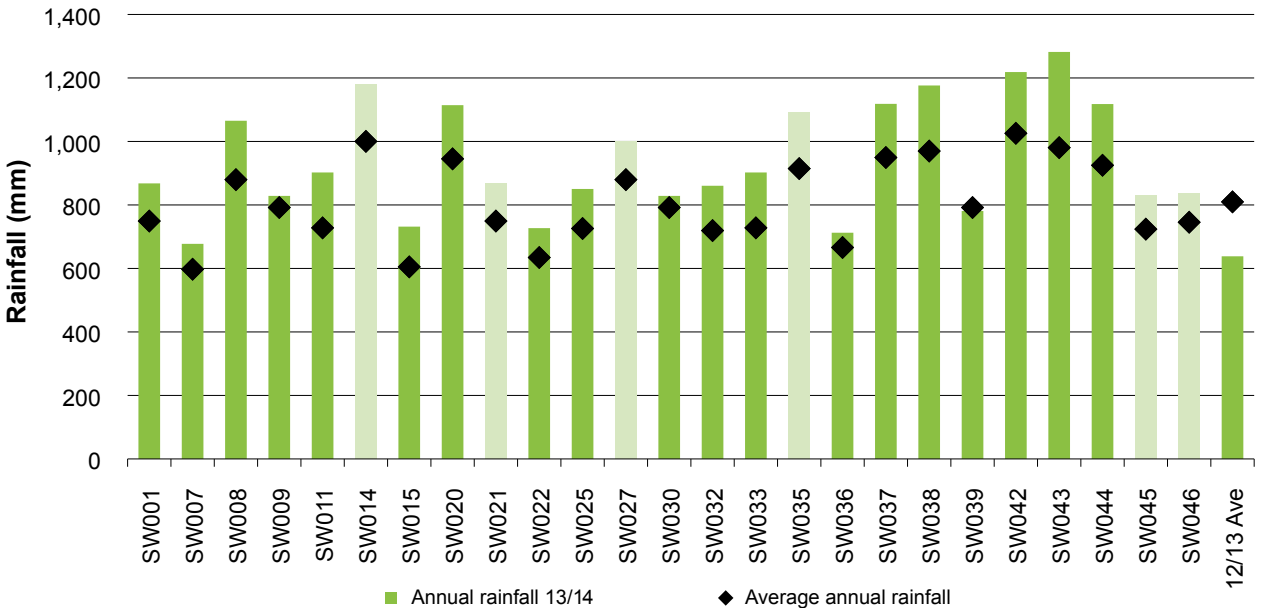
Summer conditions presented a week of high temperatures which impacted on ryegrass persistence and milk production for some, and has led to a need to resow or oversow some paddocks this autumn.

However, a timely autumn break got pasture growth off to a great start across the district and above average rains continuing into June. Warmer than average temperatures also continued to promote good pasture growth rates through early winter providing reasonable cover and pasture available leading up to July.

Although grain prices remain relatively high, marginal feed options were more attractive due to the higher milk price received this year.

*Top 25% * - The top 25% are shown as the lighter bars in all graphs as ranked by return on assets.*

FIGURE 25. 2013/14 ANNUAL RAINFALL AND LONG TERM AVERAGE RAINFALL – SOUTH WEST



Whole farm analysis

The key whole farm physical parameters for the South West are presented in Table 6. The Q1 – Q3 range shows the band in which the middle 50% of farms for each parameter sit.

The physical characteristics of top 25% of farms (ranked by return on assets) generally lie within the middle 50% of the South West dataset.

The parameters where the top 25% group distinguished themselves from the average were greater usable area, higher milk production per cow and per hectare, and higher labour efficiency. However these physical characteristics are not an indicator of top performance, as the trends are not seen each year.

TABLE 6. FARM PHYSICAL DATA – SOUTH WEST

Farm physical parameters	South west average	Q1 to Q3 range	Top 25% average
Annual rainfall 13/14	943	829 - 1,114	943
Water used (irrigation + rainfall) (mm/ha)	951	830 - 1,118	945
Total usable area (hectares)	330	157 - 458	382
Milking cows per usable hectares	1.2	1.1 - 1.4	1.1
Milk solids sold (kg MS/cow)	503	513 - 694	549
Milk solids sold (kg MS/ha)	600	468 - 566	614
Home grown feed as % of ME consumed	62%	54% - 68%	66%
Labour efficiency (milking cows/FTE)	102	75 - 130	121
Labour efficiency (kg MS/FTE)	51,524	38,485 - 66,210	65,320

Gross farm income

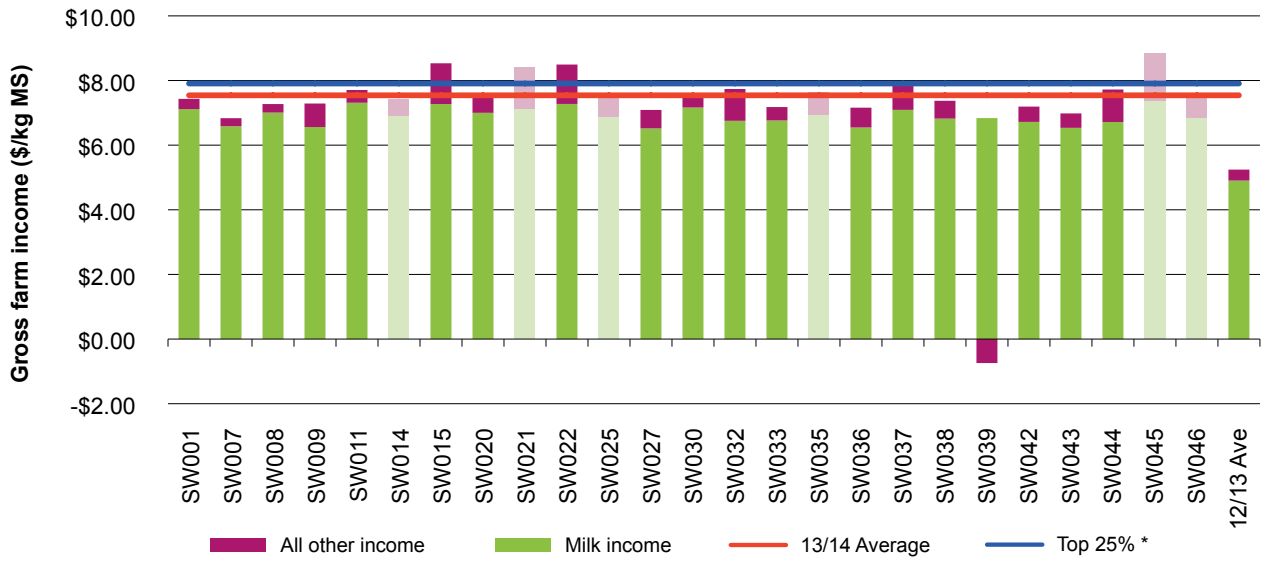
Gross farm income includes all farm income, whether that is income from milk sales, cash income from livestock trading, or income from other sources such as milk factory shares. Changes in inventories of stock or feed are also accounted for in gross farm income.

For the South West, more feed was on hand at the end of June for the 2013/14 year due to the favourable growing season resulting in a positive feed inventory average of $43,557. This figure is added onto the gross farm income. This was a noticeable turnaround from last year following successive dry summers and a depleted feed inventory of $11, 515 from 2012/13.

Figure 26 shows that gross farm income in the South West ranged from $6.10/kg MS to $8.86/kg MS. In comparison with last year's average gross farm income of $5.24/kg MS, this year's average increased by over 44% to 7.54/kg MS, as shown by the red 13/14 average line in Figure 26.

Three farms in the top 25% recorded gross farm income below the average for farms in the region. This suggests that while it has an influence, high gross farm income alone does not translate to being highly profitable and that other attributes of top performers need to be examined when assessing farm performance.

FIGURE 26. GROSS FARM INCOME PER KILOGRAM OF MILK SOLIDS – SOUTH WEST



Milk solids production

Large variation can be seen in the amount of milk solids produced per hectare with a range of 290 to 844 kg MS/ha reported (Figure 27). Part of this variation can be accounted for by farms having runoff areas and out paddocks that are included as part of the total usable area.

The top performing farms achieved 614 kg MS/ha in the South West which was only 2% above the average of farms who sold slightly less milk at 600 kg MS/ha.

This group average is similar to the average reported in 2011/12 and 2012/13 of 605 kg MS/ha and 601 kg MS/ha respectively. With production relatively stable, the increase in gross farm income can be predominantly attributed to the higher milk price which is shown in Figures 26 and 29.

Average kilograms of milk solids sold per cow remained relatively stable compared to last year at 503 kg MS/cow.

FIGURE 27. MILK SOLIDS SOLD PER HECTARE – SOUTH WEST

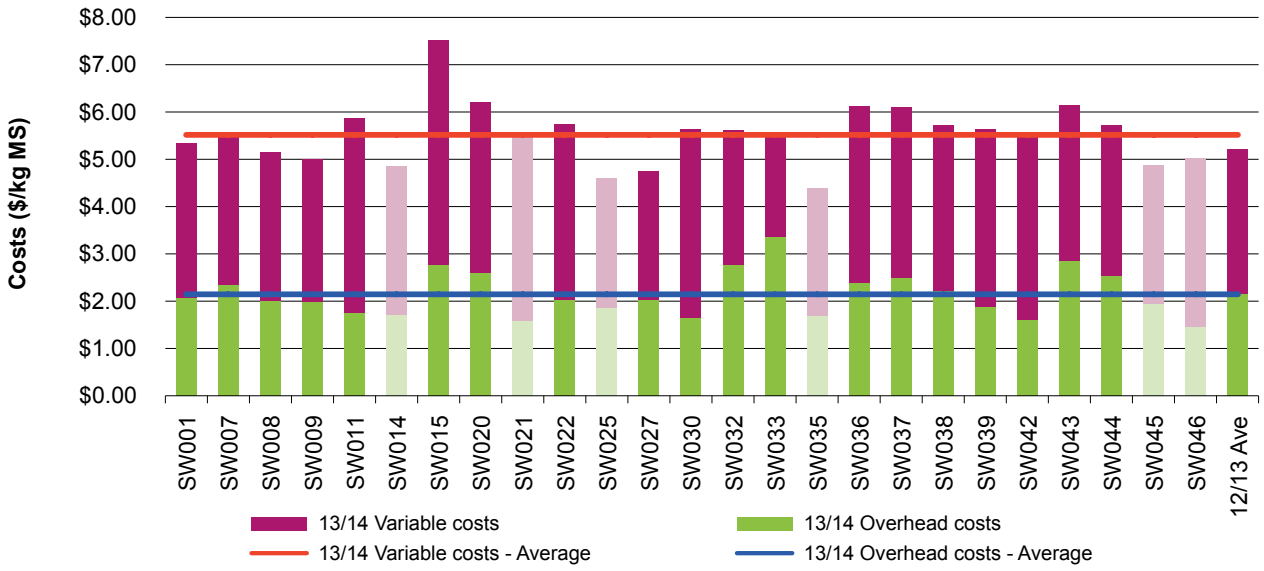
Variable costs

The separation of variable and overhead costs per kg MS is shown in Figure 28. Variable costs are those costs that change directly according to the amount of output, such as herd, shed and feed costs. Variable costs for the South West region ranged from $2.11/kg MS to $4.74/kg MS, increasing on average from $3.06/kg MS last year to $3.37/kg MS in 2013/14. This could be due to a 26% increase in nitrogen fertiliser application to $0.50/kg MS and average concentrate costs increasing by 10% to $395 t DM from last year. Although fodder purchases decreased by 35% which was expected due to favourable growing conditions, the level of concentrate feeding remained similar at a higher cost compared to the previous year. This reflects the higher milk price making marginal feeding options viable.

Feed costs were again the major variable cost on South West farms. Feed costs accounted for 53% of total costs of production, an increase from 2012/13 and does not include the $0.21/kg MS feed inventory gain associated with increased fodder reserves at the end of the year.

The percentage breakdown of the variable costs can be found in Appendix Table B6.

FIGURE 28. WHOLE FARM VARIABLE AND OVERHEAD COSTS PER KILOGRAM OF MILK SOLIDS – SOUTH WEST



Overhead costs

The calculation of overhead costs in the Dairy Farm Monitor project consists of cash and non-cash costs to the dairy business. Examples of cash overheads include rates, insurance and employed labour, and non-cash overheads include depreciation and imputed owner/operator and family labour.

Figure 28 also illustrates the variation in overhead costs between participant farms. Values ranged from $1.45 to $3.35/kg MS. The top 25% recorded much lower overhead costs at $1.71/kg MS compared to the regional average of $2.14/kg MS, which remains similar to last year.

The major overhead cost to the average South West farm was the cost of labour in the business, which includes both employed and imputed labour. Labour costs account for 23% of total costs; however a larger proportion was spent on employed labour in 2013/14 compared to last year. Repairs and maintenance and depreciation are the other two major overhead cost categories, of which spending on repairs and maintenance increased by 37% which was expected due to increased cash flow on farms this year.

Cost of production

Table 7 presents cost of production which includes both variable and overhead costs, as well as changes in fodder inventory and livestock trading losses. Considering the changes in inventory is important to establish the true costs to the business. The changes in fodder inventory count for the net cost of feed from what was fed out, conserved, purchased and stored over the year. Livestock trading loss is also considered in cost of production, where an average loss of $0.03/kg MS was included. The average livestock trading loss was due to one farm purchasing a large amount of livestock during the year.

Where positive changes in inventory occur, such as the $0.21/kg MS feed inventory change, this is counted as a cost to the business and added to variable and overhead costs to give total cost of production.

Table 5 shows average cost of production was $5.34/kg MS, a slight increase from last year. The cost of production for the top 25% of farms was $4.58/kg MS, which was lower than last year's top group of $4.66/kg MS.

TABLE 7. COST OF PRODUCTION – SOUTH WEST

Farm costs ($/kg MS)	South West average	Q1 to Q3 range	Top 25% average
Livestock trading loss	$0.03	$0.00 - $0.00	$0.00
Feed inventory change	-$0.21	-$0.32 - -$0.09	-$0.30
Changes in inventory ($/kg MS)	-$0.18	-$0.32 - -$0.09	-$0.30
VARIABLE COSTS			
Herd costs	$0.25	$0.19 - $0.31	$0.24
Shed costs	$0.23	$0.19 - $0.24	$0.19
Purchased feed and agistment	$1.94	$1.66 - $2.14	$1.71
Home grown feed cost	$0.96	$0.82 - $1.07	$1.03
Total variable costs ($/kg MS)	$3.37	$3.01 - $3.73	$3.17
OVERHEAD COSTS			
Rates	$0.06	$0.04 - $0.08	$0.03
Registration and insurance	$0.02	$0.01 - $0.02	$0.01
Farm insurance	$0.05	$0.03 - $0.06	$0.04
Repairs and maintenance	$0.41	$0.32 - $0.46	$0.37
Bank charges	$0.01	$0.00 - $0.01	$0.02
Other overheads	$0.12	$0.08 - $0.14	$0.11
Employed labour	$0.47	$0.13 - $0.55	$0.42
Total cash overheads ($/kg MS)	$1.14	$0.82 - $1.30	$1.00
Depreciation	$0.24	$0.15 - $0.29	$0.19
Imputed owner operator and family labour	$0.77	$0.39 - $1.14	$0.51
Total overhead costs ($/kg MS)	$2.14	$1.76 - $2.49	$1.71
Total cost of production ($/kg MS)	$5.34	$4.89 - $5.81	$4.58

Break-even price required

The break-even price required per kilogram of milk solids sold is calculated as the cost of production less any income from other sources, including livestock trading profit or increase in feed inventory. This makes it an even more relevant risk indicator in dairying than cost of production as it can be compared directly to the price of the main output in the business, that being milk price.

Figure 29 shows that the break-even price required ranged from $3.39/kg MS to $6.38/kg MS in the South West.

The average milk price was $6.91/kg MS, well above the average milk price of $4.90/kg MS for 2012/13. This implies that the milk price received this year was above the break-even price required for all farms in the sample.

The difference between the price received and the break-even price required is the earnings before interest and tax per kilogram of milk solids sold. The average earnings before interest and tax was $2.03/kg MS, the second highest figure recorded in the eight year history of the project.

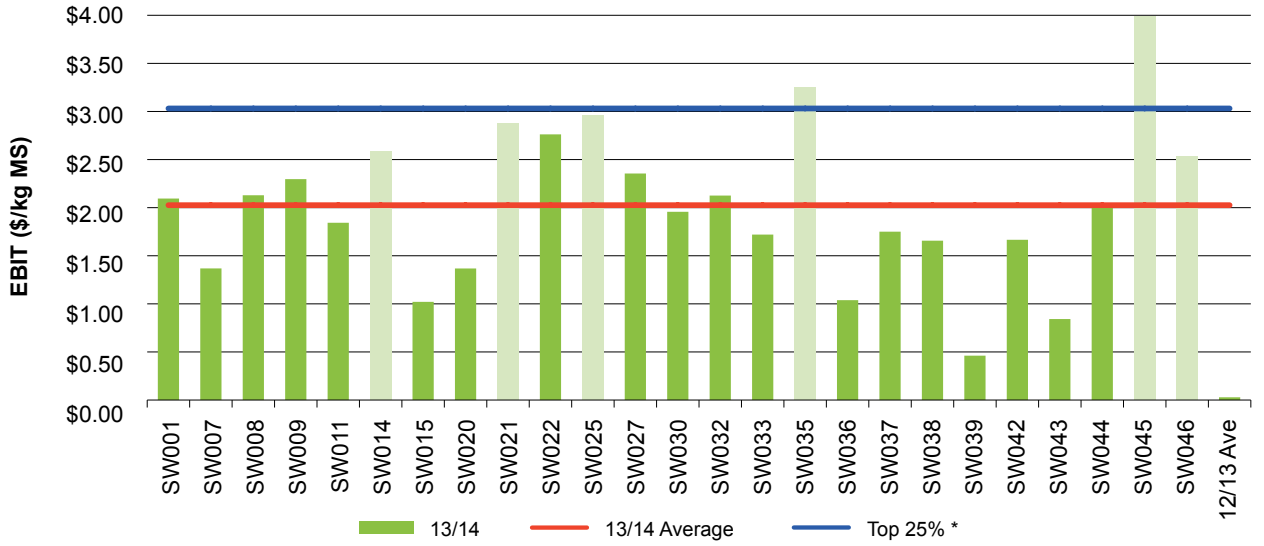
FIGURE 29. BREAK-EVEN PRICE REQUIRED PER KILOGRAM OF MILK SOLIDS SOLD – SOUTH WEST

Earnings before interest and tax

Earnings before interest and tax (EBIT) is calculated by subtracting variable and overhead costs, including imputed labour costs from gross income. It is the return from all the capital invested in the business.

On average EBIT increased significantly from $0.04/kg MS in 2012/13 to $2.03/kg MS (Figure 30), largely due to an increase in gross farm income. This increase in gross farm income was in response to the high milk price, feed inventory gain and livestock trading profit. The strength of the top performers is highlighted with an average EBIT of $3.03/kg MS, a $2.10/kg MS increase on the performance of the top 25% from last year.

FIGURE 30. WHOLE FARM EARNINGS BEFORE INTEREST AND TAX PER KILOGRAM OF MILK SOLIDS – SOUTH WEST

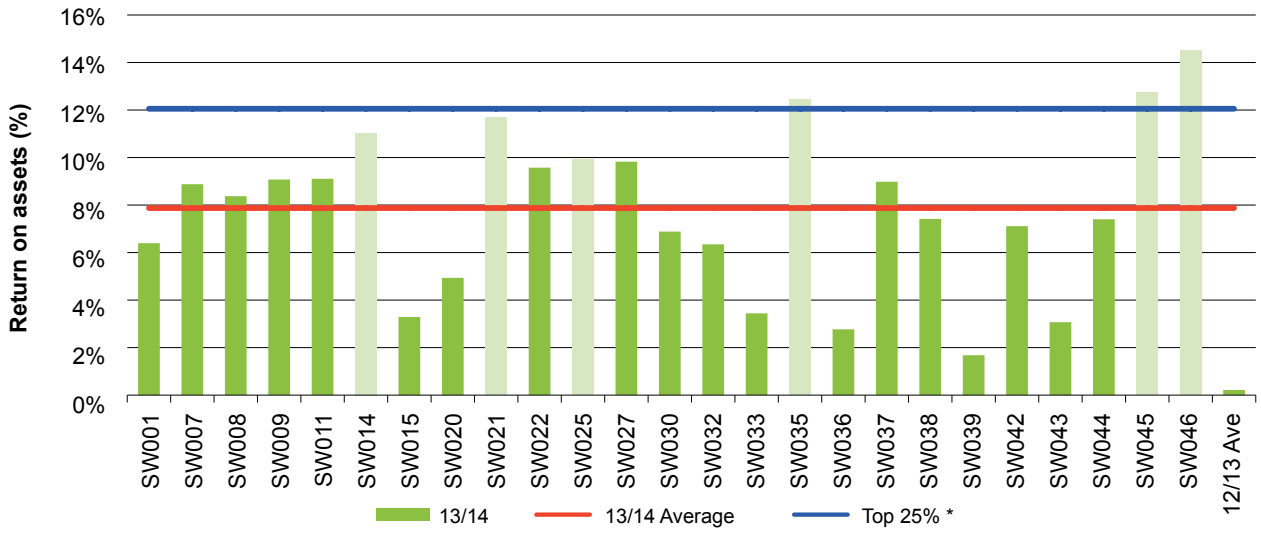


Return on assets and equity

Return on assets is the earnings before interest and tax (EBIT) expressed as a percentage of total assets involved in the farm business. It is an indicator of the overall earning power of total assets, irrespective of capital structure. Return on equity is a measure of the owner's rate of return on investment. It is calculated as EBIT minus interest and lease costs expressed as a percentage of owner's equity. Figures 31 and 32 were calculated excluding capital appreciation. For return on equity including capital appreciation, as well as individual farm results, refer to Appendix Table B1.

The return on assets for the South West region ranged from 1.7% to 14.5%, recording a significant increase in average farm economic efficiency of 0.2% from last year to 7.9% in 2013/14. This reflects the significant rise in income received. The top 25% achieved an average of 12.1% return on assets. Land value is a major component of the assets under management and in the South West land value appears to have decreased slightly. In 2013/14 average land was $11,397 after stabilising at $11,714/ha ($4,739/acre) in 2012/13, which had fallen from higher land value of $14,238/ha ($5,764/acre) back in 2010/11. However changes to the sample mean that caution must be exercised when comparing results between years.

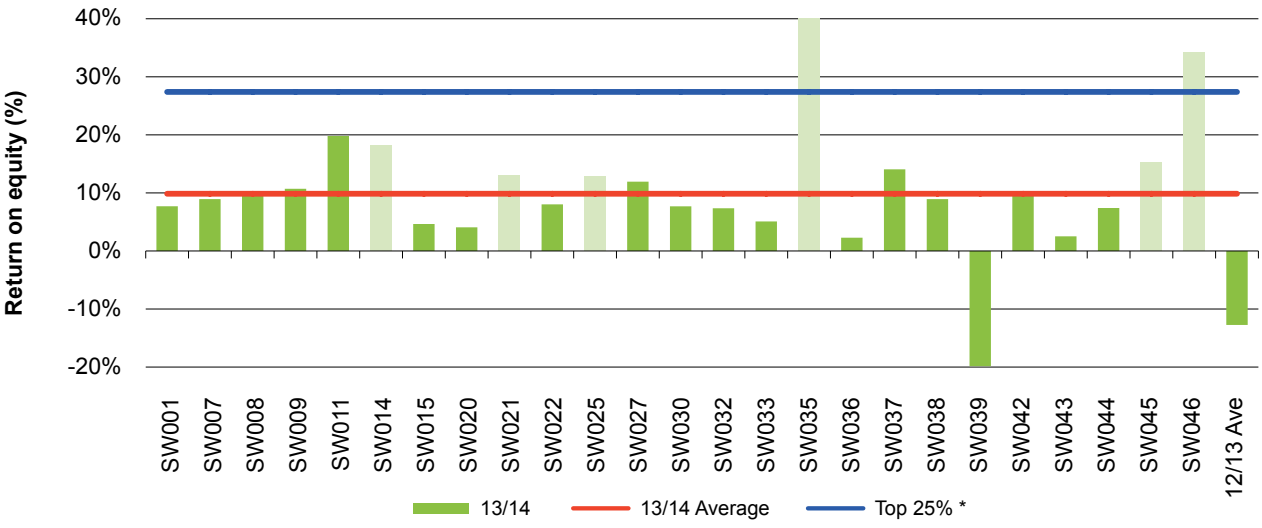
FIGURE 31. RETURN ON ASSETS – SOUTH WEST



This year return on equity showed a turnaround in results with an average of 9.9% recorded for the South West, a contrast to the previous two years of negative returns. All but one farm recorded a positive return on equity with individual farm variation illustrated in Figure 32. This farm recorded -69% and is not shown on the chart in order to visually compare the majority of farms. Indicating the wide range in results, another farm recorded a high positive result of 64%, which is also not shown on the figure.

The average of the top 25% of farm was 27%, considerably higher than 0% reported in 2012/13 for the top group and much higher than the 2013/14 group average. The strength of the year and operating conditions is highlighted by the fact that 24 of the 25 farms in the sample reported a positive return on equity.

FIGURE 32. RETURN ON EQUITY – SOUTH WEST



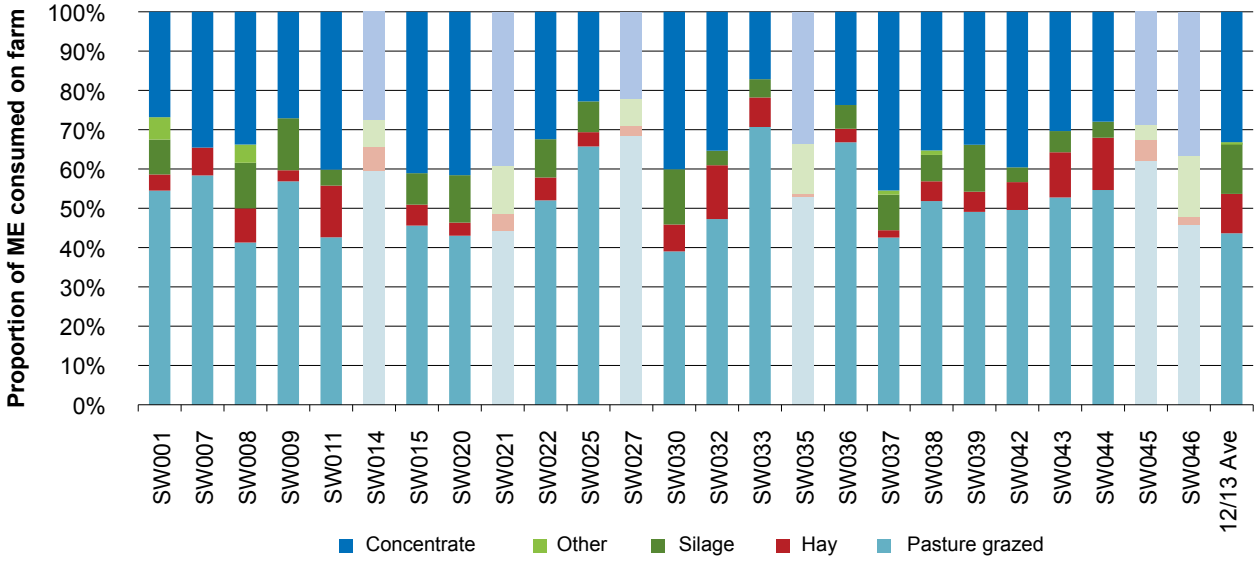
Feed consumption and fertiliser

Feed data was collected on a whole farm basis rather than determining which feeds went to each class of stock as this would have made the data collection process too difficult on many farms.

Figure 33 shows the relative contribution of each feed type to the metabolisable energy (ME) consumption on the farm. The contribution of grazed pasture as a proportion of ME consumed on farm rose from 44% on average in 2012/13 to 53% in 2013/14. Concentrates were the most used supplement contributing to one-third of total ME fed. The contribution of silage decreased compared to last year contributing 8% of total ME. Hay use also decreased due to the higher proportion of direct grazed pasture available this year contributing 6% of total ME, compared to 10% in 2012/13.

Other sources of feed include those that are not commonly used by, or available to, dairy farmers.

FIGURE 33. SOURCES OF WHOLE FARM METABOLISABLE ENERGY – SOUTH WEST



Since 2011/12 home grown feed consumption has been measured per milking hectare as opposed to per usable hectare as had been reported prior to this date. Pasture consumption for farms expressed as tonnes of dry matter per hectare (t DM/ha) in the South West is shown in Figure 34.

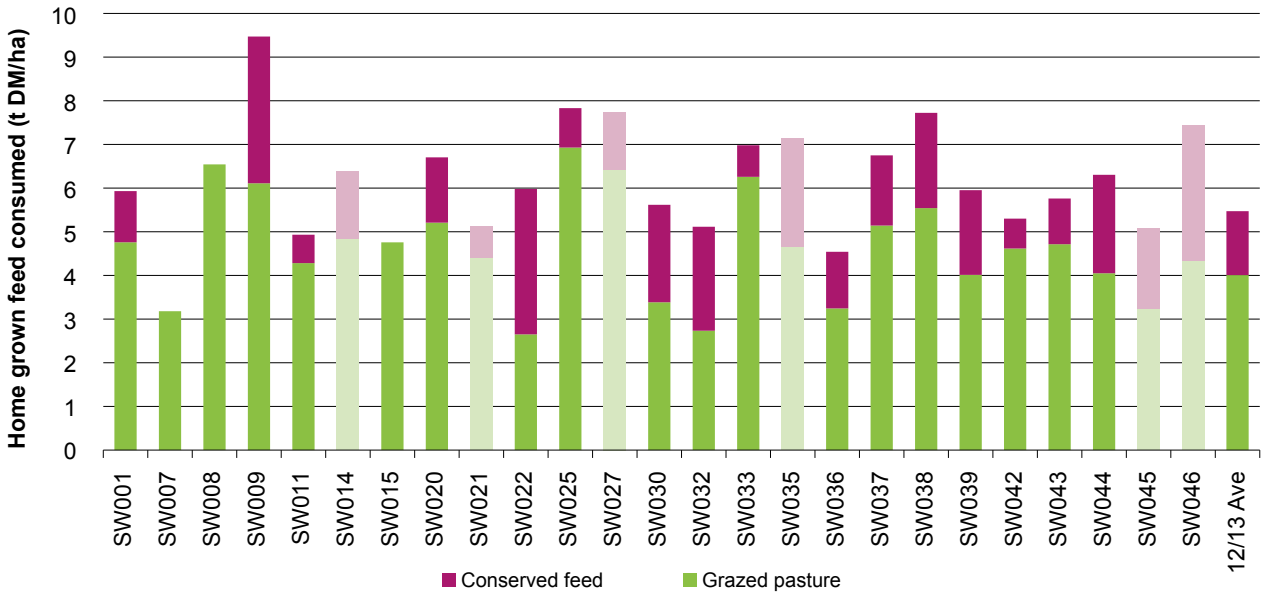
The amount of pasture grazed on the milking area this year ranged from 2.7 t DM/ha to 7.0 t DM/ha. The average pasture grazed of 4.6 t DM/ha is up from 4.0 t DM/ha grazed in 2012/13 reflecting the better seasonal conditions particularly due to rains continuing into November-December. Conserved fodder ranged from 0.7 t DM/ha (excluding the 0 t DM/ha values) to 3.4 t DM/ha, with a conserved average of 1.5 t DM/ha, the same as last year. Although the same amount of fodder was conserved, the increase in directly grazed pasture led to more fodder stored and available on farm at the end of the year.

Overall average total pasture harvested (grazed and conserved) from the milking area was 6.2 t DM/ha, up from 5.5 t DM/ha harvested in 2012/13.

The proportion of concentrate feeding remained very similar to the previous year despite higher concentrate prices.

It should be noted that there can be a number of potential sources of error in the method used to calculate home pasture consumption. The errors include incorrect estimation of live weight, amounts of fodder and concentrates fed, energy content of fodder and concentrate, energy content of pasture, wastage of feed and associative effects of feeds. Comparing pasture consumption estimated using the back calculation method between farms can lead to incorrect conclusions due errors in each farm's estimate. It is best to compare pasture consumption on the same farm over time using the same method of estimation.

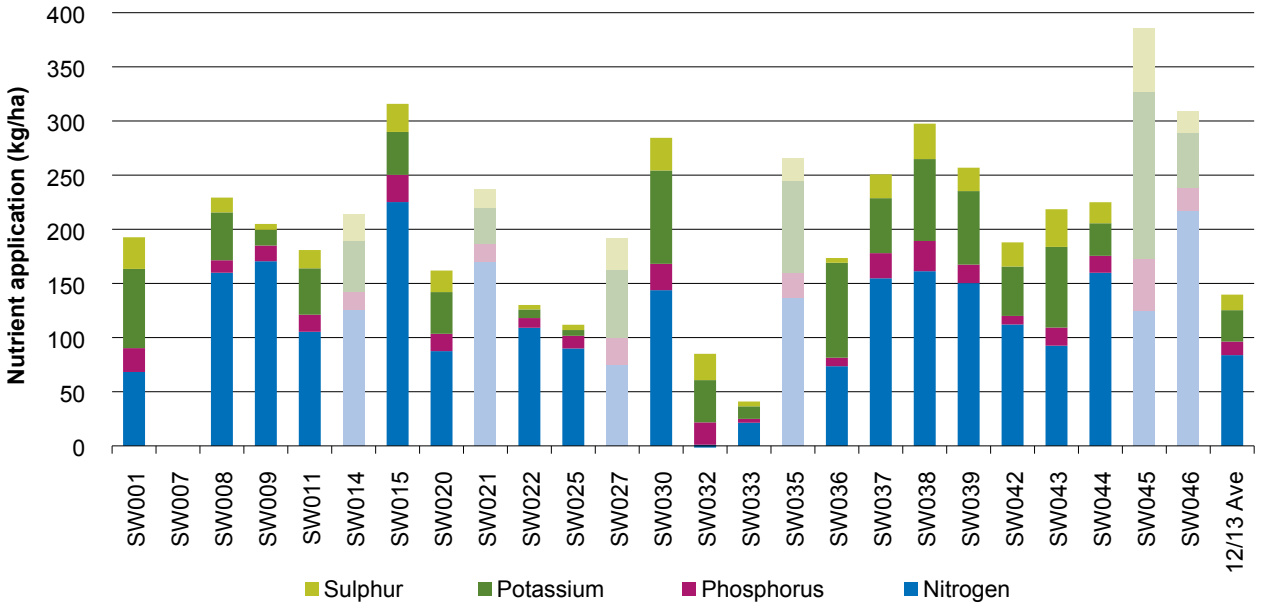
FIGURE 34. ESTIMATED TONNES OF HOME GROWN FEED CONSUMED PER MILKING HECTARE – SOUTH WEST



Fertiliser application

The proportion of nutrients in fertiliser applied per hectare on farm is shown in Figure 35. Total average nutrients applied for the year increased from 141 kg/ha in 2012/13 to 206kg/ha for 2013/14. Rates of nitrogen (N) fertiliser application increased by 28% from 84kg N/ha to 117kg N/ha, however there was substantial range from 1 kg N/ha (excluding the 0kg N/ha values) to up to 225kg N/ha. Figures 34 and 35 show limited signs of correlation between fertiliser application and tonnes of home grown feed. There could be other factors beyond fertiliser application that influence the production of home grown feed including soil fertility, climate and management of pastures. The individual values relating to Figure 35 can be found in Appendix Table B2.

FIGURE 35. NUTRIENT APPLICATION PER HECTARE – SOUTH WEST



Part Four: Gippsland

Gippsland

Farms GI004 to GI017 participated in the project for their eighth year. Farms GI020 to GI048 were involved in the project for their third year. Farm GI049 took part in the project for their second year. Farms GI050 and GI051 were new to the project this year. Please refer to page 3 for notes on the presentation of this data.

2013/14 Seasonal conditions

Similar to the 2012/13 year, Gippsland started off exceptionally wet and ran into a dry summer. Compared to the previous year; climatic conditions were quite variable across Gippsland with average or below average growing conditions. Although average rainfall was received, this was not evenly distributed either by month or by location (Figure 36). On the whole, fodder reserves were either maintained or increased over the year allowing for more strategic feeding decisions to be made.

Across Gippsland seasonal conditions have been variable and not necessarily favourable across the district. Gippsland received average rainfall but the timing was poor as temperature and rainfall did not align in many months. This resulted in pastures greening up after the dry summer but not enough for consistent growth.

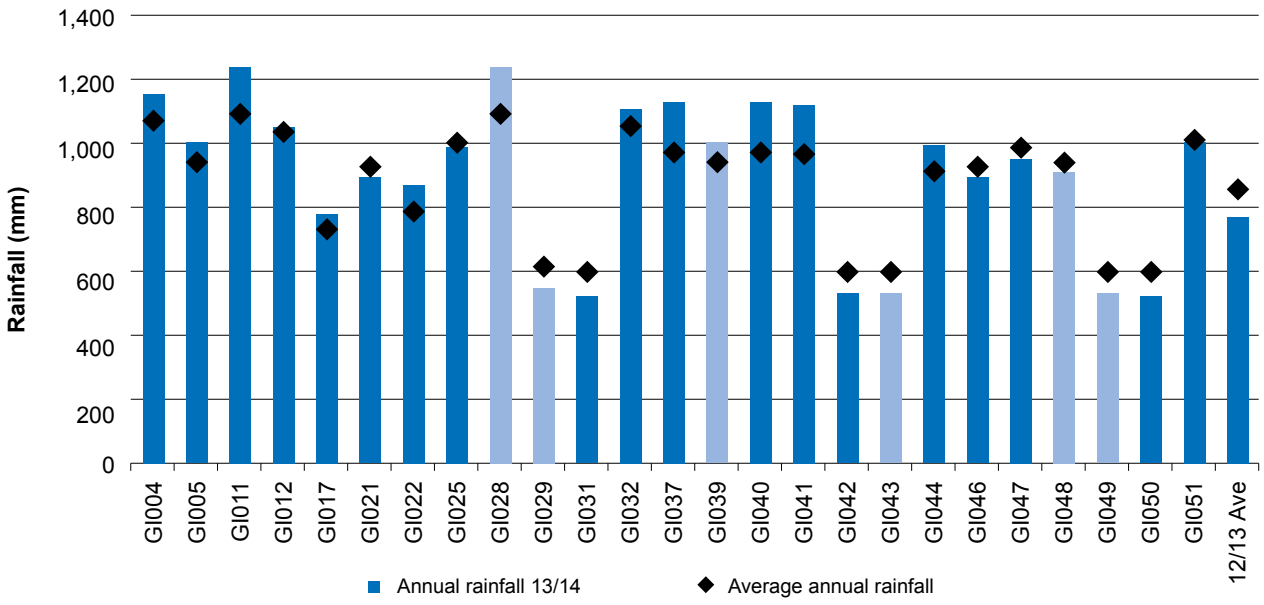
North East Gippsland experienced a wet winter and hot summer resulting in lower milk production. South Gippsland experienced a wet winter, was able to conserve late silage, and received summer rains which kept pasture green but did not translate to high pasture availability. This area received a late break resulting in positive mild autumn growing conditions to June when some of the highest rainfall on record was recorded.

West Gippsland experienced a wet winter also with a slow spring followed by a very hot summer. Late February saw pastures recover slightly but once again a late autumn break and mild conditions saw a strong finish to the season.

The Macalister Irrigation District (MID) initially received 90% allocation of high reliability water shares and spill water from Glenmaggie Weir was able to fulfil the shortfall. In late February tighter water conditions saw farmers purchase temporary water to take them through to the autumn break. High reliability water was revised to 100% allocation, 5% allocation of low reliability water shares and 31% spill water after good autumn rains were received. This resulted in a tight but efficient growing season. On the whole, the MID had a good season and recovered nicely after the poor conditions in 2012/13.

*Top 25% * - The top 25% are shown as the lighter bars in all graphs as ranked by return on assets.*

FIGURE 36. 2013/14 ANNUAL RAINFALL AND LONG TERM AVERAGE RAINFALL – GIPPSLAND



Whole farm analysis

The key whole farm physical parameters for Gippsland are presented in Table 8. The Q1 – Q3 range shows the band in which the middle 50% of farms for each parameter sit.

The physical characteristics of the top 25% only partly explain their ability to be more profitable. Caution must be taken when looking at these physical parameters in isolation.

The top 25% have higher stocking rate on their usable area at 2.1 cows per hectare (cows/ha) compared to 1.8 cows/ha on average. The top 25% were also able to achieve greater production per cow (510 kg MS/cow) and per hectare (1,079 kg MS/ha) compared to the Gippsland average which were 468 kg MS/cow and 836 kg MS/ha respectively. The top 25% also had higher labour efficiency.

Similar to last year, the average had greater annual rainfall at 905 mm compared to the top producers' average of 793 mm, although overall water used was similar. The usable area of the top 25% was also less at 156 ha in comparison to the average at 186 ha.

TABLE 8. FARM PHYSICAL DATA – GIPPSLAND

Farm physical parameters	Gippsland average	Q1 to Q3 range	Top 25% average
Annual rainfall 13/14	905	779 - 1,107	793
Water used (irrigation + rainfall) (mm/ha)	1,044	950 - 1,128	1,053
Total usable area (hectares)	186	123 - 255	156
Milking cows per usable hectares	1.8	1.2 - 2.0	2.1
Milk solids sold (kg MS/cow)	468	416 - 517	510
Milk solids sold (kg MS/ha)	836	557 - 939	1,079
Home grown feed as % of ME consumed	68%	65% - 73%	63%
Labour efficiency (milking cows/FTE)	104	83 - 126	112
Labour efficiency (kg MS/FTE)	48,617	42,908 - 55,231	57,009

Gross farm income

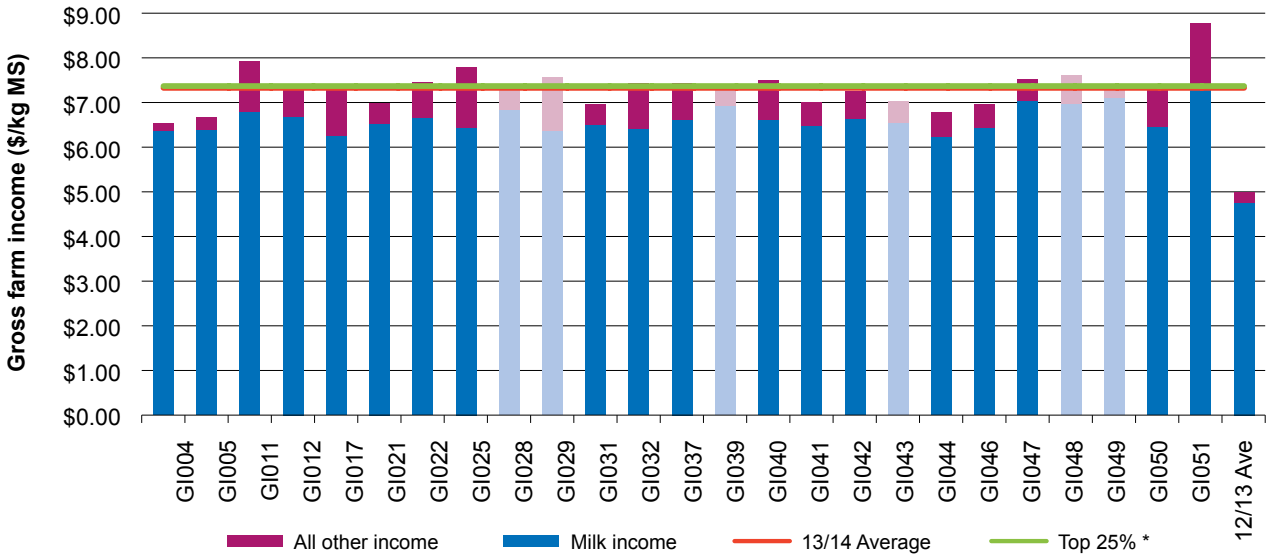
Gross farm income includes all farm income, whether from milk sales, a change in stock or feed inventories or cash income from livestock trading. Figure 37 shows the variation in gross farm income between participants in Gippsland from $6.55/kg MS to $8.77/kg MS, with an average of $7.33/kg MS which is 46% higher than last year. The top 25% of farms averaged $7.37/kg MS.

The increase in gross farm income in 2013/14 was strongly reflective of the increase in milk price received this year.

On average milk price rose 39% from $4.75/kg MS in 12/13 to $6.62/kg MS this year.

The poor season in 2012/13 resulted in low fodder reserves remaining which provided a challenging start to 2013/14. This year farm businesses in Gippsland not only consumed greater amounts of fodder but they also conserved more. This resulted in a feed inventory increase of $0.15/kg MS.

FIGURE 37. GROSS FARM INCOME PER KILOGRAM OF MILK SOLIDS – GIPPSLAND

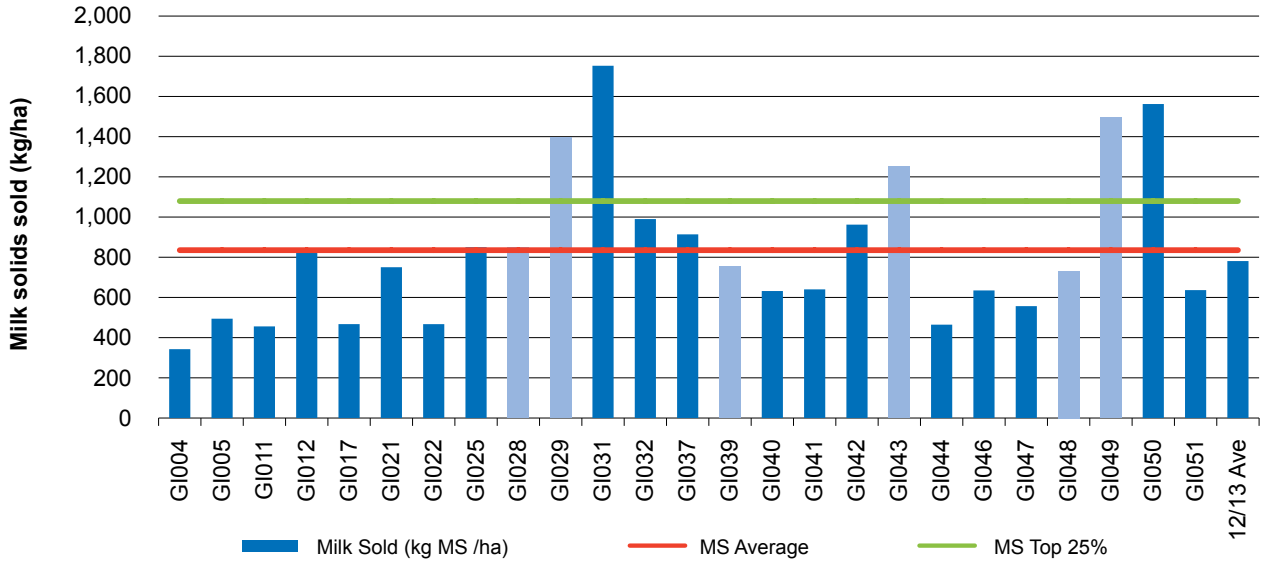


Milk solids production

Milk production describes a slightly stronger link between milk solids per hectare and the ability to perform in the top 25% of Gippsland participants. Milk solids sold per hectare for the top 25% was 1,079 kg MS/ha in comparison to the average producing 835 kg MS/ha (Figure 38). This was an increase of 31% for the top 25% group of 824 kg MS/ha in 2012/13.

On average, milk production increased 7% from 781 kg MS/ha in 2012/13, up to 835 kg MS/ha in 2013/14. This increase brought milk production closer the levels seen in 2011/12 of 843 kg MS/ha and 2010/11 of 811 kg MS/ha.

FIGURE 38. MILK SOLIDS SOLD PER HECTARE – GIPPSLAND



Variable costs

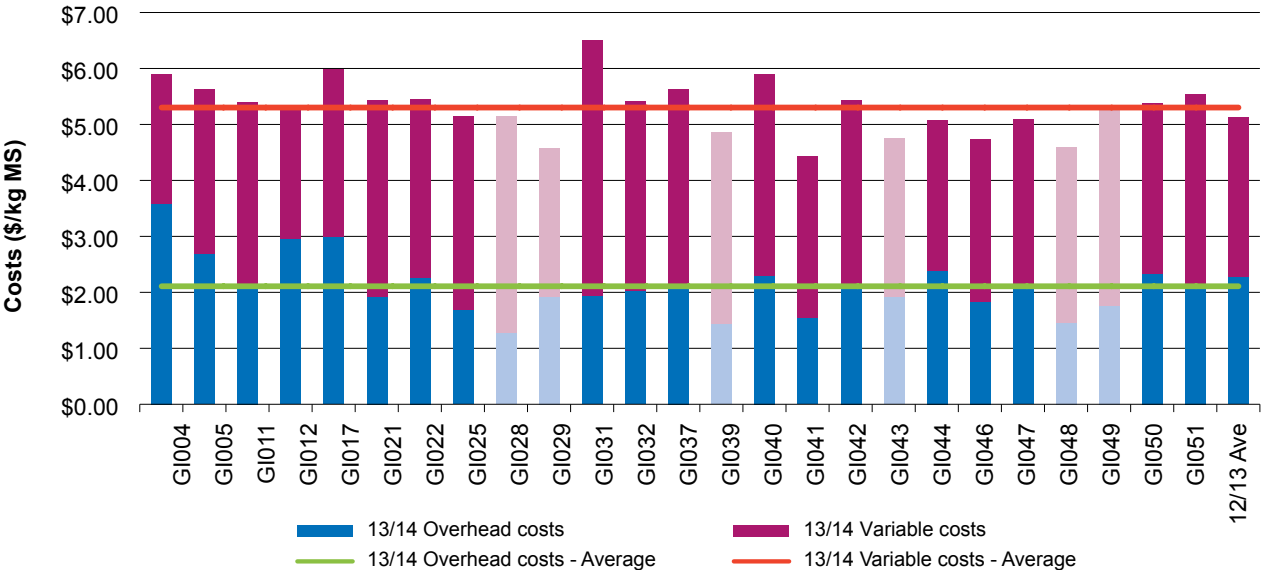
The separation of variable and overhead costs per kilogram of milk solids is shown in Figure 39. Variable costs are those costs that change directly according to the amount of output, such as herd, shed and feed costs.

The range for variable costs in Gippsland was $2.31/kg MS to $4.56/kg MS with an average of $3.19/kg MS. This was a 12% increase from 2012/13 when average variable costs were $2.85/kg MS. The top 25% in 2013/14 had higher variable costs at $3.24/kg MS.

The largest variable cost to Gippsland farms in 2013/14 was for feed. Feed costs were 50% of total costs which was an increase of 5% from 2012/13. This was primarily due to higher grain prices in 2013/14 at $1.46/kg MS from $1.33/kg MS in 2012/13 and fodder purchases increasing from $0.17/kg MS in 2012/13 to $0.24/kg MS this year.

The percentage breakdown of the variable costs can be found in Appendix Table B6 while Appendix Table B4 gives the costs at dollars per kilogram of milk solids sold.

FIGURE 39. WHOLE FARM VARIABLE AND OVERHEAD COSTS PER KILOGRAM OF MILK SOLIDS – GIPPSLAND



Overhead costs

Figure 39 and Table 9 also illustrate the range in overhead costs per kg MS for Gippsland. This figure includes the cash overhead costs and non-cash overhead costs (for imputed owner/operator and family labour and depreciation). Both of these cost categories are important costs to be considered in an economic analysis of a business to realistically monitor farm business performance.

Labour costs, including employed and imputed labour, were once again in 2013/14 the major overhead cost, accounting for 64% of overhead costs for both the average and top 25% of farms. This was similar to 65% recorded in 2012/13. The break down of overheads cost as a percentage of total costs and $/kg MS for individual farms can be found in Appendix Tables C7 and C5 respectively.

The ability to maintain lower overhead costs appears to be a key to performing in the top 25% for Gippsland at 1.63/kg MS, in comparison to the average which was $2.11/kg MS. The greatest difference between the average and top 25% was imputed labour costs which was $0.86/kg MS for the average compared to $0.53/kg MS for the top 25%. Similarly, depreciation cost for the average farm was $0.21/kg MS but only $0.11/kg MS for the top producers.

Total expenditure on overhead costs in Gippsland during 2013/14 varied greatly with a range of between $1.28/kg MS and $3.58/kg MS with the average of $2.11/kg MS.

Cost of production

Cost of production gives an indication of the average cost of producing a kilogram of milk solids. It is calculated as variable plus overhead costs and accounting for changes in fodder inventory and livestock trading losses. Considering the changes in inventory is important to establish the true costs to the business. The changes in fodder inventory count for the net cost of feed from what was fed out, conserved, purchased and stored over the year. The loss in livestock inventory that occur through livestock depreciation or reduced stock numbers over the year is also considered in cost of production.

Table 9 shows that the average cost of production was $5.16/kg MS, which was only a 3% drop from last year. The top 25% of farms was $4.81/kg MS which was almost 8% higher than last year.

It should also be noted that feed inventory actually increased this year by $0.14/kg MS for both the Gippsland average and $0.06/kg MS for the top 25% average; indicating more fodder on hand at the end of the year than at opening.

As mentioned in the overhead costs section, imputed owner/operator and family labour and depreciation are important non-cash costs to be considered in an economic analysis of a business. Table 9 has these costs separated out allowing owner/operators to distinguish their own cost of labour and where cash flow occurs in the business.

TABLE 9. COST OF PRODUCTION – GIPPSLAND

Farm costs ($/kg MS)	Gippsland average	Q1 to Q3 range	Top 25% average
Livestock trading loss	$0.00	$0.00 - $0.00	$0.00
Feed inventory change	-$0.14	-$0.20 - -$0.05	-$0.06
Changes in inventory ($/kg MS)	-$0.14	-$0.20 - -$0.03	-$0.06
VARIABLE COSTS			
Herd costs	$0.31	$0.20 - $0.42	$0.26
Shed costs	$0.21	$0.14 - $0.27	$0.18
Purchased feed and agistment	$1.75	$1.55 - $1.86	$1.86
Home grown feed cost	$0.92	$0.76 - $1.01	$0.94
Total variable costs ($/kg MS)	$3.19	$2.94 - $3.48	$3.24
OVERHEAD COSTS			
Rates	$0.06	$0.05 - $0.07	$0.05
Registration and insurance	$0.02	$0.01 - $0.02	$0.02
Farm insurance	$0.06	$0.04 - $0.08	$0.06
Repairs and maintenance	$0.28	$0.21 - $0.36	$0.26
Bank charges	$0.01	$0.00 - $0.01	$0.01
Other overheads	$0.10	$0.05 - $0.15	$0.07
Employed labour cost	$0.49	$0.27 - $0.76	$0.52
Total cash overheads ($/kg MS)	$1.04	$0.78 - $1.36	$0.98
Depreciation	$0.21	$0.54 - $1.17	$0.11
Imputed owner/operator and family labour	$0.86	$0.11 - $0.29	$0.53
Total overhead costs ($/kg MS)	$2.11	$1.81 - $2.31	$1.63
Total cost of production ($/kg MS)	$5.16	$4.78 - $5.41	$4.81

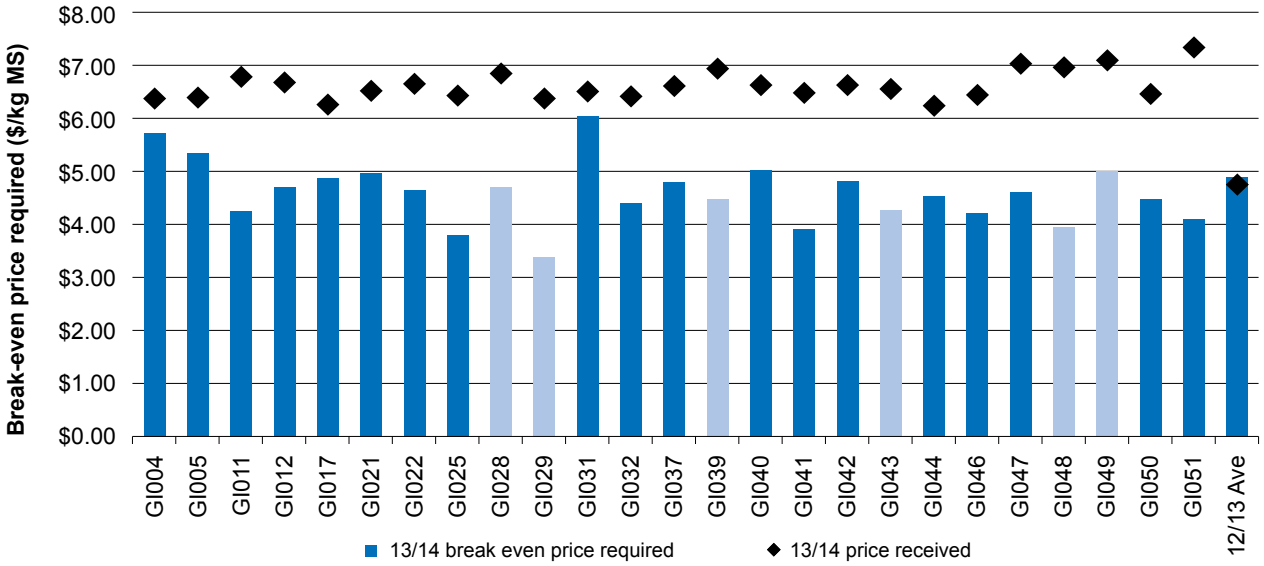
Break-even price required

The break-even price required for milk is calculated as the cost of production per kilogram of milk solids sold less any other sources of income such as livestock trading profit or feed inventory gain. By accounting for all costs and other sources of income, the break-even price required allows for a direct comparison to the price received for the main output of the business, milk. The difference between the break-even price required and the price received is the EBIT per unit.

Figure 40 shows that the break-even price required varied from $3.38/kg MS to $6.04/kg MS in Gippsland. The average break-even milk price required of $4.60/kg MS in 2013/14 was lower than $4.89/kg MS recorded last year.

Milk price was 39% higher this year with the average price for participants at $6.62/kg MS compared to $4.75/kg MS last year. The top 25% had a milk price of $6.79/kg MS.

FIGURE 40. BREAK-EVEN PRICE REQUIRED PER KILOGRAM OF MILK SOLIDS SOLD – GIPPSLAND



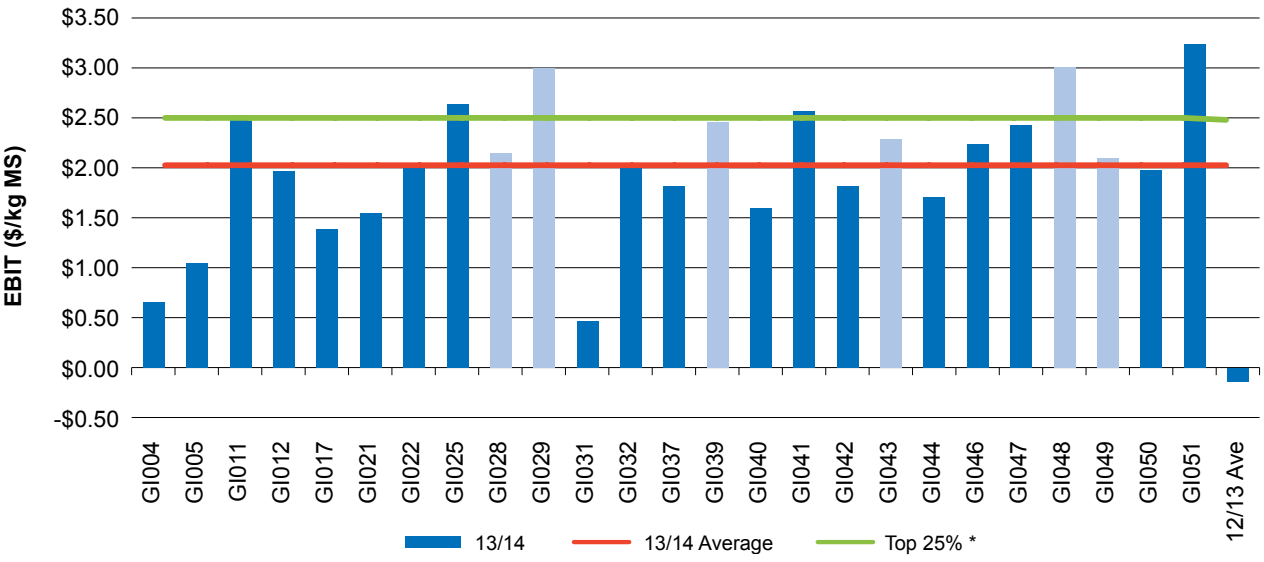
Earnings before interest and tax

EBIT is gross farm income less variable and overhead costs. With all Gippsland participants recording a positive EBIT, 2013/14 proved a stark contrast to last year. On average EBIT was $2.03/kg MS in comparison to -$0.14/kg MS in 2012/13 (Figure 41). This distinct turnaround was also exhibited in the top 25% of farms recording an average EBIT of $2.50/kg MS which was higher than the $1.05/kg MS recorded by the top 25% performers last year.

Whilst milk price was a large contributing factor to the increased EBIT this year there was a slight drop in production costs and increase of home grown fodder reserves. Gross farm income was bolstered by this increase in fodder reserves as well as some sales of export heifers.

The tight control over expenditure this year has seen good retained earnings to further reduce debt and pay interest and lease costs. This positive result was achieved despite the variability and challenging climatic conditions experienced across dryland Gippsland and the moderately good conditions in the MID.

FIGURE 41. WHOLE FARM EARNINGS BEFORE INTEREST AND TAX PER KILOGRAM OF MILK SOLIDS – GIPPSLAND



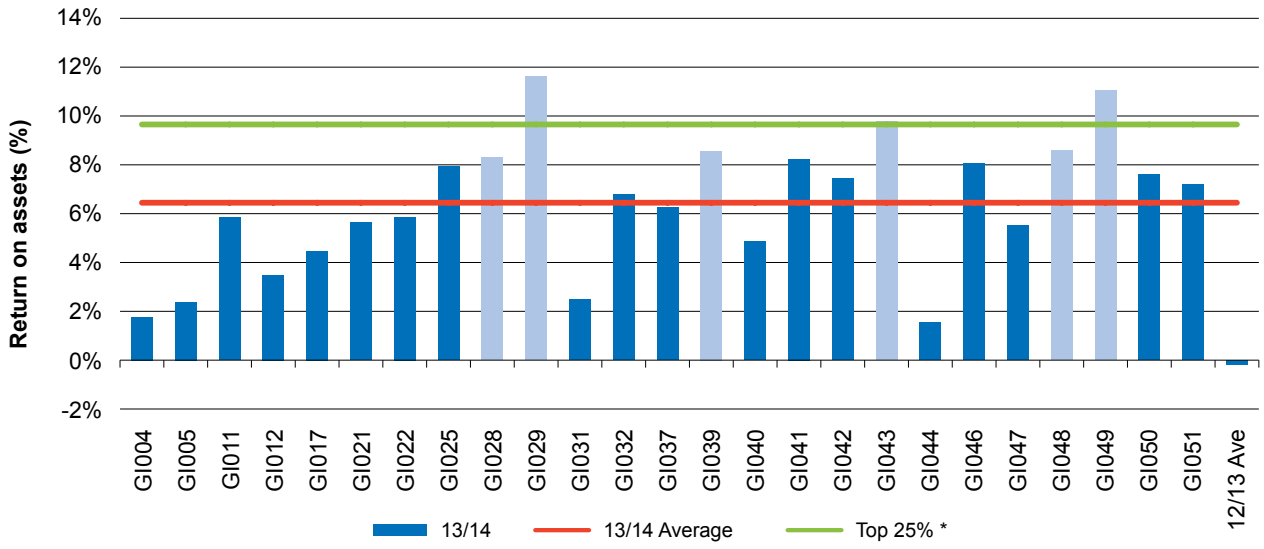
Return on assets and equity

Return on assets is the EBIT expressed as a percentage of total assets. It is an indicator of the earning power of total assets, irrespective of capital structure

The variation between farms' return on assets will reflect the variation between farms' earnings before interest and tax, with differences between those farms with a similar EBIT being explained by the variation in the valuation of the total assets managed. These results are a reflection of the total economic result on the farm.

There was a distinct rebound in return on assets (ROA) for Gippsland businesses this year as shown in Figure 42. All farms in the project returned a positive ROA ranging from 1.5% to 11.6% during 2013/14. The average of 6.4% ROA, shown by the red line, for Gippsland is noticeably higher than last year's result of -0.2%. The top 25% ROA was 9.7% as shown by the green line.

FIGURE 42. RETURN ON ASSETS – GIPPSLAND



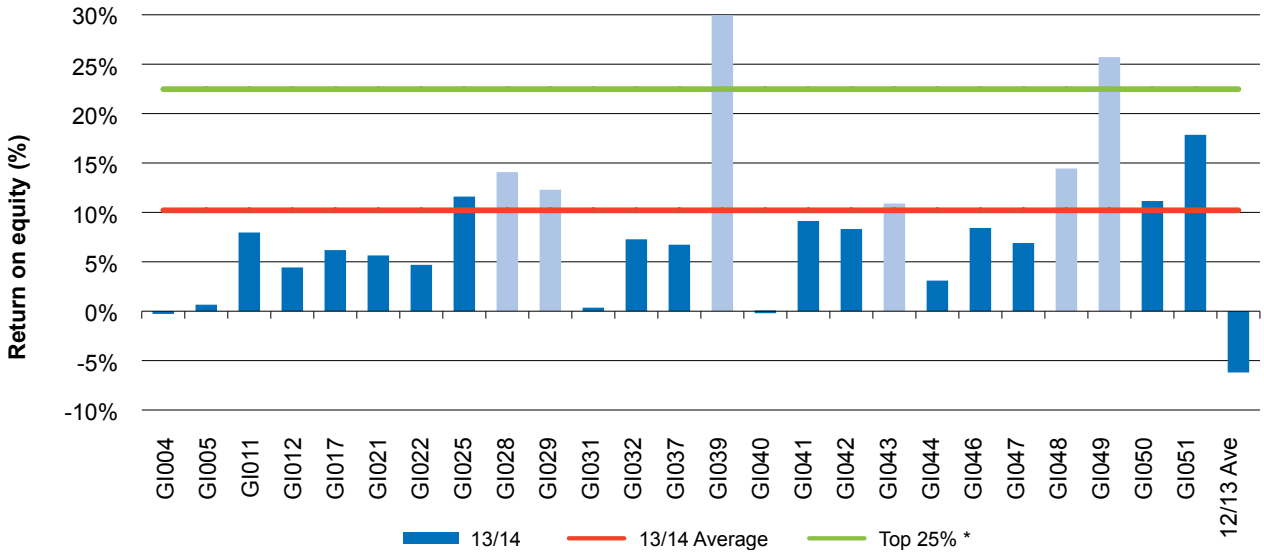
Return on equity is the net farm income (EBIT less interest and lease payments) expressed as a percentage of the owner's equity. It is a measure of the owner's rate of return on investment.

Nearly all (24 out of 25) of the Gippsland farms returned a positive return on equity (ROE) in 2013/14, with an average ROE of 10.2% (Figure 43). This was a complete turnaround from 2012/13 when three quarters of Gippsland farms, or 19 of the 25 farms, recorded negative ROE which was on average -6.2% and the top 25% group was 2.6%. In 2013/14 the top 25% recorded a ROE of 22.5%.

Note that the graph below has been altered to allow for better visual representation of the range of ROE experienced in Gippsland. Farm GI039 had a ROE of 57% which is greater than the axis allows.

Interest and lease costs were $0.69/kg MS which was lower than in 2012/13 when they were recorded as being $0.73/kg MS. Average capital values can be seen in Appendix C8.

FIGURE 43. RETURN ON EQUITY – GIPPSLAND



Feed consumption and fertiliser

Figure 44 shows that Gippsland dairy farming systems were predominantly pasture based, with 23 farms sourcing at least half their energy requirement as grazed pasture.

Pasture consumption is calculated as the gap between the total energy required on farm for all stock classes and the energy provided from concentrates, silage, hay and other sources. A further description of the Energetics method used to calculate energy sources and feed consumption can be found on page 19 of Part One – Statewide or in Appendix E.

Concentrates provided the next greatest energy source after pasture consumption averaging 27% of energy in the diet, similar to last year's proportion of the diet. The intake of concentrates ranged from 17% to 43% of all metabolisable energy (ME) consumed which was also similar to the range seen in 2012/13.

Other sources of feed include those that are not commonly used by, or available to, dairy farmers.

FIGURE 44. SOURCES OF WHOLE FARM METABOLISABLE ENERGY – GIPPSLAND

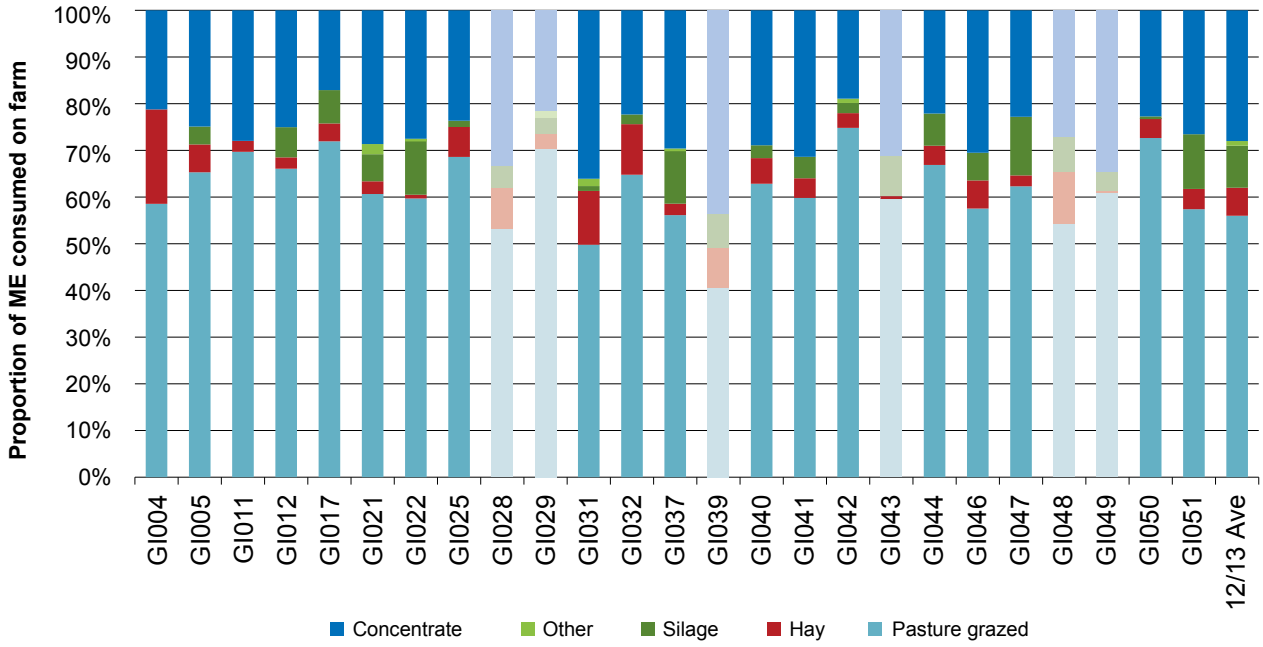


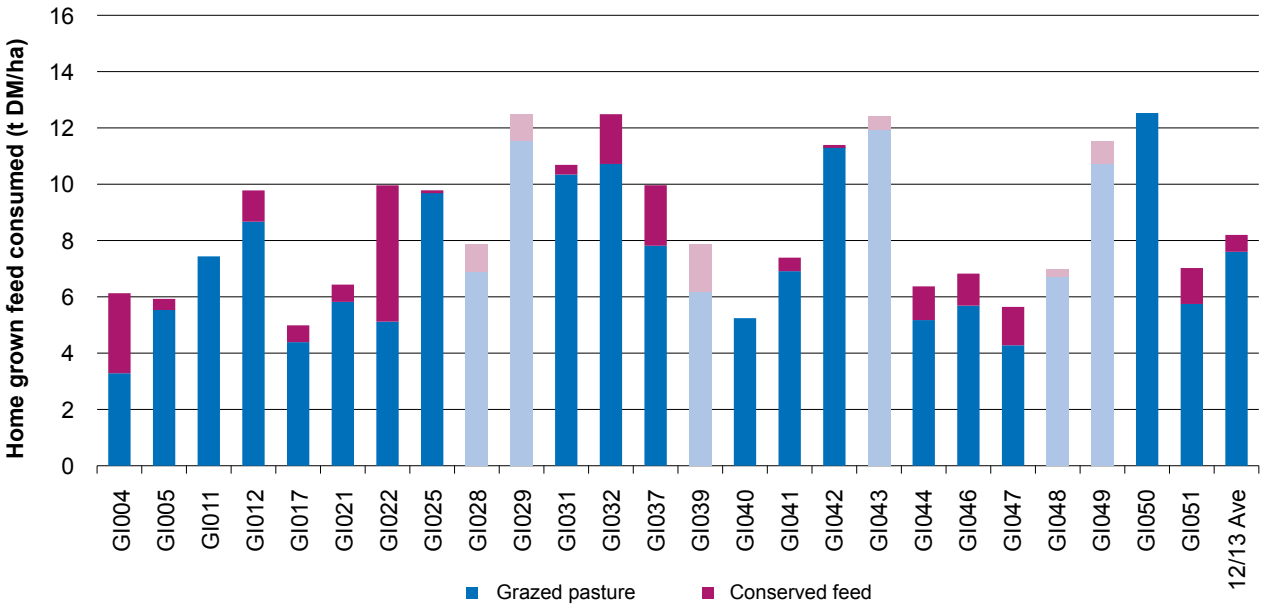
Figure 45 shows the estimated tonnes of home grown feed consumed per milking hectare for farms in Gippsland. Home grown feed can be grazed pasture (shown by the bottom lighter blue bars) and conserved pasture (shown by the top darker blue bars). Total home grown feed ranged from 5 tonnes of dry matter per milking hectare (t DM/ha) up to 12.5 t DM/ha. The average home grown feed produced per milking hectare was 8.6 t DM and the top 25% of farms averaged 9.9 t DM/ha.

Despite the challenging and variable climatic conditions experienced across Gippsland in 2013/14, total pasture consumption on the home milking area was only slightly higher than the more challenging conditions last year.

Similar to 2012/13, Gippsland experienced the extremes of a wet winter and dry summer however direct pasture consumed was higher at 7.6 t DM/ha compared to 6.8 t DM/ha in 2012/13. The quantity of conserved feed increased from to 0.6 t DM/ha last year to 1.0 t DM/ha this year. This is also seen by an increase in feed inventory at the end of the season. Three farms did not conserve any feed on the milking area in 2013/14.

It should be noted that there can be a number of sources of error in the method used to calculate home pasture consumption. These errors include incorrect estimation of liveweight, amounts of fodder and concentrates fed, energy content of fodder and concentrates, energy content of pasture, wastage of feed and associative effects of feeds. Comparing pasture consumption estimated using the back calculation method between farms can lead to incorrect conclusions due to errors in each farms estimate. It is best to compare pasture consumption on the same farm over time using the same method of estimation.

FIGURE 45. ESTIMATED TONNES OF HOME GROWN FEED PRODUCED PER MILKING HECTARE – GIPPSLAND



Fertiliser application

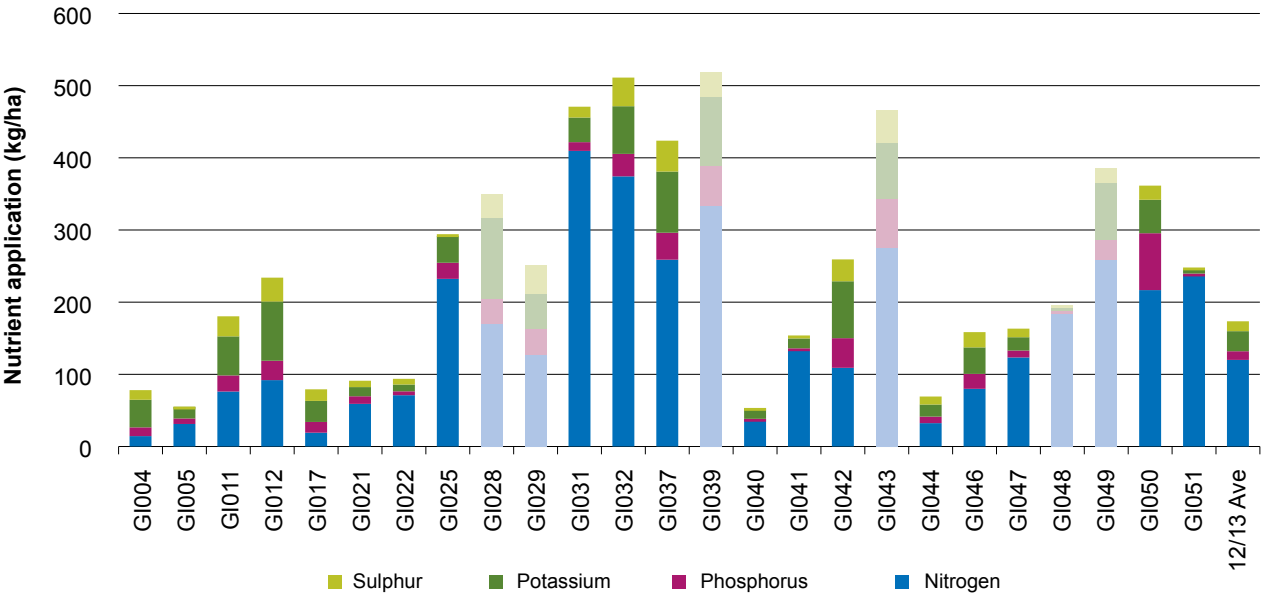
Farms in Gippsland used a wide range of fertilisers and fertiliser application rates, both between farms and with the mix of key macronutrients on individual farms. Nitrogen applied varied from 14 kg N/ha up to 410 kg N/ha, with the group average at 158 kg N/ha, which was a 32% increase from 120 kg N/ha last year.

There was a wider range of fertilisers utilised by participants this year with some choosing to utilise non chemical fertilisers. This goes some way toward explaining the variation in nutrients applied this season. Similarly there does not appear to be any degree of correlation between the pasture growth per milking hectare and fertiliser application rates per usable hectare as seen in Figures 45 and 46.

Fertiliser application could be an indicator of the stage of development of the grazing land by farms in the study and as such should not be an indicator of productive capacity of land utilised.

It should also be recognised that grazing strategies and timing of rainfall and irrigation scheduling would also impact upon pasture growth and consumption. The values for Figures 45 and 46 can be found in Appendix Table C2.

FIGURE 46. NUTRIENT APPLICATION PER HECTARE – GIPPSLAND



Part Five: Business confidence survey

Expectations and issues

Responses to this business confidence survey were made in June 2014 with regard to the 2014/15 financial year.

Expectations for business returns

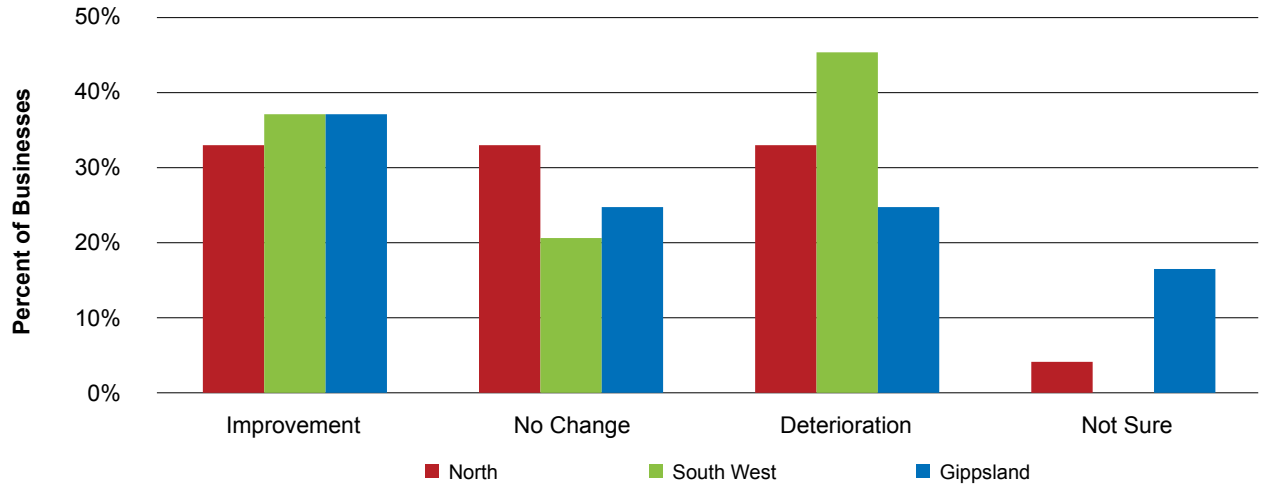
Following a positive 2013/14 year, expectations for the coming season are variable with a third of farmers predicting an improvement in farm business returns and an equal proportion predicting deterioration (Figure 47). This is notably different to the very positive expectations recorded last year.

Responses to the survey were made with consideration to all aspects of farming, including climate and market conditions for all products bought and sold.

While expectations of the coming year are spread across the categories, there are slight regional differences.

Participants in the South West have slightly more negative expectations of their farm business returns in 2014/15 and participants in Gippsland are slightly more positive, whereas the North is evenly split, as shown in Figure 47.

FIGURE 47. EXPECTED CHANGE TO FARM BUSINESS RETURNS IN 2014/15



Price and production expectations - milk

Majority of farmers across the state are expecting their milk price to decrease for the 2014/15 year (Figure 48). The extent of this decrease was not known. This follows a record high milk price for most farms across the state in 2013/14. Farms in Gippsland received the lowest milk price in 2013/14 and 14% expect their milk price to increase in the coming year.

More than 60% of farmers in Gippsland and the South West and 40% in the North indicated that they will increase milk production in the coming year, with less than 10% of participants across the state expecting to decrease production in 2014/15.

FIGURE 48. PRODUCER EXPECTATIONS OF PRICES AND PRODUCTION OF MILK IN 2014/15

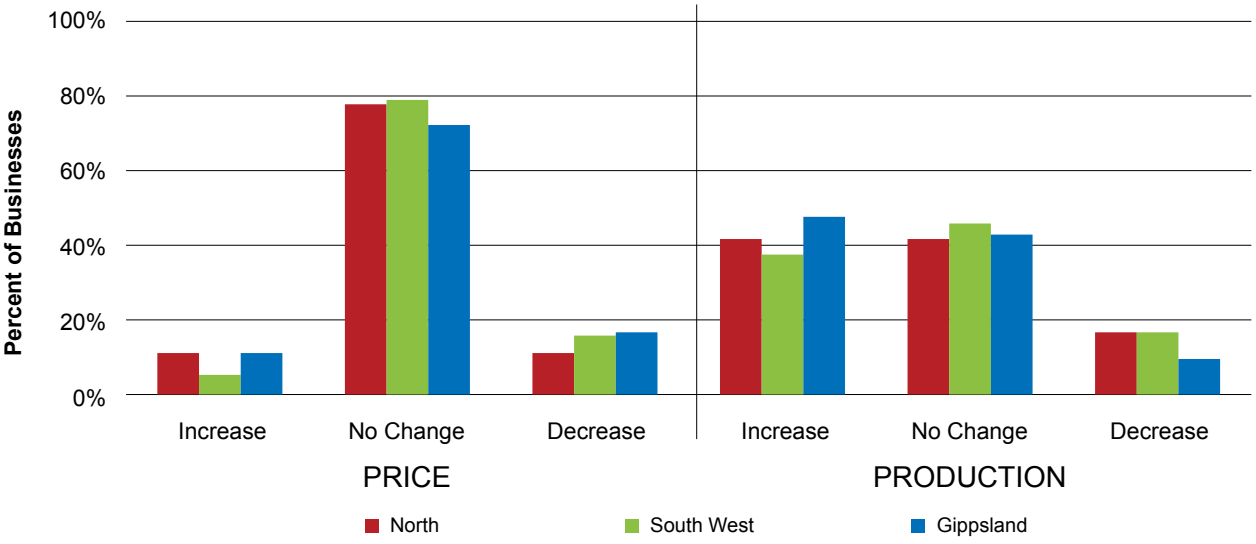
Price and production expectations - fodder

The majority of participating farmers expect their fodder prices to remain unchanged next year (Figure 49).

More than 40% of respondents indicated that they expect fodder production to increase in the coming year, while the same proportion expect no change in how much feed is conserved on farm. Nearly 15% of farmers reported that fodder production is expected to decrease on their farms in 2014/15.

10% of participants reported that expectations for an El Niño event causing a drier than average spring and summer is a concern for the coming year. The effect of this event on fodder prices and production remains to be seen.

FIGURE 49. PRODUCER EXPECTATIONS OF PRICES AND PRODUCTION OF FODDER IN 2014/15

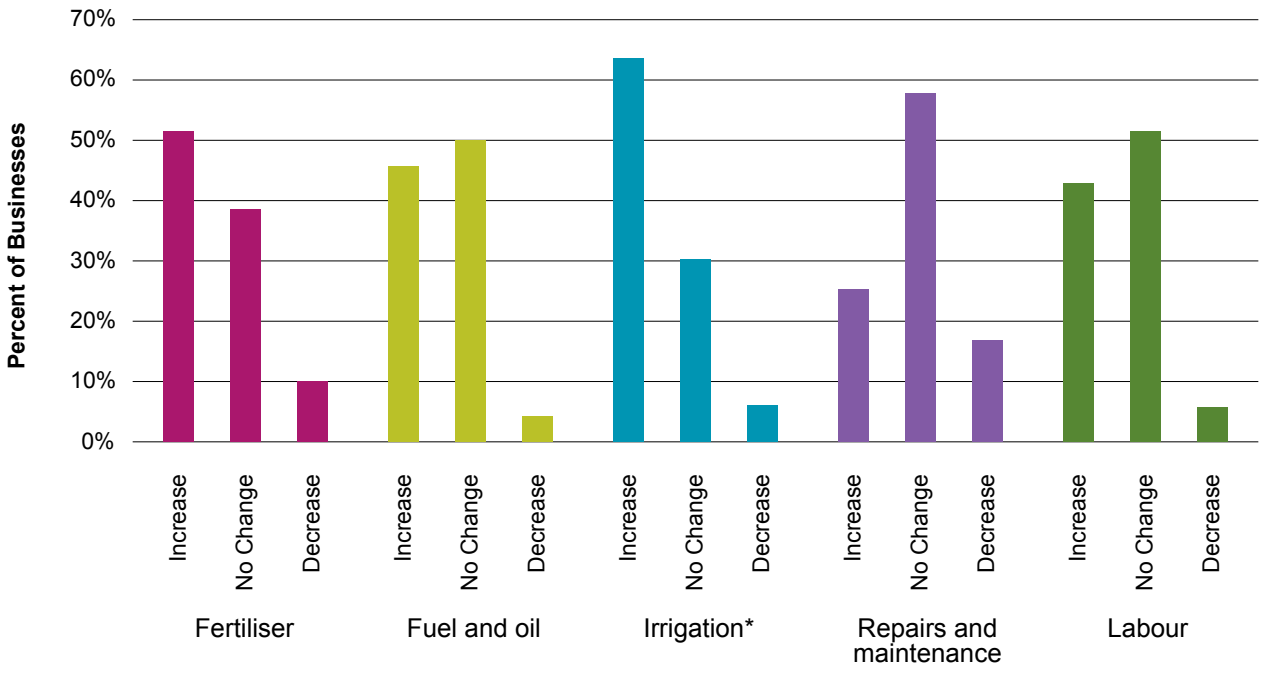


Cost expectations

Data presented in Figure 50 represents the expectations of costs for the dairy industry from 70 of the farms in the project. The cost of irrigation is an exception, as it was only answered by 31 of the 38 farms that have significant irrigation in the sample.

The majority of farms in all categories expect input costs to remain unchanged or increase. Over half of the farmers across the state are not expecting changes to repairs and maintenance costs or fuel and oil costs for their farm in this coming year.

FIGURE 50. PRODUCER EXPECTATIONS OF COSTS FOR THE DAIRY INDUSTRY IN 2014/15



**only includes responses from 31 farms with irrigation*

Major issues in the dairy industry – The next 12 months

A summary of the key issues identified by participant businesses over the coming 12 months are identified in Figure 51. A total of 148 responses were recorded from 70 farms. Five of these participating farms gave no comment or responded with no notable concerns.

Cash flow was the major concern facing participating farms going into 2014/15 with 21% of responses followed by seasonal variability with 18% of responses.

Labour management made up 12% of responses. It is important to note that 40% of farmers in the South West reported that labour was a concern to them in contrast to 13% in Gippsland and 13% in the North. While input costs and seasonal variability were also noted as major issues last year, the labour concern is new to the top three challenges that farmers expect to face in the coming year.

A shift towards improving the work-life balance and towards business succession are more notable challenges for the coming year with 8% and 5% of comments, respectively.

Major issues in the dairy industry – The next five years

The key issues identified by individual participants for their business over the next five years are identified in Figure 52. A total of 139 responses were recorded from 68 farms.

As in previous years, milk price (13% of responses) and cost of inputs (12% of responses) were identified as key issues in the dairy industry over the next five years. However the issue facing 20% of the farmers surveyed is planning for succession of their farm or the industry in general with several farmers looking toward retirement and others wanting to keep the dairy industry growing. Farm expansion and development (12% of comments) and managing labour (11%) make up the same top five concerns that are seen year-on-year.

FIGURE 51. MAJOR ISSUES FOR INDIVIDUAL BUSINESSES – 12 MONTH OUTLOOK

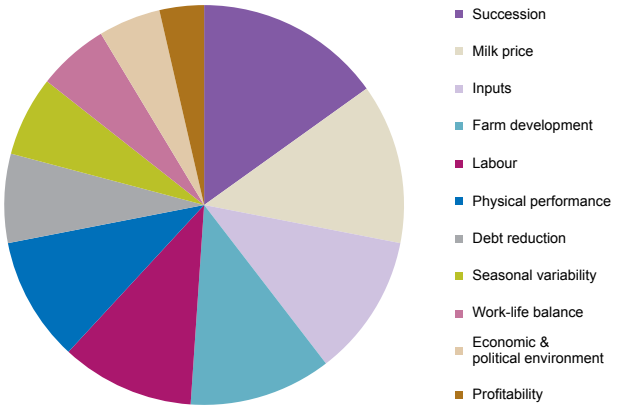
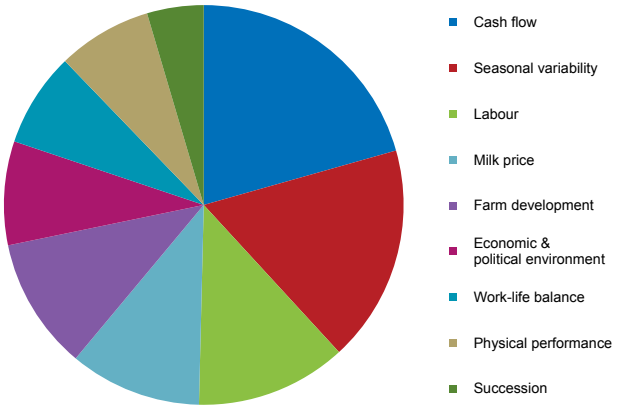


FIGURE 52. MAJOR ISSUES FOR INDIVIDUAL BUSINESSES – 5 YEAR OUTLOOK



Part Six: Greenhouse

2013/14 Greenhouse gas emissions

The analysis of greenhouse gas emissions from participating farms is based on the Australian National Greenhouse Gas Inventory method. This model was developed to predict the magnitude and source of greenhouse gasses emitted from a dairy farm. The initial analysis template was sourced from Melbourne University's greenhouse in agriculture website (http://www.greenhouse.unimelb.edu.au), which provides decision support frameworks for greenhouse accounting on Australian dairy, sheep, beef and grain farms. While comprehensive, this analysis should not be assumed exact, but used as indicative only.

Carbon dioxide equivalents (CO_2-e) are used to standardise the greenhouse potentials from different gases. The Global Warming Potential (GWP) is the index used to convert relevant non-carbon dioxide gases to a carbon dioxide equivalent. This is calculated by multiplying the quantity of the gas by its Global Warming Potential (GWP). All of the data in this section is in CO_2-e tonnes.

The GWP for the three gases that are noted in this report are; 1 : 21 : 310 (CO_2 : CH_4 : N_2O). This means that one CO_2-e tonne equates to 47.6 kg of methane (CH_4) and 3.2 kg of nitrous oxide (N_2O).

The distribution of different emissions for 2013/14 is shown in Figure 53. Greenhouse gas emissions per tonne of milk solids produced ranged from 9.1 t CO_2-e/t MS to 16.3 t CO_2-e/t MS and the average level of emission was 12.3 t CO_2-e/t MS. This was higher than last year's total greenhouse gas emissions of 11.2 t CO_2-e/t MS, as a result of an average increase in livestock numbers and fertiliser use across the state in 2013/14.

Methane (CH_4) was identified as the main greenhouse gas emitted from dairy farms, accounting for 70% of all greenhouse emissions. There are two main sources on farm: ruminant digestion and anaerobic digestion in effluent management systems. Methane produced from ruminant digestion is known as enteric methane and was the major source of emissions from all farms in this report, with an average of 65% of total emissions. Methane from effluent ponds accounted for 5% of total emissions.

The most efficient strategy to reduce enteric methane production is manipulating the diet by increasing the diet quality through improved pastures and adding concentrates. Adding fat supplements such as whole cotton seed and linseed oil into the diet can also reduce methane emissions. This is simple and effective method however it is recommended that fats should not be more than 6-7% of the dietary dry matter.

The second main greenhouse gas emission is nitrous oxide (N_2O) accounting for 22% of total emissions or 2.7 t CO_2e/t MS. N_2O emissions in dairy farms are sourced primarily from direct emissions; including nitrogen fertiliser application, effluent management systems, and animal excreta (dung and urine), as well as indirect emissions such as that from ammonia and nitrate loss in soils.

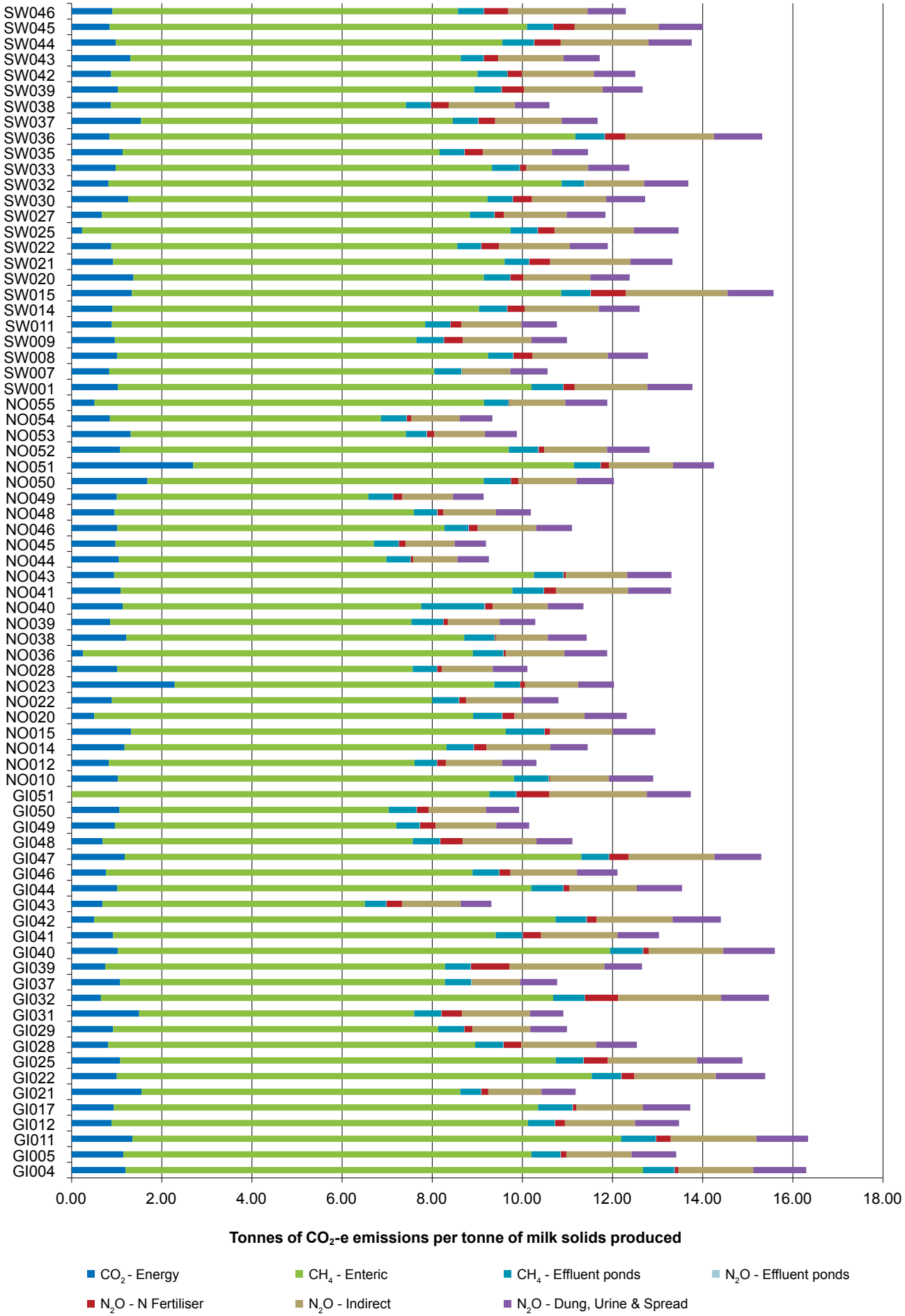
Nitrous oxide emissions from fertiliser accounted for 2% of total emissions, effluent ponds accounted for 0.1% and excreta accounted for 7%. N_2O from indirect emissions were 12%. N_2O emissions are greatest in warm, waterlogged soils with readily available nitrogen. Over application of nitrogen, high stocking intensity and wet soils are all potential causes of increased nitrogen loss as N_2O. Strategic fertiliser management practices can reduce N_2O emissions and improve nitrogen efficiency.

The third main greenhouse gas emission is carbon dioxide (CO_2), which is produced primarily from fossil fuel consumption as either electricity or petrochemicals. CO_2 accounted for 8% of total emissions or 1.0 t CO_2e/t MS. Output levels were highly dependent on the source of electricity used with all farms using brown coal generated electricity. Using renewable energy sources however, could cut electricity emissions significantly. There are also a number of technologies available to improve energy efficiency in the dairy while reducing electricity costs.

We are currently seeing the importance of understanding and monitoring greenhouse gas emissions, and this will potentially become even more essential in the near future. To find detailed information on the Australian National Greenhouse Gas Inventory, sources and strategies for reducing greenhouse gasses on dairy farms visit The Department of Environment's website at www.climatechange.gov.au.

Methane (CH_4) was identified as the main greenhouse gas emitted from dairy farms, accounting for 70% of all greenhouse emissions.

FIGURE 53. 2013/14 GREENHOUSE GAS EMISSIONS PER TONNE OF MILK SOLIDS SOLD (CO_2 EQUIVALENT)



Part Seven: Historical analysis

Historical analysis

This section compares the performance of participant farms in the Dairy Farm Monitor Project over the past eight years. The historical analysis compares the trends in farm performance between individual regions. While figures are adjusted for inflation to allow comparison between years it should be noted that the same farms do not participate each year and care needs be taken when comparing the performance across years.

North

Farms in the North recorded their strongest performance in the eight year history of the project in 2013/14 (Figure 54 and 55). This was a result of good operating conditions from a favourable season and a high milk price. Previous to the 2013/14 year, the period between 2006/07 to 2009/10 was affected by drought, low water allocations and milk price volatility impacting on farm profitability. In 2010/11 conditions turned enabling a year of recovery with farms posting much healthier profits, and in 2011/12 farms in the North recorded profits similar to those of 2007/08 which coincided with the highest milk price on record. In 2012/13 farm profitability fell with the milk price declining year on year and a rise in input costs.

The difference between earnings before interest and tax (EBIT) and net income is interest and lease costs. In the North interest and lease costs increased over the period, but have been variable, with a decline in 2012/13 followed by a 5% increase in 2013/14.

Return on equity has exceeded return on assets in 2013/14 following the sharp fall to -2.9% in 2012/13. A return on assets becomes a lesser return on equity when the rate of interest on loans or lease on leased capital is greater than the return from the additional assets managed.

The eight year average for return on assets in the North is 4.7% and return on equity is 3.1%.

FIGURE 54. HISTORICAL FARM PROFITABILITY (REAL $) – NORTH

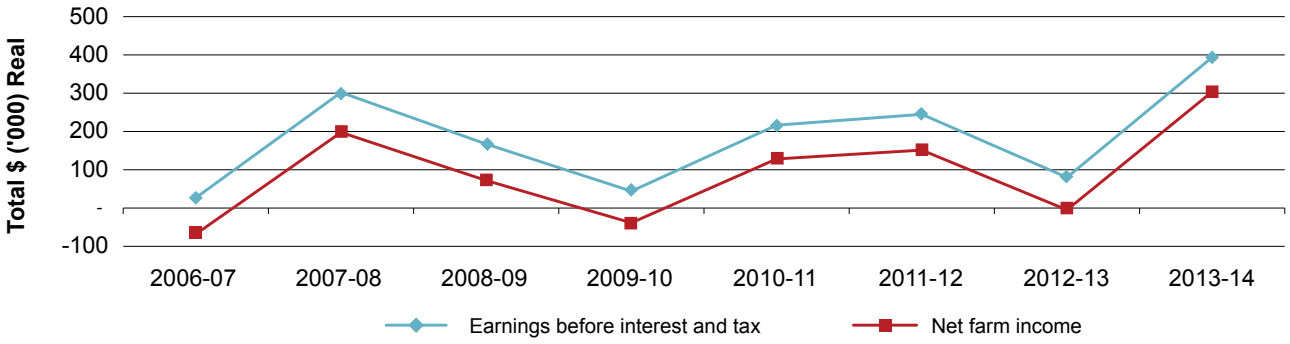
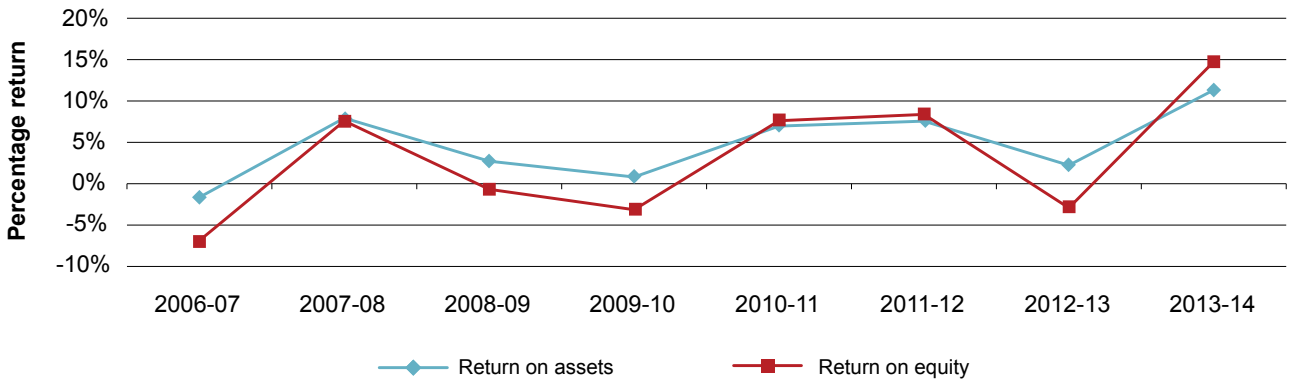


FIGURE 55. HISTORICAL WHOLE FARM PERFORMANCE – NORTH



South West

In each of the seven years of the project, on average south west farms have recorded positive EBIT which is the dark green line in Figure 56. Net farm income on average has also been positive in five out of the seven years. In 2012/13 both EBIT and net farm income have fallen to the lowest levels in the history of the project finishing the year at $61,888 and -$98,128 respectively.

Over the seven year period the gap between EBIT and net farm income has been growing, as shown by the diverging EBIT and net farm income lines in Figure 56 indicating a rise in interest and lease costs. While average total interest and lease costs have declined from $191,293 in 2011/12 to $160,017 in 2012/13 this decline is due to changes in the project sample rather than reductions in debt on project farms.

In 2012/13 average return on asset was 0.2%, falling from 3.3% in 2011/12. Average return on equity fell considerably from -0.2% in 2011/12 to -12.7% as shown in Figure 57 reflective of the challenging year in the south west. It is worth noting that two farms in the South West reported returns on equity in excess of -90% which has a large affect on the group average result. When excluded from the sample average return on equity in the South West is -5.8%.

The seven year average for return on assets in south west Victoria is 4.1% and return on equity is 1.3%. Interestingly the average return on asset figure is the highest of the three regions while the average return on equity figure is the lowest.

FIGURE 56. HISTORICAL FARM PROFITABILITY (REAL $) – SOUTH WEST

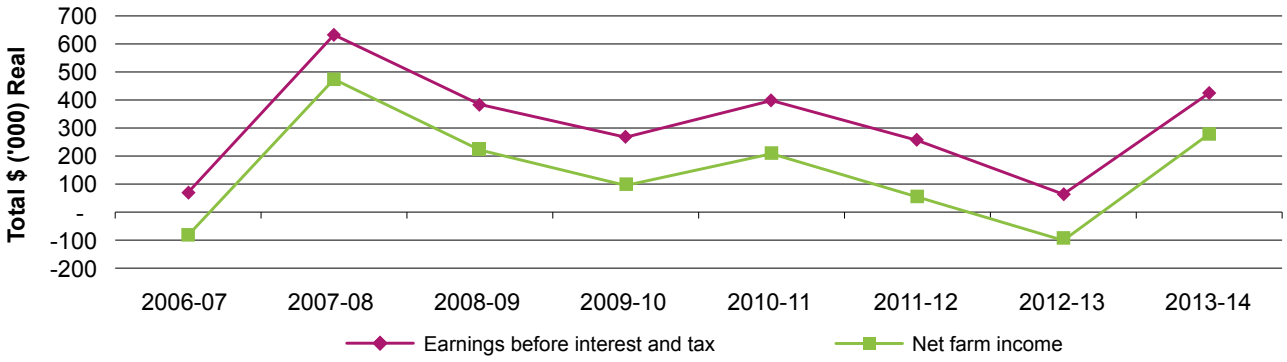
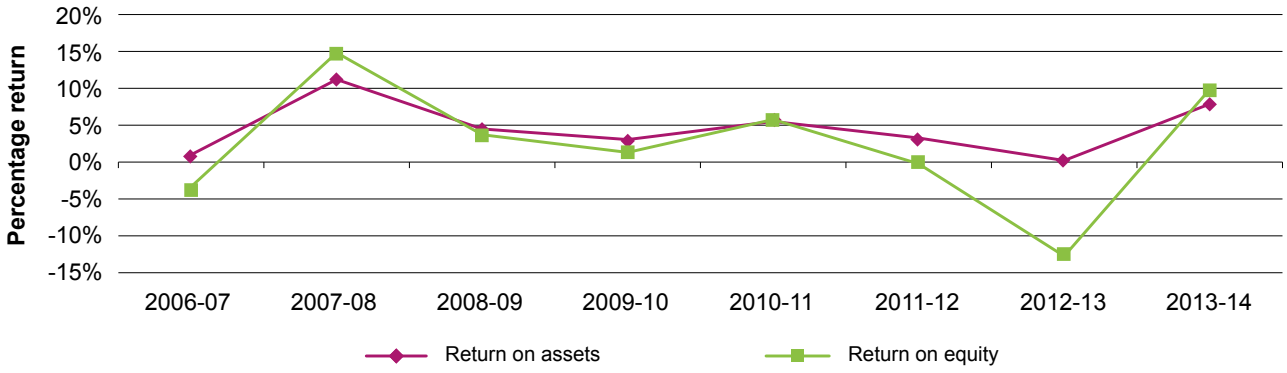


FIGURE 57. HISTORICAL WHOLE FARM PERFORMANCE – SOUTH WEST



Gippsland

In 2013/14 Gippsland EBIT and net farm income reached its third highest level in the history of the project. Farm profits increased following average seasonal conditions and an improvement in the milk price in 2013/14. Farms decreased their expenditure on overhead costs particularly in the areas of repairs and maintenance and imputed labour. While the grain price increased, the higher milk price meant it was attractive to continue to feed grain. Further discussion about the Gippsland regional performance is provided in Part Four.

Interest and lease costs in the last three years have been decreasing which can be seen by the EBIT and net farm income lines moving closer together in Figure 58. In 2013/14 average interest and lease costs were $96,561.

Figure 59 displays return on asset and return on equity both excluding capital appreciation. In 2013/14 average return on assets increased to 6.4%, and return on equity increased to 10%. This result was the second highest profit recorded in the Gippsland region over the history of the project for both these indicators.

The eight year average for return on assets in Gippsland is 4.2% and return on equity is 4.5%.

FIGURE 58. HISTORICAL FARM PROFITABILITY (REAL $) – GIPPSLAND

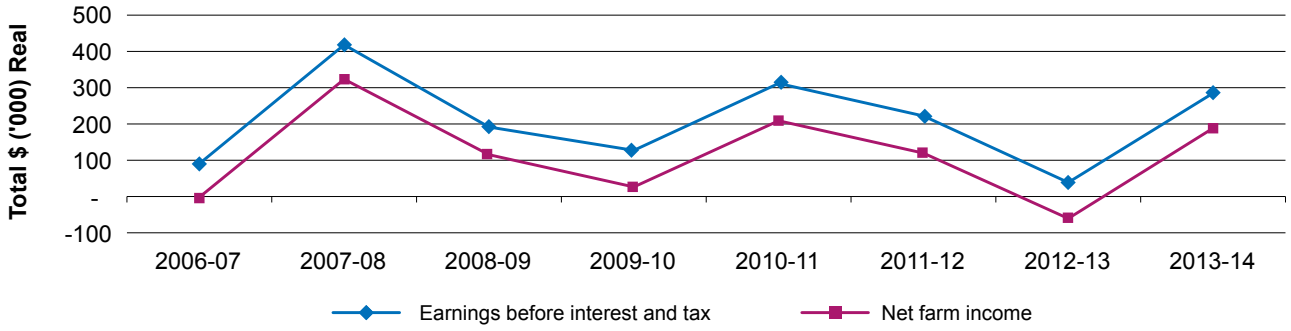
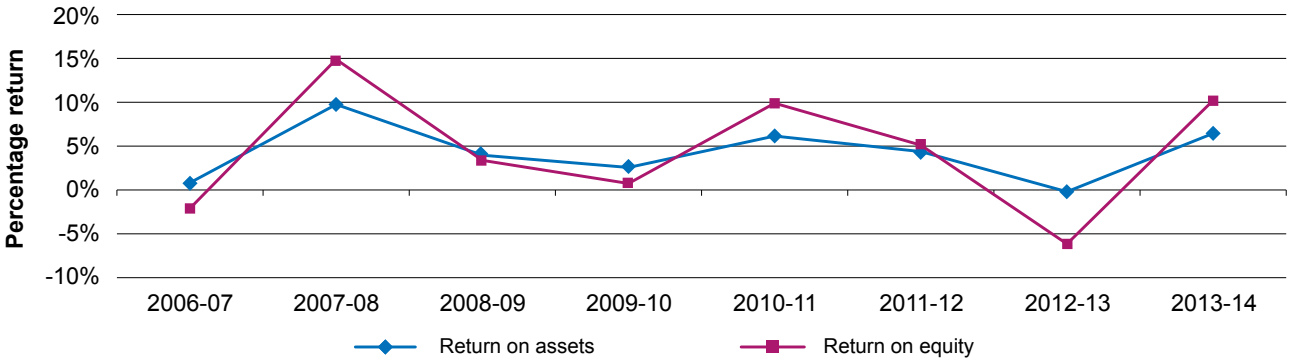


FIGURE 59. HISTORICAL WHOLE FARM PERFORMANCE – GIPPSLAND



Regional comparison

Profitability performance of the three regions is compared in Figures 60 to 63 simultaneously over the last eight years.

The cyclical nature of returns from farming is obvious in each of the figures below. The strong performance of farms in the North in recent years has continued into 2013/14. Farm returns in the south west were the highest of the regions in the early part of the project, but since 2010/11 farm performance in the south west has mostly been below that reported in the other regions (Figures 62 and 63). However, in 2013/14 they have moved closer to the top and recorded the highest EBIT in 2013/14 (Figure 60). Over the eight year period Gippsland farms have reported strong returns when milk price has been high, specifically 2007/08 and 2010/11, yet they did not experience the same heights in profit in 2013/14 due to the average growing conditions.

In the North, good seasonal conditions, 100% irrigation allocations and a high milk price contributed to the performance of this region recording the highest profitability in 2013/14. Average total assets are the lowest in the North contributing to their strong return on assets and return on equity performance.

Larger farm and herd size helped the South West to stand out in terms of EBIT and net farm income during the middle years of the project (Figures 60 and 61). A turnaround in operating conditions has seen the performance of the region record stronger profits in 2013/14.

Gippsland farm performance did not reach the peaks and troughs of the other two regions for all profitability indicators. Since 2011/12 Gippsland has been marginally lower that the other two regions for EBIT and return on assets (Figure 60 and 62).

FIGURE 60. REGIONAL HISTORICAL EARNINGS BEFORE INTEREST AND TAX (REAL $)

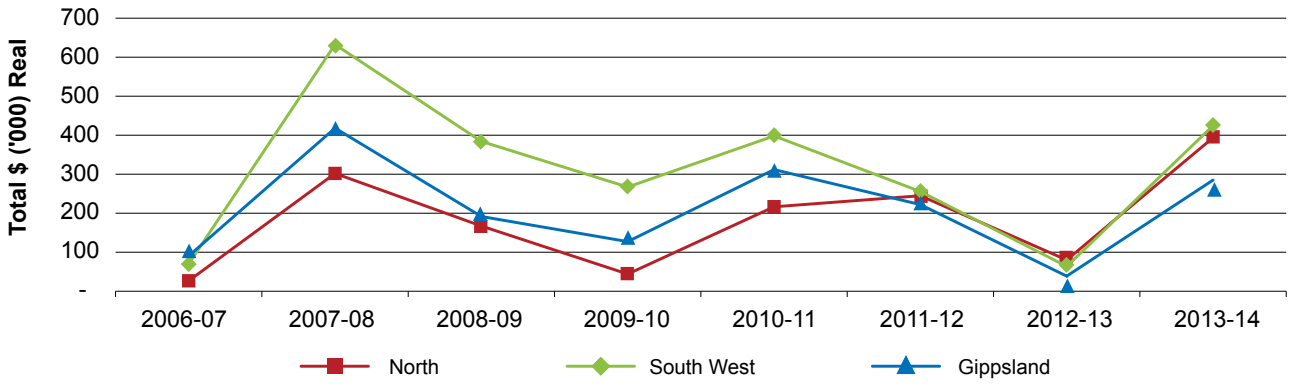


FIGURE 61. REGIONAL HISTORICAL NET FARM INCOME (REAL $)

FIGURE 62. REGIONAL HISTORICAL RETURN ON ASSETS

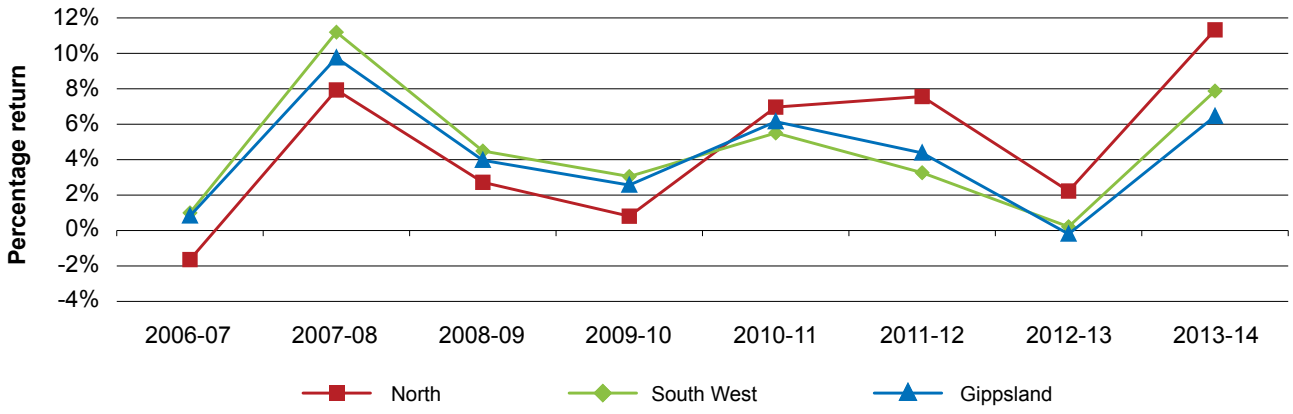
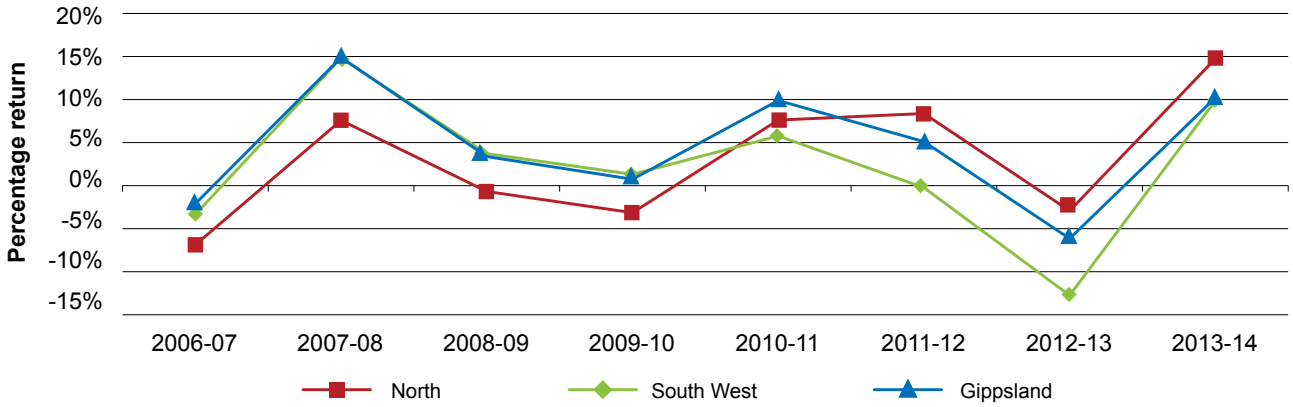


FIGURE 63. REGIONAL HISTORICAL RETURN ON EQUITY



Appendices

TABLE A1

Main Financial Indicators - Statewide

Farm number	Milk income (net)	All other income	Gross farm income	Total variable costs	Total overhead costs	Cost structure (variable costs / total costs)	Earnings Before Interest & Tax	Return on assets (excl. capital apprec.)	Interest & lease charges	Debt servicing ratio	Net farm income	Return on equity	Return on equity (incl. capital apprec.)
	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	%	$/ KG MS	%	$/ KG MS	% OF INCOME	$/ KG MS	%	%
Average	$6.79	$0.66	$7.44	$3.39	$2.03	63%	$2.02	8.5%	$0.65	9%	$1.38	11.6%	11.6%
Top 25%	$6.96	$0.75	$7.71	$3.43	$1.65	67%	$2.62	14.3%	$0.54	7%	$2.08	23.0%	24.4%

TABLE A2

Physical Information - Statewide

Farm number	Total usable area	Milking area	Water used	Number of milking cows	Milking cows per usable area	Milk sold	Milk sold	Fat	Protein
	HA	HA	MM/HA	HD	HD/HA	KG MS/ COW	KG MS/ HA	%	%
Average	242	157	993	335	1.6	498	810	4.2%	3.4%
Top 25%	262	177	1,018	412	2.1	550	1,126	4.1%	3.4%

Farm number	Estimated grazed pasture*	Estimated conserved feed*	Home grown feed as % of ME consumed	Nitrogen application	Phosphorous application	Potassium application	Sulphur application	Labour efficiency	Labour efficiency
	T DM/ HA	T DM/ HA	% OF ME	KG/ HA	KG/ HA	KG/ HA	KG/ HA	HD/ FTE	KG MS/ FTE
Average	6.6	1.4	62%	114.2	21.2	33.6	20.6	105	52,251
Top 25%	7.6	1.5	56%	116.8	21.8	29.5	24.4	117	64,303

* on milking area

TABLE A3

Purchased feed - Statewide

Farm number	Purchased feed per milker	Concentrate price	Silage price	Hay price	Other feed price	Average purchased feed price	Average ME of purchased feed	Average purchased feed price	Percent of total energy imported
	T DM/HD	$/ T DM	$/ T DM	$/ T DM	$/ T DM	$/ T DM	MJ ME/ KG	C/ MJ	% OF ME
Average	2.3	$388	$231	$250	$262	$363	12.1	3.1	38%
Top 25%	2.7	$381	$72	$201	$42	$350	12.0	3.0	44%

TABLE A4

Variable costs - Statewide

Farm number	AI and herd test	Animal health	Calf rearing	Shed power	Dairy supplies	Total herd and shed costs	Fertiliser	Irrigation	Hay and silage making
	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS
Average	$0.11	$0.14	$0.03	$0.12	$0.10	$0.49	$0.40	$0.19	$0.15
Top 25%	$0.10	$0.13	$0.02	$0.10	$0.09	$0.45	$0.34	$0.28	$0.14

Farm number	Fuel and oil	Pasture improvement/ cropping	Other feed costs	Fodder purchases	Grain/ concentrates/ other	Agistment costs	Total feed costs	Total variable costs
	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS
Average	$0.11	$0.15	$0.05	$0.29	$1.49	$0.07	$2.90	$3.39
Top 25%	$0.09	$0.16	$0.03	$0.39	$1.44	$0.11	$2.98	$3.43

TABLE A5

Overhead costs - Statewide

Farm number	Rates	Registration and insurance	Farm insurance	Repairs and maintenance	Bank charges	Other overheads	Employed labour	Total cash overheads	Depreciation	Imputed owner/ operator & family labour	Total overheads
	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS
Average	$0.05	$0.02	$0.06	$0.33	$0.01	$0.11	$0.48	$1.05	$0.21	$0.76	$2.03
Top 25%	$0.03	$0.01	$0.04	$0.31	$0.01	$0.11	$0.56	$1.07	$0.15	$0.44	$1.65

TABLE A6

Variable costs % - Statewide

Percentage of total farm costs

Farm number	AI and herd test	Animal health	Calf rearing	Shed power	Dairy supplies	Total herd and shed costs	Fertiliser	Irrigation	Hay and silage making
	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS
Average	2.0%	2.5%	0.6%	2.2%	1.8%	9.1%	7.5%	2.0%	2.7%
Top 25%	2.0%	2.6%	0.4%	2.0%	1.8%	8.9%	6.8%	2.6%	2.7%

Farm number	Fuel and oil	Pasture improvement/ cropping	Other feed costs	Fodder purchases	Grain/ concentrates/ other	Agistment costs	Total feed costs	Total variable costs
	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS
Average	2.0%	2.8%	0.9%	5.3%	27.6%	1.3%	53.6%	62.6%
Top 25%	1.8%	3.1%	0.6%	7.5%	28.2%	2.2%	58.4%	67.3%

TABLE A7

Overhead costs - Statewide

Percentage of total farm costs

Farm number	Rates	Registration and insurance	Farm insurance	Repairs and maintenance	Bank charges	Other overheads	Employed labour	Total cash overheads	Depreciation	Imputed owner/ operator & family labour	Total overheads
	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS
Average	1.0%	0.4%	1.0%	6.0%	0.2%	2.1%	8.8%	19.4%	3.9%	14.1%	37.4%
Top 25%	0.7%	0.2%	0.9%	6.1%	0.2%	2.1%	10.7%	20.9%	2.9%	8.9%	32.7%

TABLE A8

Capital structure - Statewide

	FARM ASSETS				OTHER FARM ASSETS (PER USABLE HECTARE)					LIABILITIES		EQUITY	
	Land value	Land value	Permanent water value	Permanent water value	Plant and equipment	Livestock	Hay and grain	Other assets	Total assets	Liabilities	Liabilities	Equity	Average equity
	$/HA	$/COW	$/HA	$/COW	$/HA	$/HA	$/HA	$/HA	$/HA	$/HA	$/COW	$/HA	%
Average	$11,731	$7,394	$1,385	$708	$1,470	$2,426	$187	$765	$16,777	$6,354	$3,977	$10,423	62%
Top 25%	$9,114	$4,989	$1,799	$941	$1,381	$3,066	$284	$1,260	$17,400	$6,952	$3,230	$10,448	59%

TABLE A9

Historical data - Statewide

Average farm income, costs and profit per kilogram of milk solids

	INCOME				VARIABLE COSTS							
	Milk income (net)		Gross farm income		Herd costs		Shed costs		Feed costs		Total variable costs	
	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)
2006-07	$4.46	$5.40	$5.23	$6.32	$0.21	$0.25	$0.15	$0.18	$2.83	$3.42	$3.23	$3.91
2007-08	$6.57	$7.60	$7.80	$9.03	$0.24	$0.27	$0.14	$0.16	$3.39	$3.92	$3.79	$4.39
2008-09	$5.35	$6.10	$6.08	$6.93	$0.23	$0.26	$0.15	$0.17	$2.85	$3.25	$3.23	$3.68
2009-10	$4.46	$4.94	$5.17	$5.71	$0.22	$0.24	$0.16	$0.18	$2.20	$2.43	$2.58	$2.85
2010-11	$5.64	$6.01	$6.47	$6.90	$0.26	$0.28	$0.18	$0.20	$2.27	$2.42	$2.71	$2.90
2011-12	$5.52	$5.82	$5.97	$6.30	$0.26	$0.27	$0.19	$0.20	$2.33	$2.45	$2.78	$2.93
2012-13	$4.90	$5.05	$5.25	$5.41	$0.27	$0.28	$0.22	$0.23	$2.59	$2.67	$3.08	$3.17
2013-14	$6.79	$6.79	$7.44	$7.44	$0.28	$0.28	$0.22	$0.22	$2.90	$2.90	$3.39	$3.39
Average		$5.96		$6.76		$0.27		$0.19		$2.93		$3.40

	OVERHEAD COSTS						PROFIT							
	Cash overhead costs		Non-cash overhead costs		Total overhead costs		Earnings before interest & tax		Interest & lease charges		Net farm income			
	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	RETURN ON ASSETS	RETURN ON EQUITY
2006-07	$0.77	$0.93	$1.17	$1.41	$1.94	$2.34	$0.06	$0.07	$0.58	$0.70	-$0.52	-$0.63	0.1%	-4.1%
2007-08	$0.84	$0.97	$0.88	$1.02	$1.62	$1.88	$2.39	$2.76	$0.63	$0.73	$1.75	$2.03	9.8%	12.4%
2008-09	$0.82	$0.94	$0.88	$1.00	$1.70	$1.94	$1.08	$1.23	$0.59	$0.67	$0.49	$0.56	3.8%	2.2%
2009-10	$0.84	$0.93	$1.05	$1.16	$1.89	$2.09	$0.65	$0.72	$0.68	$0.75	-$0.03	-$0.03	2.2%	-0.3%
2010-11	$1.00	$1.07	$1.02	$1.09	$2.02	$2.16	$1.73	$1.85	$0.76	$0.81	$0.98	$1.04	6.2%	7.8%
2011-12	$0.99	$1.04	$1.07	$1.13	$2.06	$2.17	$1.14	$1.20	$0.71	$0.75	$0.43	$0.46	5.0%	4.4%
2012-13	$0.99	$1.02	$1.09	$1.12	$2.08	$2.14	$0.09	$0.10	$0.70	$0.72	-$0.60	-$0.62	0.7%	-7.3%
2013-14	$1.05	$1.05	$0.97	$0.97	$2.03	$2.03	$2.02	$2.02	$0.65	$0.65	$1.38	$1.38	8.5%	11.6%
Average		$0.99		$1.11		$2.09		$1.24		$0.72		$0.52	4.6%	3.3%

Note: 'Real' dollar values are the nominal values converted to 2013/14 dollar equivalents by the consumer price index (CPI) to allow for inflation.

TABLE A10

Historical data - Statewide

Average farm physical information

	Total usable area	Milking area	Water used	Number of milking cows	Milking cows per usable area	Milk sold	Milk sold	Estimated graze pasture*	Estimated conserved feed*	Home grown feed as % of ME consumed	Concentrate price	
	HA	HA	MM/HA	HD	HD/HA	KG MS/ COW	KG MS/ HA	T DM/ HA	T DM/ HA	% OF ME	NOMINAL ($/T DM)	REAL ($/ T DM)
2006-07	271	268	610	345	1.4	447	636	4.9	1.0	60%	$329	$398
2007-08	265	250	683	332	1.3	489	612	4.8	1.0	64%	$425	$492
2008-09	256	237	691	330	1.5	498	741	5.6	0.9	62%	$375	$428
2009-10	232	219	903	307	1.5	496	752	6.2	0.8	66%	$273	$302
2010-11	236	227	1,104	305	1.4	493	719	5.8	1.9	65%	$301	$321
2011-12	237	160	967	328	1.6	508	800	6.2	1.0	57%	$296	$312
2012-13	232	154	818	323	1.6	495	781	6.2	1.2	58%	$336	$347
2013-14	242	157	993	335	1.6	498	810	6.6	1.4	62%	$388	$388
Average	246	209	846	326	1.5	491	731	5.8	1.1	62%		$373

* 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.

TABLE B1

Main Financial Indicators - North

Farm number	Milk income (net)	All other income	Gross farm income	Total variable costs	Total overhead costs	Cost structure (variable costs / total costs)	Earnings Before Interest & Tax	Return on assets (excl. capital apprec.)	Interest & lease charges	Debt servicing ratio	Net farm income	Return on equity	Return on equity (incl. capital apprec.)
	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	%	$/ KG MS	%	$/ KG MS	% OF INCOME	$/ KG MS	%	%
NO010	$6.43	$0.29	$6.72	$3.68	$2.41	60%	$0.63	2.6%	$0.81	12%	-$0.18	-1.2%	-6.3%
NO012	$7.24	$0.70	$7.94	$3.86	$1.76	69%	$2.32	13.8%	$0.30	4%	$2.02	18.7%	18.6%
NO014	$6.84	$0.85	$7.69	$3.59	$1.98	64%	$2.12	8.0%	$0.55	7%	$1.57	8.6%	9.1%
NO015	$6.50	$0.72	$7.22	$3.63	$1.74	68%	$1.86	8.4%	$0.49	7%	$1.37	7.8%	5.1%
NO020	$7.47	$1.17	$8.64	$3.07	$1.51	67%	$4.07	12.7%	$1.51	17%	$2.56	21.2%	23.1%
NO022	$6.81	$0.63	$7.45	$3.07	$1.62	65%	$2.76	11.6%	$0.42	6%	$2.34	13.2%	8.4%
NO023	$6.66	$0.76	$7.42	$3.29	$1.41	70%	$2.71	15.9%	$0.43	6%	$2.28	24.4%	25.8%
NO028	$6.76	$0.41	$7.17	$3.54	$2.20	62%	$1.43	10.3%	$0.25	4%	$1.18	13.8%	4.2%
NO036	$6.55	-$0.07	$6.48	$3.04	$1.80	63%	$1.64	6.9%	$0.38	6%	$1.25	9.3%	7.0%
NO038	***$6.77***	***$0.83***	***$7.60***	***$4.10***	***$1.71***	***71%***	***$1.78***	***18.7%***	***$0.56***	***7%***	***$1.22***	***-***	***-***
NO039	$6.58	$0.46	$7.03	$4.13	$1.56	73%	$1.34	12.2%	$0.31	4%	$1.02	17.0%	14.2%
NO040	$6.70	$0.42	$7.11	$4.40	$1.81	71%	$0.91	6.0%	$0.70	10%	$0.21	5.1%	2.4%
NO041	$6.56	$0.60	$7.16	$3.71	$1.87	67%	$1.58	10.2%	$0.52	7%	$1.06	21.6%	13.6%
NO043	$6.54	$0.14	$6.68	$3.47	$2.37	59%	$0.84	3.6%	$0.54	8%	$0.29	2.0%	2.0%
NO044	***$6.93***	***$0.47***	***$7.40***	***$3.35***	***$1.42***	***70%***	***$2.63***	***16.8%***	***$0.31***	***4%***	***$2.32***	***22.4%***	***17.5%***
NO045	***$6.86***	***$0.85***	***$7.71***	***$3.91***	***$1.44***	***73%***	***$2.36***	***16.4%***	***$0.36***	***5%***	***$2.01***	***21.7%***	***17.5%***
NO046	$7.07	$1.11	$8.17	$3.67	$2.13	63%	$2.38	15.9%	$0.63	8%	$1.75	27.6%	52.2%
NO048	$6.45	$0.58	$7.03	$3.31	$1.42	70%	$2.30	9.5%	$0.34	5%	$1.96	11.1%	10.5%
NO049	***$6.67***	***$0.27***	***$6.93***	***$3.18***	***$1.89***	***63%***	***$1.87***	***16.1%***	***$0.49***	***7%***	***$1.38***	***39.6%***	***38.7%***
NO050	$6.67	$1.86	$8.53	$4.79	$2.52	66%	$1.22	5.5%	$0.92	11%	$0.30	2.9%	-1.0%
NO051	$7.17	$0.72	$7.89	$2.92	$2.09	58%	$2.89	11.0%	$0.86	11%	$2.03	15.4%	15.9%
NO052	$7.27	$0.60	$7.87	$4.27	$2.46	63%	$1.14	6.0%	$0.98	13%	$0.15	1.6%	15.3%
NO053	***$7.09***	***$0.52***	***$7.60***	***$2.77***	***$1.52***	***65%***	***$3.31***	***20.7%***	***$0.16***	***2%***	***$3.15***	***24.7%***	***24.3%***
NO054	***$7.37***	***$0.33***	***$7.71***	***$4.39***	***$1.35***	***76%***	***$1.96***	***16.2%***	***$0.22***	***3%***	***$1.75***	***17.2%***	***14.3%***
NO055	$6.68	$0.70	$7.38	$3.14	$1.83	63%	$2.40	8.3%	$0.86	12%	$1.54	8.4%	6.8%
Average	$6.83	$0.64	$7.46	$3.61	$1.83	66%	$2.02	11.3%	$0.56	7%	$1.46	14.7%	14.1%
Top 25%*	$6.95	$0.54	$7.49	$3.62	$1.55	70%	$2.32	17.5%	$0.35	5%	$1.97	20.9%	18.7%

* Top 25% are bold and italicised

TABLE B2

Physical Information - North

Farm number	Total usable area	Milking area	Water used	Number of milking cows	Milking cows per usable area	Milk sold	Milk sold	Fat	Protein
	HA	HA	MM/HA	HD	HD/HA	KG MS/ COW	KG MS/ HA	%	%
NO010	188	119	790	255	1.4	475	645	4.3%	3.3%
NO012	452	372	1,125	775	1.7	633	1,086	4.0%	3.4%
NO014	440	340	832	408	0.9	535	496	3.9%	3.3%
NO015	230	92	820	310	1.3	464	625	4.4%	3.5%
NO020	563	280	798	476	0.8	525	445	3.6%	3.3%
NO022	226	105	836	300	1.3	523	694	4.5%	3.4%
NO023	282	110	811	330	1.2	576	674	4.4%	3.6%
NO028	148	120	915	240	1.6	541	877	3.9%	3.5%
NO036	140	100	1,413	280	2.0	519	1,038	3.9%	3.2%
NO038	***85***	***85***	***920***	***345***	***4.1***	***536***	***2,174***	***3.8%***	***3.3%***
NO039	90	60	1,139	310	3.4	528	1,818	4.5%	3.5%
NO040	129	120	1,223	240	1.9	572	1,064	4.0%	3.5%
NO041	208	144	896	262	1.3	497	627	4.1%	3.4%
NO043	103	45	929	202	2.0	362	709	5.1%	3.8%
NO044	***140***	***100***	***1,269***	***290***	***2.1***	***575***	***1,194***	***4.2%***	***3.4%***
NO045	***159***	***74***	***995***	***286***	***1.8***	***551***	***992***	***4.1%***	***3.3%***
NO046	129	104	1,256	320	2.5	557	1,382	4.5%	3.6%
NO048	146	63	869	204	1.4	421	589	4.5%	3.5%
NO049	***108***	***81***	***1,311***	***295***	***2.7***	***499***	***1,363***	***4.5%***	***3.5%***
NO050	168	81	701	185	1.1	433	477	4.4%	3.5%
NO051	203	105	804	212	1.0	530	554	4.3%	3.6%
NO052	51	44	1,055	142	2.8	466	1,311	3.9%	3.4%
NO053	***112***	***112***	***1,301***	***420***	***3.8***	***612***	***2,295***	***4.1%***	***3.5%***
NO054	***522***	***310***	***819***	***930***	***1.8***	***666***	***1,187***	***3.8%***	***3.3%***
NO055	221	90	814	275	1.2	444	552	3.9%	3.3%
Average	210	130	986	332	1.9	522	995	4.2%	3.4%
Top 25%	188	127	1,103	428	2.7	573	1,534	4.1%	3.4%

TABLE B2

Physical Information - North

(Continued)

Farm number	Estimated grazed pasture**	Estimated conserved feed**	Home grown feed as % of ME consumed	Nitrogen application	Phosphorous application	Potassium application	Sulphur application	Labour efficiency	Labour efficiency
	T DM/ HA	T DM/ HA	% OF ME	KG/ HA	KG/ HA	KG/ HA	KG/ HA	HD/ FTE	KG MS/ FTE
NO010	5.4	0.0	52%	5.4	5.1	0.0	6.4	89	42,136
NO012	3.3	5.3	34%	131.6	30.2	1.1	12.2	120	75,905
NO014	3.2	1.1	67%	72.2	25.6	8.9	28.0	85	45,360
NO015	8.9	1.0	58%	38.8	15.2	0.0	18.9	141	65,165
NO020	7.1	1.2	75%	61.2	20.7	33.3	28.8	115	60,235
NO022	9.7	0.5	70%	53.9	8.4	4.1	8.7	119	61,938
NO023	7.8	4.7	69%	38.0	16.8	8.2	61.4	93	53,477
NO028	4.7	2.9	54%	47.1	56.8	10.0	35.8	75	40,617
NO036	8.0	2.1	62%	23.0	52.5	0.0	65.7	96	49,575
NO038	***6.5***	***0.0***	***22%***	***26.0***	***0.0***	***0.0***	***0.0***	***107***	***57,377***
NO039	15.0	0.0	42%	90.6	6.6	0.0	8.3	111	58,436
NO040	5.3	1.4	49%	92.7	0.0	0.0	0.0	80	45,691
NO041	6.5	1.4	70%	90.7	65.0	29.0	32.5	100	49,558
NO043	10.4	0.0	69%	17.8	17.9	0.0	27.1	112	40,401
NO044	***7.7***	***1.0***	***51%***	***33.1***	***25.0***	***12.2***	***7.5***	***128***	***73,374***
NO045	***10.4***	***0.0***	***52%***	***78.5***	***16.6***	***0.0***	***8.9***	***113***	***62,507***
NO046	8.4	2.9	55%	146.8	36.1	4.3	55.9	91	50,852
NO048	6.7	5.2	58%	39.9	6.6	6.8	1.0	153	64,621
NO049	***13.2***	***1.2***	***70%***	***141.3***	***44.4***	***0.0***	***48.2***	***126***	***62,935***
NO050	7.2	0.9	80%	42.4	16.7	0.0	25.4	101	43,829
NO051	7.9	1.5	79%	52.3	20.2	22.4	8.1	104	54,937
NO052	8.3	2.6	50%	85.5	21.8	0.0	13.8	78	36,257
NO053	***7.0***	***0.1***	***27%***	***193.0***	***6.3***	***0.0***	***7.9***	***126***	***77,194***
NO054	***5.5***	***0.0***	***36%***	***64.4***	***14.0***	***0.0***	***17.5***	***127***	***84,323***
NO055	6.1	2.4	61%	2.4	27.4	0.0	31.1	132	58,561
Average	7.6	1.6	57%	66.7	22.2	5.6	22.4	109	56,611
Top 25%	8.4	0.4	43%	89.4	17.7	2.0	15.0	121	69,618

** on milking area

TABLE B3

Purchased feed - North

Farm number	Purchased feed per milker	Concentrate price	Silage price	Hay price	Other feed price	Average purchased feed price	Average ME of purchased feed	Average purchased feed price	Percent of total energy imported
	T DM/HD	$/ T DM	$/ T DM	$/ T DM	$/ T DM	$/ T DM	MJ ME/ KG	C/ MJ	% OF ME
NO010	3.9	$351	-	$247	-	$293	10.4	3.1	48%
NO012	3.1	$426	-	$171	$201	$359	12.0	3.1	66%
NO014	2.7	$340	-	$257	-	$310	12.0	2.7	33%
NO015	2.9	$298	-	$186	$121	$244	9.1	2.8	42%
NO020	2.0	$352	-	$203	-	$345	12.5	2.8	25%
NO022	2.0	$449	-	$233	-	$410	11.6	3.6	30%
NO023	1.9	$367	-	$144	-	$355	11.9	3.0	31%
NO028	2.2	$295	$218	-	$780	$302	12.4	2.5	46%
NO036	2.4	$406	-	$245	-	$361	11.4	3.3	38%
NO038	***5.3***	***$288***	***$100***	***$200***	***$256***	***$251***	***11.0***	***2.4***	***78%***
NO039	4.3	$420	-	$273	-	$333	10.4	3.5	58%
NO040	3.6	$402	-	$272	-	$350	11.2	3.3	51%
NO041	2.3	$398	-	$260	-	$363	11.1	3.4	30%
NO043	2.0	$377	$180	$188	-	$328	11.3	3.0	31%
NO044	***3.0***	***$367***	***$223***	***$232***	***-***	***$309***	***11.5***	***2.8***	***49%***
NO045	***2.5***	***$404***	***-***	***$345***	***-***	***$385***	***11.8***	***3.4***	***48%***
NO046	2.4	$278	$291	$255	-	$276	11.8	2.5	45%
NO048	1.3	$330	-	$312	-	$329	13.1	2.6	42%
NO049	***1.4***	***$379***	***-***	***$268***	***$120***	***$356***	***12.2***	***3.0***	***30%***
NO050	1.1	$359	-	$100	-	$343	11.7	3.0	20%
NO051	1.5	$378	-	-	-	$378	13.2	2.9	21%
NO052	2.9	$389	-	$182	-	$317	11.7	2.8	50%
NO053	***4.7***	***$293***	***$143***	***$128***	***-***	***$211***	***12.1***	***1.8***	***73%***
NO054	***4.5***	***$430***	***$200***	***$251***	***-***	***$361***	***11.4***	***3.3***	***64%***
NO055	1.9	$382	-	-	-	$335	13.6	2.5	39%
Average	2.7	$366	$193	$225	$296	$328	11.7	2.9	43%
Top 25%	3.6	$360	-	-	-	$312	11.7	2.8	57%

TABLE B4

Variable costs - North

Farm number	AI and herd test	Animal health	Calf rearing	Shed power	Dairy supplies	Total herd and shed costs	Fertiliser	Irrigation	Hay and silage making
	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS
NO010	$0.08	$0.17	$0.00	$0.11	$0.11	$0.47	$0.08	$0.21	$0.16
NO012	$0.09	$0.17	$0.06	$0.07	$0.10	$0.49	$0.28	$0.44	$0.31
NO014	$0.12	$0.20	$0.03	$0.15	$0.12	$0.61	$0.42	$0.03	$0.01
NO015	$0.17	$0.13	$0.00	$0.12	$0.06	$0.48	$0.22	$0.51	$0.27
NO020	$0.14	$0.11	$0.04	$0.10	$0.06	$0.45	$0.44	$0.00	$0.27
NO022	$0.09	$0.16	$0.01	$0.15	$0.04	$0.44	$0.18	$0.49	$0.12
NO023	$0.09	$0.11	$0.01	$0.10	$0.04	$0.34	$0.19	$0.47	$0.10
NO028	$0.10	$0.17	$0.04	$0.12	$0.08	$0.52	$0.35	$0.44	$0.27
NO036	$0.14	$0.04	$0.07	$0.14	$0.05	$0.44	$0.27	$0.39	$0.04
NO038	***$0.12***	***$0.29***	***$0.00***	***$0.15***	***$0.15***	***$0.70***	***$0.04***	***$0.21***	***$0.00***
NO039	$0.10	$0.20	$0.02	$0.10	$0.13	$0.54	$0.13	$0.33	$0.03
NO040	$0.11	$0.10	$0.01	$0.14	$0.05	$0.40	$0.14	$0.64	$0.33
NO041	$0.14	$0.20	$0.00	$0.13	$0.10	$0.58	$0.26	$0.57	$0.10
NO043	$0.11	$0.09	$0.05	$0.14	$0.06	$0.45	$0.28	$0.49	$0.03
NO044	***$0.08***	***$0.12***	***$0.02***	***$0.12***	***$0.06***	***$0.41***	***$0.21***	***$0.52***	***$0.08***
NO045	***$0.12***	***$0.11***	***$0.01***	***$0.11***	***$0.07***	***$0.42***	***$0.17***	***$0.61***	***$0.14***
NO046	$0.07	$0.10	$0.00	$0.12	$0.05	$0.34	$0.25	$0.54	$0.12
NO048	$0.08	$0.03	$0.02	$0.13	$0.02	$0.28	$0.22	$0.60	$0.37
NO049	***$0.15***	***$0.09***	***$0.01***	***$0.13***	***$0.21***	***$0.59***	***$0.27***	***$0.69***	***$0.15***
NO050	$0.02	$0.14	$0.02	$0.18	$0.34	$0.71	$0.22	$1.84	$0.04
NO051	$0.17	$0.18	$0.02	$0.11	$0.02	$0.50	$0.27	$0.20	$0.32
NO052	$0.15	$0.18	$0.02	$0.15	$0.10	$0.60	$0.21	$0.44	$0.17
NO053	***$0.07***	***$0.07***	***$0.00***	***$0.07***	***$0.05***	***$0.26***	***$0.16***	***$0.31***	***$0.00***
NO054	***$0.20***	***$0.26***	***$0.01***	***$0.06***	***$0.04***	***$0.57***	***$0.23***	***$0.29***	***$0.09***
NO055	$0.09	$0.03	$0.01	$0.13	$0.08	$0.35	$0.31	$0.57	$0.04
Average	$0.11	$0.14	$0.02	$0.12	$0.09	$0.48	$0.23	$0.47	$0.14
Top 25%	$0.12	$0.16	$0.01	$0.11	$0.10	$0.49	$0.18	$0.44	$0.08

Farm number	Fuel and oil	Pasture improvement/ cropping	Other feed costs	Fodder purchases	Grain/ concentrates/ other	Agistment costs	Total feed costs	Total variable costs
	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS
NO010	$0.09	$0.19	$0.01	$1.18	$1.29	$0.00	$3.21	$3.68
NO012	$0.13	$0.21	$0.00	$0.17	$1.73	$0.09	$3.37	$3.86
NO014	$0.21	$0.20	$0.23	$0.57	$1.31	$0.00	$2.97	$3.59
NO015	$0.13	$0.11	$0.09	$0.52	$1.30	$0.00	$3.15	$3.63
NO020	$0.10	$0.30	$0.01	$0.21	$1.30	$0.00	$2.62	$3.07
NO022	$0.06	$0.18	$0.00	$0.19	$1.41	$0.01	$2.62	$3.07
NO023	$0.10	$0.29	$0.20	$0.11	$1.49	$0.00	$2.95	$3.29
NO028	$0.10	$0.17	$0.02	$0.07	$1.29	$0.30	$3.02	$3.54
NO036	$0.14	$0.07	$0.00	$0.32	$1.35	$0.00	$2.60	$3.04
NO038	***$0.12***	***$0.13***	***$0.11***	***$0.68***	***$2.10***	***$0.00***	***$3.40***	***$4.10***
NO039	$0.09	$0.09	$0.02	$1.38	$1.38	$0.14	$3.59	$4.13
NO040	$0.13	$0.37	$0.00	$0.71	$1.57	$0.10	$3.99	$4.40
NO041	$0.12	$0.24	$0.09	$0.35	$1.39	$0.01	$3.13	$3.71
NO043	$0.16	$0.24	$0.00	$0.29	$1.53	$0.00	$3.02	$3.47
NO044	***$0.03***	***$0.13***	***$0.00***	***$0.63***	***$1.29***	***$0.06***	***$2.95***	***$3.35***
NO045	***$0.08***	***$0.19***	***$0.00***	***$0.67***	***$1.38***	***$0.25***	***$3.49***	***$3.91***
NO046	$0.09	$0.17	$0.00	$1.08	$0.81	$0.26	$3.33	$3.67
NO048	$0.04	$0.31	$0.00	$0.31	$0.97	$0.20	$3.03	$3.31
NO049	***$0.04***	***$0.14***	***$0.04***	***$0.06***	***$0.96***	***$0.23***	***$2.59***	***$3.18***
NO050	$0.30	$0.32	$0.48	$0.02	$0.86	$0.00	$4.08	$4.79
NO051	$0.13	$0.31	$0.02	$0.00	$1.08	$0.09	$2.41	$2.92
NO052	$0.16	$0.18	$0.11	$0.51	$1.66	$0.23	$3.67	$4.27
NO053	***$0.06***	***$0.09***	***$0.00***	***$0.61***	***$1.10***	***$0.17***	***$2.51***	***$2.77***
NO054	***$0.10***	***$0.25***	***$0.05***	***$0.66***	***$2.01***	***$0.14***	***$3.82***	***$4.39***
NO055	$0.17	$0.25	$0.02	$0.00	$1.42	$0.00	$2.79	$3.14
Average	$0.11	$0.21	$0.06	$0.45	$1.36	$0.09	$3.13	$3.61
Top 25%	$0.07	$0.15	$0.03	$0.55	$1.47	$0.14	$3.13	$3.62

TABLE B5

Overhead costs - North

Farm number	Rates	Registration and insurance	Farm insurance	Repairs and maintenance	Bank charges	Other overheads	Employed labour	Total cash overheads	Depreciation	Imputed owner/ operator & family labour	Total overheads
	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS
NO010	$0.04	$0.02	$0.05	$0.16	$0.01	$0.07	$0.88	$1.22	$0.51	$0.67	$2.41
NO012	$0.03	$0.01	$0.01	$0.30	$0.01	$0.25	$1.00	$1.60	$0.16	$0.00	$1.76
NO014	$0.03	$0.01	$0.06	$0.44	$0.01	$0.03	$0.62	$1.19	$0.35	$0.44	$1.98
NO015	$0.04	$0.02	$0.06	$0.39	$0.00	$0.17	$0.60	$1.28	$0.07	$0.39	$1.74
NO020	$0.04	$0.01	$0.04	$0.16	$0.00	$0.14	$0.56	$0.96	$0.16	$0.39	$1.51
NO022	$0.06	$0.01	$0.06	$0.30	$0.00	$0.12	$0.40	$0.96	$0.10	$0.56	$1.62
NO023	$0.05	$0.01	$0.03	$0.14	$0.00	$0.06	$0.54	$0.85	$0.09	$0.47	$1.41
NO028	$0.04	$0.01	$0.13	$0.24	$0.00	$0.09	$0.62	$1.12	$0.29	$0.78	$2.20
NO036	$0.03	$0.02	$0.11	$0.17	$0.01	$0.09	$0.56	$0.99	$0.14	$0.67	$1.80
NO038	***$0.02***	***$0.01***	***$0.04***	***$0.27***	***$0.01***	***$0.05***	***$1.15***	***$1.56***	***$0.09***	***$0.06***	***$1.71***
NO039	$0.02	$0.00	$0.05	$0.16	$0.00	$0.10	$0.32	$0.66	$0.15	$0.75	$1.56
NO040	$0.02	$0.03	$0.05	$0.21	$0.00	$0.10	$0.22	$0.63	$0.18	$1.01	$1.81
NO041	$0.03	$0.05	$0.03	$0.27	$0.02	$0.13	$0.48	$1.00	$0.19	$0.68	$1.87
NO043	$0.04	$0.09	$0.08	$0.32	$0.01	$0.18	$0.00	$0.72	$0.19	$1.45	$2.37
NO044	***$0.04***	***$0.01***	***$0.05***	***$0.36***	***$0.00***	***$0.07***	***$0.29***	***$0.81***	***$0.11***	***$0.50***	***$1.42***
NO045	***$0.03***	***$0.02***	***$0.02***	***$0.21***	***$0.01***	***$0.08***	***$0.38***	***$0.75***	***$0.13***	***$0.56***	***$1.44***
NO046	$0.04	$0.01	$0.05	$0.44	$0.01	$0.14	$0.71	$1.41	$0.18	$0.54	$2.13
NO048	$0.05	$0.02	$0.07	$0.11	$0.02	$0.02	$0.02	$0.31	$0.27	$0.84	$1.42
NO049	***$0.03***	***$0.03***	***$0.05***	***$0.27***	***$0.02***	***$0.09***	***$0.67***	***$1.15***	***$0.17***	***$0.57***	***$1.89***
NO050	$0.03	$0.01	$0.11	$0.72	$0.01	$0.15	$0.12	$1.15	$0.24	$1.12	$2.52
NO051	$0.07	$0.02	$0.00	$0.57	$0.00	$0.10	$0.42	$1.19	$0.19	$0.71	$2.09
NO052	$0.03	$0.03	$0.18	$0.13	$0.01	$0.21	$0.11	$0.71	$0.26	$1.49	$2.46
NO053	***$0.02***	***$0.01***	***$0.04***	***$0.35***	***$0.01***	***$0.13***	***$0.05***	***$0.59***	***$0.20***	***$0.73***	***$1.52***
NO054	***$0.01***	***$0.01***	***$0.02***	***$0.28***	***$0.00***	***$0.08***	***$0.86***	***$1.26***	***$0.09***	***$0.00***	***$1.35***
NO055	$0.04	$0.08	$0.02	$0.31	$0.00	$0.11	$0.00	$0.56	$0.26	$1.02	$1.83
Average	$0.04	$0.02	$0.06	$0.29	$0.01	$0.11	$0.46	$0.99	$0.19	$0.66	$1.83
Top 25%	$0.03	$0.01	$0.04	$0.29	$0.01	$0.08	$0.57	$1.02	$0.13	$0.40	$1.55

TABLE B6

Variable costs % - North

Percentage of total farm costs

Farm number	AI and herd test	Animal health	Calf rearing	Shed power	Dairy supplies	Total herd and shed costs	Fertiliser	Irrigation	Hay and silage making
	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS
NO010	1.4%	2.8%	0.0%	1.8%	1.9%	7.7%	1.3%	3.5%	2.7%
NO012	1.6%	3.0%	1.1%	1.3%	1.8%	8.8%	5.0%	3.4%	5.6%
NO014	2.2%	3.6%	0.5%	2.6%	2.1%	11.0%	7.6%	0.5%	0.3%
NO015	3.2%	2.3%	0.0%	2.3%	1.1%	9.0%	4.0%	6.0%	5.1%
NO020	3.1%	2.4%	0.9%	2.1%	1.3%	9.9%	9.6%	0.0%	5.8%
NO022	1.9%	3.4%	0.1%	3.2%	1.0%	9.5%	3.7%	7.5%	2.6%
NO023	1.9%	2.3%	0.2%	2.1%	0.8%	7.3%	4.1%	4.8%	2.1%
NO028	1.8%	3.0%	0.7%	2.1%	1.4%	9.0%	6.2%	3.5%	4.7%
NO036	3.0%	0.8%	1.4%	2.9%	1.1%	9.1%	5.7%	6.3%	0.9%
NO038	***2.0%***	***5.0%***	***0.0%***	***2.5%***	***2.6%***	***12.1%***	***0.7%***	***1.4%***	***0.0%***
NO039	1.7%	3.5%	0.3%	1.7%	2.3%	9.5%	2.2%	1.7%	0.5%
NO040	1.7%	1.5%	0.2%	2.3%	0.8%	6.5%	2.3%	4.4%	5.3%
NO041	2.6%	3.6%	0.0%	2.4%	1.8%	10.4%	4.6%	4.6%	1.8%
NO043	1.8%	1.6%	0.9%	2.4%	1.1%	7.8%	4.8%	4.7%	0.4%
NO044	***1.7%***	***2.6%***	***0.5%***	***2.5%***	***1.2%***	***8.5%***	***4.3%***	***4.5%***	***1.7%***
NO045	***2.3%***	***2.1%***	***0.3%***	***2.0%***	***1.2%***	***7.9%***	***3.2%***	***4.7%***	***2.5%***
NO046	1.3%	1.7%	0.0%	2.0%	0.9%	5.9%	4.3%	3.3%	2.1%
NO048	1.8%	0.7%	0.3%	2.8%	0.4%	6.0%	4.7%	5.7%	7.7%
NO049	***3.0%***	***1.7%***	***0.1%***	***2.5%***	***4.2%***	***11.6%***	***5.4%***	***3.8%***	***2.9%***
NO050	0.3%	1.9%	0.2%	2.5%	4.7%	9.7%	3.1%	4.7%	0.5%
NO051	3.4%	3.6%	0.4%	2.3%	0.4%	10.0%	5.4%	3.9%	6.3%
NO052	2.2%	2.6%	0.3%	2.2%	1.5%	9.0%	3.2%	4.6%	2.5%
NO053	***1.7%***	***1.6%***	***0.0%***	***1.6%***	***1.2%***	***6.0%***	***3.8%***	***2.7%***	***0.0%***
NO054	***3.5%***	***4.5%***	***0.1%***	***1.1%***	***0.7%***	***10.0%***	***4.0%***	***3.4%***	***1.5%***
NO055	1.9%	0.6%	0.2%	2.7%	1.6%	7.0%	6.3%	6.1%	0.8%
Average	2.1%	2.5%	0.3%	2.2%	1.6%	8.8%	4.4%	4.0%	2.7%
Top 25%	2.4%	2.9%	0.2%	2.0%	1.9%	9.3%	3.6%	3.4%	1.5%

TABLE B6

Variable costs % - North

Percentage of total farm costs (Continued)

Farm number	Fuel and oil	Pasture improvement/ cropping	Other feed costs	Fodder purchases	Grain/ concentrates/ other	Agistment costs	Total feed costs	Total variable costs
	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS
NO010	1.4%	3.2%	0.2%	19.4%	21.1%	0.0%	52.7%	60.5%
NO012	2.3%	3.8%	0.0%	3.0%	30.7%	1.6%	59.9%	68.6%
NO014	3.7%	3.6%	4.1%	10.2%	23.5%	0.0%	53.5%	64.5%
NO015	2.4%	2.0%	1.8%	9.6%	24.3%	0.0%	58.7%	67.6%
NO020	2.2%	6.5%	0.2%	4.5%	28.4%	0.0%	57.2%	67.0%
NO022	1.3%	3.8%	0.0%	4.0%	30.0%	0.2%	56.0%	65.5%
NO023	2.0%	6.2%	4.3%	2.2%	31.7%	0.1%	62.7%	70.0%
NO028	1.8%	2.9%	0.4%	1.2%	22.5%	5.3%	52.7%	61.7%
NO036	2.9%	1.5%	0.0%	6.6%	28.0%	0.0%	53.7%	62.8%
NO038	***2.1%***	***2.3%***	***1.8%***	***11.7%***	***36.1%***	***0.0%***	***58.4%***	***70.5%***
NO039	1.5%	1.6%	0.3%	24.3%	24.2%	2.5%	63.0%	72.5%
NO040	2.0%	6.0%	0.0%	11.5%	25.4%	1.6%	64.4%	70.9%
NO041	2.1%	4.4%	1.7%	6.4%	24.9%	0.2%	56.2%	66.6%
NO043	2.7%	4.1%	0.0%	4.9%	26.2%	0.0%	51.7%	59.5%
NO044	***0.7%***	***2.6%***	***0.0%***	***13.2%***	***27.0%***	***1.2%***	***61.7%***	***70.2%***
NO045	***1.5%***	***3.5%***	***0.0%***	***12.6%***	***25.9%***	***4.6%***	***65.3%***	***73.1%***
NO046	1.5%	3.0%	0.0%	18.7%	14.0%	4.6%	57.4%	63.3%
NO048	0.9%	6.6%	0.0%	6.6%	20.4%	4.3%	64.0%	70.0%
NO049	***0.9%***	***2.7%***	***0.9%***	***1.3%***	***19.0%***	***4.5%***	***51.2%***	***62.8%***
NO050	4.1%	4.4%	6.5%	0.2%	11.8%	0.0%	55.9%	65.5%
NO051	2.6%	6.3%	0.5%	0.0%	21.5%	1.7%	48.3%	58.3%
NO052	2.4%	2.7%	1.6%	7.5%	24.6%	3.4%	54.4%	63.4%
NO053	***1.4%***	***2.1%***	***0.0%***	***14.2%***	***25.7%***	***4.0%***	***58.6%***	***64.6%***
NO054	***1.7%***	***4.3%***	***0.9%***	***11.5%***	***35.0%***	***2.5%***	***66.5%***	***76.5%***
NO055	3.4%	5.1%	0.5%	0.0%	28.5%	0.0%	56.1%	63.1%
Average	2.1%	3.8%	1.0%	8.2%	25.2%	1.7%	57.6%	66.4%
Top 25%	1.4%	2.9%	0.6%	10.7%	28.1%	2.8%	60.3%	69.6%

TABLE B7

Overhead costs % - North

Percentage of total farm costs

Farm number	Rates	Registration and insurance	Farm insurance	Repairs and maintenance	Bank charges	Other overheads	Employed labour	Total cash overheads	Depreciation	Imputed owner/ operator & family labour	Total overheads
	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	
NO010	0.6%	0.3%	0.8%	2.6%	0.1%	1.2%	14.4%	20.1%	8.5%	11.0%	39.5%
NO012	0.5%	0.1%	0.1%	5.3%	0.1%	4.5%	17.8%	28.5%	2.9%	0.0%	31.4%
NO014	0.5%	0.3%	1.0%	7.9%	0.1%	0.5%	11.1%	21.4%	6.2%	7.9%	35.5%
NO015	0.7%	0.3%	1.1%	7.3%	0.0%	3.1%	11.2%	23.8%	1.3%	7.3%	32.4%
NO020	1.0%	0.2%	1.0%	3.5%	0.1%	3.1%	12.2%	21.0%	3.5%	8.5%	33.0%
NO022	1.2%	0.1%	1.4%	6.5%	0.0%	2.6%	8.6%	20.5%	2.1%	11.9%	34.5%
NO023	1.1%	0.3%	0.6%	3.1%	0.0%	1.3%	11.6%	18.0%	1.9%	10.1%	30.0%
NO028	0.7%	0.2%	2.2%	4.2%	0.0%	1.5%	10.7%	19.6%	5.0%	13.7%	38.3%
NO036	0.7%	0.3%	2.3%	3.5%	0.1%	1.8%	11.6%	20.4%	2.9%	13.9%	37.2%
NO038	***0.4%***	***0.3%***	***0.6%***	***4.7%***	***0.1%***	***0.9%***	***19.7%***	***26.7%***	***1.6%***	***1.1%***	***29.5%***
NO039	0.3%	0.0%	0.9%	2.8%	0.0%	1.7%	5.7%	11.5%	2.7%	13.2%	27.5%
NO040	0.3%	0.5%	0.9%	3.4%	0.0%	1.6%	3.5%	10.1%	2.8%	16.2%	29.1%
NO041	0.6%	0.9%	0.5%	4.8%	0.4%	2.3%	8.6%	17.9%	3.3%	12.2%	33.4%
NO043	0.7%	1.5%	1.4%	5.5%	0.1%	3.1%	0.0%	12.3%	3.3%	24.9%	40.5%
NO044	***0.9%***	***0.1%***	***1.0%***	***7.4%***	***0.0%***	***1.5%***	***6.1%***	***17.0%***	***2.3%***	***10.4%***	***29.8%***
NO045	***0.6%***	***0.4%***	***0.4%***	***3.8%***	***0.2%***	***1.5%***	***7.1%***	***14.0%***	***2.4%***	***10.5%***	***26.9%***
NO046	0.7%	0.1%	0.9%	7.7%	0.1%	2.4%	12.3%	24.3%	3.0%	9.4%	36.7%
NO048	1.1%	0.4%	1.5%	2.2%	0.3%	0.5%	0.5%	6.6%	5.6%	17.8%	30.0%
NO049	***0.6%***	***0.5%***	***0.9%***	***5.3%***	***0.3%***	***1.8%***	***13.2%***	***22.7%***	***3.4%***	***11.2%***	***37.2%***
NO050	0.4%	0.1%	1.6%	9.8%	0.2%	2.0%	1.6%	15.8%	3.3%	15.4%	34.5%
NO051	1.4%	0.4%	0.0%	11.5%	0.0%	2.1%	8.4%	23.8%	3.8%	14.1%	41.7%
NO052	0.5%	0.4%	2.7%	1.9%	0.2%	3.2%	1.6%	10.6%	3.9%	22.1%	36.6%
NO053	***0.4%***	***0.1%***	***1.0%***	***8.1%***	***0.2%***	***3.0%***	***1.1%***	***13.8%***	***4.7%***	***16.9%***	***35.4%***
NO054	***0.2%***	***0.2%***	***0.3%***	***4.9%***	***0.0%***	***1.4%***	***15.0%***	***22.0%***	***1.5%***	***0.0%***	***23.5%***
NO055	0.8%	1.6%	0.3%	6.3%	0.0%	2.1%	0.0%	11.2%	5.2%	20.5%	36.9%
Average	0.7%	0.4%	1.0%	5.4%	0.1%	2.0%	8.5%	18.1%	3.5%	12.0%	33.6%
Top 25%	0.5%	0.3%	0.7%	5.7%	0.2%	1.7%	10.4%	19.4%	2.7%	8.4%	30.4%

TABLE B8

Capital structure - North

	FARM ASSETS				OTHER FARM ASSETS (PER USABLE HECTARE)					LIABILITIES		EQUITY	
	Land value	Land value	Permanent water value	Permanent water value	Plant and equipment	Livestock	Hay and grain	Other assets	Total assets	Liabilities	Liabilities	Equity	Average equity
	$/HA	$/COW	$/HA	$/COW	$/HA	$/HA	$/HA	$/HA	$/HA	$/HA	$/COW	$/HA	%
Average	$7,697	$4,676	$2,641	$1,531	$1,545	$2,784	$265	$705	$15,930	$6,472	$3,489	$9,458	59%
Top 25%	$8,364	$3,640	$2,480	$1,243	$1,804	$4,072	$315	$1,166	$19,935	$8,818	$3,016	$11,118	54%

TABLE B9

Historical data - North

Average farm income, costs and profit per kilogram of milk solids

	INCOME				VARIABLE COSTS							
	Milk income (net)		Gross farm income		Herd costs		Shed costs		Feed costs		Total variable costs	
	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)
2006-07	$4.64	$5.61	$5.48	$6.63	$0.21	$0.26	$0.17	$0.20	$3.60	$4.35	$4.03	$4.87
2007-08	$6.53	$7.55	$7.86	$9.09	$0.23	$0.26	$0.15	$0.17	$4.37	$5.06	$4.70	$5.43
2008-09	$5.32	$6.06	$6.06	$6.90	$0.21	$0.24	$0.13	$0.15	$3.47	$3.96	$3.81	$4.34
2009-10	$4.46	$4.93	$5.19	$5.74	$0.23	$0.25	$0.15	$0.17	$2.71	$3.00	$3.09	$3.42
2010-11	$5.69	$6.08	$6.74	$7.19	$0.31	$0.33	$0.19	$0.20	$2.66	$2.84	$3.16	$3.37
2011-12	$5.64	$5.95	$6.06	$6.39	$0.26	$0.27	$0.18	$0.19	$2.52	$2.66	$2.95	$3.11
2012-13	$5.05	$5.20	$5.53	$5.70	$0.25	$0.26	$0.24	$0.24	$2.85	$2.93	$3.34	$3.44
2013-14	$6.83	$6.83	$7.46	$7.46	$0.27	$0.27	$0.21	$0.21	$3.13	$3.13	$3.61	$3.61
Average		$6.03		$6.89		$0.27		$0.19		$3.49		$3.95

	OVERHEAD COSTS						PROFIT							
	Cash overhead costs		Non-cash overhead costs		Total overhead costs		Earnings before interest & tax		Interest & lease charges		Net farm income			
	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	RETURN ON ASSETS	RETURN ON EQUITY
2006-07	$0.82	$0.99	$1.10	$1.33	$1.92	$2.32	-$0.47	-$0.57	$0.57	$0.68	-$1.04	-$1.25	-1.6%	-6.9%
2007-08	$0.78	$0.90	$0.90	$1.04	$1.57	$1.82	$1.59	$1.84	$0.55	$0.64	$1.04	$1.20	7.9%	7.6%
2008-09	$0.74	$0.85	$0.82	$0.94	$1.56	$1.78	$0.59	$0.67	$0.54	$0.61	$0.05	$0.05	2.7%	-0.7%
2009-10	$0.82	$0.91	$1.01	$1.12	$1.83	$2.03	$0.20	$0.22	$0.51	$0.57	-$0.31	-$0.35	0.8%	-3.1%
2010-11	$1.01	$1.08	$1.05	$1.12	$2.06	$2.20	$1.52	$1.62	$0.65	$0.69	$0.87	$0.93	7.0%	7.6%
2011-12	$0.90	$0.95	$0.85	$0.89	$1.75	$1.85	$1.36	$1.43	$0.57	$0.61	$0.78	$0.83	7.6%	8.4%
2012-13	$0.94	$0.97	$0.87	$0.89	$1.81	$1.86	$0.39	$0.40	$0.58	$0.60	-$0.19	-$0.20	2.2%	-2.9%
2013-14	$0.99	$0.99	$0.85	$0.85	$1.83	$1.83	$2.02	$2.02	$0.56	$0.56	$1.46	$1.46	11.3%	14.7%
Average		$0.95		$1.02		$1.96		$0.95		$0.62		$0.33	4.7%	3.1%

Note: 'Real' dollar values are the nominal values converted to 2013/14 dollar equivalents by the consumer price index (CPI) to allow for inflation.

TABLE B10

Historical data - North

Average farm physical information

	Total usable area	Milking area	Water used	Number of milking cows	Milking cows per usable area	Milk sold	Milk sold	Estimated grazed pasture*	Estimated conserved feed*	Home grown feed as % of ME consumed	Concentrate price	
	HA	HA	MM/HA	HD	HD/HA	KG MS/ COW	KG MS/ HA	T DM/ HA	T DM/ HA	% OF ME	NOMINAL ($/T DM)	REAL ($/ T DM)
2006-07	336	331	539	365	1.4	430	636	4.3	0.5	48%	$316	$382
2007-08	294	258	490	321	1.1	511	559	3.1	0.7	47%	$398	$461
2008-09	245	195	528	322	1.6	500	784	4.3	0.7	46%	$347	$396
2009-10	216	195	811	282	1.6	515	806	5.0	0.6	51%	$256	$283
2010-11	196	171	1,089	261	1.5	495	762	5.1	2.6	58%	$286	$305
2011-12	193	128	1,035	304	1.9	516	957	7.1	1.1	53%	$267	$282
2012-13	193	123	901	300	1.8	518	961	8.1	1.4	55%	$311	$320
2013-14	210	130	986	332	1.9	522	995	7.6	1.6	57%	$366	$366
Average	235	192	798	311	1.6	501	807	5.6	1.1	52%		$347

* 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.

TABLE C1

Main Financial Indicators - South West

Farm number	Milk income (net)	All other income	Gross farm income	Total variable costs	Total overhead costs	Cost structure (variable costs / total costs)	Earnings Before Interest & Tax	Return on assets (excl. capital apprec.)	Interest & lease charges	Debt servicing ratio	Net farm income	Return on equity	Return on equity (incl. capital apprec.)
	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	%	$/ KG MS	%	$/ KG MS	% OF INCOME	$/ KG MS	%	%
SW001	$7.11	$0.32	$7.43	$3.26	$2.08	61%	$2.09	6.4%	$1.10	15%	$0.99	7.7%	7.9%
SW007	$6.59	$0.25	$6.83	$3.11	$2.36	57%	$1.37	8.9%	$0.00	0%	$1.37	8.9%	9.2%
SW008	$7.01	$0.26	$7.27	$3.14	$2.01	61%	$2.13	8.4%	$0.51	7%	$1.62	9.9%	10.0%
SW009	$6.56	$0.73	$7.29	$3.01	$1.98	60%	$2.30	9.1%	$0.61	8%	$1.68	10.7%	6.0%
SW011	$7.31	$0.39	$7.71	$4.11	$1.76	70%	$1.84	9.1%	$0.74	10%	$1.10	19.8%	20.4%
SW014	***$6.91***	***$0.52***	***$7.44***	***$3.14***	***$1.71***	***65%***	***$2.59***	***11.0%***	***$0.43***	***6%***	***$2.15***	***18.2%***	***19.3%***
SW015	$7.27	$1.26	$8.53	$4.74	$2.77	63%	$1.02	3.3%	$0.85	10%	$0.17	4.6%	6.1%
SW020	$7.00	$0.58	$7.58	$3.61	$2.60	58%	$1.37	4.9%	$1.05	14%	$0.32	4.1%	4.2%
SW021	***$7.14***	***$1.27***	***$8.41***	***$3.94***	***$1.59***	***71%***	***$2.88***	***11.7%***	***$0.28***	***3%***	***$2.60***	***13.1%***	***13.4%***
SW022	$7.28	$1.22	$8.49	$3.71	$2.02	65%	$2.76	9.6%	$1.15	14%	$1.61	8.0%	7.1%
SW025	***$6.87***	***$0.68***	***$7.55***	***$2.74***	***$1.86***	***60%***	***$2.96***	***9.9%***	***$0.72***	***10%***	***$2.23***	***12.9%***	***13.3%***
SW027	$6.52	$0.57	$7.09	$2.71	$2.03	57%	$2.36	9.8%	$0.45	6%	$1.90	11.9%	9.6%
SW030	$7.16	$0.43	$7.60	$3.98	$1.66	71%	$1.96	6.9%	$0.74	10%	$1.22	7.7%	4.7%
SW032	$6.75	$0.98	$7.74	$2.85	$2.77	51%	$2.13	6.3%	$0.89	12%	$1.24	7.4%	7.7%
SW033	$6.76	$0.41	$7.18	$2.11	$3.35	39%	$1.72	3.4%	$0.17	2%	$1.55	5.1%	5.2%
SW035	***$6.95***	***$0.69***	***$7.64***	***$2.69***	***$1.70***	***61%***	***$3.25***	***12.4%***	***$1.59***	***21%***	***$1.67***	***70.7%***	***75.3%***
SW036	$6.55	$0.61	$7.16	$3.73	$2.40	61%	$1.04	2.8%	$0.27	4%	$0.77	2.3%	2.3%
SW037	$7.09	$0.75	$7.85	$3.61	$2.49	59%	$1.75	9.0%	$0.51	6%	$1.24	14.1%	14.0%
SW038	$6.82	$0.55	$7.37	$3.49	$2.23	61%	$1.66	7.4%	$0.42	6%	$1.24	8.9%	8.8%
SW039	$6.84	-$0.74	$6.10	$3.76	$1.88	67%	$0.46	1.7%	$1.65	27%	-$1.19	-68.9%	-70.5%
SW042	$6.72	$0.47	$7.19	$3.92	$1.61	71%	$1.67	7.1%	$0.61	8%	$1.06	9.9%	10.1%
SW043	$6.54	$0.45	$6.98	$3.28	$2.86	53%	$0.84	3.1%	$0.33	5%	$0.51	2.5%	2.5%
SW044	$6.72	$1.01	$7.72	$3.18	$2.54	56%	$2.00	7.4%	$0.89	11%	$1.12	7.4%	7.7%
SW045	***$7.38***	***$1.48***	***$8.86***	***$2.93***	***$1.94***	***60%***	***$3.98***	***12.7%***	***$0.55***	***6%***	***$3.43***	***15.3%***	***16.3%***
SW046	***$6.84***	***$0.70***	***$7.55***	***$3.57***	***$1.45***	***71%***	***$2.53***	***14.5%***	***$0.85***	***11%***	***$1.68***	***34.2%***	***39.7%***
Average	$6.91	$0.63	$7.54	$3.37	$2.14	61%	$2.03	7.9%	$0.69	9%	$1.33	9.9%	10.0%
Top 25%*	$7.02	$0.89	$7.91	$3.17	$1.71	65%	$3.03	12.1%	$0.74	10%	$2.29	27.4%	29.5%

* Top 25% are bold and italicised

TABLE C2

Physical Information - South West

Farm number	Total usable area	Milking area	Water used	Number of milking cows	Milking cows per usable area	Milk sold	Milk sold	Fat	Protein
	HA	HA	MM/HA	HD	HD/HA	KG MS/ COW	KG MS/ HA	%	%
SW001	458	250	890	520	1.1	461	524	4.0%	3.2%
SW007	116	116	677	153	1.3	320	423	5.3%	4.1%
SW008	573	290	1,143	816	1.4	515	733	4.1%	3.4%
SW009	160	125	854	240	1.5	525	788	3.9%	3.2%
SW011	573	450	902	850	1.5	569	844	3.8%	3.4%
SW014	***214***	***174***	***1,181***	***240***	***1.1***	***573***	***643***	***3.7%***	***3.2%***
SW015	741	400	756	960	1.3	439	569	3.6%	3.5%
SW020	299	161	1,114	330	1.1	545	601	3.6%	3.2%
SW021	***679***	***344***	***868***	***878***	***1.3***	***468***	***605***	***3.7%***	***3.4%***
SW022	759	410	727	650	0.9	552	473	3.7%	3.5%
SW025	***331***	***140***	***850***	***275***	***0.8***	***576***	***479***	***4.2%***	***3.4%***
SW027	127	99	1,001	184	1.4	479	694	5.3%	3.9%
SW030	264	180	829	340	1.3	506	651	4.0%	3.4%
SW032	171	130	860	185	1.1	412	446	5.1%	3.9%
SW033	146	56	902	109	0.7	388	290	4.4%	3.6%
SW035	***205***	***162***	***1,106***	***230***	***1.1***	***584***	***656***	***3.9%***	***3.4%***
SW036	333	220	713	220	0.7	479	316	4.5%	3.5%
SW037	407	252	1,149	566	1.4	594	825	3.7%	3.4%
SW038	125	100	1,176	164	1.3	608	798	4.0%	3.3%
SW039	274	163	781	343	1.3	477	597	3.8%	3.4%
SW042	157	157	1,219	216	1.4	487	670	3.6%	3.3%
SW043	131	86	1,282	153	1.2	474	553	4.3%	3.5%
SW044	152	152	1,118	175	1.2	463	533	3.9%	3.2%
SW045	***573***	***465***	***830***	***520***	***0.9***	***566***	***513***	***3.5%***	***3.4%***
SW046	***287***	***270***	***836***	***430***	***1.5***	***526***	***788***	***4.3%***	***3.4%***
Average	330	214	951	390	1.2	503	600	4.1%	3.4%
Top 25%	382	259	945	429	1.1	549	614	3.9%	3.4%

TABLE C2

Physical Information - South West

(Continued)

Farm number	Estimated grazed pasture**	Estimated conserved feed**	Home grown feed as % of ME consumed	Nitrogen application	Phosphorous application	Potassium application	Sulphur application	Labour efficiency	Labour efficiency
	T DM/ HA	T DM/ HA	% OF ME	KG/ HA	KG/ HA	KG/ HA	KG/ HA	HD/ FTE	KG MS/ FTE
SW001	4.8	1.2	65%	68.2	22.0	73.2	29.2	147	67,908
SW007	3.2	0.0	58%	0.0	0.0	0.0	0.0	79	25,403
SW008	6.5	0.0	53%	159.9	11.5	44.2	13.7	111	57,166
SW009	6.1	3.4	69%	170.5	14.5	14.5	5.4	64	33,645
SW011	4.3	0.7	48%	105.4	15.8	42.8	16.9	139	78,885
SW014	***4.9***	***1.5***	***68%***	***125.1***	***17.5***	***46.7***	***24.3***	***89***	***51,202***
SW015	4.8	0.0	54%	225.1	25.2	39.6	25.9	101	44,188
SW020	5.2	1.5	54%	87.5	16.0	38.5	19.9	87	47,397
SW021	***4.4***	***0.7***	***58%***	***170.2***	***17.0***	***32.5***	***17.3***	***165***	***77,340***
SW022	2.7	3.3	62%	109.0	9.0	7.9	4.1	127	70,104
SW025	***6.9***	***0.9***	***74%***	***90.0***	***11.7***	***5.3***	***4.9***	***92***	***53,194***
SW027	6.4	1.3	76%	74.7	25.7	62.2	29.5	93	44,513
SW030	3.4	2.2	53%	143.8	24.3	86.2	30.2	130	65,602
SW032	2.7	2.4	56%	1.1	20.6	39.0	24.3	75	30,856
SW033	6.3	0.7	77%	21.4	3.6	11.6	4.5	67	25,978
SW035	***4.7***	***2.5***	***66%***	***136.7***	***23.4***	***85.0***	***20.5***	***101***	***59,274***
SW036	3.2	1.3	76%	73.6	7.8	87.6	4.4	68	32,608
SW037	5.1	1.6	51%	154.7	23.2	50.8	22.0	70	41,463
SW038	5.5	2.2	61%	161.3	27.9	75.6	32.7	72	43,853
SW039	4.0	1.9	66%	150.3	17.1	67.9	21.6	104	49,391
SW042	4.6	0.7	54%	112.1	7.9	45.6	22.3	136	66,210
SW043	4.7	1.0	63%	92.5	16.7	74.5	34.8	69	32,532
SW044	4.0	2.3	66%	159.9	15.6	30.1	19.4	83	38,485
SW045	***3.2***	***1.8***	***69%***	***124.7***	***47.9***	***154.8***	***58.3***	***146***	***82,630***
SW046	***4.3***	***3.1***	***61%***	***217.2***	***21.1***	***50.6***	***19.9***	***130***	***68,277***
Average	4.6	1.5	62%	117.4	17.7	50.7	20.2	102	51,524
Top 25%	4.7	1.8	66%	144.0	23.1	62.5	24.2	121	65,320

** on milking area

TABLE C3

Purchased feed - South West

Farm number	Purchased feed per milker	Concentrate price	Silage price	Hay price	Other feed price	Average purchased feed price	Average ME of purchased feed	Average purchased feed price	Percent of total energy imported
	T DM/HD	$/ T DM	$/ T DM	$/ T DM	$/ T DM	$/ T DM	MJ ME/ KG	C/ MJ	% OF ME
SW001	2.3	$423	-	$119	$142	$346	11.2	3.2	35%
SW007	1.5	$440	-	$145	-	$388	12.2	3.3	42%
SW008	2.8	$352	$180	$154	$109	$287	12.4	2.4	47%
SW009	2.1	$460	-	$153	-	$425	11.6	3.7	31%
SW011	3.6	$402	-	$235	-	$390	11.7	3.4	52%
SW014	***2.4***	***$395***	***-***	***$305***	***-***	***$381***	***12.0***	***3.3***	***32%***
SW015	2.7	$433	-	$291	-	$415	12.2	3.5	46%
SW020	3.1	$386	$247	-	-	$375	12.2	3.1	46%
SW021	***2.4***	***$387***	***-***	***$292***	***-***	***$385***	***13.0***	***3.0***	***42%***
SW022	2.7	$301	-	$362	-	$305	12.8	2.4	38%
SW025	***2.0***	***$425***	***-***	***$218***	***-***	***$405***	***12.2***	***3.4***	***26%***
SW027	1.4	$428	-	$231	-	$399	12.3	3.3	24%
SW030	2.8	$398	-	$298	-	$378	11.7	3.3	47%
SW032	2.6	$336	-	$202	-	$304	12.2	2.6	44%
SW033	0.8	$389	-	-	-	$389	13.6	2.9	23%
SW035	***2.2***	***$377***	***-***	***-***	***-***	***$377***	***12.5***	***3.0***	***34%***
SW036	1.7	$437	-	-	-	$437	12.5	3.5	24%
SW037	3.4	$358	-	-	$147	$350	11.9	3.0	49%
SW038	2.6	$417	-	$275	$147	$394	12.1	3.3	39%
SW039	2.3	$402	-	-	-	$402	12.5	3.3	34%
SW042	2.9	$439	-	$215	-	$397	11.7	3.5	46%
SW043	2.2	$387	-	$341	-	$380	13.1	3.0	37%
SW044	2.1	$366	-	$306	-	$354	11.5	3.2	34%
SW045	***2.3***	***$352***	***-***	***$263***	***-***	***$343***	***12.9***	***2.7***	***31%***
SW046	***2.3***	***$380***	***$209***	***-***	***-***	***$362***	***12.2***	***3.0***	***39%***
Average	2.4	$395	$212	$245	$136	$375	12.3	3.1	38%
Top 25%	2.3	$386	-	-	-	$376	12.4	3.1	34%

TABLE C4

Variable costs - South West

Farm number	AI and herd test	Animal health	Calf rearing	Shed power	Dairy supplies	Total herd and shed costs	Fertiliser	Irrigation	Hay and silage making
	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS
SW001	$0.04	$0.14	$0.00	$0.12	$0.09	$0.39	$0.40	$0.05	$0.23
SW007	$0.15	$0.15	$0.01	$0.16	$0.07	$0.54	$0.00	$0.00	$0.00
SW008	$0.04	$0.21	$0.00	$0.11	$0.08	$0.44	$0.32	$0.03	$0.15
SW009	$0.09	$0.11	$0.00	$0.09	$0.10	$0.39	$0.41	$0.05	$0.11
SW011	$0.10	$0.09	$0.09	$0.13	$0.10	$0.52	$0.32	$0.00	$0.15
SW014	***$0.10***	***$0.10***	***$0.00***	***$0.10***	***$0.04***	***$0.35***	***$0.65***	***$0.00***	***$0.18***
SW015	$0.06	$0.17	$0.00	$0.10	$0.12	$0.45	$0.82	$0.19	$0.02
SW020	$0.13	$0.17	$0.00	$0.14	$0.17	$0.62	$0.46	$0.00	$0.06
SW021	***$0.10***	***$0.11***	***$0.12***	***$0.10***	***$0.06***	***$0.50***	***$0.64***	***$0.00***	***$0.50***
SW022	$0.09	$0.15	$0.19	$0.10	$0.12	$0.65	$0.52	$0.00	$0.20
SW025	***$0.08***	***$0.16***	***$0.03***	***$0.09***	***$0.04***	***$0.40***	***$0.50***	***$0.00***	***$0.08***
SW027	$0.07	$0.08	$0.00	$0.12	$0.18	$0.46	$0.39	$0.00	$0.19
SW030	$0.09	$0.09	$0.00	$0.14	$0.07	$0.40	$0.53	$0.01	$0.05
SW032	$0.05	$0.12	$0.06	$0.07	$0.08	$0.38	$0.31	$0.00	$0.18
SW033	$0.08	$0.12	$0.00	$0.11	$0.06	$0.37	$0.21	$0.00	$0.35
SW035	***$0.09***	***$0.08***	***$0.00***	***$0.09***	***$0.06***	***$0.32***	***$0.55***	***$0.00***	***$0.07***
SW036	$0.14	$0.21	$0.01	$0.12	$0.13	$0.61	$0.90	$0.02	$0.30
SW037	$0.10	$0.16	$0.05	$0.08	$0.12	$0.50	$0.60	$0.08	$0.12
SW038	$0.07	$0.19	$0.14	$0.10	$0.10	$0.60	$0.60	$0.00	$0.23
SW039	$0.13	$0.18	$0.00	$0.16	$0.23	$0.70	$0.49	$0.00	$0.20
SW042	$0.05	$0.17	$0.01	$0.13	$0.09	$0.44	$0.58	$0.00	$0.11
SW043	$0.09	$0.09	$0.00	$0.16	$0.18	$0.52	$0.68	$0.00	$0.06
SW044	$0.03	$0.04	$0.00	$0.13	$0.11	$0.32	$0.64	$0.00	$0.22
SW045	***$0.05***	***$0.06***	***$0.01***	***$0.10***	***$0.25***	***$0.47***	***$0.56***	***$0.00***	***$0.05***
SW046	***$0.13***	***$0.16***	***$0.04***	***$0.11***	***$0.10***	***$0.54***	***$0.55***	***$0.00***	***$0.29***
Average	$0.09	$0.13	$0.03	$0.11	$0.11	$0.48	$0.50	$0.02	$0.17
Top 25%	$0.09	$0.11	$0.03	$0.10	$0.09	$0.43	$0.57	$0.00	$0.19

Farm number	Fuel and oil	Pasture improvement/ cropping	Other feed costs	Fodder purchases	Grain/ concentrates/ other	Agistment costs	Total feed costs	Total variable costs
	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS
SW001	$0.14	$0.26	$0.01	$0.06	$1.72	$0.00	$2.86	$3.26
SW007	$0.06	$0.00	$0.05	$0.37	$1.71	$0.37	$2.57	$3.11
SW008	$0.09	$0.11	$0.37	$0.18	$1.43	$0.00	$2.69	$3.14
SW009	$0.08	$0.16	$0.00	$0.09	$1.71	$0.00	$2.61	$3.01
SW011	$0.02	$0.10	$0.00	$0.45	$2.04	$0.51	$3.59	$4.11
SW014	***$0.09***	***$0.13***	***$0.00***	***$0.33***	***$1.42***	***$0.00***	***$2.78***	***$3.14***
SW015	$0.28	$0.25	$0.12	$0.23	$2.38	$0.00	$4.28	$4.74
SW020	$0.21	$0.09	$0.03	$0.13	$2.02	$0.00	$3.00	$3.61
SW021	***$0.11***	***$0.18***	***$0.00***	***$0.04***	***$1.97***	***$0.00***	***$3.44***	***$3.94***
SW022	$0.16	$0.34	$0.28	$0.12	$1.45	$0.00	$3.07	$3.71
SW025	***$0.12***	***$0.16***	***$0.02***	***$0.08***	***$1.37***	***$0.00***	***$2.33***	***$2.74***
SW027	$0.09	$0.12	$0.00	$0.17	$1.30	$0.00	$2.25	$2.71
SW030	$0.14	$0.22	$0.09	$0.39	$1.81	$0.34	$3.58	$3.98
SW032	$0.06	$0.02	$0.00	$0.30	$1.59	$0.00	$2.47	$2.85
SW033	$0.10	$0.21	$0.00	$0.00	$0.87	$0.00	$1.74	$2.11
SW035	***$0.12***	***$0.21***	***$0.00***	***$0.00***	***$1.42***	***$0.00***	***$2.37***	***$2.69***
SW036	$0.14	$0.17	$0.00	$0.00	$1.58	$0.00	$3.11	$3.73
SW037	$0.15	$0.11	$0.04	$0.00	$2.01	$0.00	$3.11	$3.61
SW038	$0.11	$0.15	$0.06	$0.12	$1.63	$0.00	$2.89	$3.49
SW039	$0.09	$0.13	$0.18	$0.00	$1.96	$0.00	$3.06	$3.76
SW042	$0.15	$0.15	$0.01	$0.33	$2.14	$0.00	$3.47	$3.92
SW043	$0.14	$0.10	$0.00	$0.24	$1.54	$0.00	$2.76	$3.28
SW044	$0.13	$0.22	$0.00	$0.34	$1.32	$0.00	$2.87	$3.18
SW045	***$0.13***	***$0.11***	***$0.14***	***$0.14***	***$1.35***	***$0.00***	***$2.47***	***$2.93***
SW046	***$0.10***	***$0.09***	***$0.01***	***$0.20***	***$1.51***	***$0.27***	***$3.03***	***$3.57***
Average	$0.12	$0.15	$0.06	$0.17	$1.65	$0.06	$2.90	$3.37
Top 25%	$0.11	$0.15	$0.03	$0.13	$1.50	$0.04	$2.74	$3.17

TABLE C5

Overhead costs - South West

Farm number	Rates	Registration and insurance	Farm insurance	Repairs and maintenance	Bank charges	Other overheads	Employed labour	Total cash overheads	Depreciation	Imputed owner/ operator & family labour	Total overheads
	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS
SW001	$0.05	$0.02	$0.06	$0.51	$0.00	$0.07	$0.39	$1.09	$0.59	$0.39	$2.08
SW007	$0.07	$0.01	$0.06	$0.17	$0.01	$0.07	$1.70	$2.10	$0.10	$0.16	$2.36
SW008	$0.04	$0.01	$0.04	$0.27	$0.00	$0.10	$1.10	$1.56	$0.25	$0.19	$2.01
SW009	$0.09	$0.02	$0.04	$0.36	$0.02	$0.05	$0.82	$1.39	$0.16	$0.44	$1.98
SW011	$0.04	$0.00	$0.04	$0.35	$0.00	$0.23	$0.91	$1.57	$0.19	$0.00	$1.76
SW014	***$0.04***	***$0.01***	***$0.03***	***$0.32***	***$0.00***	***$0.05***	***$0.45***	***$0.90***	***$0.12***	***$0.69***	***$1.71***
SW015	$0.06	$0.03	$0.04	$0.79	$0.00	$0.15	$1.20	$2.27	$0.34	$0.17	$2.77
SW020	$0.03	$0.02	$0.06	$0.68	$0.00	$0.11	$0.41	$1.30	$0.44	$0.85	$2.60
SW021	***$0.02***	***$0.01***	***$0.05***	***$0.44***	***$0.00***	***$0.14***	***$0.55***	***$1.20***	***$0.15***	***$0.24***	***$1.59***
SW022	$0.10	$0.01	$0.07	$0.53	$0.01	$0.14	$0.30	$1.17	$0.28	$0.56	$2.02
SW025	***$0.04***	***$0.03***	***$0.06***	***$0.31***	***$0.00***	***$0.08***	***$0.44***	***$0.97***	***$0.24***	***$0.64***	***$1.86***
SW027	$0.07	$0.11	$0.00	$0.07	$0.01	$0.27	$0.09	$0.62	$0.17	$1.24	$2.03
SW030	$0.09	$0.01	$0.02	$0.34	$0.02	$0.11	$0.00	$0.59	$0.21	$0.87	$1.66
SW032	$0.05	$0.02	$0.04	$0.44	$0.01	$0.23	$0.17	$0.96	$0.07	$1.73	$2.77
SW033	$0.13	$0.02	$0.19	$0.34	$0.00	$0.13	$0.11	$0.92	$0.36	$2.07	$3.35
SW035	***$0.00***	***$0.00***	***$0.03***	***$0.25***	***$0.01***	***$0.17***	***$0.29***	***$0.75***	***$0.19***	***$0.76***	***$1.70***
SW036	$0.08	$0.02	$0.06	$0.39	$0.01	$0.11	$0.51	$1.17	$0.09	$1.14	$2.40
SW037	$0.04	$0.03	$0.00	$0.81	$0.00	$0.05	$0.87	$1.80	$0.28	$0.41	$2.49
SW038	$0.05	$0.03	$0.04	$0.38	$0.01	$0.17	$0.13	$0.82	$0.19	$1.22	$2.23
SW039	$0.08	$0.01	$0.08	$0.28	$0.03	$0.12	$0.54	$1.13	$0.26	$0.48	$1.88
SW042	$0.06	$0.04	$0.03	$0.34	$0.01	$0.12	$0.05	$0.65	$0.11	$0.85	$1.61
SW043	$0.05	$0.02	$0.06	$0.46	$0.02	$0.11	$0.04	$0.76	$0.29	$1.82	$2.86
SW044	$0.08	$0.01	$0.07	$0.38	$0.01	$0.08	$0.00	$0.64	$0.35	$1.54	$2.54
SW045	***$0.05***	***$0.01***	***$0.02***	***$0.58***	***$0.07***	***$0.14***	***$0.31***	***$1.19***	***$0.39***	***$0.36***	***$1.94***
SW046	***$0.02***	***$0.02***	***$0.06***	***$0.35***	***$0.00***	***$0.08***	***$0.46***	***$0.99***	***$0.06***	***$0.39***	***$1.45***
Average	$0.06	$0.02	$0.05	$0.41	$0.01	$0.12	$0.47	$1.14	$0.24	$0.77	$2.14
Top 25%	$0.03	$0.01	$0.04	$0.37	$0.02	$0.11	$0.42	$1.00	$0.19	$0.51	$1.71

TABLE C6

Variable costs % - South West

Percentage of total farm costs

Farm number	AI and herd test	Animal health	Calf rearing	Shed power	Dairy supplies	Total herd and shed costs	Fertiliser	Irrigation	Hay and silage making
	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS
SW001	0.8%	2.6%	0.0%	2.3%	1.7%	7.4%	7.4%	1.0%	4.3%
SW007	2.8%	2.8%	0.2%	2.8%	1.3%	9.9%	0.0%	0.0%	0.0%
SW008	0.7%	4.2%	0.0%	2.1%	1.6%	8.6%	6.3%	0.6%	3.0%
SW009	1.8%	2.2%	0.1%	1.8%	2.0%	7.9%	8.1%	1.0%	2.2%
SW011	1.8%	1.5%	1.6%	2.3%	1.8%	8.8%	5.5%	0.0%	2.5%
SW014	***2.1%***	***2.1%***	***0.1%***	***2.1%***	***0.9%***	***7.3%***	***13.3%***	***0.0%***	***3.7%***
SW015	0.8%	2.2%	0.0%	1.4%	1.7%	6.1%	10.9%	2.5%	0.3%
SW020	2.1%	2.8%	0.0%	2.3%	2.8%	10.0%	7.3%	0.0%	1.0%
SW021	***1.9%***	***2.1%***	***2.2%***	***1.8%***	***1.1%***	***9.0%***	***11.6%***	***0.0%***	***9.1%***
SW022	1.5%	2.6%	3.3%	1.8%	2.0%	11.3%	9.1%	0.0%	3.4%
SW025	***1.8%***	***3.4%***	***0.7%***	***2.0%***	***0.9%***	***8.8%***	***10.8%***	***0.0%***	***1.8%***
SW027	1.6%	1.8%	0.0%	2.5%	3.9%	9.7%	8.1%	0.0%	4.1%
SW030	1.6%	1.6%	0.1%	2.5%	1.3%	7.1%	9.3%	0.1%	0.9%
SW032	0.8%	2.1%	1.1%	1.3%	1.5%	6.8%	5.5%	0.0%	3.3%
SW033	1.5%	2.2%	0.1%	1.9%	1.0%	6.8%	3.9%	0.0%	6.4%
SW035	***2.0%***	***1.7%***	***0.0%***	***2.1%***	***1.4%***	***7.2%***	***12.6%***	***0.0%***	***1.5%***
SW036	2.3%	3.5%	0.1%	1.9%	2.2%	10.0%	14.6%	0.3%	4.9%
SW037	1.6%	2.6%	0.8%	1.4%	1.9%	8.2%	9.8%	1.4%	2.0%
SW038	1.2%	3.3%	2.5%	1.7%	1.8%	10.4%	10.4%	0.0%	4.0%
SW039	2.3%	3.3%	0.0%	2.8%	4.0%	12.4%	8.7%	0.0%	3.6%
SW042	1.0%	3.0%	0.1%	2.3%	1.6%	8.0%	10.5%	0.0%	2.0%
SW043	1.5%	1.4%	0.0%	2.7%	2.9%	8.5%	11.0%	0.0%	1.1%
SW044	0.6%	0.7%	0.0%	2.3%	1.9%	5.5%	11.2%	0.0%	3.9%
SW045	***1.0%***	***1.2%***	***0.2%***	***2.0%***	***5.1%***	***9.5%***	***11.5%***	***0.0%***	***1.0%***
SW046	***2.7%***	***3.1%***	***0.8%***	***2.1%***	***2.0%***	***10.7%***	***11.0%***	***0.0%***	***5.7%***
Average	1.6%	2.4%	0.6%	2.1%	2.0%	8.6%	9.1%	0.3%	3.0%
Top 25%	1.9%	2.3%	0.7%	2.0%	1.9%	8.8%	11.8%	0.0%	3.8%

TABLE C6

Variable costs % - South West

Percentage of total farm costs (Continued)

Farm number	Fuel and oil	Pasture improvement/ cropping	Other feed costs	Fodder purchases	Grain/ concentrates/ other	Agistment costs	Total feed costs	Total variable costs
	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS
SW001	2.6%	4.8%	0.2%	1.1%	32.2%	0.0%	53.7%	61.0%
SW007	1.1%	0.1%	0.9%	6.8%	31.3%	6.8%	47.0%	56.9%
SW008	1.7%	2.2%	7.3%	3.6%	27.9%	0.0%	52.4%	61.0%
SW009	1.5%	3.3%	0.0%	1.9%	34.3%	0.0%	52.3%	60.2%
SW011	0.3%	1.7%	0.0%	7.6%	34.8%	8.7%	61.2%	70.1%
SW014	***1.8%***	***2.6%***	***0.0%***	***6.7%***	***29.3%***	***0.0%***	***57.4%***	***64.7%***
SW015	3.8%	3.4%	1.5%	3.0%	31.7%	0.0%	57.0%	63.1%
SW020	3.3%	1.5%	0.4%	2.1%	32.5%	0.0%	48.2%	58.2%
SW021	***2.0%***	***3.3%***	***0.0%***	***0.7%***	***35.5%***	***0.0%***	***62.2%***	***71.2%***
SW022	2.7%	6.0%	4.9%	2.0%	25.3%	0.0%	53.5%	64.8%
SW025	***2.7%***	***3.5%***	***0.5%***	***1.8%***	***29.7%***	***0.0%***	***50.7%***	***59.5%***
SW027	1.9%	2.4%	0.0%	3.6%	27.4%	0.0%	47.5%	57.2%
SW030	2.5%	3.8%	1.6%	6.9%	32.2%	6.1%	63.4%	70.5%
SW032	1.1%	0.3%	0.0%	5.4%	28.3%	0.0%	43.9%	50.7%
SW033	1.8%	3.8%	0.0%	0.0%	15.9%	0.0%	31.9%	38.6%
SW035	***2.6%***	***4.8%***	***0.1%***	***0.0%***	***32.3%***	***0.0%***	***54.1%***	***61.3%***
SW036	2.3%	2.8%	0.0%	0.0%	25.9%	0.0%	50.8%	60.9%
SW037	2.5%	1.8%	0.6%	0.0%	32.9%	0.0%	51.0%	59.2%
SW038	2.0%	2.6%	1.0%	2.0%	28.5%	0.0%	50.6%	61.1%
SW039	1.7%	2.4%	3.2%	0.0%	34.8%	0.0%	54.3%	66.7%
SW042	2.7%	2.7%	0.2%	6.0%	38.8%	0.0%	62.8%	70.8%
SW043	2.3%	1.6%	0.0%	3.9%	25.0%	0.0%	44.9%	53.4%
SW044	2.3%	3.8%	0.0%	5.9%	23.0%	0.0%	50.1%	55.7%
SW045	***2.6%***	***2.2%***	***2.9%***	***2.8%***	***27.6%***	***0.0%***	***50.6%***	***60.2%***
SW046	***2.0%***	***1.9%***	***0.3%***	***4.1%***	***30.2%***	***5.4%***	***60.5%***	***71.2%***
Average	2.1%	2.8%	1.0%	3.1%	29.9%	1.1%	52.5%	61.1%
Top 25%	2.3%	3.1%	0.6%	2.7%	30.8%	0.9%	55.9%	64.7%

TABLE C7

Overhead costs % - South West

Percentage of total farm costs

Farm number	Rates	Registration and insurance	Farm insurance	Repairs and maintenance	Bank charges	Other overheads	Employed labour	Total cash overheads	Depreciation	Imputed owner/ operator & family labour	Total overheads
	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	
SW001	0.9%	0.3%	1.1%	9.6%	0.0%	1.3%	7.3%	20.5%	11.1%	7.4%	39.0%
SW007	1.3%	0.1%	1.1%	3.2%	0.2%	1.2%	31.2%	38.3%	1.9%	2.9%	43.1%
SW008	0.7%	0.2%	0.7%	5.3%	0.0%	2.0%	21.3%	30.3%	5.0%	3.7%	39.0%
SW009	1.8%	0.4%	0.7%	7.2%	0.3%	1.0%	16.3%	27.8%	3.2%	8.7%	39.8%
SW011	0.7%	0.0%	0.6%	6.0%	0.0%	3.9%	15.6%	26.7%	3.2%	0.0%	29.9%
SW014	***0.9%***	***0.2%***	***0.5%***	***6.6%***	***0.1%***	***1.1%***	***9.3%***	***18.6%***	***2.5%***	***14.2%***	***35.3%***
SW015	0.8%	0.4%	0.5%	10.5%	0.1%	2.0%	15.9%	30.2%	4.5%	2.3%	36.9%
SW020	0.5%	0.3%	1.0%	10.9%	0.0%	1.7%	6.5%	21.0%	7.1%	13.7%	41.8%
SW021	***0.4%***	***0.1%***	***0.8%***	***8.0%***	***0.0%***	***2.6%***	***9.9%***	***21.8%***	***2.8%***	***4.3%***	***28.8%***
SW022	1.7%	0.2%	1.3%	9.3%	0.2%	2.5%	5.3%	20.5%	4.9%	9.8%	35.2%
SW025	***1.0%***	***0.7%***	***1.3%***	***6.8%***	***0.1%***	***1.8%***	***9.6%***	***21.2%***	***5.3%***	***14.0%***	***40.5%***
SW027	1.4%	2.4%	0.0%	1.5%	0.1%	5.7%	1.8%	13.0%	3.6%	26.2%	42.8%
SW030	1.6%	0.2%	0.3%	6.0%	0.3%	1.9%	0.0%	10.4%	3.7%	15.3%	29.5%
SW032	0.9%	0.3%	0.7%	7.9%	0.2%	4.1%	3.0%	17.1%	1.2%	30.9%	49.3%
SW033	2.4%	0.4%	3.4%	6.3%	0.0%	2.4%	2.0%	16.9%	6.6%	37.9%	61.4%
SW035	***0.0%***	***0.0%***	***0.7%***	***5.6%***	***0.2%***	***3.9%***	***6.7%***	***17.1%***	***4.4%***	***17.2%***	***38.7%***
SW036	1.3%	0.2%	0.9%	6.4%	0.1%	1.8%	8.3%	19.1%	1.4%	18.7%	39.1%
SW037	0.7%	0.5%	0.0%	13.2%	0.0%	0.7%	14.3%	29.4%	4.6%	6.7%	40.8%
SW038	0.9%	0.5%	0.7%	6.7%	0.1%	3.0%	2.3%	14.3%	3.4%	21.3%	38.9%
SW039	1.3%	0.2%	1.4%	5.0%	0.5%	2.2%	9.6%	20.1%	4.7%	8.5%	33.3%
SW042	1.1%	0.8%	0.5%	6.2%	0.1%	2.2%	0.9%	11.8%	2.1%	15.3%	29.2%
SW043	0.8%	0.3%	1.0%	7.5%	0.3%	1.8%	0.7%	12.3%	4.7%	29.6%	46.6%
SW044	1.4%	0.2%	1.3%	6.7%	0.2%	1.3%	0.0%	11.2%	6.1%	27.0%	44.3%
SW045	***1.1%***	***0.3%***	***0.5%***	***11.9%***	***1.5%***	***2.8%***	***6.3%***	***24.4%***	***8.0%***	***7.4%***	***39.8%***
SW046	***0.5%***	***0.3%***	***1.3%***	***7.1%***	***0.0%***	***1.5%***	***9.1%***	***19.8%***	***1.3%***	***7.7%***	***28.8%***
Average	1.0%	0.4%	0.9%	7.3%	0.2%	2.3%	8.5%	20.6%	4.3%	14.0%	38.9%
Top 25%	0.6%	0.3%	0.9%	7.6%	0.3%	2.3%	8.5%	20.5%	4.0%	10.8%	35.3%

TABLE C8

Capital structure - South West

	FARM ASSETS				OTHER FARM ASSETS (PER USABLE HECTARE)					LIABILITIES		EQUITY	
	Land value	Land value	Permanent water value	Permanent water value	Plant and equipment	Livestock	Hay and grain	Other assets	Total assets	Liabilities	Liabilities	Equity	Average equity
	$/HA	$/COW	$/HA	$/COW	$/HA	$/HA	$/HA	$/HA	$/HA	$/HA	$/COW	$/HA	%
Average	$11,397	$8,779	$33	$22	$1,338	$1,898	$134	$283	$13,393	$5,490	$4,476	$7,903	60%
Top 25%	$9,119	$7,768	$0	$0	$1,090	$1,875	$138	$513	$11,946	$4,369	$3,398	$7,479	60%

TABLE C9

Historical data - South West

Average farm income, costs and profit per kilogram of milk solids

	INCOME				VARIABLE COSTS							
	Milk income (net)		Gross farm income		Herd costs		Shed costs		Feed costs		Total variable costs	
	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)
2006-07	$4.31	$5.21	$5.05	$6.11	$0.19	$0.22	$0.13	$0.16	$2.61	$3.16	$2.97	$3.59
2007-08	$6.56	$7.59	$7.91	$9.15	$0.21	$0.24	$0.14	$0.17	$2.95	$3.41	$3.32	$3.85
2008-09	$5.40	$6.16	$6.13	$6.99	$0.22	$0.25	$0.15	$0.18	$2.55	$2.91	$2.93	$3.34
2009-10	$4.55	$5.03	$5.23	$5.79	$0.21	$0.23	$0.16	$0.18	$2.00	$2.21	$2.37	$2.62
2010-11	$5.62	$6.00	$6.34	$6.77	$0.21	$0.22	$0.18	$0.19	$2.10	$2.24	$2.48	$2.65
2011-12	$5.56	$5.86	$5.97	$6.30	$0.23	$0.24	$0.21	$0.22	$2.35	$2.48	$2.79	$2.95
2012-13	$4.90	$5.05	$5.24	$5.40	$0.24	$0.25	$0.21	$0.22	$2.60	$2.68	$3.06	$3.16
2013-14	$6.91	$6.91	$7.54	$7.54	$0.25	$0.25	$0.23	$0.23	$2.90	$2.90	$3.37	$3.37
Average		$5.98		$6.76		$0.24		$0.19		$2.75		$3.19

	OVERHEAD COSTS						PROFIT							
	Cash overhead costs		Non-cash overhead costs		Total overhead costs		Earnings before interest & tax		Interest & lease charges		Net farm income			
	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	RETURN ON ASSETS	RETURN ON EQUITY
2006-07	$0.79	$0.96	$0.99	$1.19	$1.78	$2.15	$0.30	$0.37	$0.59	$0.72	-$0.29	-$0.35	1.0%	-3.3%
2007-08	$0.95	$1.10	$0.84	$0.98	$1.69	$1.96	$2.89	$3.34	$0.72	$0.84	$2.17	$2.51	11.2%	14.8%
2008-09	$0.92	$1.05	$0.89	$1.01	$1.81	$2.06	$1.32	$1.51	$0.69	$0.79	$0.63	$0.72	4.5%	3.7%
2009-10	$0.89	$0.98	$1.03	$1.14	$1.92	$2.13	$0.91	$1.00	$0.80	$0.89	$0.10	$0.11	3.0%	1.3%
2010-11	$1.06	$1.13	$1.08	$1.16	$2.14	$2.29	$1.71	$1.83	$0.95	$1.01	$0.77	$0.82	5.5%	5.8%
2011-12	$1.11	$1.17	$1.29	$1.36	$2.40	$2.53	$0.78	$0.82	$0.90	$0.95	-$0.12	-$0.12	3.3%	-0.2%
2012-13	$0.95	$0.98	$1.20	$1.24	$2.15	$2.22	$0.03	$0.03	$0.78	$0.80	-$0.75	-$0.77	0.2%	-12.7%
2013-14	$1.14	$1.14	$1.00	$1.00	$2.14	$2.14	$2.03	$2.03	$0.69	$0.69	$1.33	$1.33	7.9%	9.9%
Average		$1.06		$1.14		$2.19		$1.37		$0.84		$0.53	4.6%	2.4%

Note: 'Real' dollar values are the nominal values converted to 2013/14 dollar equivalents by the consumer price index (CPI) to allow for inflation.

TABLE C10

Historical data - South West

Average farm physical information

	Total usable area	Milking area	Water used	Number of milking cows	Milking cows per usable area	Milk sold	Milk sold	Estimated grazed pasture*	Estimated conserved feed*	Home grown feed as % of ME consumed	Concentrate price	
	HA	HA	MM/HA	HD	HD/HA	KG MS/ COW	KG MS/ HA	T DM/ HA	T DM/ HA	% OF ME	NOMINAL ($/T DM)	REAL ($/ T DM)
2006-07	286	285	622	386	1.4	500	688	4.8	1.1	61%	$332	$401
2007-08	320	317	728	387	1.2	489	591	5.1	1.3	71%	$425	$492
2008-09	330	328	719	384	1.3	510	649	5.3	1.2	68%	$390	$445
2009-10	302	298	868	366	1.3	503	665	6.0	1.0	71%	$287	$317
2010-11	322	319	1,099	369	1.2	491	585	5.1	1.6	67%	$302	$322
2011-12	327	225	687	387	1.2	507	605	4.2	1.0	55%	$309	$326
2012-13	308	205	647	369	1.2	506	601	4.0	1.5	58%	$342	$352
2013-14	330	214	951	390	1.2	503	600	4.6	1.5	62%	$395	$395
Average	316	274	790	380	1.2	501	623	4.9	1.3	64%		$381

* 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.

TABLE D1

Main Financial Indicators - Gippsland

Farm number	Milk income (net)	All other income	Gross farm income	Total variable costs	Total overhead costs	Cost structure (variable costs / total costs)	Earnings Before Interest & Tax	Return on assets (excl. capital apprec.)	Interest & lease charges	Debt servicing ratio	Net farm income	Return on equity	Return on equity (incl. capital apprec.)
	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	%	$/ KG MS	%	$/ KG MS	% OF INCOME	$/ KG MS	%	%
GI004	$6.37	$0.18	$6.55	$2.31	$3.58	39%	$0.66	1.8%	$0.67	10%	-$0.01	-0.1%	-0.1%
GI005	$6.39	$0.29	$6.68	$2.94	$2.69	52%	$1.05	2.4%	$0.93	14%	$0.12	0.7%	0.7%
GI011	$6.78	$1.13	$7.92	$3.29	$2.09	61%	$2.53	5.8%	$1.01	13%	$1.51	8.0%	8.2%
GI012	$6.68	$0.59	$7.26	$2.33	$2.96	44%	$1.97	3.5%	$0.61	8%	$1.36	4.4%	4.1%
GI017	$6.26	$1.11	$7.37	$2.98	$3.00	50%	$1.39	4.5%	$0.21	3%	$1.18	6.2%	6.4%
GI021	$6.52	$0.47	$6.98	$3.52	$1.92	65%	$1.55	5.6%	$1.02	15%	$0.53	5.6%	5.7%
GI022	$6.65	$0.80	$7.45	$3.19	$2.26	59%	$2.01	5.9%	$1.03	14%	$0.98	4.7%	4.9%
GI025	$6.43	$1.35	$7.78	$3.45	$1.69	67%	$2.63	7.9%	$0.89	11%	$1.75	11.6%	5.3%
GI028	***$6.85***	***$0.45***	***$7.30***	***$3.87***	***$1.28***	***75%***	***$2.15***	***8.3%***	***$0.83***	***11%***	***$1.32***	***14.1%***	***15.1%***
GI029	***$6.37***	***$1.19***	***$7.57***	***$2.66***	***$1.92***	***58%***	***$3.00***	***11.6%***	***$0.19***	***3%***	***$2.80***	***12.3%***	***12.8%***
GI031	$6.51	$0.46	$6.97	$4.56	$1.94	70%	$0.47	2.5%	$0.41	6%	$0.05	0.4%	-0.1%
GI032	$6.41	$1.02	$7.44	$3.39	$2.03	63%	$2.01	6.8%	$0.16	2%	$1.85	7.3%	4.3%
GI037	$6.61	$0.83	$7.44	$3.51	$2.11	62%	$1.82	6.2%	$0.68	9%	$1.14	6.7%	4.1%
GI039	***$6.94***	***$0.39***	***$7.32***	***$3.42***	***$1.44***	***70%***	***$2.46***	***8.6%***	***$0.83***	***11%***	***$1.63***	***57.4%***	***72.2%***
GI040	$6.63	$0.87	$7.50	$3.59	$2.31	61%	$1.60	4.9%	$1.59	21%	$0.01	0.1%	0.1%
GI041	$6.48	$0.52	$7.00	$2.89	$1.55	65%	$2.56	8.2%	$0.38	5%	$2.19	9.1%	9.3%
GI042	$6.63	$0.62	$7.25	$3.38	$2.06	62%	$1.82	7.4%	$0.34	5%	$1.48	8.3%	8.6%
GI043	***$6.55***	***$0.49***	***$7.04***	***$2.83***	***$1.93***	***59%***	***$2.28***	***9.8%***	***$0.23***	***3%***	***$2.05***	***10.9%***	***11.6%***
GI044	$6.24	$0.55	$6.79	$2.68	$2.40	53%	$1.71	1.5%	$0.20	3%	$1.51	3.1%	3.1%
GI046	$6.44	$0.53	$6.97	$2.91	$1.82	61%	$2.24	8.1%	$1.34	19%	$0.90	8.4%	8.6%
GI047	$7.03	$0.49	$7.52	$2.97	$2.12	58%	$2.43	5.5%	$0.53	7%	$1.90	6.9%	7.0%
GI048	***$6.96***	***$0.64***	***$7.60***	***$3.14***	***$1.45***	***68%***	***$3.01***	***8.6%***	***$0.50***	***7%***	***$2.51***	***14.4%***	***15.4%***
GI049	***$7.09***	***$0.29***	***$7.38***	***$3.53***	***$1.76***	***67%***	***$2.10***	***11.1%***	***$0.73***	***10%***	***$1.37***	***25.7%***	***32.6%***
GI050	$6.46	$0.90	$7.36	$3.04	$2.34	56%	$1.98	7.6%	$0.83	11%	$1.15	11.2%	11.8%
GI051	$7.34	$1.44	$8.77	$3.48	$2.06	63%	$3.24	7.2%	$1.10	13%	$2.14	17.9%	17.8%
Average	$6.62	$0.70	$7.33	$3.19	$2.11	60%	$2.03	6.4%	$0.69	9%	$1.34	10.2%	10.8%
Top 25%	$6.79	$0.57	$7.37	$3.24	$1.63	66%	$2.50	9.7%	$0.55	7%	$1.95	22.5%	26.6%

* Top 25% are bold and italicised

TABLE D2

Physical Information - Gippsland

Farm number	Total usable area	Milking area	Water used	Number of milking cows	Milking cows per usable area	Milk sold	Milk sold	Fat	Protein
	HA	HA	MM/HA	HD	HD/HA	KG MS/ COW	KG MS/ HA	%	%
GI004	138	87	1,154	142	1.0	333	343	4.4%	3.5%
GI005	123	91	1,002	162	1.3	375	494	4.0%	3.2%
GI011	145	85	1,238	174	1.2	380	456	4.0%	3.4%
GI012	100	70	1,050	158	1.6	525	829	3.9%	3.5%
GI017	187	161	782	215	1.1	406	467	4.1%	3.1%
GI021	255	163	893	380	1.5	504	750	5.1%	3.9%
GI022	498	280	869	505	1.0	461	467	4.0%	3.5%
GI025	137	85	1,010	280	2.0	416	850	4.7%	3.5%
GI028	***150***	***94***	***1,238***	***250***	***1.7***	***510***	***850***	***3.7%***	***3.4%***
GI029	***79***	***79***	***1,074***	***222***	***2.8***	***497***	***1,397***	***4.5%***	***3.4%***
GI031	73	73	1,264	280	3.8	457	1,753	4.3%	3.6%
GI032	130	110	1,107	260	2.0	495	990	4.2%	3.4%
GI037	236	173	1,128	400	1.7	539	914	4.0%	3.5%
GI039	***183***	***120***	***1,002***	***270***	***1.5***	***510***	***754***	***4.1%***	***3.5%***
GI040	323	220	1,128	480	1.5	425	632	3.8%	3.1%
GI041	286	153	1,119	415	1.5	441	640	4.4%	3.4%
GI042	187	130	983	359	1.9	501	962	4.1%	3.3%
GI043	***110***	***67***	***1,231***	***241***	***2.2***	***571***	***1,251***	***4.3%***	***3.4%***
GI044	137	101	993	170	1.2	374	465	4.3%	3.3%
GI046	185	122	898	233	1.3	504	635	3.9%	3.5%
GI047	256	198	950	265	1.0	538	557	3.9%	3.4%
GI048	***342***	***185***	***911***	***475***	***1.4***	***527***	***732***	***4.0%***	***3.4%***
GI049	***72***	***72***	***864***	***240***	***3.3***	***448***	***1,494***	***4.6%***	***3.5%***
GI050	54	55	1,203	191	3.5	442	1,562	4.4%	3.5%
GI051	268	188	1,004	330	1.2	517	636	4.1%	3.2%
Average	186	126	1,044	284	1.8	468	835	4.2%	3.4%
Top 25%	156	103	1,053	283	2.1	510	1,079	4.2%	3.4%

TABLE D2

Physical Information - Gippsland

(Continued)

Farm number	Estimated grazed pasture**	Estimated conserved feed**	Home grown feed as % of ME consumed	Nitrogen application	Phosphorous application	Potassium application	Sulphur application	Labour efficiency	Labour efficiency
	T DM/ HA	T DM/ HA	% OF ME	KG/ HA	KG/ HA	KG/ HA	KG/ HA	HD/ FTE	KG MS/ FTE
GI004	3.3	2.8	71%	14.4	12.1	38.2	13.3	69	23,073
GI005	5.5	0.4	73%	31.2	7.6	16.1	0.4	74	27,658
GI011	7.4	0.0	71%	76.2	22.3	54.1	27.8	159	60,362
GI012	8.7	1.1	74%	92.0	26.8	82.0	33.2	59	30,971
GI017	4.4	0.6	74%	19.1	14.9	29.1	16.0	74	30,225
GI021	5.8	0.6	63%	59.1	10.5	12.7	8.8	98	49,250
GI022	5.1	4.8	70%	71.1	5.4	9.4	7.9	138	63,378
GI025	9.7	0.1	69%	232.3	22.3	37.1	2.5	127	52,852
GI028	***6.9***	***1.0***	***59%***	***170.0***	***34.0***	***113.3***	***32.0***	***128***	***65,412***
GI029	***11.5***	***0.9***	***74%***	***127.0***	***35.6***	***49.3***	***39.2***	***99***	***49,436***
GI031	10.3	0.3	51%	409.6	12.1	34.1	15.0	126	57,399
GI032	10.7	1.8	68%	374.3	31.1	66.0	39.7	132	65,162
GI037	7.8	2.1	68%	258.8	37.4	84.7	42.8	98	52,928
GI039	***6.2***	***1.7***	***51%***	***333.1***	***56.1***	***95.6***	***34.4***	***108***	***55,231***
GI040	5.2	0.0	67%	38.0	0.4	14.6	0.5	102	43,395
GI041	6.9	0.5	65%	132.7	3.3	13.6	4.2	131	57,868
GI042	11.3	0.1	75%	109.0	41.1	78.8	30.3	83	41,455
GI043	***11.9***	***0.5***	***69%***	***276.0***	***67.2***	***77.3***	***45.7***	***93***	***53,219***
GI044	5.2	1.2	76%	32.4	9.0	16.7	11.1	75	27,922
GI046	5.7	1.1	67%	79.9	20.7	36.7	21.1	98	49,486
GI047	4.3	1.4	70%	123.4	9.6	18.4	11.9	80	42,908
GI048	***6.7***	***0.3***	***60%***	***185.6***	***1.8***	***5.3***	***3.1***	***121***	***63,700***
GI049	***10.7***	***0.8***	***65%***	***259.4***	***27.0***	***79.1***	***19.7***	***123***	***55,054***
GI050	12.5	0.0	73%	216.7	78.8	46.4	19.6	112	49,266
GI051	5.7	1.3	70%	237.8	1.9	6.1	2.3	93	47,822
Average	7.6	1.0	68%	158.4	23.6	44.6	19.3	104	48,617
Top 25%	9.0	0.9	63%	225.2	36.9	70.0	29.0	112	57,009

** on milking area

TABLE D3

Purchased feed - Gippsland

Farm number	Purchased feed per milker	Concentrate price	Silage price	Hay price	Other feed price	Average purchased feed price	Average ME of purchased feed	Average purchased feed price	Percent of total energy imported
	T DM/HD	$/ T DM	$/ T DM	$/ T DM	$/ T DM	$/ T DM	MJ ME/ KG	C/ MJ	% OF ME
GI004	1.1	$421	-	-	-	$421	13.0	3.3	29%
GI005	1.3	$404	$688	$233	-	$394	13.3	3.0	27%
GI011	1.6	$424	-	-	-	$424	12.0	3.6	29%
GI012	1.7	$365	-	-	-	$365	13.0	2.8	26%
GI017	1.4	$417	$320	$272	-	$387	11.3	3.6	26%
GI021	1.9	$446	-	$312	$390	$437	13.0	3.4	37%
GI022	1.9	$365	-	-	$111	$356	12.6	2.9	30%
GI025	1.8	$377	$200	$282	-	$347	12.2	3.0	31%
GI028	***2.9***	***$455***	***-***	***$339***	***-***	***$429***	***11.8***	***3.8***	***41%***
GI029	***1.4***	***$394***	***-***	***$252***	***$225***	***$360***	***12.1***	***3.1***	***26%***
GI031	2.7	$441	-	$321	$272	$397	11.6	3.6	49%
GI032	2.4	$450	-	$163	-	$354	11.2	3.3	32%
GI037	2.0	$385	-	-	$641	$387	12.1	3.2	32%
GI039	***2.9***	***$316***	***-***	***$312***	***-***	***$315***	***11.7***	***2.8***	***49%***
GI040	2.5	$427	-	$273	-	$399	11.6	3.6	33%
GI041	2.0	$390	-	$285	-	$379	12.6	3.1	35%
GI042	1.9	$426	$135	$304	-	$385	11.7	3.4	25%
GI043	***1.8***	***$459***	***-***	***-***	***-***	***$459***	***13.0***	***3.6***	***31%***
GI044	1.3	$394	-	-	-	$394	12.5	3.2	24%
GI046	2.1	$391	-	$374	-	$390	12.7	3.1	33%
GI047	1.9	$342	-	$285	-	$338	12.8	2.7	30%
GI048	***2.9***	***$324***	***$159***	***$346***	***-***	***$299***	***11.4***	***2.8***	***40%***
GI049	***1.5***	***$494***	***$200***	***-***	***-***	***$490***	***13.0***	***3.8***	***35%***
GI050	1.3	$360	-	$316	-	$350	11.5	3.2	27%
GI051	1.8	$417	-	-	-	$417	12.5	3.4	30%
Average	1.9	$403	$284	$292	$328	$387	12.2	3.2	32%
Top 25%	2.2	$407	-	-	-	$392	12.2	3.3	37%

TABLE D4

Variable costs - Gippsland

Farm number	AI and herd test	Animal health	Calf rearing	Shed power	Dairy supplies	Total herd and shed costs	Fertiliser	Irrigation	Hay and silage making
	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS
GI004	$0.07	$0.10	$0.02	$0.10	$0.04	$0.33	$0.20	$0.00	$0.12
GI005	$0.12	$0.04	$0.14	$0.16	$0.10	$0.55	$0.56	$0.00	$0.14
GI011	$0.06	$0.05	$0.02	$0.19	$0.17	$0.48	$0.64	$0.01	$0.16
GI012	$0.06	$0.11	$0.03	$0.10	$0.08	$0.38	$0.40	$0.04	$0.07
GI017	$0.10	$0.13	$0.02	$0.14	$0.14	$0.52	$0.19	$0.03	$0.03
GI021	$0.25	$0.14	$0.17	$0.19	$0.18	$0.94	$0.29	$0.00	$0.10
GI022	$0.12	$0.29	$0.01	$0.07	$0.05	$0.55	$0.36	$0.00	$0.08
GI025	$0.01	$0.15	$0.09	$0.14	$0.12	$0.51	$0.57	$0.01	$0.16
GI028	***$0.14***	***$0.12***	***$0.04***	***$0.09***	***$0.11***	***$0.50***	***$0.61***	***$0.00***	***$0.09***
GI029	***$0.08***	***$0.10***	***$0.03***	***$0.06***	***$0.07***	***$0.33***	***$0.46***	***$0.20***	***$0.06***
GI031	$0.25	$0.13	$0.03	$0.20	$0.09	$0.70	$0.42	$0.38	$0.05
GI032	$0.11	$0.11	$0.22	$0.08	$0.05	$0.57	$0.82	$0.00	$0.04
GI037	$0.10	$0.25	$0.09	$0.08	$0.08	$0.60	$0.92	$0.03	$0.15
GI039	***$0.10***	***$0.14***	***$0.06***	***$0.11***	***$0.07***	***$0.47***	***$0.78***	***$0.00***	***$0.14***
GI040	$0.22	$0.16	$0.11	$0.14	$0.14	$0.76	$0.11	$0.02	$0.15
GI041	$0.11	$0.19	$0.01	$0.10	$0.03	$0.44	$0.41	$0.00	$0.17
GI042	$0.07	$0.06	$0.01	$0.06	$0.14	$0.34	$0.65	$0.47	$0.05
GI043	***$0.06***	***$0.08***	***$0.00***	***$0.06***	***$0.07***	***$0.27***	***$0.52***	***$0.33***	***$0.10***
GI044	$0.09	$0.03	$0.00	$0.11	$0.03	$0.26	$0.24	$0.30	$0.21
GI046	$0.12	$0.12	$0.03	$0.08	$0.04	$0.39	$0.38	$0.00	$0.17
GI047	$0.12	$0.22	$0.05	$0.13	$0.23	$0.74	$0.56	$0.00	$0.17
GI048	***$0.12***	***$0.13***	***$0.06***	***$0.10***	***$0.09***	***$0.50***	***$0.36***	***$0.05***	***$0.16***
GI049	***$0.10***	***$0.17***	***$0.04***	***$0.09***	***$0.18***	***$0.58***	***$0.44***	***$0.22***	***$0.07***
GI050	$0.16	$0.09	$0.03	$0.14	$0.10	$0.53	$0.31	$0.23	$0.22
GI051	$0.20	$0.33	$0.05	$0.13	$0.08	$0.79	$0.55	$0.00	$0.37
Average	$0.12	$0.14	$0.05	$0.11	$0.10	$0.52	$0.47	$0.09	$0.13
Top 25%	$0.10	$0.12	$0.04	$0.08	$0.10	$0.44	$0.53	$0.13	$0.10

Farm number	Fuel and oil	Pasture improvement/ cropping	Other feed costs	Fodder purchases	Grain/ concentrates/ other	Agistment costs	Total feed costs	Total variable costs
	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS
GI004	$0.17	$0.05	$0.00	$0.00	$1.43	$0.00	$1.98	$2.31
GI005	$0.09	$0.01	$0.05	$0.34	$1.20	$0.00	$2.39	$2.94
GI011	$0.16	$0.01	$0.00	$0.00	$1.84	$0.00	$2.82	$3.29
GI012	$0.10	$0.06	$0.03	$0.00	$1.26	$0.00	$1.96	$2.33
GI017	$0.11	$0.04	$0.00	$0.96	$1.07	$0.03	$2.46	$2.98
GI021	$0.16	$0.21	$0.04	$0.16	$1.63	$0.00	$2.58	$3.52
GI022	$0.17	$0.37	$0.01	$0.00	$1.65	$0.00	$2.63	$3.19
GI025	$0.07	$0.12	$0.02	$0.63	$1.30	$0.06	$2.94	$3.45
GI028	***$0.04***	***$0.11***	***$0.03***	***$0.44***	***$2.03***	***$0.00***	***$3.37***	***$3.87***
GI029	***$0.16***	***$0.02***	***$0.00***	***$0.31***	***$0.93***	***$0.19***	***$2.33***	***$2.66***
GI031	$0.06	$0.10	$0.13	$0.55	$1.75	$0.41	$3.86	$4.56
GI032	$0.14	$0.13	$0.00	$0.26	$1.43	$0.00	$2.82	$3.39
GI037	$0.09	$0.15	$0.00	$0.03	$1.53	$0.00	$2.91	$3.51
GI039	***$0.07***	***$0.16***	***$0.00***	***$0.22***	***$1.57***	***$0.00***	***$2.95***	***$3.42***
GI040	$0.06	$0.08	$0.03	$0.30	$2.08	$0.00	$2.83	$3.59
GI041	$0.06	$0.02	$0.01	$0.18	$1.61	$0.00	$2.45	$2.89
GI042	$0.14	$0.00	$0.06	$0.29	$1.36	$0.00	$3.03	$3.38
GI043	***$0.09***	***$0.03***	***$0.00***	***$0.00***	***$1.41***	***$0.08***	***$2.56***	***$2.83***
GI044	$0.08	$0.04	$0.00	$0.18	$1.38	$0.00	$2.43	$2.68
GI046	$0.09	$0.11	$0.08	$0.15	$1.52	$0.01	$2.52	$2.91
GI047	$0.09	$0.06	$0.15	$0.07	$1.12	$0.00	$2.23	$2.97
GI048	***$0.08***	***$0.14***	***$0.10***	***$0.68***	***$1.08***	***$0.00***	***$2.64***	***$3.14***
GI049	***$0.04***	***$0.11***	***$0.01***	***$0.02***	***$1.74***	***$0.31***	***$2.95***	***$3.53***
GI050	$0.06	$0.04	$0.07	$0.24	$1.05	$0.30	$2.51	$3.04
GI051	$0.16	$0.06	$0.09	$0.00	$1.44	$0.00	$2.68	$3.48
Average	$0.10	$0.09	$0.04	$0.24	$1.46	$0.06	$2.67	$3.19
Top 25%	$0.08	$0.10	$0.02	$0.28	$1.46	$0.10	$2.80	$3.24

TABLE D5

Overhead costs - Gippsland

Farm number	Rates	Registration and insurance	Farm insurance	Repairs and maintenance	Bank charges	Other overheads	Employed labour	Total cash overheads	Depreciation	Imputed owner/ operator & family labour	Total overheads
	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS
GI004	$0.10	$0.04	$0.07	$0.28	$0.02	$0.19	$0.07	$0.78	$0.29	$2.51	$3.58
GI005	$0.11	$0.03	$0.13	$0.02	$0.02	$0.05	$0.00	$0.36	$0.20	$2.14	$2.69
GI011	$0.07	$0.03	$0.06	$0.36	$0.00	$0.11	$0.18	$0.81	$0.45	$0.83	$2.09
GI012	$0.08	$0.02	$0.04	$0.37	$0.00	$0.23	$0.35	$1.10	$0.31	$1.56	$2.96
GI017	$0.05	$0.02	$0.04	$0.27	$0.00	$0.04	$0.99	$1.41	$0.41	$1.18	$3.00
GI021	$0.09	$0.01	$0.11	$0.15	$0.01	$0.11	$0.67	$1.15	$0.12	$0.65	$1.92
GI022	$0.07	$0.02	$0.09	$0.44	$0.00	$0.34	$0.85	$1.81	$0.25	$0.20	$2.26
GI025	$0.07	$0.01	$0.08	$0.17	$0.01	$0.10	$0.12	$0.55	$0.19	$0.95	$1.69
GI028	***$0.05***	***$0.03***	***$0.06***	***$0.19***	***$0.00***	***$0.02***	***$0.27***	***$0.61***	***$0.06***	***$0.61***	***$1.28***
GI029	***$0.07***	***$0.01***	***$0.09***	***$0.29***	***$0.01***	***$0.05***	***$0.56***	***$1.08***	***$0.13***	***$0.71***	***$1.92***
GI031	$0.04	$0.00	$0.03	$0.51	$0.04	$0.18	$1.07	$1.87	$0.08	$0.00	$1.94
GI032	$0.07	$0.03	$0.06	$0.24	$0.01	$0.08	$0.44	$0.93	$0.37	$0.74	$2.03
GI037	$0.04	$0.01	$0.05	$0.37	$0.00	$0.09	$0.80	$1.36	$0.31	$0.44	$2.11
GI039	***$0.04***	***$0.03***	***$0.02***	***$0.21***	***$0.00***	***$0.05***	***$0.35***	***$0.71***	***$0.11***	***$0.62***	***$1.44***
GI040	$0.10	$0.00	$0.14	$0.29	$0.00	$0.12	$0.83	$1.47	$0.22	$0.61	$2.31
GI041	$0.06	$0.00	$0.04	$0.32	$0.00	$0.06	$0.46	$0.94	$0.10	$0.51	$1.55
GI042	$0.04	$0.01	$0.08	$0.40	$0.00	$0.06	$0.08	$0.67	$0.07	$1.32	$2.06
GI043	***$0.04***	***$0.02***	***$0.07***	***$0.21***	***$0.02***	***$0.15***	***$0.50***	***$1.00***	***$0.20***	***$0.73***	***$1.93***
GI044	$0.10	$0.02	$0.04	$0.05	$0.00	$0.02	$0.58	$0.81	$0.14	$1.45	$2.40
GI046	$0.06	$0.01	$0.01	$0.37	$0.00	$0.18	$0.46	$1.08	$0.14	$0.61	$1.82
GI047	$0.07	$0.02	$0.03	$0.24	$0.02	$0.08	$0.45	$0.90	$0.25	$0.97	$2.12
GI048	***$0.05***	***$0.02***	***$0.03***	***$0.31***	***$0.00***	***$0.04***	***$0.38***	***$0.84***	***$0.08***	***$0.54***	***$1.45***
GI049	***$0.04***	***$0.00***	***$0.10***	***$0.35***	***$0.01***	***$0.10***	***$1.07***	***$1.66***	***$0.10***	***$0.00***	***$1.76***
GI050	$0.05	$0.02	$0.10	$0.24	$0.18	$0.04	$0.06	$0.69	$0.49	$1.17	$2.34
GI051	$0.05	$0.01	$0.06	$0.33	$0.00	$0.18	$0.76	$1.39	$0.18	$0.49	$2.06
Average	$0.06	$0.02	$0.07	$0.28	$0.01	$0.11	$0.49	$1.04	$0.21	$0.86	$2.11
Top 25%	$0.05	$0.02	$0.06	$0.26	$0.01	$0.07	$0.52	$0.98	$0.11	$0.53	$1.63

TABLE D6

Variable costs % - Gippsland

Percentage of total farm costs

Farm number	AI and herd test	Animal health	Calf rearing	Shed power	Dairy supplies	Total herd and shed costs	Fertiliser	Irrigation	Hay and silage making
	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS
GI004	1.2%	1.7%	0.3%	1.7%	0.6%	5.6%	3.4%	0.0%	2.0%
GI005	2.0%	0.6%	2.4%	2.8%	1.8%	9.7%	10.0%	0.0%	2.5%
GI011	1.1%	0.9%	0.4%	3.4%	3.1%	8.9%	11.9%	0.1%	3.0%
GI012	1.2%	2.0%	0.6%	1.9%	1.5%	7.2%	7.5%	0.8%	1.3%
GI017	1.7%	2.1%	0.3%	2.3%	2.4%	8.7%	3.2%	0.4%	0.4%
GI021	4.7%	2.5%	3.1%	3.5%	3.4%	17.2%	5.4%	0.0%	1.8%
GI022	2.2%	5.3%	0.2%	1.4%	1.0%	10.2%	6.6%	0.0%	1.4%
GI025	0.2%	2.8%	1.7%	2.7%	2.4%	9.9%	11.2%	0.1%	3.2%
GI028	***2.7%***	***2.2%***	***0.9%***	***1.8%***	***2.2%***	***9.7%***	***11.8%***	***0.0%***	***1.8%***
GI029	***1.7%***	***2.1%***	***0.6%***	***1.3%***	***1.5%***	***7.2%***	***10.0%***	***4.3%***	***1.3%***
GI031	3.8%	2.1%	0.5%	3.0%	1.3%	10.7%	6.4%	5.9%	0.7%
GI032	1.9%	2.1%	4.1%	1.4%	0.9%	10.4%	15.1%	0.0%	0.7%
GI037	1.7%	4.5%	1.6%	1.4%	1.4%	10.6%	16.4%	0.5%	2.7%
GI039	***2.0%***	***2.9%***	***1.1%***	***2.2%***	***1.3%***	***9.6%***	***16.1%***	***0.1%***	***2.8%***
GI040	3.7%	2.6%	1.9%	2.4%	2.3%	12.9%	1.9%	0.3%	2.6%
GI041	2.4%	4.4%	0.2%	2.2%	0.7%	9.8%	9.2%	0.0%	3.8%
GI042	1.3%	1.1%	0.2%	1.1%	2.6%	6.3%	11.9%	7.8%	1.0%
GI043	***1.3%***	***1.6%***	***0.0%***	***1.3%***	***1.4%***	***5.6%***	***10.9%***	***6.5%***	***2.2%***
GI044	1.7%	0.6%	0.0%	2.1%	0.7%	5.1%	4.7%	5.9%	4.1%
GI046	2.5%	2.5%	0.6%	1.7%	0.8%	8.2%	8.1%	0.1%	3.5%
GI047	2.3%	4.3%	0.9%	2.5%	4.5%	14.5%	11.0%	0.0%	3.3%
GI048	***2.7%***	***2.8%***	***1.4%***	***2.1%***	***1.9%***	***10.8%***	***7.8%***	***1.2%***	***3.4%***
GI049	***2.0%***	***3.3%***	***0.7%***	***1.7%***	***3.3%***	***10.9%***	***8.3%***	***4.1%***	***1.3%***
GI050	3.0%	1.7%	0.6%	2.7%	1.9%	9.8%	5.8%	4.2%	4.1%
GI051	3.6%	6.0%	0.9%	2.4%	1.4%	14.3%	10.0%	0.0%	6.7%
Average	2.2%	2.6%	1.0%	2.1%	1.8%	9.8%	9.0%	1.7%	2.5%
Top 25%	2.1%	2.5%	0.8%	1.7%	1.9%	9.0%	10.8%	2.7%	2.1%

TABLE D6

Variable costs % - Gippsland

Percentage of total farm costs (Continued)

Farm number	Fuel and oil	Pasture improvement/ cropping	Other feed costs	Fodder purchases	Grain/ concentrates/ other	Agistment costs	Total feed costs	Total variable costs
	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS
GI004	2.9%	0.9%	0.1%	0.0%	24.3%	0.0%	33.6%	39.2%
GI005	1.6%	0.2%	0.8%	6.0%	21.3%	0.0%	42.5%	52.2%
GI011	2.9%	0.2%	0.0%	0.0%	34.1%	0.0%	52.3%	61.1%
GI012	1.8%	1.1%	0.6%	0.0%	23.7%	0.0%	36.9%	44.1%
GI017	1.8%	0.7%	0.0%	16.1%	17.9%	0.5%	41.1%	49.9%
GI021	2.9%	3.9%	0.7%	2.9%	29.9%	0.0%	47.5%	64.7%
GI022	3.1%	6.8%	0.1%	0.0%	30.4%	0.0%	48.4%	58.5%
GI025	1.4%	2.4%	0.3%	12.2%	25.3%	1.1%	57.2%	67.1%
GI028	***0.8%***	***2.2%***	***0.6%***	***8.6%***	***39.5%***	***0.0%***	***65.4%***	***75.1%***
GI029	***3.5%***	***0.4%***	***0.0%***	***6.9%***	***20.3%***	***4.2%***	***50.9%***	***58.1%***
GI031	1.0%	1.5%	2.0%	8.5%	27.0%	6.3%	59.4%	70.1%
GI032	2.5%	2.5%	0.0%	4.8%	26.4%	0.0%	52.1%	62.5%
GI037	1.7%	2.7%	0.1%	0.5%	27.2%	0.0%	51.8%	62.4%
GI039	***1.4%***	***3.4%***	***0.0%***	***4.6%***	***32.4%***	***0.0%***	***60.7%***	***70.4%***
GI040	1.1%	1.3%	0.5%	5.0%	35.3%	0.0%	48.0%	60.9%
GI041	1.2%	0.3%	0.2%	4.0%	36.4%	0.0%	55.2%	65.0%
GI042	2.5%	0.0%	1.1%	5.4%	25.0%	0.0%	55.8%	62.2%
GI043	***2.0%***	***0.6%***	***0.0%***	***0.0%***	***29.7%***	***1.7%***	***53.9%***	***59.5%***
GI044	1.5%	0.8%	0.0%	3.5%	27.2%	0.0%	47.8%	52.8%
GI046	2.0%	2.3%	1.8%	3.1%	32.2%	0.1%	53.2%	61.4%
GI047	1.8%	1.2%	3.0%	1.4%	22.1%	0.0%	43.8%	58.3%
GI048	***1.7%***	***3.0%***	***2.2%***	***14.7%***	***23.6%***	***0.0%***	***57.5%***	***68.4%***
GI049	***0.8%***	***2.1%***	***0.2%***	***0.4%***	***32.9%***	***5.8%***	***55.8%***	***66.7%***
GI050	1.1%	0.8%	1.2%	4.4%	19.5%	5.5%	46.7%	56.4%
GI051	3.0%	1.2%	1.7%	0.0%	25.9%	0.0%	48.5%	62.8%
Average	1.9%	1.7%	0.7%	4.5%	27.6%	1.0%	50.6%	60.4%
Top 25%	1.7%	1.9%	0.5%	5.9%	29.7%	1.9%	57.4%	66.4%

TABLE D7

Overhead costs % - Gippsland

Percentage of total farm costs

Farm number	Rates	Registration and insurance	Farm insurance	Repairs and maintenance	Bank charges	Other overheads	Employed labour	Total cash overheads	Depreciation	Imputed owner/ operator & family labour	Total overheads
	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	
GI004	1.7%	0.7%	1.2%	4.8%	0.3%	3.3%	1.2%	13.2%	4.9%	42.7%	60.8%
GI005	1.9%	0.5%	2.4%	0.4%	0.3%	0.8%	0.0%	6.3%	3.5%	38.0%	47.8%
GI011	1.3%	0.6%	1.2%	6.6%	0.0%	2.0%	3.4%	15.0%	8.4%	15.4%	38.9%
GI012	1.4%	0.3%	0.8%	7.0%	0.1%	4.4%	6.7%	20.7%	5.8%	29.4%	55.9%
GI017	0.9%	0.4%	0.6%	4.6%	0.0%	0.7%	16.5%	23.6%	6.9%	19.6%	50.1%
GI021	1.6%	0.2%	2.1%	2.8%	0.1%	2.0%	12.3%	21.1%	2.3%	11.9%	35.3%
GI022	1.3%	0.3%	1.7%	8.1%	0.1%	6.2%	15.6%	33.3%	4.6%	3.6%	41.5%
GI025	1.5%	0.2%	1.5%	3.3%	0.2%	1.9%	2.3%	10.8%	3.7%	18.5%	32.9%
GI028	***1.0%***	***0.5%***	***1.1%***	***3.7%***	***0.1%***	***0.3%***	***5.2%***	***11.9%***	***1.1%***	***11.8%***	***24.9%***
GI029	***1.5%***	***0.3%***	***2.0%***	***6.4%***	***0.1%***	***1.2%***	***12.2%***	***23.6%***	***2.7%***	***15.5%***	***41.9%***
GI031	0.5%	0.0%	0.5%	7.9%	0.6%	2.8%	16.4%	28.7%	1.2%	0.0%	29.9%
GI032	1.3%	0.6%	1.1%	4.4%	0.1%	1.4%	8.2%	17.1%	6.8%	13.6%	37.5%
GI037	0.7%	0.2%	0.9%	6.6%	0.1%	1.5%	14.3%	24.3%	5.4%	7.9%	37.6%
GI039	***0.9%***	***0.6%***	***0.4%***	***4.4%***	***0.0%***	***1.0%***	***7.3%***	***14.5%***	***2.3%***	***12.8%***	***29.6%***
GI040	1.7%	0.0%	2.3%	4.9%	0.0%	2.0%	14.1%	24.9%	3.8%	10.4%	39.1%
GI041	1.3%	0.0%	0.9%	7.1%	0.1%	1.3%	10.3%	21.1%	2.4%	11.5%	35.0%
GI042	0.8%	0.1%	1.4%	7.3%	0.1%	1.1%	1.4%	12.3%	1.2%	24.4%	37.8%
GI043	***0.8%***	***0.4%***	***1.5%***	***4.3%***	***0.4%***	***3.2%***	***10.4%***	***21.0%***	***4.3%***	***15.3%***	***40.5%***
GI044	2.0%	0.3%	0.9%	0.9%	0.0%	0.4%	11.4%	16.0%	2.7%	28.6%	47.2%
GI046	1.3%	0.1%	0.1%	7.7%	0.0%	3.8%	9.7%	22.8%	2.9%	12.9%	38.6%
GI047	1.3%	0.3%	0.6%	4.7%	0.3%	1.6%	8.9%	17.7%	5.0%	19.0%	41.7%
GI048	***1.1%***	***0.4%***	***0.7%***	***6.7%***	***0.1%***	***0.9%***	***8.4%***	***18.2%***	***1.7%***	***11.7%***	***31.6%***
GI049	***0.7%***	***0.0%***	***1.8%***	***6.7%***	***0.1%***	***1.8%***	***20.2%***	***31.4%***	***1.9%***	***0.0%***	***33.3%***
GI050	1.0%	0.3%	1.8%	4.5%	3.3%	0.8%	1.1%	12.8%	9.1%	21.7%	43.6%
GI051	1.0%	0.2%	1.1%	5.9%	0.0%	3.2%	13.8%	25.1%	3.2%	8.9%	37.2%
Average	1.2%	0.3%	1.2%	5.3%	0.3%	2.0%	9.2%	19.5%	3.9%	16.2%	39.6%
Top 25%	1.0%	0.4%	1.2%	5.4%	0.1%	1.4%	10.6%	20.1%	2.3%	11.2%	33.6%

TABLE D8

Capital structure - Gippsland

FARM ASSETS					OTHER FARM ASSETS (PER USABLE HECTARE)					LIABILITIES		EQUITY	
	Land value	Land value	Permanent water value	Permanent water value	Plant and equipment	Livestock	Hay and grain	Other assets	Total assets	Liabilities	Liabilities	Equity	Average equity
	$/HA	$/COW	$/HA	$/COW	$/HA	$/HA	$/HA	$/HA	$/HA	$/HA	$/COW	$/HA	%
Average	$16,269	$8,840	$1,429	$569	$1,528	$2,596	$163	$1,307	$21,009	$7,099	$3,964	$13,910	66%
Top 25%	$13,421	$5,749	$2,252	$1,042	$1,091	$3,163	$159	$2,360	$21,766	$7,400	$3,206	$14,366	65%

TABLE D9

Historical data - Gippsland

Average farm income, costs and profit per kilogram of milk solids

	INCOME				VARIABLE COSTS							
	Milk income (net)		Gross farm income		Herd costs		Shed costs		Feed costs		Total variable costs	
	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)
2006-07	$4.46	$5.39	$5.16	$6.24	$0.23	$0.28	$0.15	$0.18	$2.31	$2.80	$2.72	$3.29
2007-08	$6.62	$7.67	$7.58	$8.78	$0.27	$0.32	$0.13	$0.15	$2.80	$3.24	$3.30	$3.82
2008-09	$5.32	$6.07	$6.05	$6.90	$0.25	$0.29	$0.15	$0.18	$2.61	$2.97	$3.01	$3.44
2009-10	$4.38	$4.85	$5.07	$5.61	$0.22	$0.24	$0.17	$0.18	$1.95	$2.15	$2.33	$2.58
2010-11	$5.59	$5.97	$6.34	$6.76	$0.28	$0.29	$0.19	$0.20	$2.06	$2.19	$2.52	$2.69
2011-12	$5.37	$5.66	$5.89	$6.21	$0.29	$0.30	$0.18	$0.19	$2.12	$2.23	$2.59	$2.73
2012-13	$4.75	$4.89	$4.99	$5.14	$0.31	$0.32	$0.22	$0.23	$2.31	$2.38	$2.85	$2.93
2013-14	$6.62	$6.62	$7.33	$7.33	$0.31	$0.31	$0.21	$0.21	$2.67	$2.67	$3.19	$3.19
Average		$5.89		$6.62		$0.29		$0.19		$2.58		$3.08

	OVERHEAD COSTS						PROFIT							
	Cash overhead costs		Non-cash overhead costs		Total overhead costs		Earnings before interest & tax		Interest & lease charges		Net farm income			
	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	NOMINAL ($/KG MS)	REAL ($/KG MS)	RETURN ON ASSETS	RETURN ON EQUITY
2006-07	$0.69	$0.84	$1.44	$1.74	$2.13	$2.57	$0.31	$0.38	$0.57	$0.69	-$0.26	-$0.31	0.8%	-2.1%
2007-08	$0.80	$0.92	$0.90	$1.04	$1.59	$1.84	$2.69	$3.12	$0.61	$0.71	$2.08	$2.41	9.7%	14.9%
2008-09	$0.78	$0.89	$0.93	$1.06	$1.71	$1.95	$1.28	$1.46	$0.51	$0.58	$0.76	$0.87	4.0%	3.4%
2009-10	$0.80	$0.89	$1.09	$1.21	$1.90	$2.10	$0.80	$0.88	$0.70	$0.77	$0.10	$0.11	2.6%	0.7%
2010-11	$0.93	$1.00	$0.93	$0.99	$1.86	$1.98	$1.96	$2.09	$0.67	$0.71	$1.29	$1.38	6.1%	9.9%
2011-12	$0.95	$1.00	$1.05	$1.11	$2.01	$2.12	$1.30	$1.37	$0.65	$0.69	$0.64	$0.68	4.4%	5.1%
2012-13	$1.09	$1.12	$1.19	$1.22	$2.28	$2.34	-$0.14	-$0.14	$0.73	$0.75	-$0.86	-$0.89	-0.2%	-6.2%
2013-14	$1.04	$1.04	$1.07	$1.07	$2.11	$2.11	$2.03	$2.03	$0.69	$0.69	$1.34	$1.34	6.4%	10.2%
Average		$0.96		$1.18		$2.13		$1.40		$0.70		$0.70	4.2%	4.5%

Note: 'Real' dollar values are the nominal values converted to 2013/14 dollar equivalents by the consumer price index (CPI) to allow for inflation.

TABLE D10

Historical data - Gippsland

Average farm physical information

	Total usable area	Milking area	Water used	Number of milking cows	Milking cows per usable area	Milk sold	Milk sold	Estimated grazed pasture*	Estimated conserved feed*	Home grown feed as % of ME consumed	Concentrate price	
	HA	HA	MM/HA	HD	HD/HA	KG MS/ COW	KG MS/ HA	T DM/ HA	T DM/ HA	% OF ME	NOMINAL ($/T DM)	REAL ($/ T DM)
2006-07	191	187	668	282	1.4	405	579	5.6	1.2	71%	$339	$410
2007-08	181	174	838	289	1.6	464	741	7.2	1.1	74%	$451	$522
2008-09	182	172	814	276	1.6	483	803	7.2	0.8	71%	$385	$439
2009-10	172	160	1022	268	1.7	472	792	7.6	0.9	73%	$273	$302
2010-11	190	187	1,123	285	1.6	494	811	7.1	1.7	69%	$315	$336
2011-12	189	126	1,182	291	1.7	501	843	7.4	0.9	62%	$311	$328
2012-13	194	134	906	299	1.7	462	781	6.9	0.6	62%	$356	$367
2013-14	186	126	1,044	284	1.8	468	835	7.6	1.0	68%	$403	$403
Average	186	158	950	284	1.6	468	773	7.1	1.0	69%		$388

* 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

All other income

Income to the farm from all sources except milk. Includes livestock trading profit, feed inventory change, dividends, interest payments received, rents from cottages, rebates and grants.

Appreciation

An increase in the value of an asset in the market place. Often only applicable to land value.

Asset

Anything managed by the farm, whether it is owned or not. Assets include land and buildings, plant and machinery, fixtures and fittings, trading stock, investments, debtors, and cash.

Break-even price required

Cost of production minus income only sourced from the main enterprise output. Allows for direct comparison with price received of main output.

Cash overheads

All fixed costs that have a cash cost to the business. Includes all overhead costs except imputed people costs and depreciation.

Cost of production

It is calculated as variable plus overhead costs and accounts for changes in fodder inventory and livestock trading losses. Usually expressed in terms of the main enterprise output i.e. kilograms of milk solids.

Cost structure

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

Debt servicing ratio

Interest and lease costs as a percentage of gross farm income.

Depreciation

Decrease is value over time of capital asset, usually as a result of using the asset. Depreciation is not cash, but reduces the book value of the asset and is therefore a cost.

Earnings before interest and tax (EBIT)

Gross farm income minus total variable costs and total overhead costs.

EBIT %

The ratio of EBIT compared to gross farm income. Indicates the percentage of each dollar of gross income that is retained as EBIT.

Employed labour cost

Cash cost of any paid employee, including on-costs such as superannuation, workcover etc.

Equity

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

Equity %

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

Farm income

See gross farm income.

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.

Finance costs

Total interest plus total lease costs paid.

Full time equivalent (FTE)

Standardised people unit. Equal to 2400 hours a year. Calculated as 50 hours a week, 48 weeks a year.

Grazed area

Total usable area minus any area used only for fodder production during the year.

Grazed pasture

Calculated using the energetics method. Grazed pasture is calculated as the gap between total energy required by livestock over the year and amount of energy available from other sources (hay, silage, grain and concentrates).

Total energy required by livestock is a factor of; age, weight, growth rate, pregnancy and lactation requirements, distance to shed and terrain, and number of animals.

Total energy available is the sum of energy available from all feed sources except pasture, calculated as (weight (kg) x dry matter content (DM %) x metabolisable energy (MJ/kg DM)).

Gross farm income

Farm income including milk sales, livestock and feed trading gains and other income such as income from milk share dividends.

Gross margin

Gross income minus total variable costs.

Herd costs

Cost of 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 cost of owner/operator, family and sharefarmer time in the business, taken as the greater of $400 per cow less employed labour or $25 per hour.

Liability

Money owed to someone else, eg. family or an institute such as a bank.

Metabolisable energy

Energy available to livestock in feed, expressed in megajoules per kilogram of dry matter (MJ/kg DM).

Milk income

Income through the sales of milk.

Milking area

Area grazed by the milking cows.

Net farm income

Earnings before interest and tax minus interest and lease costs. The amount of profit available for capital investment, loan principal repayments and tax.

Number of milking cows

Total number of cows milked for at least three months.

Other income

Income to the farm from other farm owned assets and external sources. Includes dividends, interest payments received and rents from cottage.

Overhead costs

All fixed costs incurred by the farm business e.g. rates, administration, depreciation, insurance, imputed labour. Interest, leases, capital expenditure, principal repayments and tax are not included.

Labour cost

Cost of the labour resource on farm.
Includes both imputed and employed labour cost.

Labour efficiency

FTEs per cow and per kilogram of milk solid. Measures of productivity of the total labour resources in the business.

Labour resource

Any person who works in the business, be they the owner, family, sharefarmer or employed on a permanent, part time or contract basis.

Livestock trading profit

An estimate of the annual contribution to gross 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. An increase in livestock trading indicates there was an appreciation of livestock or an increase in livestock numbers over the year.

Return on assets (ROA)

Earnings before interest and tax divided by the value of total assets under management.

Return on equity (ROE)

Net farm income divided by the value of total equity.

Shed costs

Cost of shed power and dairy supplies such as filter socks, rubber ware, vacuum pump oil etc.

Total income

See gross farm income.

Total usable area

Total hectares managed minus that area of land which is of little or no value for livestock production eg house and shed area.

Total water used

Total rainfall plus average irrigation water used expressed as millimetres per hectare, where irrigation water is calculated as: (total megalitres of water used/total usable area) x 100.

Variable costs

All costs that vary with the size of production in the enterprise eg herd, shed and feed costs.

List of abbreviations

CH_4	Methane gas.
CO_2	Carbon dioxide gas.
CO_2-e	Carbon dioxide equivalent.
DFMP	Dairy Farm Monitor Project.
DM	Dry matter of feed stuffs.
DEPI	Department of Environment and Primary Industries Victoria.
EBIT	Earnings before interest and tax.
FTE	Full time equivalent.
GWP	Global Warming Potential.
ha	Hectares.
HRWS	High Reliability Water Shares.
kg	Kilograms.
LRWS	Low Reliability Water Shares.
ME	Metabolisable energy (MJ/kg).
MJ	Megajoules of energy.
mm	Millimetres. 1 mm is equivalent to 4 points or 1/25th of an inch of rainfall.
MS	Milk solids (proteins and fats).
N_2O	Nitrous oxide gas.
Q1	First quartile, i.e. the value of which one quarter, or 25%, of data in that range is less than.
Q3	Third quartile, i.e. the value of which one quarter, or 25%, of data in that range is greater than.
RoA	Return on assets.
RoE	Return on equity.
t	Tonne = 1,000 kg.

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