Dairy Industry Farm Monitor Project

Annual Report
2011/12

State Government Victoria

Dairy Australia
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Acknowledgments

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

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This report has been produced in conjunction with Dairy Australia.

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

If you would like to receive this information/publication in an accessible format (such as large print or audio) please call the Customer Service Centre on 136 186, TTY 1800 122 969, or email customer.service@dpi.vic.gov.au.

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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 presents a guide to the layout of the report and should not be confused with Part II. Farm monitor method which discusses the method for the farm data analysis.

This report is presented in the following parts;

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

The report presents visual descriptions of the data for the 2011/12 financial 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 the fact that farms are not randomly selected.

The top 25% of farms are presented as lighter coloured bars in the regional overview figures. Return on assets has replaced earnings before interest and tax (EBIT) per hectare as the determinate of the top producers due to return on assets providing an assessment of the performance of the whole farm while accounting for differences in location, the quality of land and production system. Reference to the average of last year's top 25% refers to those farms as ranked by EBIT per hectare.

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 (75%) 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 provide both brevity, and clarity, in the report, groups of participating farms in each region are referred to by their regional name;

- The 24 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 hectare basis, with occasional reference to measure on a per kilogram of milk solids sold, or per cow basis. The appendix tables contain the majority of financial information on a per kilogram of milk solids basis. This is done to give a broader range of information and to ensure that data is presented in the format relevant to the discussion.

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 method when directly comparing figures from this report with those generated via other means. More detail on the method is provided in Part II.

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 the 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 74 farms as the one sample and not from combining the top farms from each region.

Discussion on 'last year' refers to the 2010/11 Dairy Industry Farm Monitor Project report. It must be noted that farms included in the dataset for 2010/11 and 2011/12 are not identical and so care should be exercised when making comparisons between the two years. Farms that were included in last year's 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.

What's new in 2012!

The Dairy Industry Farm Monitor Project for 2011/12 includes a number of changes since last years' report. The following highlights the most significant of those.

- The top 25% of farms will now be ranked by return on assets as opposed to earnings before interest and tax per hectare. The change in ranking method is to enable a more complete comparison of whole farm performance to be made between farms in different areas and regions.
- Pasture consumption has been calculated and reported for the milking area only. This calculation accounts for pasture consumed by grazing cows and young and dry stock plus removal of pasture for hay and silage production on the milking area.
- The cost structure indicator now reports on the proportion of total costs in the farm business that are attributable to variable costs. It is calculated as variable costs divided by total costs, where total costs is variable plus overhead costs.

Keep an eye on the project website for further reports and updates on the project, including the 2011/12 Dairy Industry Farm Monitor Project Feature Article. The focus of this year's feature article will be on the performance of those farms that are ranked in the top 25%. The financial and physical aspects of these farms will be examined to determine what, if any, specific characteristics enable these farms to perform strongly over time. The feature article will be released online on 31 October 2012.

Visit the project website at
www.dpi.vic.gov.au/dairyfarmmonitor
or
www.dairyaustralia.com.au/dairyfarmmonitor.

Keep an eye on the project website for further reports and updates on the project, including the 2011/12 Dairy Industry Farm Monitor Project Feature Article at;

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www.dairyaustralia.com.au/dairyfarmmonitor

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farm.monitor.project@dpi.vic.gov.au.

I. Summary

Summary

This is the sixth year of the Dairy Industry Farm Monitor Project in Victoria. The project aims to provide the Victorian dairy industry with valuable farm level data relating to profitability and production, as well as identifying the key drivers of productivity and profitability growth.

Data was collected from 74 farms across three regions of Victoria; northern Victoria, south west Victoria and Gippsland. Participants have been selected with the objective of representing 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.

Following on from 2010/11, a year that saw the second highest milk price on record and strong returns for farmers across all regions, 2011/12 again yielded a strong milk price, however seasonal conditions in the southern regions conspired to depress returns compared to last year. The milk price opened strongly, with price setter Murray Goulburn offering $4.90 per kilogram of milk solids and other companies quickly following suit. Throughout the year, favourable seasonal conditions in most of the major dairy producing regions around the world helped meet growing global demand which kept Victorian farm gate prices from rising as high as they did last year. Despite the strong Australian dollar, milk price step-ups, including several late in the season helped push the average closing milk price to $5.52 per kilogram of milk solids.

In Victoria a reversal in the trends for seasonal conditions over the last decade occurred in 2011/12. The North experienced what can best be described as a traditional season for the first time in a decade, while the southern regions faced adverse seasonal conditions. In the North rainfall was above average for the year and irrigation allocations closed at 100% of high reliability water shares on all northern systems. The highest rainfall on record was recorded in areas north of Shepparton leading to some flooding in this region and parts of the north east. In the South West following a wet winter, the spring cut out early with much of the region experiencing only decile one to three rainfall over the summer and autumn period. Conversely, Gippsland experienced very wet winter and spring conditions in 2011 with flooding, wet soils and pugging being the major challenges faced by farmers in that region.

Across the three regions profitability varied as a result of the diverse seasonal conditions. In the North the good rainfall and water allocations helped farmers to reduce their cost of production by 10%, more than enough to offset the 1% drop in milk price. This result saw farms in the North improve their average whole farm earnings before interest and tax from $202,806 in 2010/11 to $232,119 in 2011/12. Subsequently return on assets rose from 7.0% in 2010/11 to 7.6% in 2011/12 and all farms in the sample reported a positive EBIT for the second consecutive year.

Milk price fell by 1% in the South West closing the year at $5.56/kg MS. The dry spell however caused costs to rise by 12% as farmers spent more on purchased feed and labour. In addition to this farmers in the South West depleted on farm fodder reserves by almost $52,000 worth of stored feed leaving many farms with little or no hay or silage by the end of the financial year. These conditions saw return on assets for farms in the South West fall from 5.5% in 2010/11 to 3.3% in 2011/12. High interest and lease costs saw average net farm income fall to $51,108. Despite this positive average net farm income, 13 of 25 farms in the sample recorded a loss for the financial year.

Gippsland farmers experienced the largest drop in milk price, falling from $5.59/kg MS in 2010/11 to $5.37/kg MS in 2011/12; a 4% drop. Variable costs were very similar to last year while overhead costs rose by almost 9% mainly due to increased imputed labour costs. This led the average return on assets for Gippsland farms to fall from 6.1% in 2010/11 to 4.4% 2011/12.

The top 25% of producers again showed the strength of well run dairy farms, recording profitability levels well above the average. These farms averaged earnings before interest and tax of $1.90 per kilogram of milk solids, $1,845 per hectare, and a return on assets of 10.0 percent excluding capital appreciation.

Expectations of a lower milk price and rising input costs, particularly for grain, meant that confidence in the dairy industry was down on last year with almost two-thirds of producers expecting farm business returns to deteriorate. Despite 90% of farmers also expecting a decrease in their milk price, more than 50% in each region are intending to increase production in 2012/13. Milk price and input costs, especially grain are the main issues concerning farmers in the coming 12 months, along with the impact of the carbon tax. Over the longer term milk price and input costs were again of major concern as well as succession planning and farm expansion and development.

A greenhouse gas emission audit was conducted using the Australian National Greenhouse Gas Inventory method. The average level of greenhouse gases emitted decreased to 10.7 tonnes per tonne of milk solids produced compared to 10.9 t/t MS produced in 2010/11.

A historical analysis over the past six years of the project showed that the North enjoyed its highest returns since the record milk price year of 2007/08. In the South West returns declined sharply falling to their lowest level since 2006/07. Gippsland returns also fell although they remained above the levels recorded in 2008/09 and 2009/10.

II.
Farm monitor method

Farm monitor method

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

The method employed to generate the profitability and productivity 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 DIFMP reports. Readers should be aware that not all benchmarking programs use the same method 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 INDUSTRY FARM MONITOR PROJECT METHOD

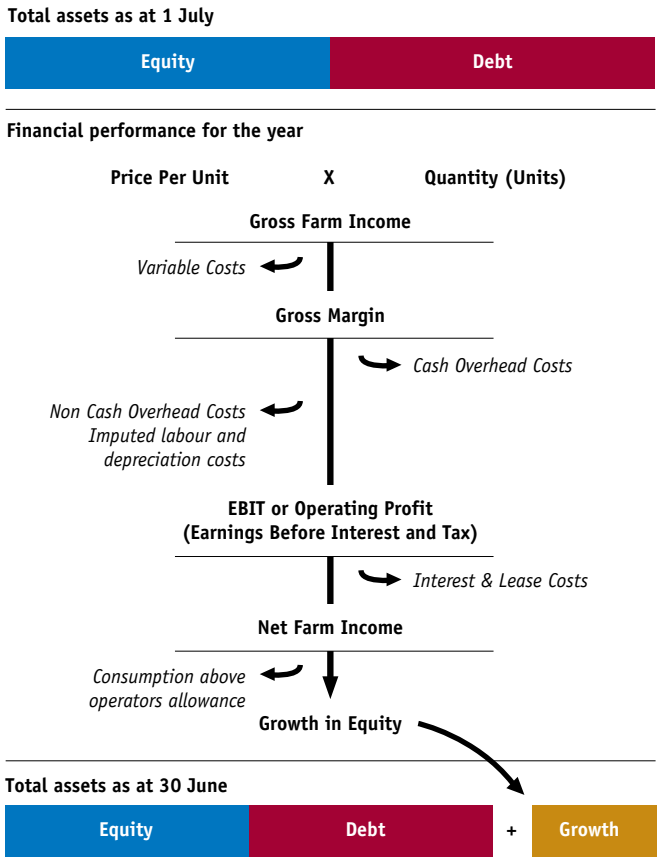


Figure 1 demonstrates how all of the different farm business economic terms come together and are calculated. It is adapted from an initial diagram obtained from Bill Malcolm (2008) at the University of Melbourne. The diagram shows the different profitability measures as certain costs are deducted from 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 income from milk cash income (net), livestock trading profit, feed inventory change or other sources such as colostrum sales or 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, and vary directly in relation to the size of the enterprise. Subtracting variable costs from total 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 DIFMP 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.

In previous editions of the DIFMP farms have been ranked by EBIT per hectare. In 2011/12 we have changed this ranking method to a return on assets basis.

In 2011/12 return on asset has replaced EBIT as the final financial measure used to gauge the profitability of a farming 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 business profit (after tax) 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.

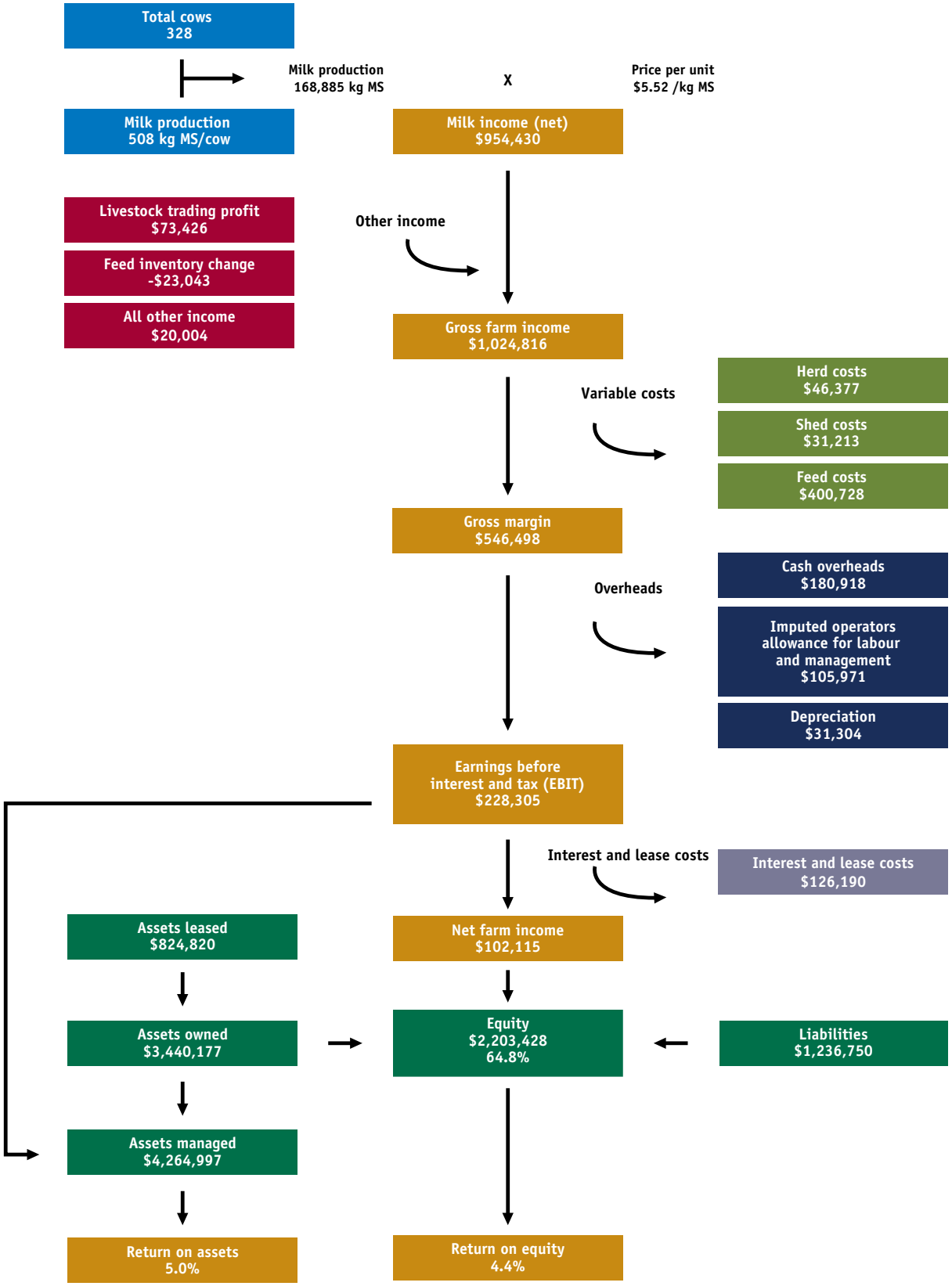
Return on assets (RoA) indicates the overall earning of the total farm assets, irrespective of capital structure of the business. It is EBIT or operating profit expressed as a percentage of the total assets under management in the farm business, including the value of leased assets. EBIT expressed as 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.

In 2011/12 RoA has 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 per cent 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 (RoE) measures the owner's rate of return on their own capital investment in the business. It is net profit expressed as a percentage of total equity (one's own capital). The DIFMP reports RoE with and without capital appreciation. This is to distinguish between productivity gains (RoE without capital appreciation) and capital gains (RoE with capital appreciation).

FIGURE 2. DAIRY INDUSTRY 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 Employment, Economic Development and Innovation, Queensland.

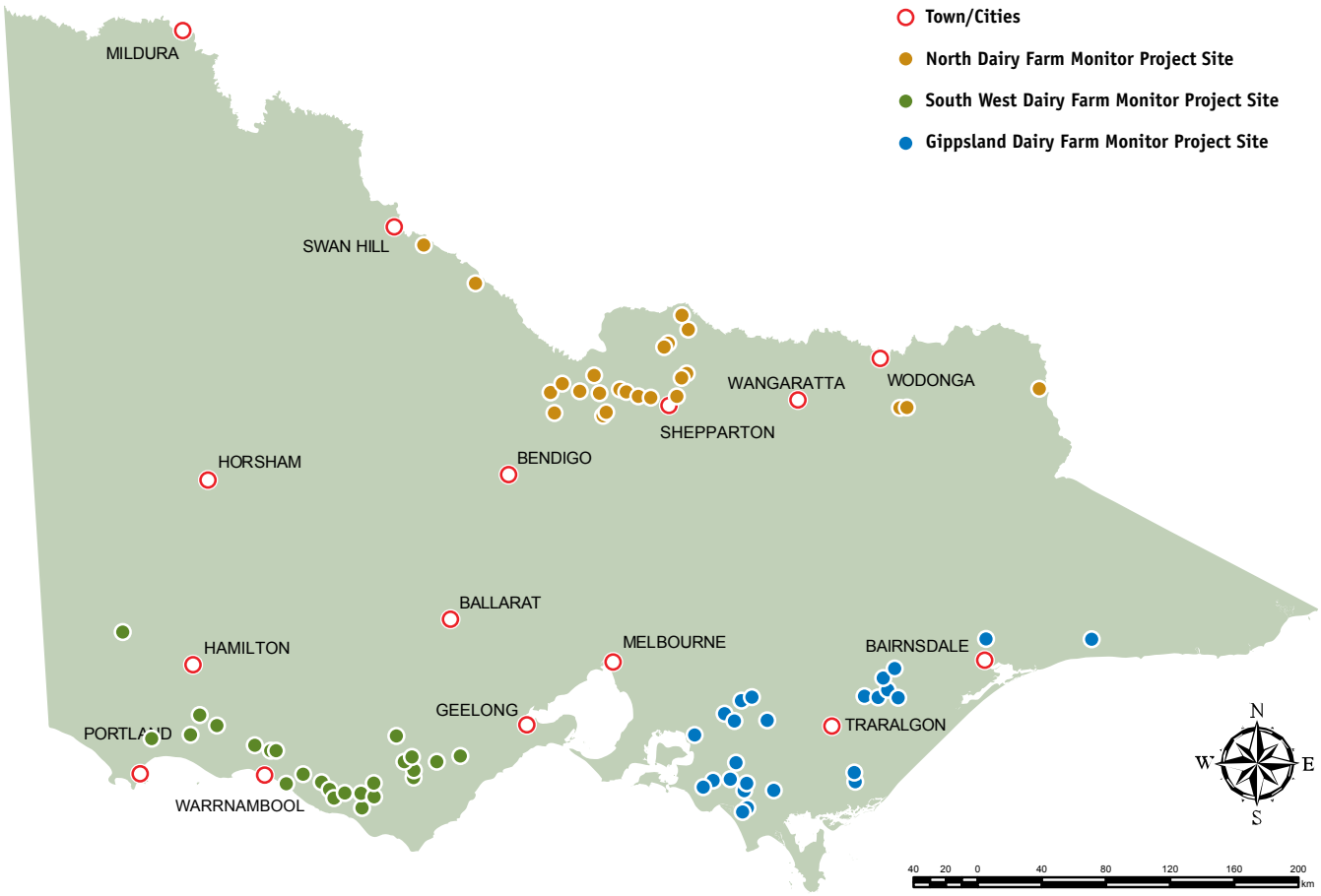
Part One: Statewide overview

Statewide overview

This section of the report compares the average performance, for 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 locations of the participating farms are shown in Figure 3.

FIGURE 3: DISTRIBUTION OF PARTICIPANT FARMS ACROSS VICTORIA



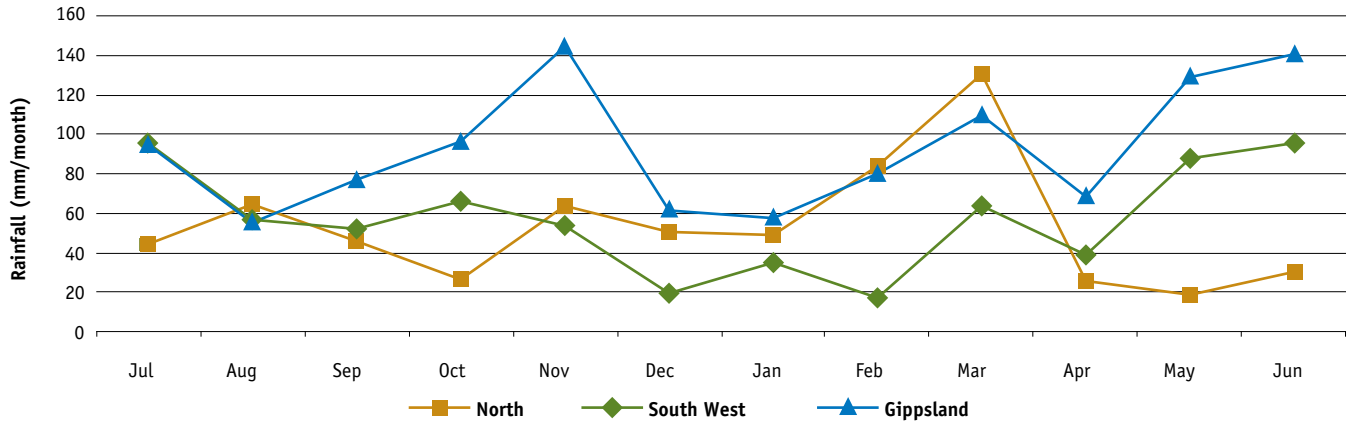
2011/12 Seasonal conditions

The average rainfall across the farms in each region varied between regions. The North received 634mm over the year, approximately 128% of the long term average for these farms of 497mm as well as both the Murray and Goulburn irrigation systems providing 100% of high reliability water shares. Farms in the South West received on average 682mm, or 84% of their long term average rainfall of 813mm.

Gippsland received an average of 1,113mm, which is equivalent to 123% of their long term average rainfall of 903mm. Figure 4 shows the rainfall pattern during the year and the wide variation that occurred.

The regional chapters provide more detail on the 2011/12 seasonal conditions.

FIGURE 4: 2011/12 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 189 hectares, but a higher average rainfall and water use than the other two regions. Farms in the North had the highest average milk production across the year on both a per cow and per hectare basis and received on average a higher milk price than farms in the other two regions.

Total water use per hectare in the North and Gippsland reflected the wet year in those regions and subsequent availability of irrigation water. Each region recorded over 1,000mm per hectare of water used. The two main systems, 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 100% allocation of low reliability water shares. Conversely rainfall in the South West was well below the long term average with the region recording its driest year since 2006/07.

As expected irrigation use is the highest in Northern Victoria which has the lowest rainfall of all regions. Water used (irrigation plus rainfall) was similar in Northern Victoria and Gippsland. Water use was considerably lower in the South West due to very low rainfall and less availability of irrigation. Farms in the North recorded the highest average labour efficiency while levels in the South West and Gippsland were similar to those reported last year.

Table 1 presents the average of some farm characteristics for each region. Further details can be found in Appendix Tables 2 for each region.

TABLE 1: FARM PHYSICAL DATA – STATE OVERVIEW

FARM PHYSICAL PARAMETERS	STATEWIDE	NORTH	SOUTH WEST	GIPPSLAND
Number of farms in sample	74	24	25	25
Herd size (max no. cows milked for at least 3 months)	328	304	387	291
Annual rainfall 11/12	812	634	682	1,113
Water used (irrigation + rainfall) (mm/ha)	967	1,035	687	1,182
Total usable area (hectares)	237	193	327	189
Stocking rate (milking cows per usable hectares)	1.6	1.9	1.2	1.7
Milk sold (kg MS /cow)	508	516	507	501
Milk sold (kg MS /ha)	800	957	605	843
Milk price received ($/kg MS)	$5.52	$5.64	$5.56	$5.37
Labour efficiency (milking cows / FTE)	98	107	87	100
Labour efficiency (kg MS / FTE)	49,752	54,875	44,344	50,244

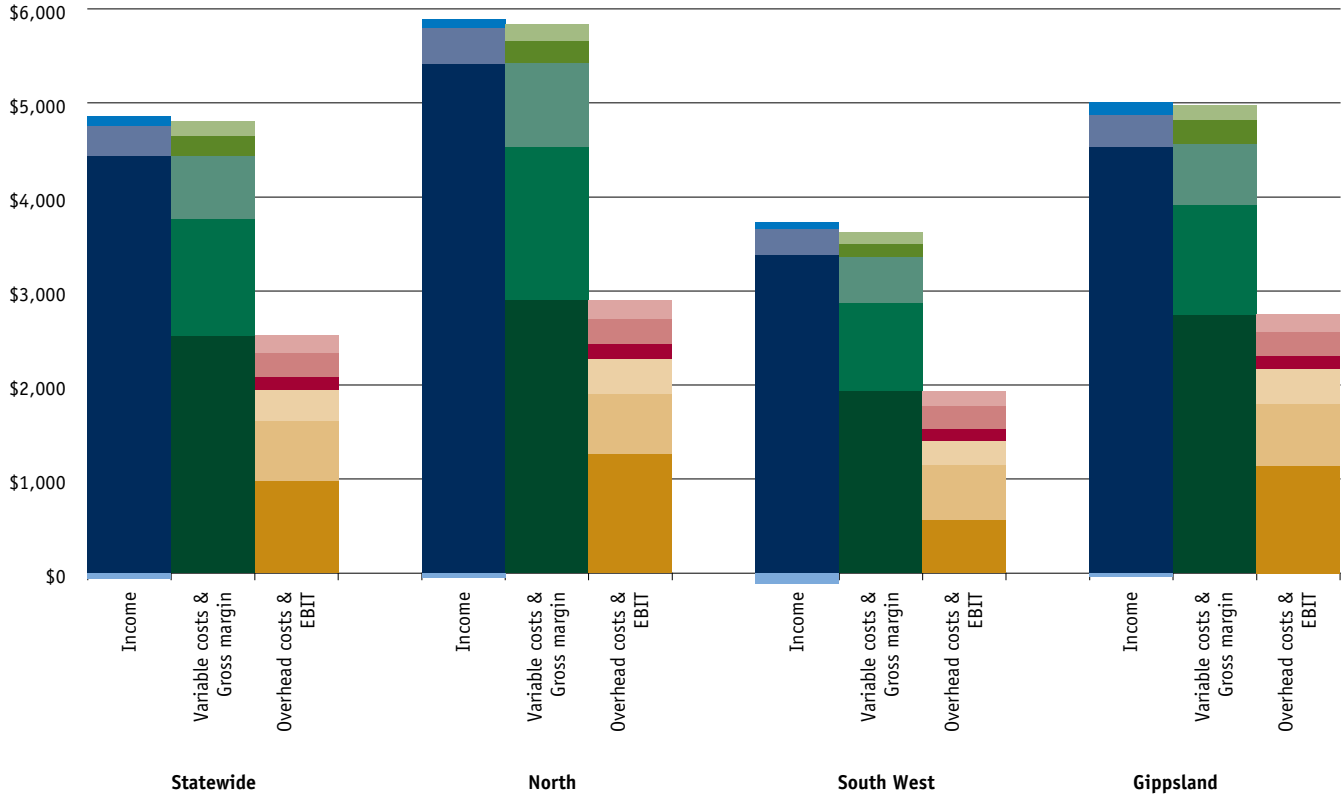
Figure 5 provides a visual representation of the average farm financial performance. The blue colours represent income per hectare added vertically to give gross farm income. From gross farm income, we can subtract the green variable costs, to give the grey gross margin values. From the gross margin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

Gross farm income

Gross 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 farm owned shares, interest from bank accounts and rebates or grants is included in other income.

The variation in gross income per hectare between the regions closely reflects the stocking rates of the three regions. While Figure 5 shows just how much milk income dominates gross income overall, other sources are still important to the farm business. Across the state, income from sources other than milk accounted for 7-9% of gross farm income and 33-44% of earnings before interest and tax.

FIGURE 5: AVERAGE FARM FINANCIAL PERFORMANCE PER HECTARE



See Table 2 for the legend on Figure 5.

Feed inventory losses were reported in all regions as both dry and wet conditions caused depletion of fodder reserves.

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 proportion of costs contributed by purchased feed and agistment (seen as dark green), particularly in the North. Home grown feed was the other major variable cost. The total cost of feed accounted for around 84% of total variable costs in all regions, although it was slightly lower in Gippsland. See Appendix Tables 6 for a breakdown of variable costs as a percentage of total costs in each region.

The gross margin is equal to gross 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 $2,525/ha, a slight decline of 4% from $2,639/ha last year.

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 the greater of $400 per cow less paid labour (the method used in Taking Stock) or $25 per hour of imputed labour performed by either the owner operator or family members. This is an increase from $20/hr which has been used by DIFMP over the past two years for imputed labour. Average overhead costs for participant farms have been increasing over the past four years.

Table 2 shows that participants in the North had a higher average costs per hectare than those in the other two regions suggesting that farmers may be continuing or restarting works delayed by low returns over the past few years. The South West incurred lower total overhead costs per hectare than the other two regions, thanks mainly to lower imputed labour and repairs and maintenance and depreciation costs. Conversely on a per kilogram of milk solids basis (see Appendix Tables 5), the South West had the highest overhead costs suggesting that their lower per hectare costs are due predominantly to their larger farm sizes.

TABLE 2: AVERAGE FARM FINANCIAL PERFORMANCE PER HECTARE - STATEWIDE

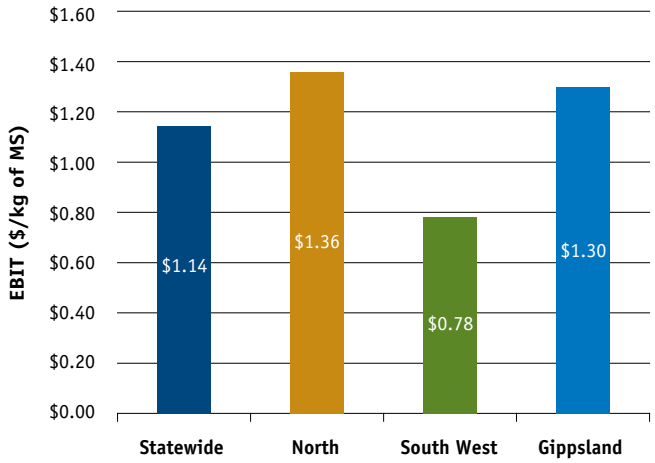
FARM INCOME AND COST CATEGORY	STATEWIDE	NORTH	SOUTH WEST	GIPPSLAND
INCOME				
Feed inventory change	-$64	-$49	-$109	-$34
Other farm income	$101	$92	$73	$136
Livestock trading profit	$330	$373	$286	$332
Milk income (net)	$4,432	$5,420	$3,380	$4,537
GROSS FARM INCOME	**$4,799**	**$5,836**	**$3,630**	**$4,971**
VARIABLE COSTS				
Shed cost	$149	$171	$123	$153
Herd cost	$211	$245	$142	$248
Home grown feed cost	$674	$883	$489	$657
Purchased feed and agistment	$1,240	$1,634	$940	$1,163
TOTAL VARIABLE COSTS	**$2,274**	**$2,933**	**$1,694**	**$2,222**
GROSS MARGIN				
PER HECTARE	**$2,525**	**$2,904**	**$1,936**	**$2,750**
OVERHEAD COSTS				
All other overheads	$180	$199	$158	$183
Repairs and maintenance	$254	$270	$238	$254
Depreciation	$142	$157	$127	$143
Employed labour	$333	$372	$265	$364
Imputed owner/operator and family labour	$627	$635	$578	$669
TOTAL OVERHEAD COSTS	**$1,536**	**$1,633**	**$1,365**	**$1,613**
EARNINGS BEFORE INTEREST AND TAX				
PER HECTARE	**$989**	**$1,270**	**$571**	**$1,137**

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 is positive in all three dairying region, when expressed as per kilogram of milk solids (Figure 6) and as per hectare (Table 2). Following on from the good milk prices and favourable seasonal conditions of 2010/11 EBIT levels have declined in 2011/12. In Gippsland, and the North, EBIT fell by 35% and 11% respectively. However, in the South West the tough seasonal conditions have seen EBIT cut by more than half, falling from $1.71/kg MS to $0.78/kg MS. Figures 19, 30 and 41 in the regional chapters provide a visual representation of the decrease in EBIT between the samples this year and last.

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

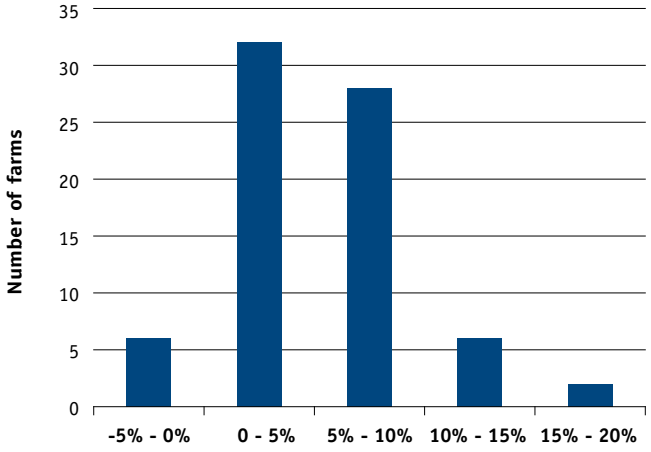


Return on assets and on equity

The 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. Return on assets is sometimes referred to return on capital.

The average return on assets for participants across the state was 5.0%, with a range from -3.1% to 16.7% and a median of 4.2% (Figure 7 and Appendix Tables 1). 68 of the 74 participant farms had a positive return on assets, while six farms, five of which were in the South West returned a negative EBIT and thus return on assets in this economic analysis.

FIGURE 7: DISTRIBUTION OF FARMS BY RETURN ON ASSETS

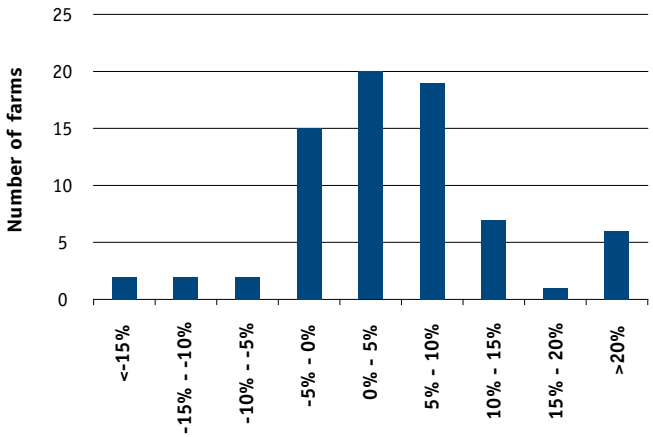


Return on equity is the net farm income (earnings before interest and tax less interest and lease charges) expressed as a percentage of owner equity. Items not accounted for in net farm income are capital expenditure, principle loan repayments and tax. Return on equity is a measure of the owner's rate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

The average return on equity for the 74 farms during 2011/12 was 4.4%, a reduction from the strong average return on equity of 7.7% recorded last year. Despite this fall, returns to dairy farms for 2011/12 remain competitive when compared with other investments in the market.

Further discussion of return on assets and return on equity occur in the risk section below and later in the regional chapters. Appendix Tables 1 present 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..."[1]

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.

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. Often in response to greater perceived risk, farmers will opt to expose their business to less risk. In good times this will result in lower returns, in bad times it will lessen the losses.

The North has a much greater exposure to fluctuations in prices and supply in the market for feed, including water, given the greater use of imported feed stuffs (Table 3). Equity levels in the region have declined slightly from 66% last year to 62% this year. It shouldn't be assumed that this change is purely due to increased debt as there has been a turnover of farms in the sample over this period.

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, $0.58 is used to cover variable costs. One minus this ratio gives the proportion of total costs that are overhead costs.

The debt services ratio shows interest and lease costs, as a proportion of gross income. The ratio of 12% this year is the same as that reported last year and indicates that on average farms repaid $0.12 of every dollar of gross income to their creditors.

TABLE 3: RISK INDICATORS - STATEWIDE

	STATEWIDE	NORTH	SOUTH WEST	GIPPSLAND
Cost structure (proportion of total costs that are variable costs)	58%	63%	55%	57%
Debt services ratio (percentage of income as finance costs)	12%	10%	15%	11%
Debt per cow	$3,608	$3,138	$4,507	$3,159
Equity percentage (ownership of total assets managed)	65%	62%	61%	72%
Percentage of feed imported (as a % of total ME)	43%	47%	45%	38%

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 participant's 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 2011/12 declining income and higher costs resulted in only 27 of 74 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.

The higher the risk indicator (or lower with equity %) in Table 3, the greater the exposure to the risk of a shock in those areas of the business. Further, the data in Appendix Tables 4 and 5 are in cost per kilograms of milk solids sold. This data is best used as risk indicators, given it is measured against the product produced and sold currently and not the capital invested.

[1] Malcolm, L.R., Makeham, J.P. and Wright, V. (2005), The Farming Game, Agricultural Management and Marketing, Cambridge University Press, New York. p.180

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 45% and 46% of the diet respectively compared to 58% in Gippsland. Home grown feed, whether grazed or conserved, accounted for over 50% of the total ME fed in each region. Forty-seven percent of the North's ME was sourced from bought in feed, compared to 46% in the South West and 38% in Gippsland. This is an increase from the proportion of brought in feed required in 2010/11, and perhaps reflects the dry and wet seasonal conditions in the South West and Gippsland respectively. All regions are dependent on concentrates with average proportion of ME sourced from concentrates at 32% for the North and 35% for the South West and 30% for Gippsland.

Appendix Tables 3 give further information on purchased feed.

FIGURE 9: SOURCES OF WHOLE FARM METABOLISABLE ENERGY

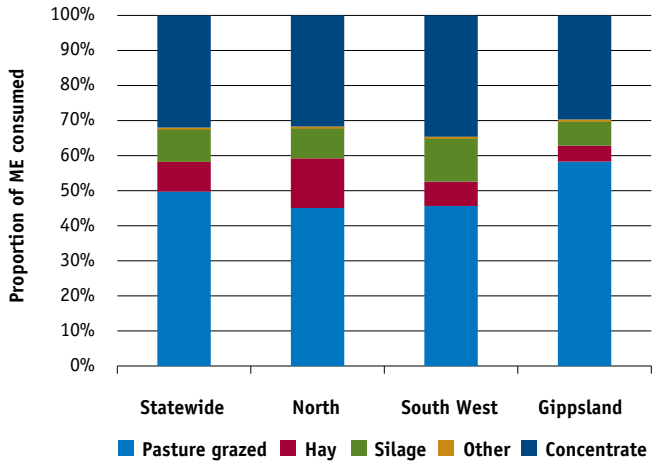
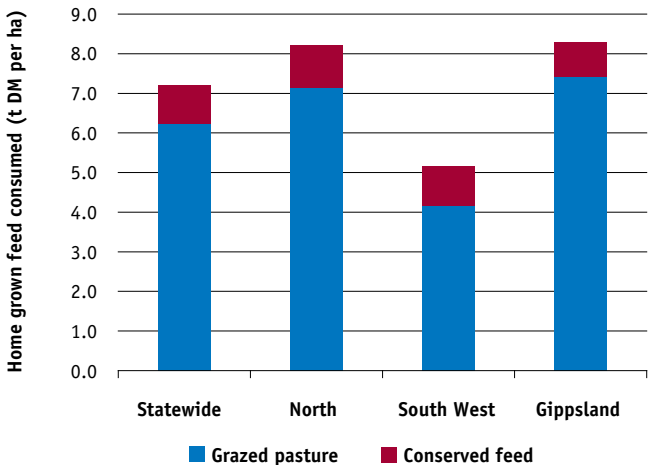


Figure 10 shows the average estimated home grown feed consumed per hectare. Both Figures 9 and 10 were estimated using DPI's Pasture Consumption calculator. It involves first a calculation of the total energy required on the farm, which is a factor of stock numbers held on the farm, the stock weights, distance the stock walk to the dairy on average and also milk production. From the total energy requirements for the farm 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.

The amount of home grown feed consumed per milking hectare will be dependent on numerous factors, with water availability, fertiliser application rates and grazing management being central. The average estimates were, as grazed feed and conserved feed, 7.1t/ha & 1.1t/ha for the North, 4.2t/ha & 1.0t/ha for the South West and 7.4t/ha & 0.9 t/ha for Gippsland. The high amount of pasture grazed and conserved in the North and Gippsland reflects the good water allocations and mild summer experienced in those regions. The drop in the amount of pasture both grazed and conserved in the South West again is a reflection of the dry summer and autumn period experienced in the region.

Appendix Tables 2 gives estimates of individual tonnes of home grown feed consumed per milking hectare. It shouldbe noted that this has changed from usable hectares used in the past which includes out paddocks and run off blocks. The graph below accounts only for the consumption of pasture that occurred on the milking area whether by milking, dry or young stock.

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

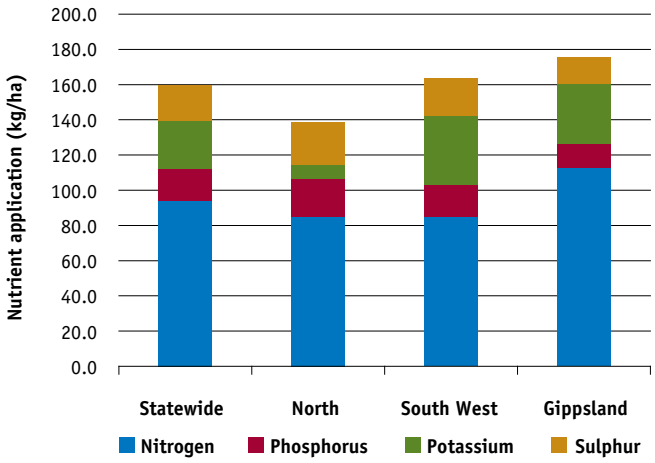


Fertiliser application

As expected Figures 10 and 11 do not show a strong relationship between estimated home grown feed consumed and fertiliser applied per hectare. This is because 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 good seasonal conditions and confidence in ongoing water availability were reflected in the North where applications of nitrogen, phosphorus and sulphur increased by 63%, 71% and 125% respectively when compared to 2010/11 levels. The South West and Gippsland spread similar amounts of phosphorus, potassium and sulphur while Gippsland spread more nitrogen than those farms in the South West. Twenty of the 21 farms in the irrigation region of the North applied fertiliser to the irrigated portion of their total usable area in 2011/12.

Appendix Tables 2 give further information on fertiliser application.

FIGURE 11: NUTRIENT APPLICATION PER HECTARE



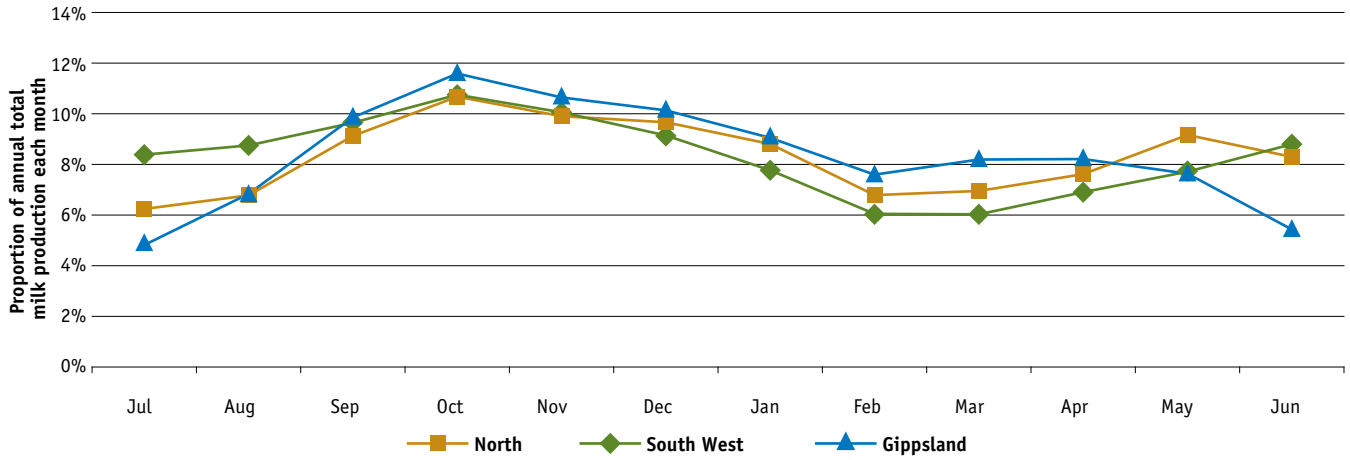
The digestion of feed in the rumen and the use of fertiliser are major sources of greenhouse gases on dairy farms. A summary of greenhouse gas emissions can be found on page 55 of this report.

Milk production

Average distribution of monthly milk production in all regions saw the main production peak in spring, but only the North saw another small peak in autumn 2012. This autumn production is reflected in the North having the highest average milk price of any region. Gippsland farms on average experienced the most rapid increase in production coming into the 2011 spring, going from 4.8% of total production in July to 11.6% by October. The South West had a smoother distribution pattern with production spread across winter and spring.

The good seasonal conditions and confidence in ongoing water availability were reflected in the North where applications of nitrogen, phosphorus and sulphur increased by 63%, 71% and 125% respectively when compared to 2010/11 levels.

FIGURE 12: MONTHLY DISTRIBUTION OF MILK PRODUCTION

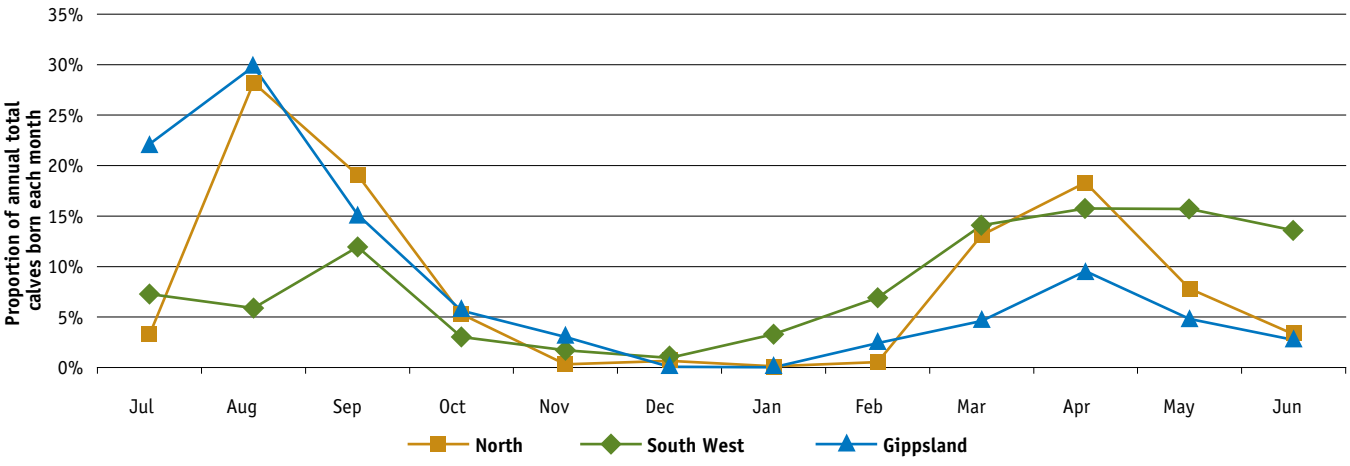


Calving Pattern

The milk production curve shown in Figure 12 follows 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.

Gippsland had a very concentrated calving pattern, with almost one-third of all calves born in August and 67% born from July to September. Less than 3% of calves were born in Gippsland during the summer months. In the North 85% of calves were born in two separate concentrated periods with 47% born during August and September and 38% born from March to May. The smoother milk production curve of the South West throughout winter mirrors the smoother calving pattern.

FIGURE 13: MONTHLY DISTRIBUTION OF CALVES BORN



Part Two: North

North

Farms N0001 – N0046 were also included in last year's report and farms N0047 and N0048 are new to the sample this year. Please refer to page 3 for notes on the presentation of data.

2011/12 Seasonal conditions

After a decade of drought followed by severe flooding, traditional seasonal conditions returned to the North in 2011/12. Above average rain fell (Figure 14) and both the Murray and Goulburn irrigation systems delivered 100% high reliability water shares (HRWS). Some isolated flooding was experienced and summer passed with no extreme hot weather. Following the good returns posted in 2010/11, this year was one for farmers in the North to consolidate their businesses and set themselves up for the future.

Following a very wet 2010/11 financial year, many farms had rapidly adapted their forage base, positioning themselves to capitalise on the relatively cheap and available irrigation water. Reasonable levels of fodder were carried over from the previous year, although much of it was of moderate quality only. This meant that regardless of the spring conditions, many farmers focussed on conserving high quality fodder and forewent the production of lower quality bulk fodder.

The spring was what could be regarded as "typical", and the ready availability of irrigation water meant that most farms grew plenty of feed over this period. The summer was also "typical" and extended hot spells were the exception rather than the norm.

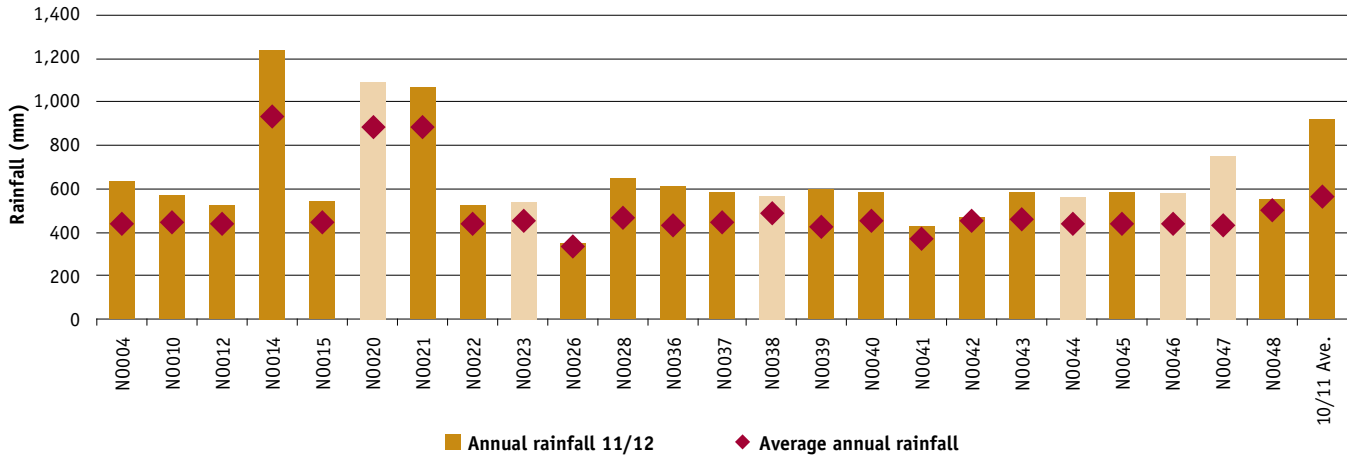
The end of February and start of March saw some large and widespread rainfall events. In some areas north of Shepparton the highest rainfall events in history were recorded and it turned into a major flood event. North east Victoria also experienced flooding at this time and while most of the irrigation region west of the Goulburn river didn't have any official flooding, many farms lost some pastures where drainage systems backed up for days on end.

The timing of this rain meant that many farms couldn't sow new pastures for up to a month after the ideal time resulting in less than normal autumn and winter feed grown on some farms. A dry spell followed these large rainfall events and in many cases crops and pastures that hadn't been irrigated late in the season had virtually stopped growing before being revived by rain in mid June.

Overall, apart from the farms damaged by the large rainfall events in early March, most farms in the North had a good year. It has been a long time coming.

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

FIGURE 14: 2011/12 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 had higher annual rainfall, higher milk production as measured by milk solids per hectare and per cow compared to the average.

However the average farmed a greater total usable area and grew slightly more home grown feed as percentage of ME consumed.

TABLE 4: FARM PHYSICAL DATA – NORTH

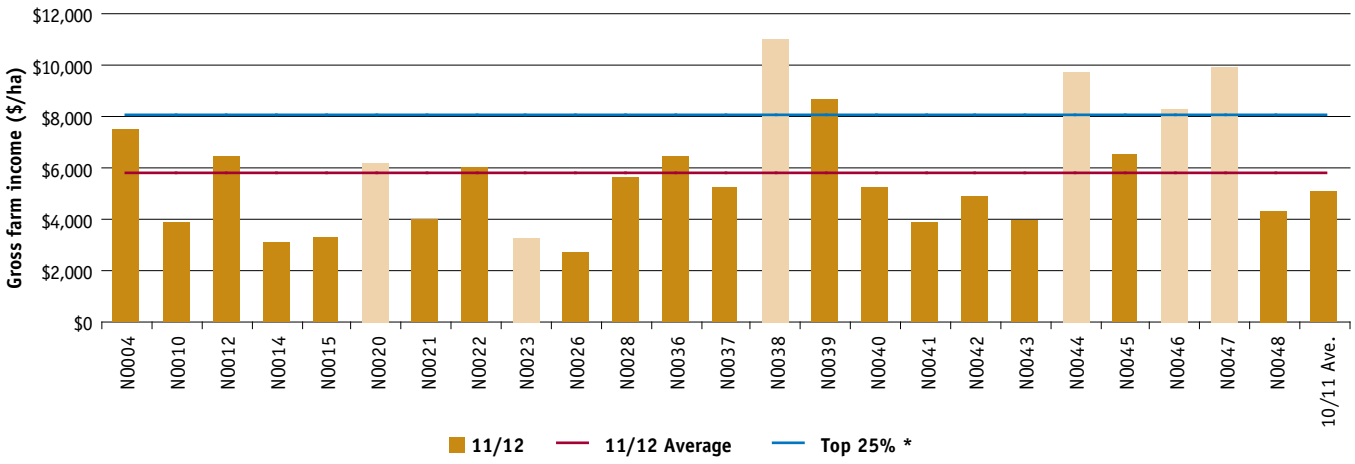
FARM PHYSICAL PARAMETERS	NORTH AVERAGE	Q1 TO Q3 RANGE	TOP 25% AVERAGE
Annual rainfall 2011/12	634	547 - 620	685
Water used (irrigation + rainfall) (mm/ha)	1,035	908 - 1,209	1,110
Total usable area (hectares)	193	101 - 243	162
Milking cows per usable hectares	1.9	1.4 - 2.2	2.2
Milk sold (kg MS /cow)	516	471 - 562	566
Milk sold (kg MS /ha)	957	668 - 1,151	1,256
Home grown feed as % of ME consumed	53%	48% - 59%	48%
Labour efficiency (milking cows / FTE)	107	92 - 119	111
Labour efficiency (kg MS / FTE)	54,875	45,610 - 65,173	63,087

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. Gross farm income of $8,072 is the average of the top 25% and is noticeably higher than the overall average of $5,836 (Figure 15).

Figure 15 also shows that the top performing farms ranked by return on assets did not necessarily have the highest gross income per hectare. This suggests that the top performing farms have other attributes that enable them to achieve a higher EBIT, other than gross farm income.

FIGURE 15: GROSS FARM INCOME PER HECTARE – NORTH

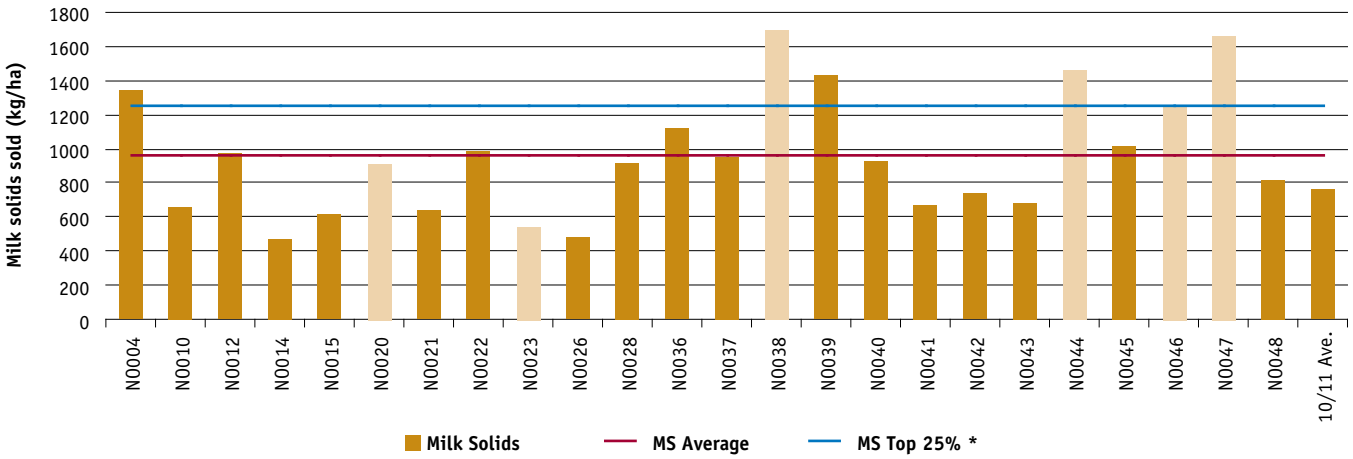


Milk solids production

Figures 15 and 16 show the very strong correlation between income and milk solids sold per hectare, as income is primarily driven by the quantity of milk solids sold. During 2011/12 on average farms produced 957 kg MS/ha compared with 762 kg MS/ha last year. The range of this year's dataset was 468 kg MS/ha to 1,701 kg MS/ha.

The top performing farms produced on average 1,256 kg MS/ha in 2011/12, 30% more than this year's average and a 25% increase on the top performing farms last year.

FIGURE 16: MILK SOLIDS SOLD PER HECTARE – NORTH



Variable costs

Variable costs include herd, shed and feed costs. On average they increased in 2011/12 to $2,933/ha, up from $2,395/ha last year. The wide range of $1,212/ha to $6,135/ha for Northern farms can be seen by the variation in maroon bars in Figure 17.

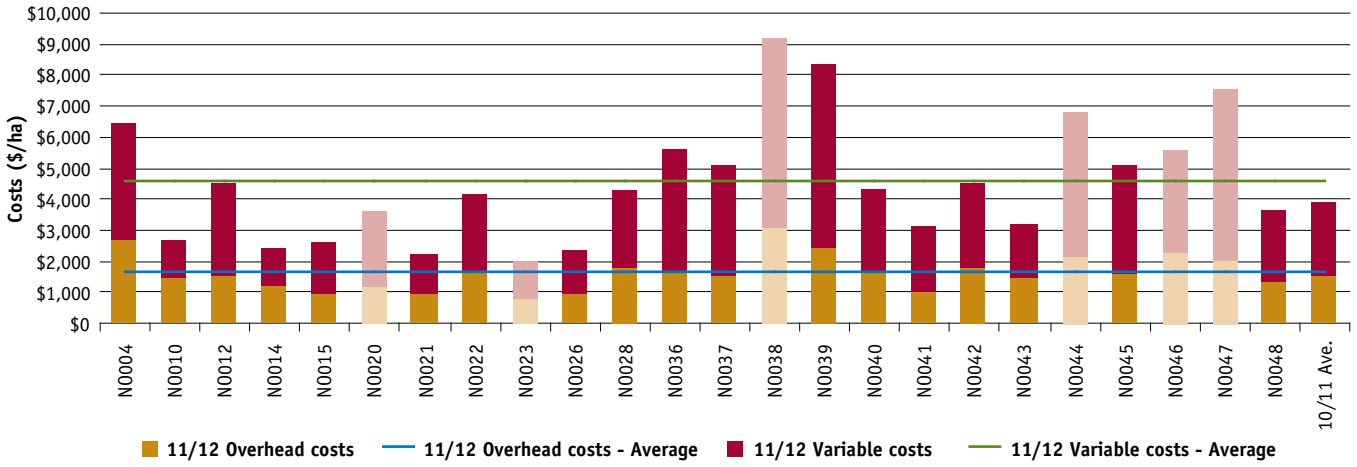
Feed costs are clearly the major variable cost accounting for 53% of total costs. With good seasonal conditions and water allocations in 2011/12 farmers focused on pasture management and conserving quality fodder rather than producing large quantities. This was reflected in a $93/ha increase in irrigation costs and a $65/ha decline in hay and silage making. Bought in feed also increased this year by $147/ha and $131/ha for fodder and grain purchases respectively.

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

Overhead costs have increased for the fifth successive year, recording $1,633/ha on average in 2010/11. The main overhead cost category that increased this year was employed labour at $102/ha or 38%. An additional cause of the increase in overhead costs was the increase in the imputed labour rate from $20/hr to $25/hr. The percentage breakdown of the individual totals expressed as percentages is presented in Appendix Table A6.

During 2011/12 on average farms produced 957 kg MS/ha compared with 762 kg MS/ha last year.

FIGURE 17: WHOLE FARM VARIABLE AND OVERHEAD COSTS PER HECTARE – NORTH



Overhead costs

Overhead costs are those that do not vary with the level of production. The DIFMP 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 16 illustrates the range spent on overhead costs per hectare, which was from $853 to $3,127 for farms in the North in 2011/12.

The main overhead cost categories include labour cost, depreciation and repairs and maintenance. A breakdown of the overhead costs is provided in Appendix Table A5 and A7.

Cost of production

Figure 17 and Table 5 present both variable and overhead costs to give the total cost of production per hectare and per kilogram of milk solids sold respectively. Cost of production expressed as per kilogram of milk solids sold is a useful risk ratio. The comparison of cost of production with gross income gives the average operating margin, i.e. EBIT/kg MS.

Table 5 shows that the top 25% of farms generally have equivalent costs per kilogram of milk solids sold in most categories when compared to the average of the entire North.

TABLE 5: COST OF PRODUCTION - NORTH

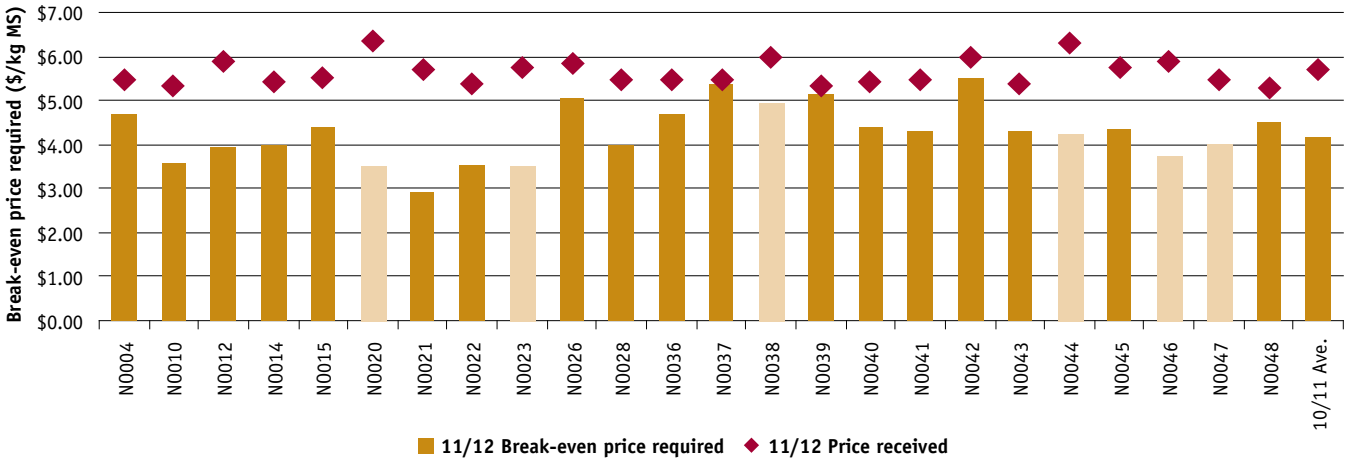
FARM COSTS ($ / KG MS)	NORTH AVERAGE	Q1 TO Q3 RANGE	TOP 25% AVERAGE
VARIABLE COSTS			
Herd costs	$0.26	$0.19 - $0.33	$0.25
Shed costs	$0.18	$0.15 - $0.20	$0.16
Purchased feed and agistment	$1.59	$1.19 - $1.95	$1.56
Home grown feed cost	$0.93	$0.69 - $1.13	$0.96
Total variable costs ($ / kg MS)	$2.95	$2.62 - $3.36	$2.93
OVERHEAD COSTS			
Rates	$0.03	$0.03 - $0.04	$0.03
Registration and insurance	$0.02	$0.01 - $0.02	$0.03
Farm insurance	$0.05	$0.02 - $0.07	$0.03
Repairs and maintenance	$0.28	$0.21 - $0.35	$0.27
Bank charges	$0.01	$0.00 - $0.01	$0.00
Other overheads	$0.11	$0.07 - $0.14	$0.08
Employed labour	$0.40	$0.16 - $0.63	$0.46
Total cash overheads	$0.90	$0.68 - $1.10	$0.90
Depreciation	$0.18	$0.09 - $0.23	$0.12
Imputed owner/operator and family labour	$0.67	$0.56 - $0.82	$0.52
Total overhead costs ($ / kg MS)	$1.75	$1.54 - $1.93	$1.54
Total cost of production ($ / kg MS)	$4.70	$3.88 - $4.69	$4.48

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 $2.91 per kg MS to $5.52 per kg MS and the price received varied from $5.31 per kg MS to $6.33 per kg MS. The results highlight that in 2011/12 all farms recorded positive profit, with the average being $1.36/kg MS. This is slightly lower than the average of $1.52/kg MS from last year.

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

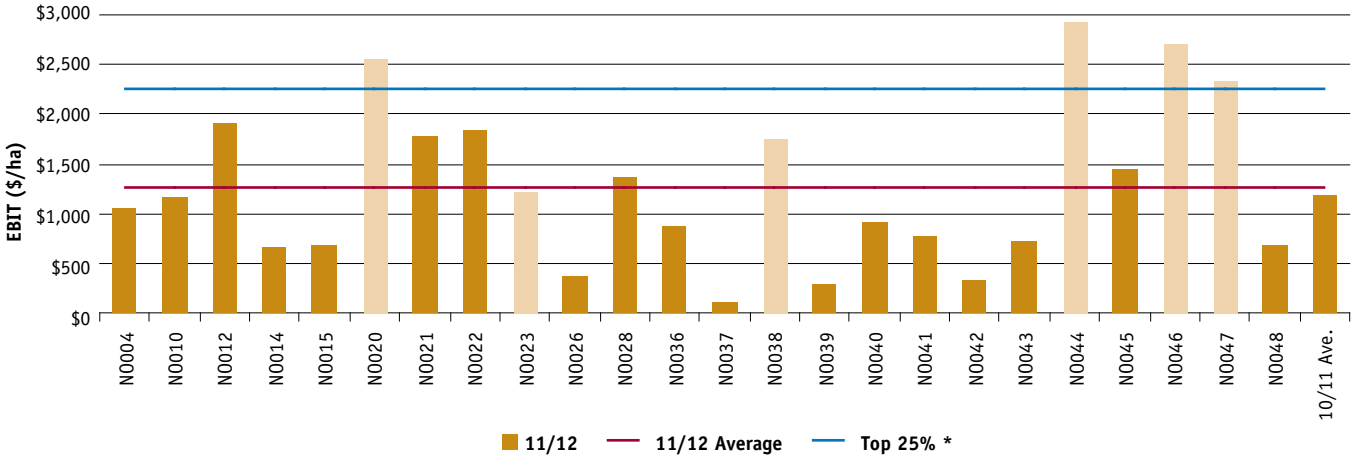


Earnings Before Interest and Tax

Earnings before interest and tax is gross income, less variable and overhead costs. Figure 19 highlights a strong performance by farms in the North. The group average was $1,270/ha in 2011/12, an 8% increase on last year. The favourable seasonal conditions and water allocations, high milk production per hectare and continued strong milk price offset the 16% increase in operating costs on a per hectare basis.

For the second consecutive year all farms in the North achieved positive earnings before interest and tax. The top 25% recorded almost $1,000/ha more than the average EBIT/ha at $2,256, and was very similar to last year's top performers of $2,279.

FIGURE 19: WHOLE FARM EARNINGS BEFORE INTEREST AND TAX PER HECTARE – NORTH

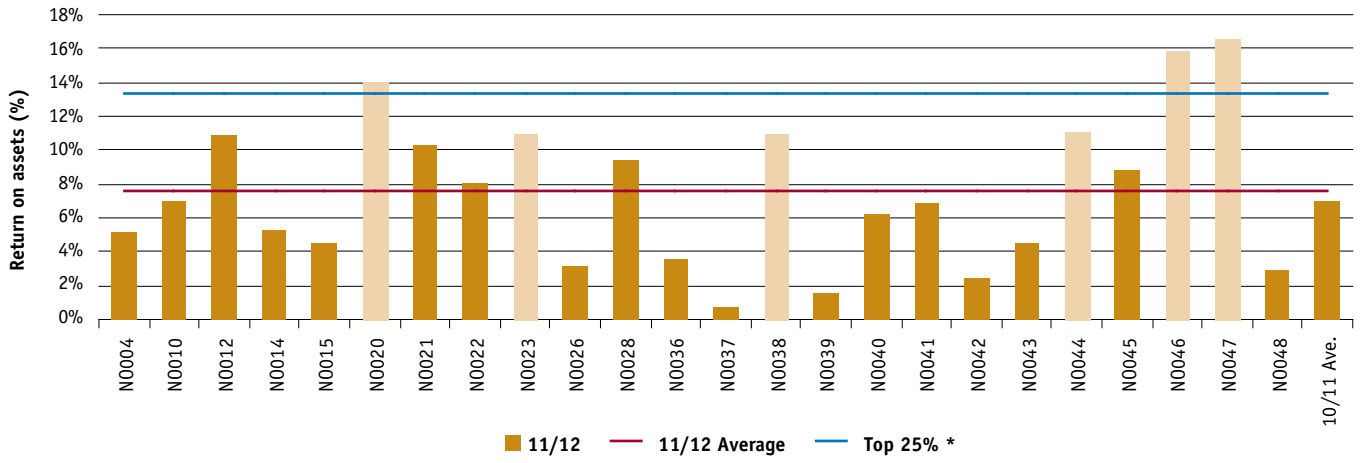


Return on assets and equity

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

Figure 20 shows the distribution of return on assets in 2011/12. The group achieved a strong average return on assets of 7.6% compared to 7.0% last year. The top 25% achieved 13.3% this year. It's worth noting that while related, a low EBIT/ha does not always result in low return on assets as highlighted by farm N0023.

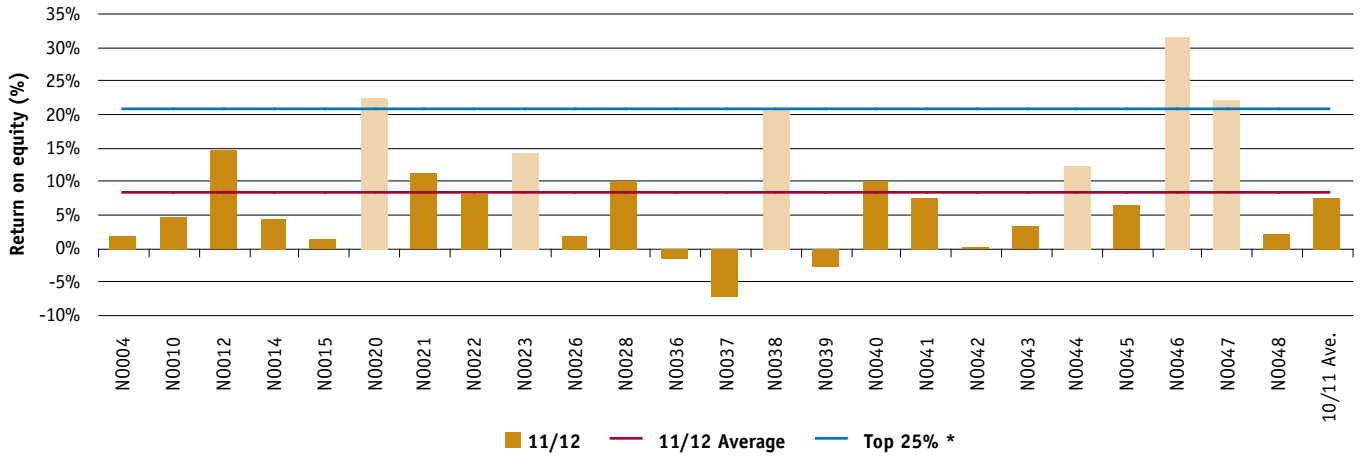
FIGURE 20: RETURN ON ASSETS – NORTH



The distribution of return on equity in 2011/12 is shown in Figure 21. This year the range of return on equity for North farms was -7.2% to 31.6%, with an average of 8.4%, up from 7.6% last year. The top performers achieved 20.7%, up from 16.4% the previous year.

Interestingly the top 25% as ranked by return on assets are within the highest performing farms according to return on equity. This consistent result highlights the financial strength of the top farms.

FIGURE 21: RETURN ON EQUITY – NORTH



Feed consumption and fertiliser

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

The relative contribution of each feed type to the ME consumption on the farm in shown in Figure 22. The broad range of different source of metabolisable energy used on individual farms is evident. Pasture grazed accounted for less than 50% of the ME consumed on 16 of 24 farms.

On average pasture constituted 45% of the diet, slightly down from 48% last year. Concentrates and silage increased to 32% and 9% of the diet respectively while hay decreased to 9%.

FIGURE 22: SOURCES OF WHOLE FARM METABOLISABLE ENERGY – NORTH

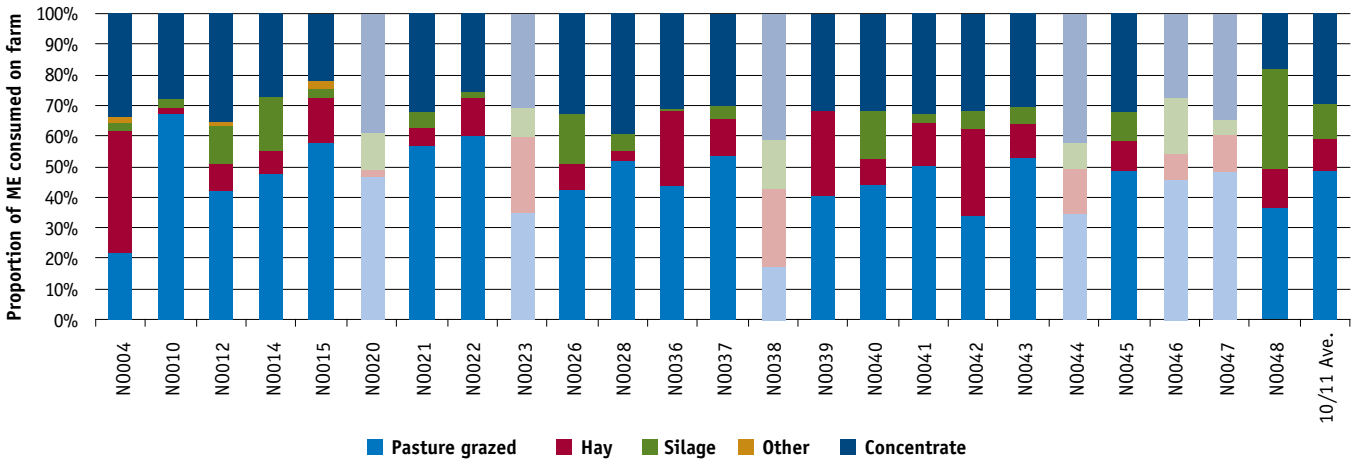


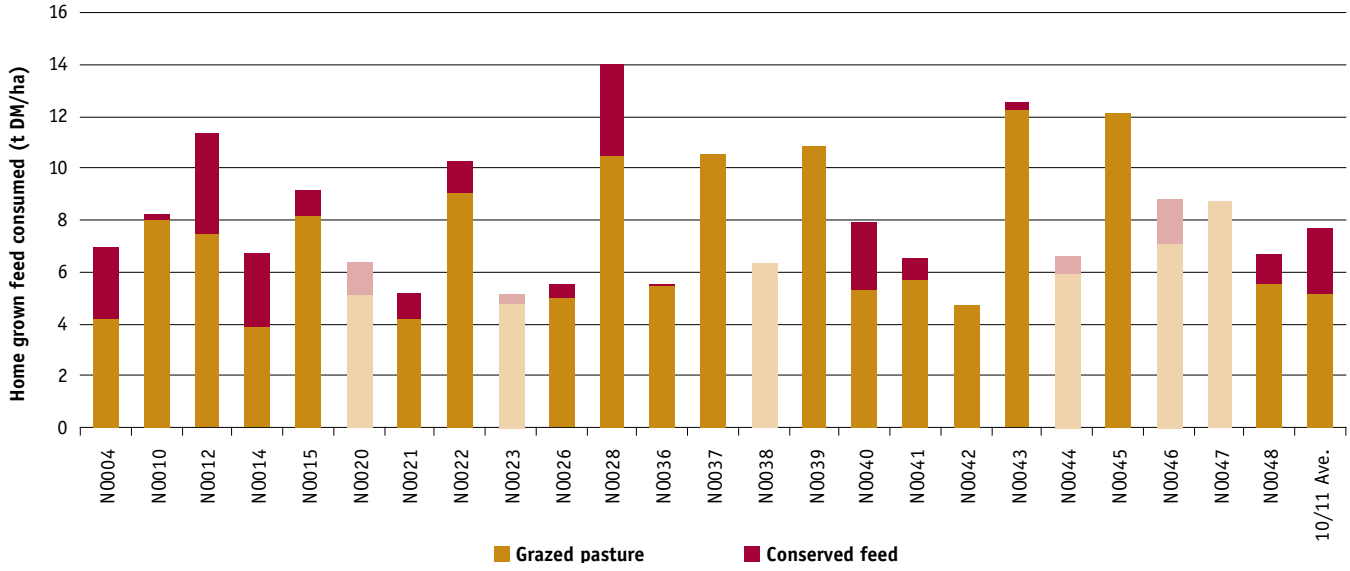
Figure 23 shows the estimated home grown feed consumed per milking hectare for farms in the North. This year pasture consumption was estimated on the milking area as compared with usable area in previous years. Given this change no direct comparison should be made between last year's pasture consumption figures and this year's.

Many farmers and services providers have commented that in the past the pasture consumption across the milking area would be higher than across total usable area and this is reflected in the difference between pasture grazed increasing from 5.1 t DM/ usable hectare last year to 7.1 t DM/ milking hectare in 2011/12.

Total pasture harvest for the North was 8.2 t DM/ha. Interestingly the top 25% of participants had lower grazed pasture at 6.4 t DM/ha and lower conserved pasture at 0.7 t DM/ha compared to the average of 7.1 t DM/ha and 1.1 t DM/ha respectively.

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 including 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 and 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

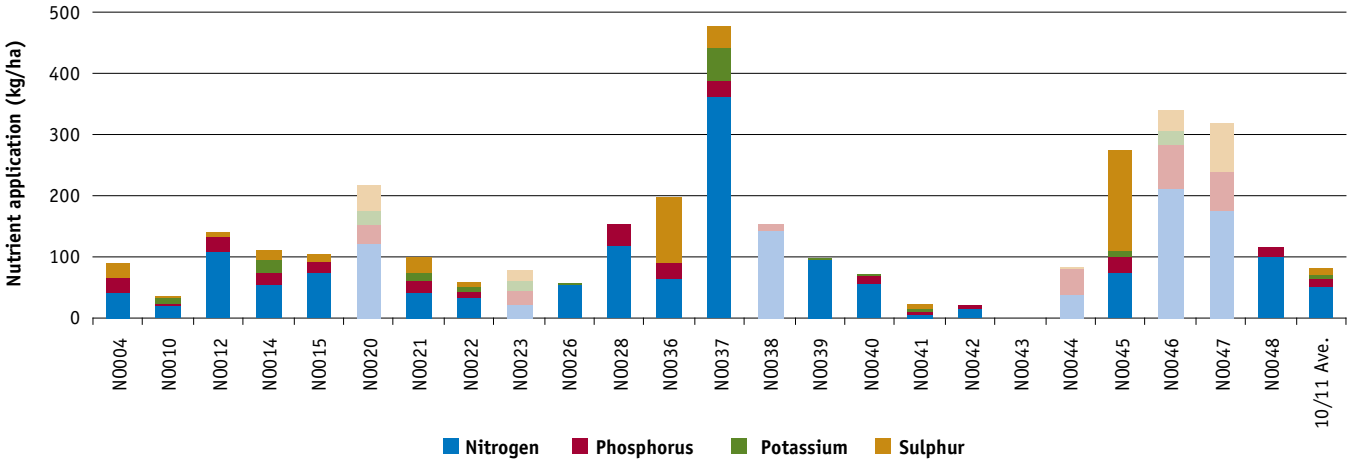


Fertiliser application

The relationship between fertiliser application per hectare and home grown feed consumed per hectare during 2011/12 is shown in Figures 23 and 24. Similar to last year, there are no discernable 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 and damage from flooding or locusts.

Nearly all of the farms (20 out of 21) located in the irrigation region of the North applied fertiliser to at least some irrigated crops or pasture.

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 SW001 to SW039 participated last year. Farms SW040 and SW041 are new this year. Please refer to page 3 for notes on the presentation of data.

2011/12 Seasonal conditions

Despite a wet start to 2011/12 the South West endured a challenging year with much of the dairy region receiving rainfall totals that ranked in deciles 1-3 of the long term average. Average rainfall across participant farms was 682mm, 131mm below normal. Participant farms received rainfall totals between 76% and 94% of their long term average rainfall as shown in Figure 25.

The 2011/12 year saw the continuation of wet conditions over the winter period resulting in extensive pugging damage, lameness issues and mastitis problems in herds. With the damage to pastures, many farmers were unable to conserve as much fodder as usual and the quality of what was conserved was also poorer than previous years. The spring was shorter than anticipated and after a long summer with minimal rainfall, most farmers in the region had fed all of their fodder reserve by early autumn.

Following the arrival of the break in May, many farmers were busy re-sowing perennial pastures that had been damaged over the previous winter period. Extensive damage from field slugs occurred across the region and some farms were forced to re-sow pastures a number of times. With slightly mild and not excessively wet winter conditions, pasture growth slowly picked up and most farms had reasonable pasture cover heading into July.

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

FIGURE 25: 2011/12 ANNUAL RAINFALL AND LONG TERM AVERAGE RAINFALL – SOUTH WEST

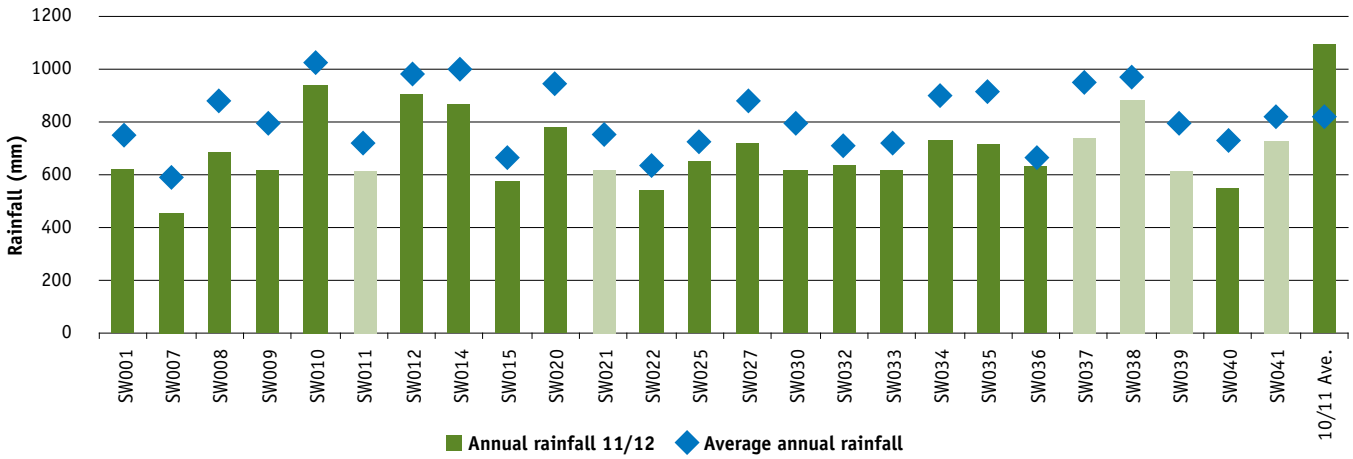


Figure 26 shows that gross income in the South West ranged from $1,338/ha to $5,360/ha.

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 top 25% of farms ranked according to return on assets recorded higher results than the average for each physical parameter, except home grown feed as a percent of ME consumed.

The top 25% of farms received greater rainfall, had larger total usable area and ran more milking cows per hectare than the average.

The areas where the top 25% were noticeably above the regional average were with milk production, both as per cow and per hectare, and labour efficiency, both milking cows/FTE and kg MS/FTE.

TABLE 6: FARM PHYSICAL DATA – SOUTH WEST

FARM PHYSICAL PARAMETERS	SOUTH WEST AVERAGE	Q1 TO Q3 RANGE	TOP 25% AVERAGE
Annual rainfall 11/12	682	613 - 733	701
Water used (irrigation + rainfall) (mm/ha)	687	615 - 764	705
Total usable area (hectares)	327	160 - 389	361
Milking cows per useable hectares	1.2	0.9 - 1.4	1.4
Milk sold (kg MS /cow)	507	429 - 763	558
Milk sold (kg MS /ha)	605	477 - 577	775
Home grown feed as % of ME consumed	55%	47% - 63%	50%
Labour efficiency (milking cows / FTE)	87	61 - 108	111
Labour efficiency (kg MS / FTE)	44,344	30,686 - 54,754	61,139

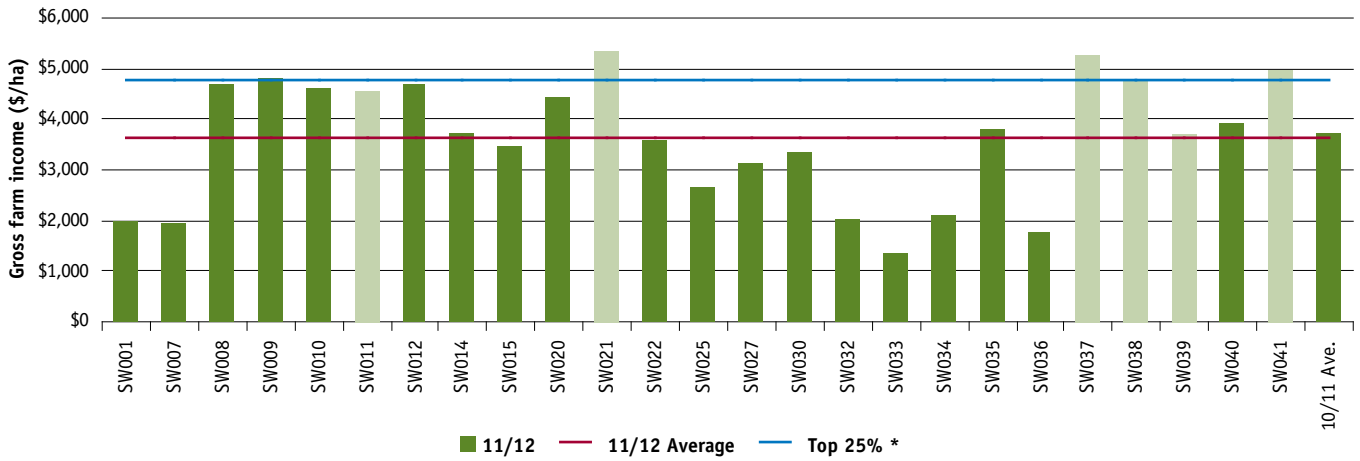
Gross farm income

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 farm owned shares, interest from bank accounts and rebates or grants. Changes in inventories of stock or feed are also accounted for in gross farm income and in 2011/12 the long, dry summer depleted feed inventory by $51,919 on average meaning this figure was deducted from gross farm income. Gross farm income as per kilogram of milk solids sold can be found in Appendix Table B1.

Figure 26 shows that gross farm income in the South West ranged from $1,338 per hectare to $5,360/ha. In comparison with last years average gross farm income of $3,698/ha, this year's average decreased slightly to $3,630/ha, as shown by the red 11/12 average being just below the 10/11 average green bar.

The farms in the top 25% recorded gross farm income within the upper half of 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 HECTARE – SOUTH WEST



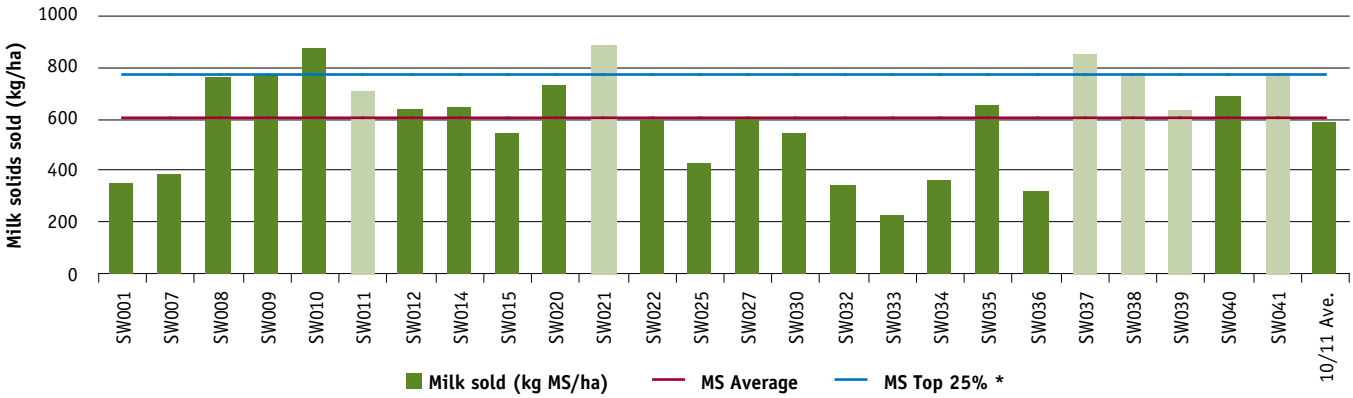
Milk solids production

The strong correlation between gross farm income and milk solids per hectare can be seen in Figures 26 and 27. The slight variation between these figures is as a result of other sources of income.

The top performing farms achieved 775 kg MS/ha in the South West compared to the average farms which sold almost 25% less at 605 kg MS/ha.

This group average is up slightly from the previous year of 585 kg MS/ha. The increase in milk solids sold this year has helped to offset the lower milk price, shown in Figure 29 below, enabling gross farm income to be more or less sustained this year.

FIGURE 27: MILK SOLIDS SOLD PER HECTARE – SOUTH WEST



Variable costs

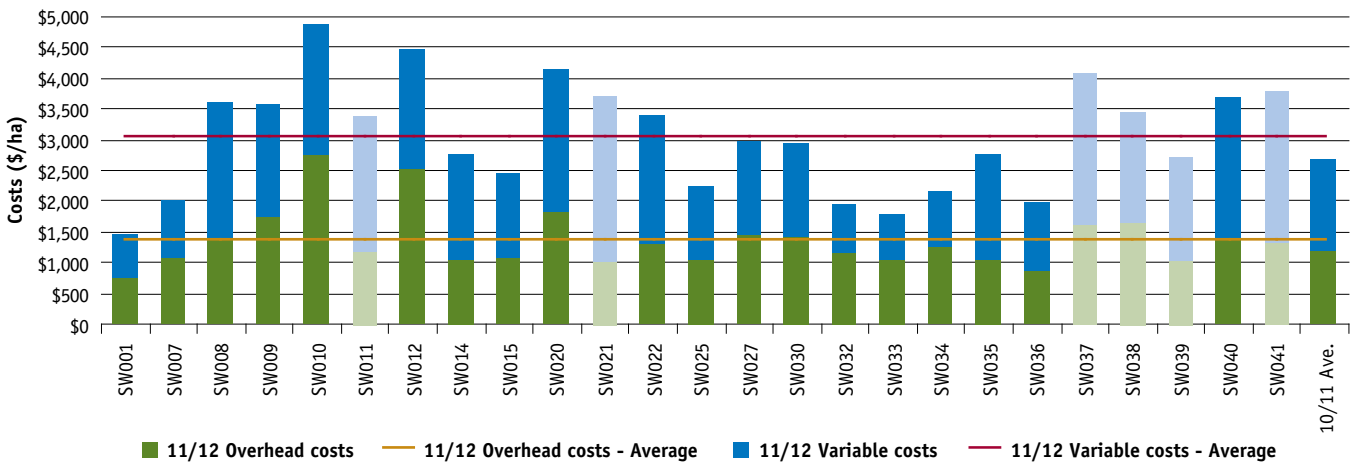
The separation of variable and overhead costs per hectare is shown in Figure 28. Variable costs are those costs that change directly according to the amount of output, such as herd, shed and feed costs.

Variable costs for the South West region varied from $685/ha to $2,678/ha. On average, they increased from $1,482/ha last year to $1,694/ha in 2011/12 due to across the board rises in herd, shed and feed costs per hectare.

Feed costs were again the major variable cost in the South West, with the hot dry summer increasing feed costs 14% on last year and accounting for 46% of total costs of production in 2011/12. It is worth noting that these costs do not include the $109/ha feed inventory loss also incurred through the depletion of fodder reserves.

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

FIGURE 28: WHOLE FARM VARIABLE AND OVERHEAD COSTS PER HECTARE – SOUTH WEST



Overhead costs

The calculation of overhead costs in the DIFMP 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 27 also illustrates the variation in overhead costs per hectare between participant farms. Values ranged from $756 to $2,756 per hectare. The top 25% recorded similar overhead costs to the regional average at $1,365/ha and $1,325/ha respectively.

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 63% of total overhead costs. Repairs and maintenance and depreciation were the other two major overhead cost categories.

Cost of production

Figure 26 and Table 7 present both variable and overhead costs to give total cost of production per hectare and per kilogram of milk solids sold. Cost of production is a useful risk indicator as it calculates the costs incurred to produce a kilogram of milk solids sold. The comparison of cost of production to gross income returns the percentage of gross income retained as earnings (EBIT %).

TABLE 7: COST OF PRODUCTION – SOUTH WEST

FARM COSTS ($ / KG MS)	SOUTH WEST AVERAGE	Q1 TO Q3 RANGE	TOP 25% AVERAGE
VARIABLE COSTS			
Herd costs	$0.23	$0.19 - $0.26	$0.26
Shed costs	$0.21	$0.14 - $0.27	$0.19
Purchased feed and agistment	$1.51	$1.31 - $1.70	$1.67
Home grown feed cost	$0.84	$0.63 - $1.04	$0.71
Total variable costs ($ / kg MS)	$2.79	$2.49 - $3.09	$2.84
OVERHEAD COSTS			
Rates	$0.05	$0.04 - $0.06	$0.04
Registration and insurance	$0.02	$0.01 - $0.02	$0.01
Farm insurance	$0.06	$0.03 - $0.08	$0.04
Repairs and maintenance	$0.40	$0.26 - $0.48	$0.30
Bank charges	$0.02	$0.00 - $0.01	$0.01
Other overheads	$0.13	$0.08 - $0.17	$0.12
Employed labour	$0.43	$0.06 - $0.66	$0.56
Total cash overheads	$1.11	$0.72 - $1.27	$1.07
Depreciation	$0.21	$0.12 - $0.24	$0.16
Imputed owner/operator and family labour	$1.08	$0.42 - $1.55	$0.48
Total overhead costs ($ / kg MS)	$2.40	$1.80 - $2.63	$1.72
Total cost of production ($ / kg MS)	$5.19	$4.51 - $5.67	$4.55

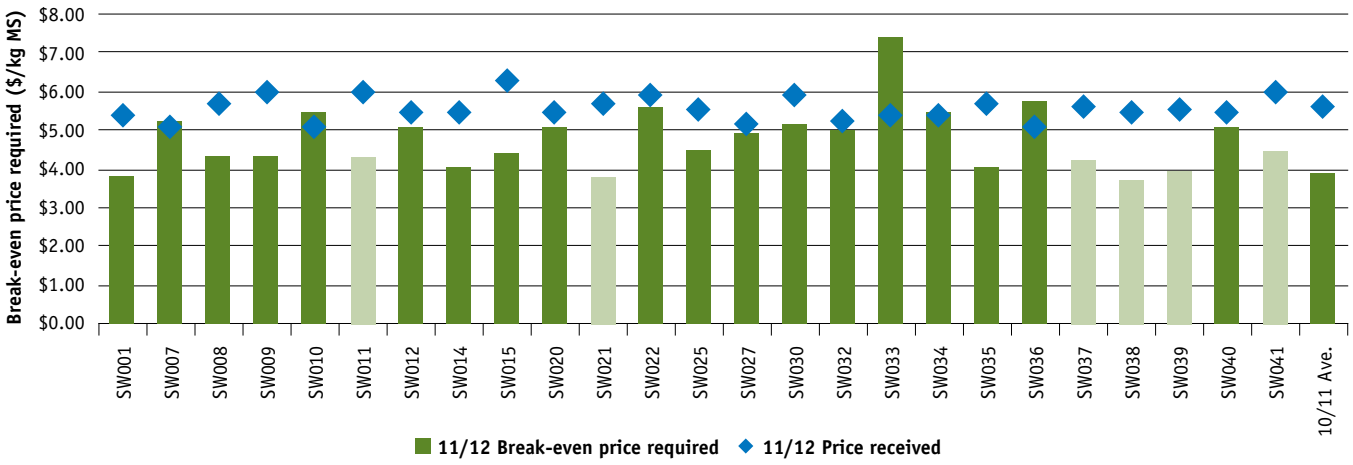
Break-even price required

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 change 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 received of the main output in the business, that being milk.

Figure 29 shows that the break-even price required ranged from $3.70/kg MS to $7.42/per kg MS in the South West. The average milk price was $5.56/kg MS, just below the 2010/11 average price of $5.62/kg MS. The distribution was $5.08 to $6.27/kg MS, a range greater than that recorded last year.

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 $0.78/kg MS, a decrease of $0.93/kg MS or 54% on the previous year.

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

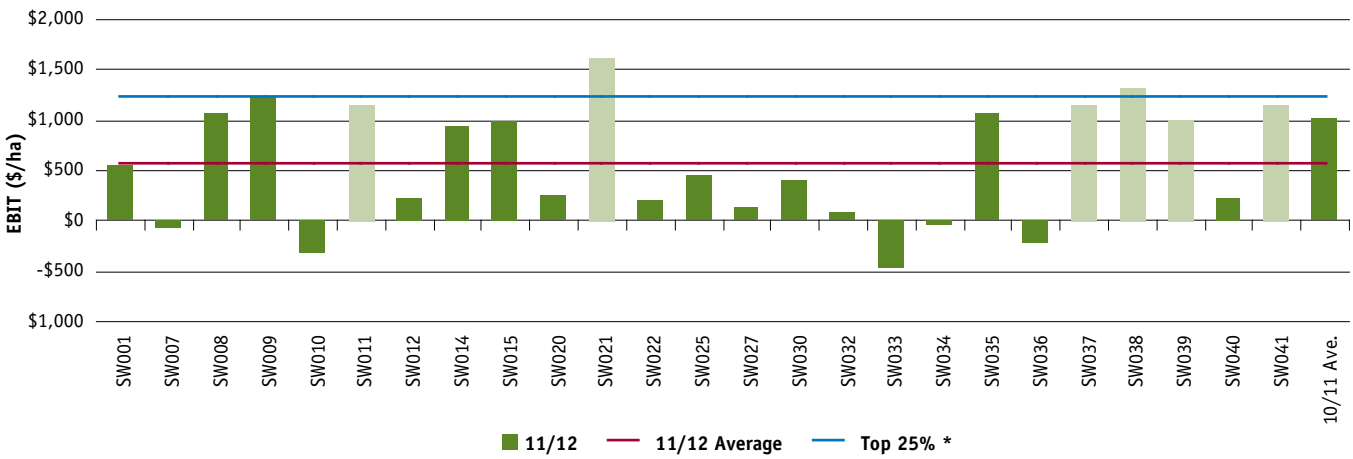


Earnings Before Interest and Tax

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 per hectare has almost halved from 2010/11 results, falling from $1,012/ha to $571/ha as shown in Figure 30. The reduced gross income via feed inventory loss and higher variable and overhead costs per hectare are contributing factors to the decline in farm returns. The strength of the top performers is highlighted by recording an average EBIT of $1,250/ha, 119% higher than the average.

FIGURE 30: WHOLE FARM EARNINGS BEFORE INTEREST AND TAX PER HECTARE – SOUTH WEST

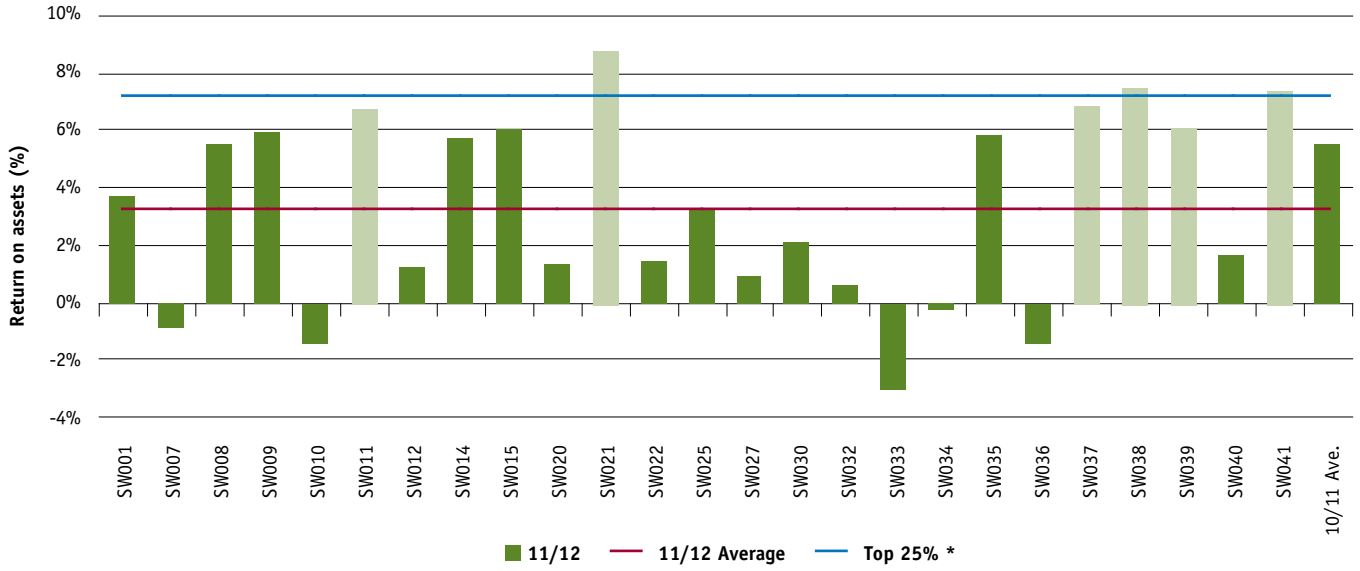


Return on assets and equity

Return on assets is the earnings before interest and tax 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. In 2011/12 the DIFMP has changed its' ranking of the top 25% of farms from EBIT/ha to return on asset. Return on equity is the net farm income; that is EBIT minus interest and lease costs, expressed as a percentage of owner equity. It is a measure of the owner's rate of return on investment. 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.

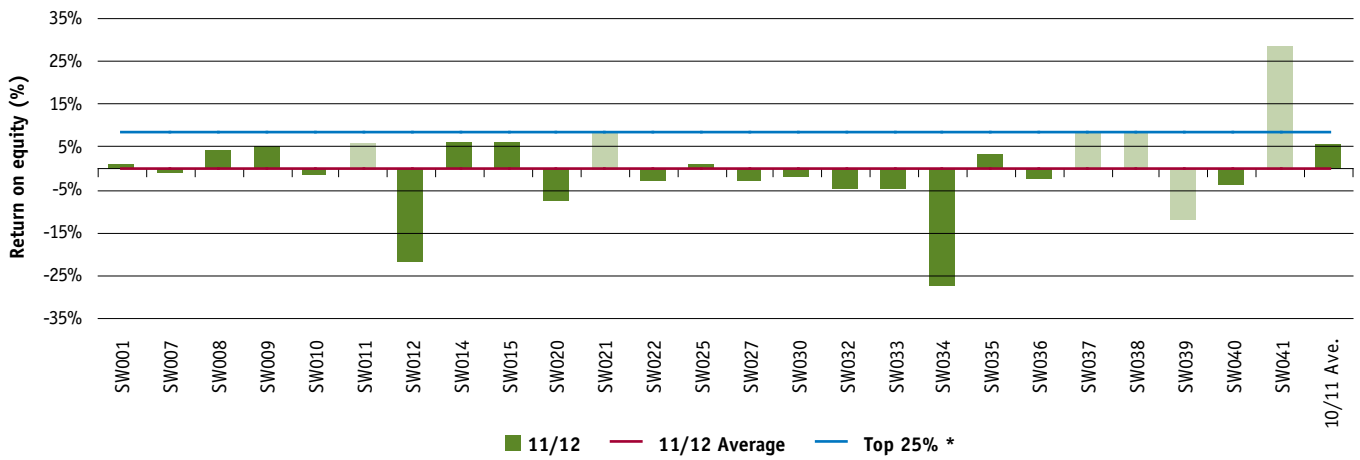
The return on assets for the South West region ranged from -3.1% to 8.8% (Figure 31). In line with falls in income and rises in costs, farm economic efficiency across the group has declined from 5.5% to 3.3% year on year. Two quite disparate groups can be identified within the sample with 12 farms recording a return on assets of 2% or less and 11 farms recording a return on assets of more than 5% with little in between. It is also worth noting that land price in the South West has declined on average from $14,238/ha ($5,764/acre) to $11,809/ha ($4,781/acre) between years for farms in the sample. The top 25% achieved 7.2%, compared to 9.3% recorded last year by the top performers.

FIGURE 31: RETURN ON ASSETS – SOUTH WEST



This year return on equity had a wide range from -27.4% up to 28.9% as shown in Figure 32. For the first time since 2006/07 the average for the region ventured into negative territory recording -0.2% this year, a substantial fall from 5.8% recorded last year. Noticeably 13 of 25 farms in the sample recorded a negative return on equity.

FIGURE 32: RETURN ON EQUITY – SOUTH WEST



Feed consumption and fertiliser

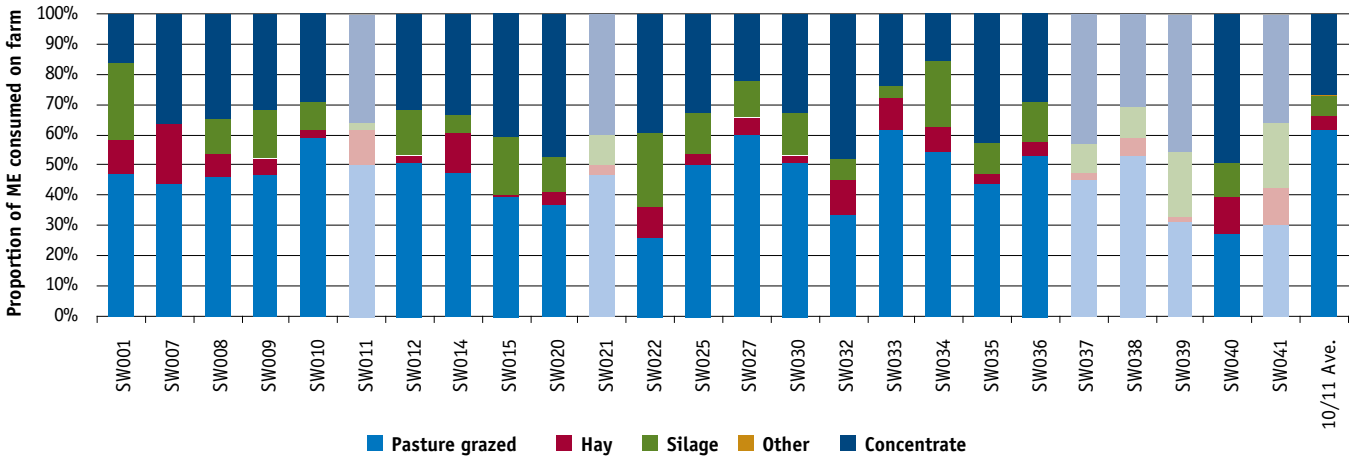
Feed data was collected on a whole farm basis rather than determining which feeds went to each class of stock as this would have made the data collection process too difficult on many farms.

Figure 33 shows the relative contribution of each feed type to the ME consumption on the farm. Pasture consumption is calculated as the gap between the calculated total energy required on farm for all stock classes and the energy provided from concentrates, silage, hay and **other sources.

The contribution of grazed pasture as a proportion of ME consumed on farm fell from 62% on average in 2010/11 to 46% in 2011/12. Concentrates were the most used supplement contributing just over one-third of total ME fed while silage and hay use doubled from the previous year contributing 13% and 7% of total ME consumed on farm on average.

**Other sources of feed include sources that are not used by or available to dairy farmers on the common market. Palm Kernel Extract is included as a concentrate.

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

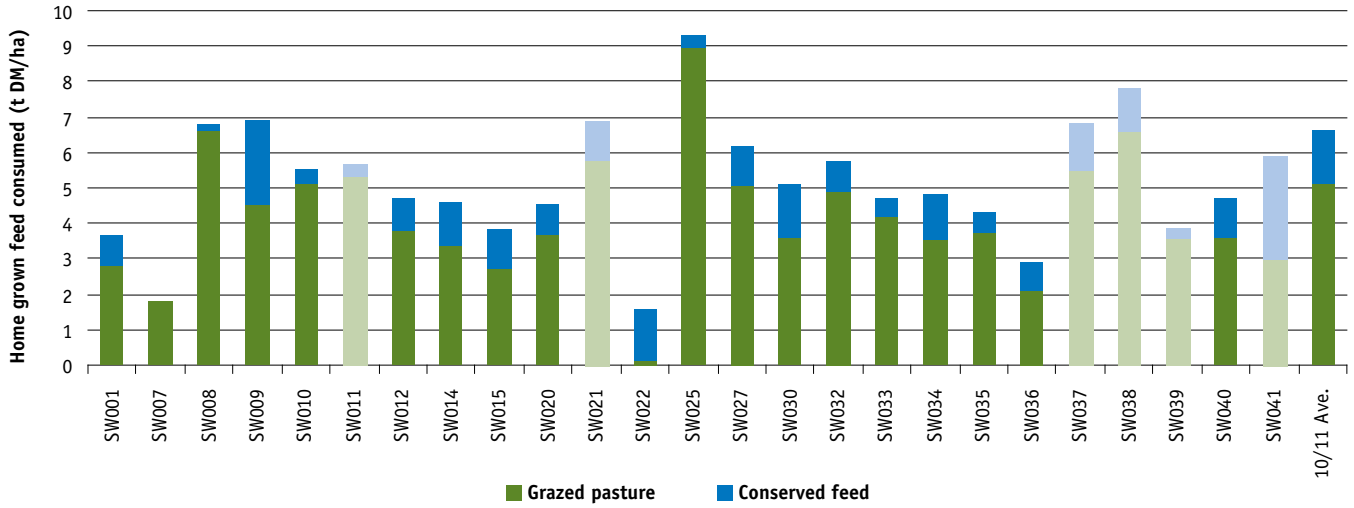


In 2011/12 home grown feed consumption has been measured per milking hectare as opposed to per usable hectare as has been the measurement in the past. Pasture consumption for farms in the South West is shown in Figure 34. The large amounts of purchased and carried over supplement fed this year made an accurate calculation of pasture consumption difficult.

The amount of pasture grazed this year ranged from 0.1 tonnes of dry matter per hectare up to 8.9 t DM/ha, with an average of 4.2 t DM/ha. Conserved fodder ranged from 0.2 t DM/ha (excluding the 0 t DM/ha values) to 2.9 t DM/ha, with an average of 1.0 t DM/ha. This resulted in an average total pasture harvest from the milking area of 5.2 t DM/ha.

It should be noted that there can be a number of potential sources of error in the method used to calculate home pasture consumption including 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 errors in each farms estimate and 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

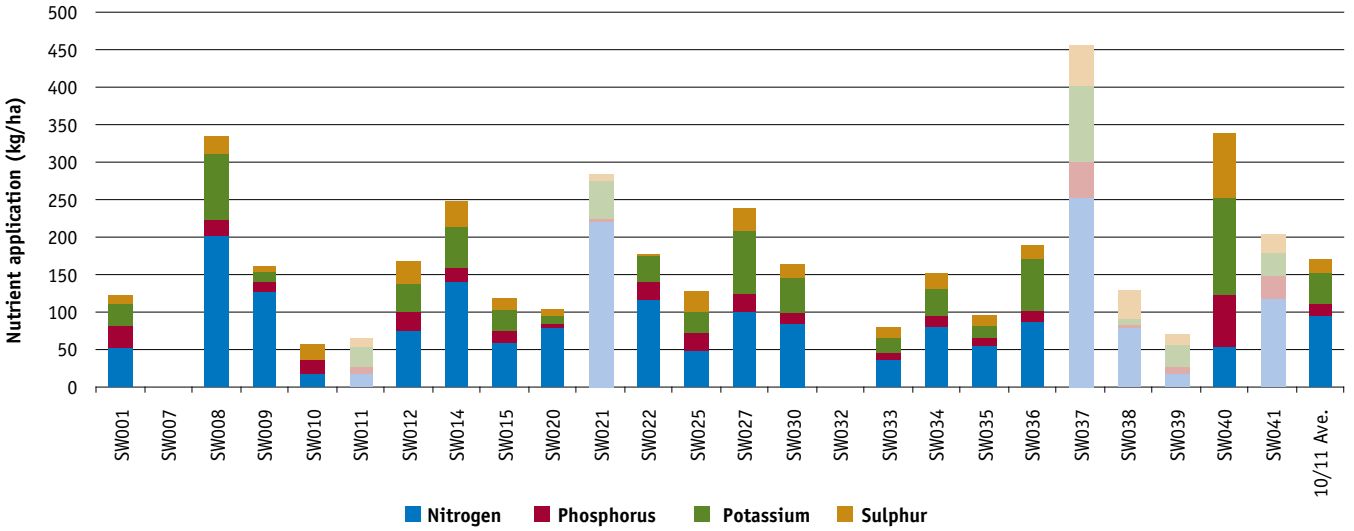


Fertiliser application

The proportion of nutrients in fertiliser applied per hectare on farm is shown in Figure 35. Figures 34 and 35 show low correlation and the influence of other factors beyond fertiliser application such as current soil fertility, climate and management of pastures can be attributable to the differences seen. Rates of nitrogen application averaged over the entire usable area of each farm varied substantially, from 19 kg/ha (excluding the 0kg/ha values) to up to 253 kg/ha. The average was 85 kg/ha, down from 96 kg/ha last year.

The individual values relating to Figure 34 and 35 can be found in Appendix Table B2.

FIGURE 35: NUTRIENT APPLICATION PER HECTARE – SOUTH WEST



Part Four: Gippsland

Gippsland

Farms GI004 to GI017 are participating in the project for their sixth year. Farms GI020 to GI048 were involved in the 2010/11 project, and farm GI028 returns to the project this year. Please refer to page 3 for notes on the presentation of this data.

2011/12 Seasonal conditions

Following 2010/11, 2011/12 was another wet year across Gippsland with the primary challenge for many of the regions dairy farmers coming in the form of floods and wet soils management. As can be seen in Figure 36, annual rainfall exceeded the long term average for all participants, with some farms experiencing up to 160% of, or 432mm more than, their long term average.

West and South Gippsland in particular experienced a winter and spring period during which water logged soils reduced the capacity to harvest any excess pasture and the opportunities for fertilisers to be applied to generate more feed. The summer, whilst not overly wet, was cool and soils remained moist meaning good quality forage grew through most of the period and was carried into the autumn, although this forage was generally not in excess of requirements. Heavy late autumn and winter rainfall necessitated the use fodder supplements two months earlier than usual.

On many farms flooding and wet soils meant paddocks were not grazed for extended periods due to damage or pugging issues which reduced farm grazing area and pasture production. Those farmers lucky enough to be on well draining sandy or red soils had a good year, with sufficient moisture available throughout the year to permit pasture growth which would normally not be the case.

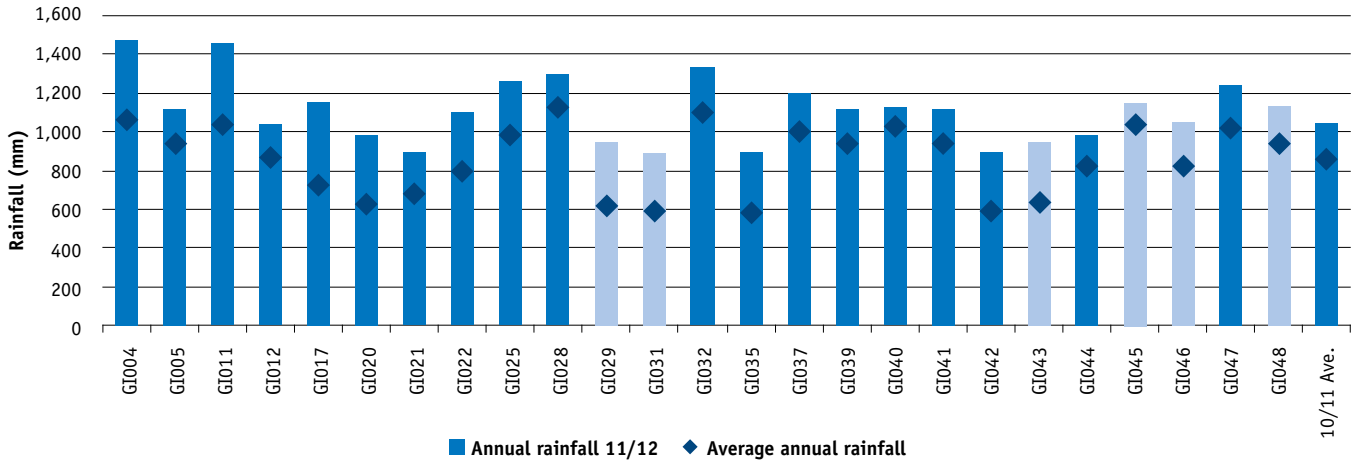
The Macalister Irrigation District again received good water allocations finishing the season with 100% high reliability water shares (HRWS) and 100% low reliability water shares (LRWS) enabling the production high quality feed and fodder throughout the season. Heavy rain in late autumn and early winter of 2012 did impact on farms located in the irrigation district as well as some in East Gippsland.

Farmers generally have not changed their practices in response to the wet conditions, with many looking to repair damaged pastures when the conditions allow. However, some have investigated installing feed pads to counter future wet soil issues.

The impact of the wet conditions, combined with the need to feed lower quality home grown fodder and more bought in concentrates in the early and the latter part of the year has contributed to a poorer performance by Gippsland farms when compared to last year.

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

FIGURE 36: 2011/12 ANNUAL RAINFALL AND LONG TERM AVERAGE RAINFALL – GIPPSLAND



The variation in gross income per hectare between participants in Gippsland, ranged from $2,686/ha to $11,943/ha.

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.

By examining the physical parameters for the top 25% of farms ranked by return on assets under management against the Q1-Q3 range if is possible to identify some of the key characteristics of the most profitable farms.

These characteristics of top farms are the greater number of milking cows per hectare, 2.0 cows/ha compared to 1.3-1.8 for the middle band, and greater milk production per hectare at 1,073 compared to 695 – 938 range.

The top 25% of farms lie within the middle band of rainfall, water used and usable hectares suggesting these parameters have less influence over profitability for these farms in the dataset.

It must be noted these physical parameters only partly explain the most profitable farms. Caution must be taken when looking at these physical parameters in isolation.

The average had greater annual rainfall at 1,113 mm compared to 1,023 mm for the top producers and slightly more usable area at 189 ha compared to 170 ha for the top producers.

TABLE 8: FARM PHYSICAL DATA – GIPPSLAND

FARM PHYSICAL PARAMETERS	GIPPSLAND AVERAGE	Q1 TO Q3 RANGE	TOP 25% AVERAGE
Annual rainfall 2011/12	1,113	982 - 1,200	1,023
Water used (irrigation + rainfall) (mm/ha)	1,182	1,115 - 1,263	1,199
Total usable area (hectares)	189	110 - 246	170
Milking cows per usable hectares	1.7	1.3 - 1.8	2.0
Milk sold (kg MS /cow)	501	485 - 535	531
Milk sold (kg MS /ha)	843	695 - 938	1,073
Home grown feed as % of ME consumed	62%	55% - 69%	62%
Labour efficiency (milking cows / FTE)	100	80 - 115	112
Labour efficiency (kg MS / FTE)	50,244	44,774 - 59,777	59,383

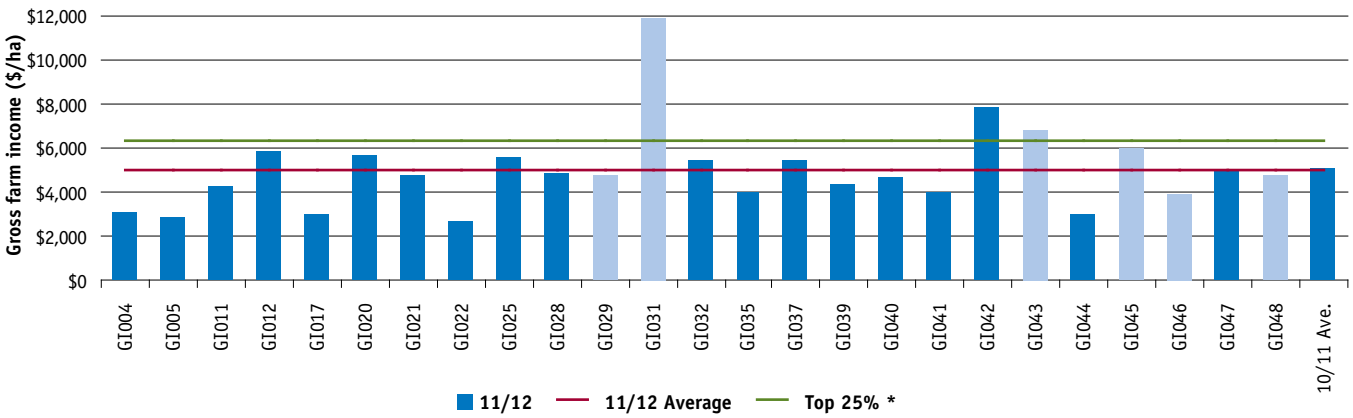
Gross farm income

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 income per hectare between participants in Gippsland, ranging from $2,686/ha up to $11,943/ha. The top 25% of farms averaged $6,370/ha, compared to the group average of $4,971/ha.

Gross farm income on average was down $362/ha compared to last year. This was predominately due to the $34/ha decline in feed inventory. The wet winter in 2011 made it difficult to conserve fodder and the heavy winter rainfall in 2012 saw greater quantities of fodder supplements used. Milk price was also 4% lower falling from $5.59/kg MS last year to $5.37/kg MS this year.

FIGURE 37: GROSS FARM INCOME PER HECTARE – GIPPSLAND

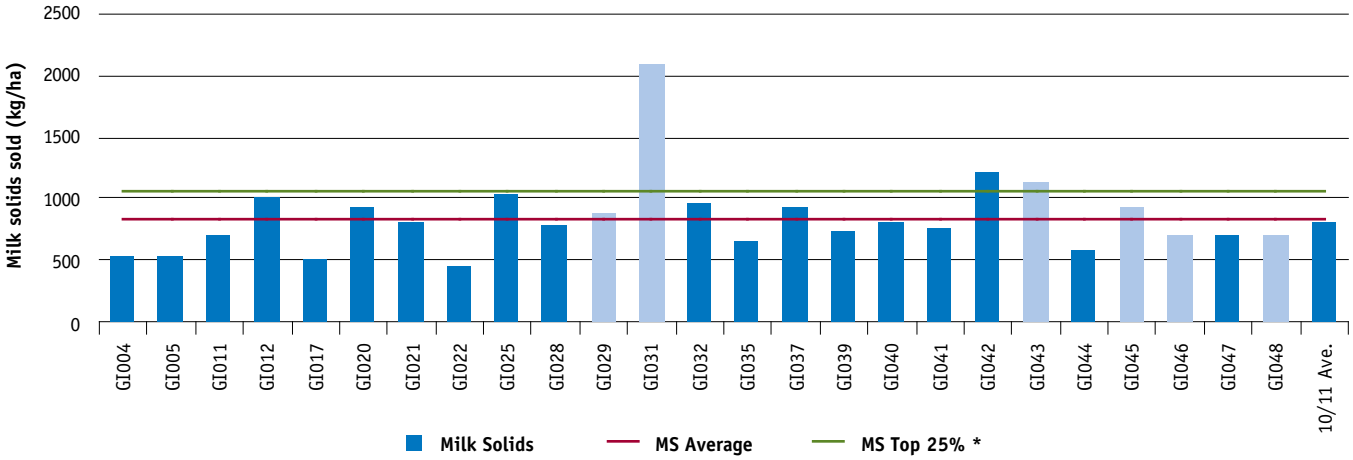


Milk solids production

In 2011/12 average milk solids sold per hectare slightly increased on average to 843 kg MS/ha, rising from the 2010/11 levels of 811 kg MS/ha. However the average milk solids production of the top 25% of farms was 10% lower at 1,073 kg MS/ha compared to 2010/11 levels at 1,198 kg MS/ha. There does not appear to be any strong link between milk solids sold per hectare and with either annual rainfall or the long-term average for individual farms.

The correlation between gross income and milk solids sold per hectare can be seen between figures 37 and 38. Minor across-farm differences can be explained by differences in the milk price received and income received from other sources by the individual farms.

FIGURE 38: MILK SOLIDS SOLD PER HECTARE – GIPPSLAND



Variable costs

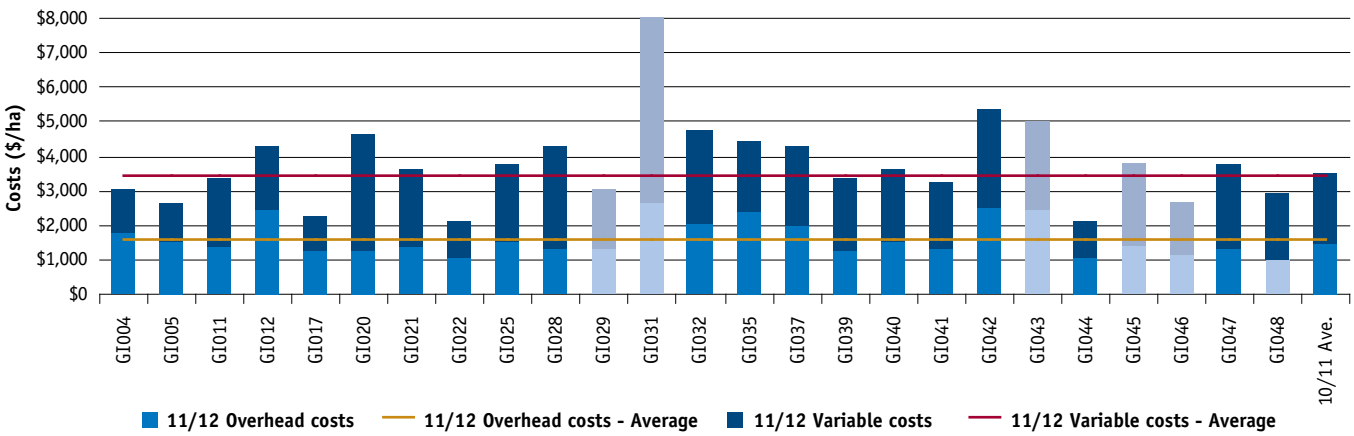
The separation of variable and overhead costs per hectare is shown in Figure 39. Variable costs are those costs that change directly according to the amount of output, such as herd, shed and feed costs.

Variable costs for Gippsland varied from $1,020/ha to $6,830/ha. This year average variable costs increased from $1,710/ha in 2010/11 to $1,820/ha this year.

Feed costs are the greatest cost in the dairy business representing 46% of total costs on Gippsland farms. Feed costs were 6% higher this year due to increases in grain and concentrates ($50/ha), fodder purchases ($42/ha) and fertiliser ($23/ha). However hay and silage making decreased by $41/ha.

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 HECTARE – GIPPSLAND



Overhead costs

Figure 39 also illustrates the overhead costs per hectare for Gippsland. This figure includes the non cash overhead costs of imputed owner/operator and family labour and depreciation. Both 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 labour and imputed owner/operator and family labour, was the major overhead cost, accounting for 64% of overhead costs for the regional average, and 69% in the top 25% of farms. The break down of overheads cost per hectare as a percentage of the total costs can be found in Appendix Table C7 and Appendix Table C5 provides a breakdown to $/kg MS.

There was a range of total expenditure on overhead costs in Gippsland during 2011/12. The highest value was $2,639/ha; two and a half times the level of the lowest value of $1,018/ha. Table 9 gives an indication of the range of overheads as per kilogram of milk solids sold and presents the regional and top 25% averages.

Cost of production

Figure 39 and Table 9 present both variable and overhead costs to give the total cost of production per hectare and per kilogram of milk solids sold respectively. When cost of production is expressed as per kilogram of milk solids sold, the cost of production can be a useful risk ratio. By comparing cost of production per kilogram of milk solids sold to gross income, the average operating margin, ie earnings before interest and tax / kg MS, can be obtained.

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

TABLE 9: COST OF PRODUCTION – GIPPSLAND

FARM COSTS ($ / KG MS)	GIPPSLAND AVERAGE	Q1 TO Q3 RANGE	TOP 25% AVERAGE
VARIABLE COSTS			
Herd costs	$0.29	$0.20 - $0.37	$0.27
Shed costs	$0.18	$0.13 - $0.23	$0.16
Purchased feed and agistment	$1.34	$0.98 - $1.68	$1.35
Home grown feed cost	$0.78	$0.60 - $0.89	$0.71
Total variable costs ($ / kg MS)	$2.59	$2.16 - $2.80	$2.50
OVERHEAD COSTS			
Rates	$0.05	$0.03 - $0.06	$0.03
Registration and insurance	$0.02	$0.01 - $0.03	$0.01
Farm insurance	$0.05	$0.03 - $0.07	$0.05
Repairs and maintenance	$0.32	$0.19 - $0.40	$0.19
Bank charges	$0.01	$0.00 - $0.01	$0.01
Other overheads	$0.10	$0.07 - $0.10	$0.09
Employed labour cost	$0.40	$0.15 - $0.54	$0.59
Total cash overheads	$0.95	$0.73 - $1.14	$0.97
Depreciation	$0.17	$0.55 - $1.03	$0.12
Imputed owner/operator and family labour	$0.88	$0.11 - $0.22	$0.48
Total overhead costs ($ / kg MS)	$2.01	$1.55 - $2.13	$1.57
Total cost of production ($ / kg MS)	$4.59	$4.23 - $4.91	$4.07

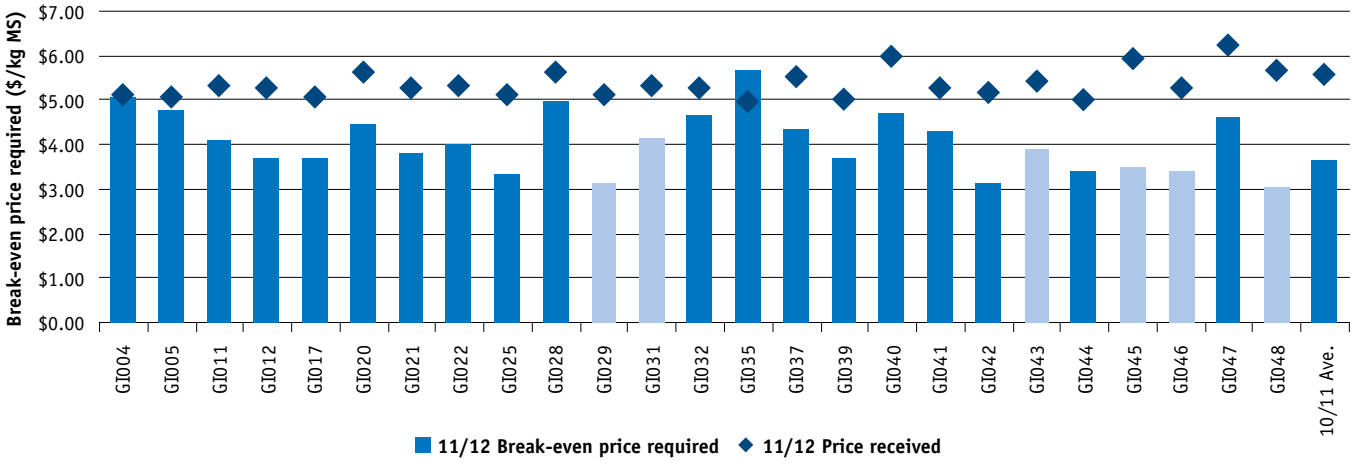
Break-even price required

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 $3.05 per kg MS to $5.66 per kg MS in Gippsland. The average break-even milk price required of 4.07/kg MS was higher than $3.63/kg MS recorded last year.

Milk price was also lower this year with the average price for participants at $5.37/kg MS compared to $5.59/kg MS last year, a 4% drop.

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



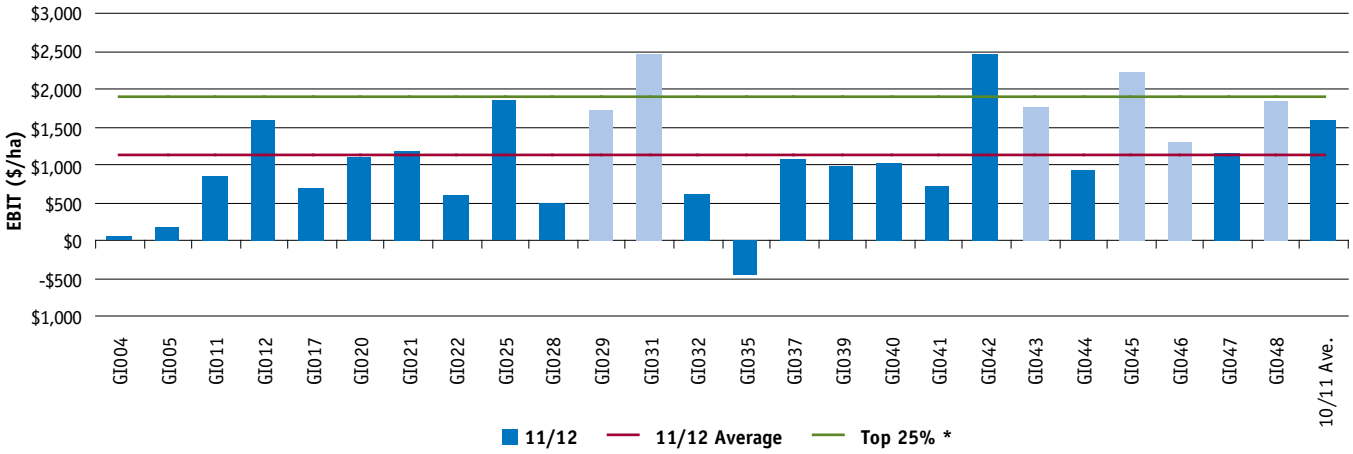
Earnings Before Interest and Tax

EBIT is gross farm income less variable and overhead costs.

On average EBIT was $1,137/ha in 2011/12, down from $1,580/ha on last year or a 28% reduction. The top 25% of farms recorded an average EBIT of $1,890 which is also lower than last year's top performers of $2,575/ha.

While milk production was slightly higher this year the lower EBIT can be attributed to the lower milk price and feed inventory loss contributing to lower gross income, and with the increase in variable and overhead costs has seen average EBIT fall year on year.

FIGURE 41: WHOLE FARM EARNINGS BEFORE INTEREST AND TAX PER HECTARE – GIPPSLAND



Return on assets and equity

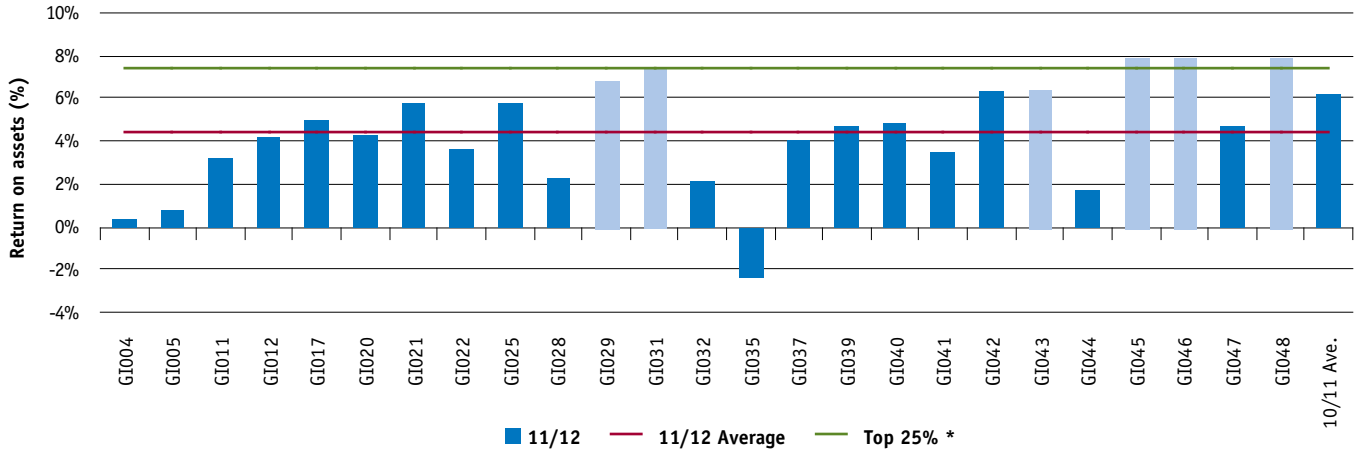
Return on assets is the EBIT expressed as a percentage of total assets. It is an indicator of the earning power of total assets, irrespective of capital structure. Return on equity is the net farm income (EBIT less interest and lease payments) expressed as a percentage of the owner's equity. It is a measure of the owner's rate of return on investment.

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.

Return on assets in Gippsland ranged from -2.4% to 8.0% during 2011/12. The average of 4.4% return on assets for Gippsland is noticeably lower than last year's result of 6.1%, as shown by the red 11/12 average line below the 10/11 average bar in figure 42.

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. A negative return on equity will result when total interest and lease payments exceed the earnings before interest and tax. When the percentage of return on equity increases compared to return on assets, it is the result of a higher return from the additional assets than the interest or lease rate.

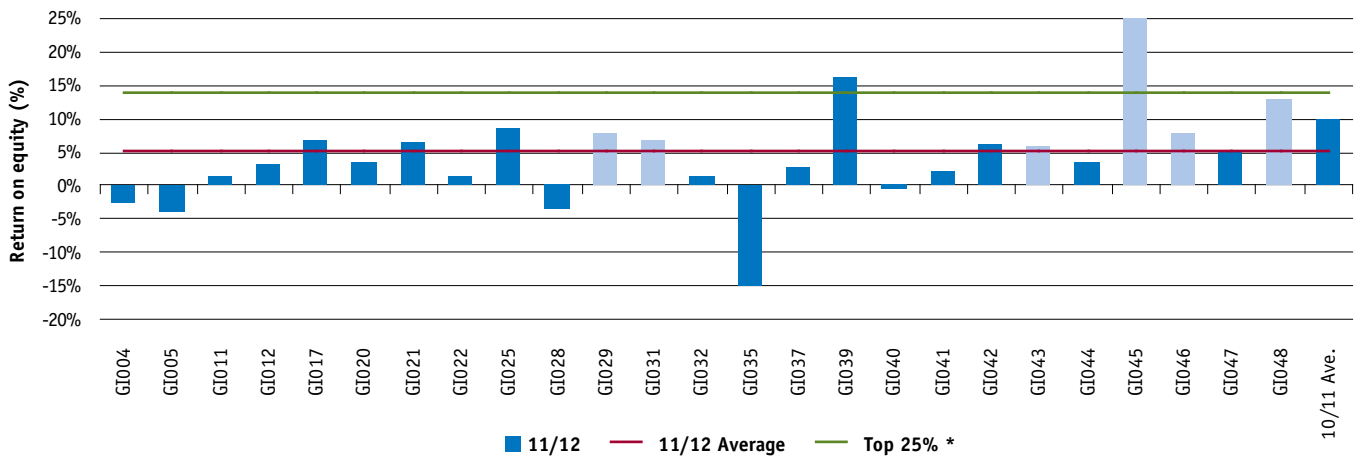
FIGURE 42: RETURN ON ASSETS – GIPPSLAND



Gippsland had varied, and mostly positive, return on equity results ranging from -15% to 43% for farm GI045 which is not displayed fully in Figure 43 below. The average return on equity for all farms was 4.4% but for the top 25% was 7.5%.

Farms that manage a significant proportion of leased land have recorded considerably higher return on equity to the average, such as GI045 and GI039. 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 18 farms sourcing at least half their energy requirement as grazed pasture.

Pasture consumption is calculated as the gap between the calculated 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 30% of energy in the diet. The intake of concentrates ranged from 16% to 44% of all metabolisable energy (ME) consumed.

**Other sources of feed include those that are not commonly used by, or available to, dairy farmers. Palm Kernel Extract is included as a concentrate.

FIGURE 44: SOURCES OF WHOLE FARM METABOLISABLE ENERGY – GIPPSLAND

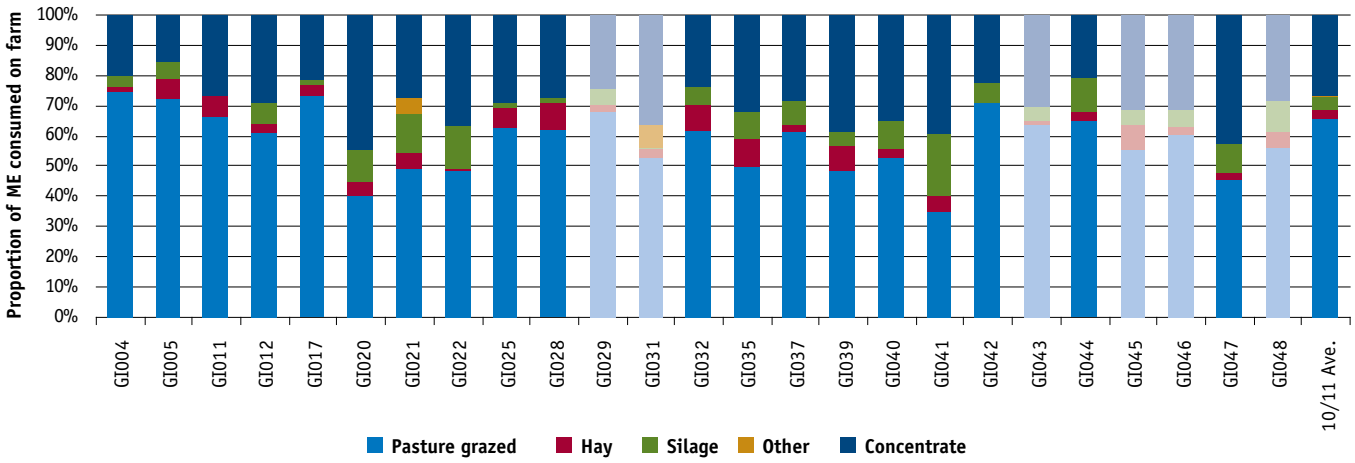
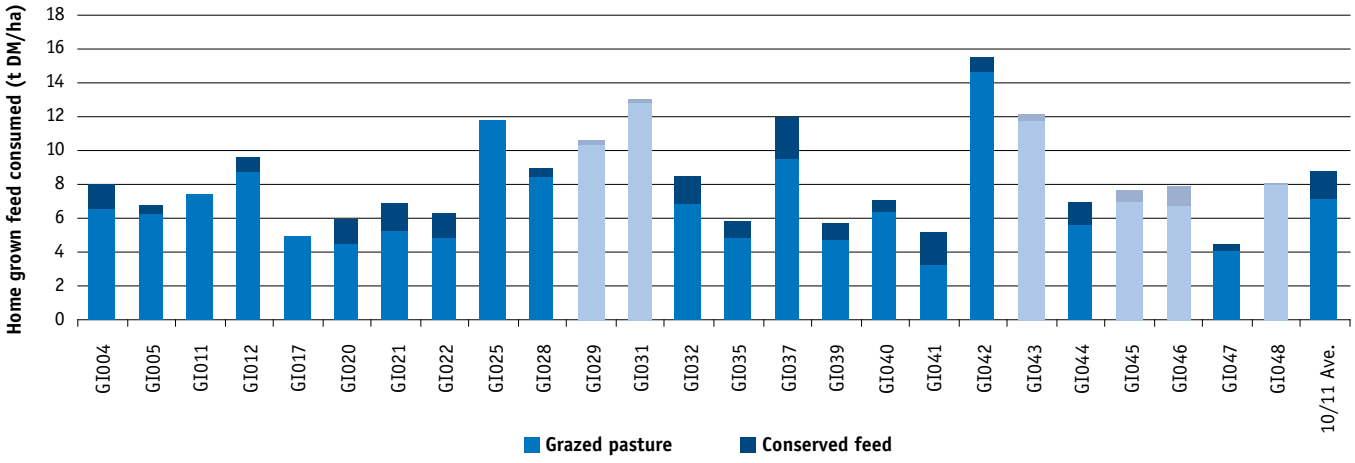


Figure 45 shows the estimated tonnes of home grown feed consumed per milking hectare for farms in Gippsland. Home grown feed can be grazed pasture (shown by the bottom lighter blue bars) and conserved pasture (shown by the top darker blue bars). Total home grown feed ranged from 4.4 tonnes of dry matter per milking hectare up to 15.5 tonnes per milking hectare. The average home grown feed produced per milking hectare was 8.3 t DM and the top 25% of farms averaged 9.9 t DM/ha.

As described above, 2011/12 was a challenging year with the wet 2011 winter and spring limiting the opportunity to conserve fodder, whilst in 2012 the heavy rainfall at the start of winter meant significant fodder was consumed. The quantity of conserved feed reduced from 1.7 t/ha last year to 0.9 t/ha this year, however, it must be noted the pasture consumption is calculated per milking area this compared to usable hectares last year. All participants conserved fodder again this year. On the other hand summer provided good conditions for pasture growth.

It should be noted that there can be a number of sources of error in the method used to calculate home pasture consumption including 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 and 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 CONSUMED PER MILKING HECTARE – GIPPSLAND

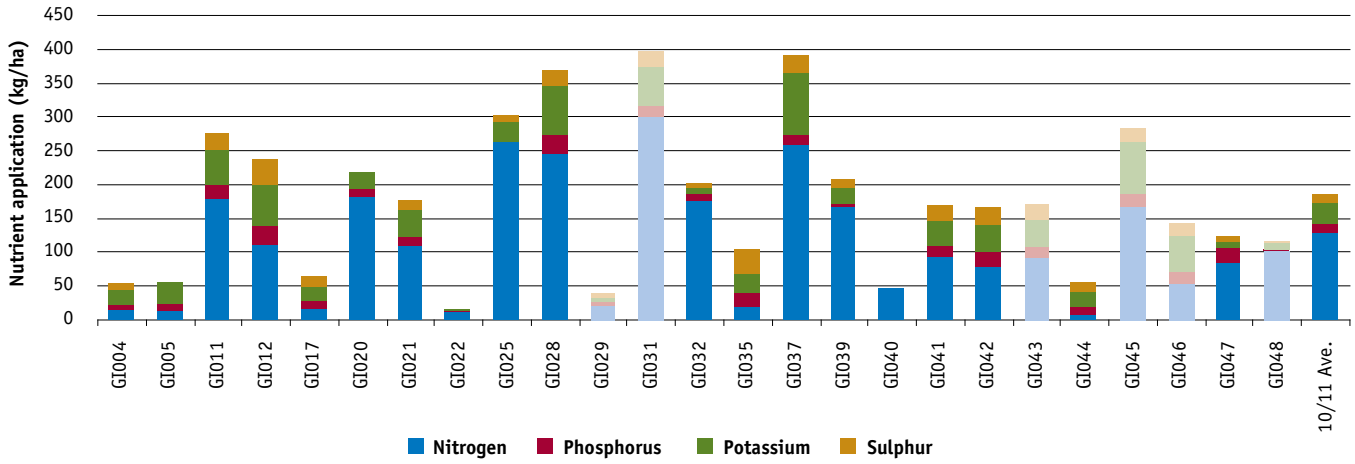


Fertiliser application

Farms in Gippsland used a wide range of fertiliser application rates, both between farms and with the mix of key macro-nutrients on individual farms. Nitrogen applied varied from 8 kg/ha up to 300 kg/ha, with the group average at 113 kg/ha, down from 130 kg/ha last year.

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. It should be noted that grazing strategies and timing of rainfall and irrigation scheduling would also impact upon pasture growth and consumption. The values for Figure 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 2012 with regard to the 2012/13 financial year.

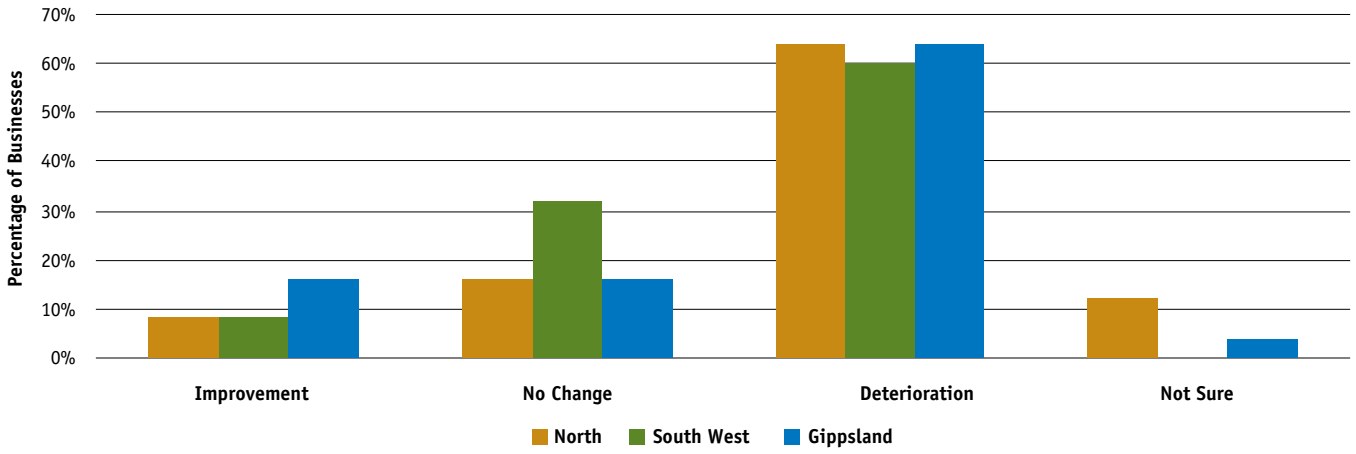
Expectations for business returns

The expectations for business returns for 2012/13 are opposite to those recorded last year with the majority of farmers expecting a deterioration in farm business returns. These expectations stem from the reduction in both 2012/13 opening price and expected full year milk price when compared to 2011/12, combined with forecast rises in prices for key inputs, particularly grain.

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

Across all three regions, two-thirds of participants expect their farm business returns to decline in 2012/13 as shown in Figure 47.

FIGURE 47: EXPECTED CHANGE TO FARM BUSINESS RETURNS IN 2012/13

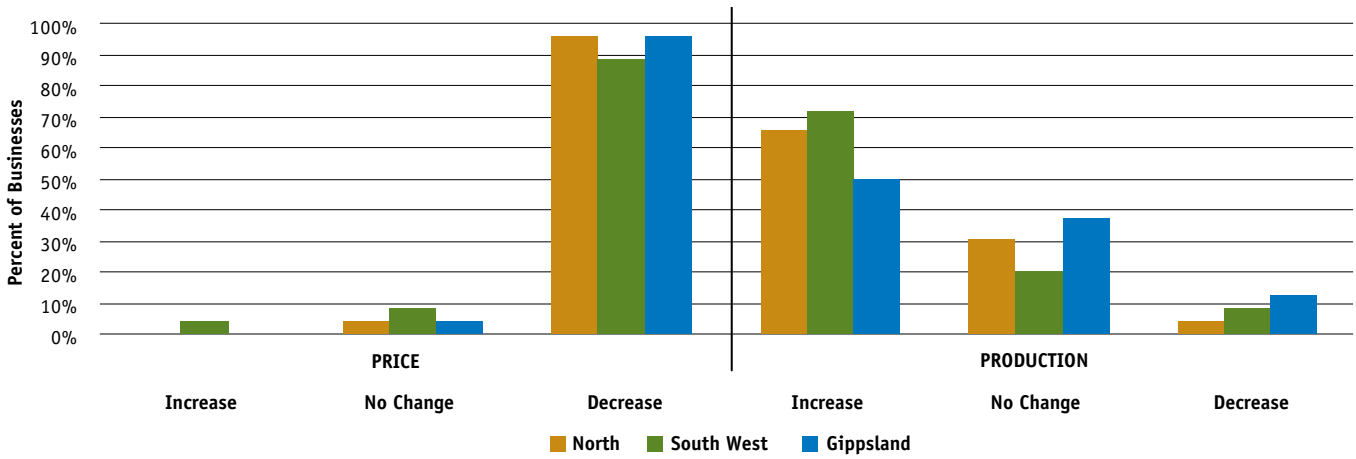


Price and production expectations – milk

The majority of farmers across the state are expecting their milk price to decline in 2012/13 (Figure 48). Four percent of farmers in the North and Gippsland expect no change to milk price while in the South West one optimistic producer expects milk price to increase in the coming year for their farm.

There is more confidence that milk production will increase than milk price. At least 50% of farmers in all regions indicated that they will increase milk production in the coming year.

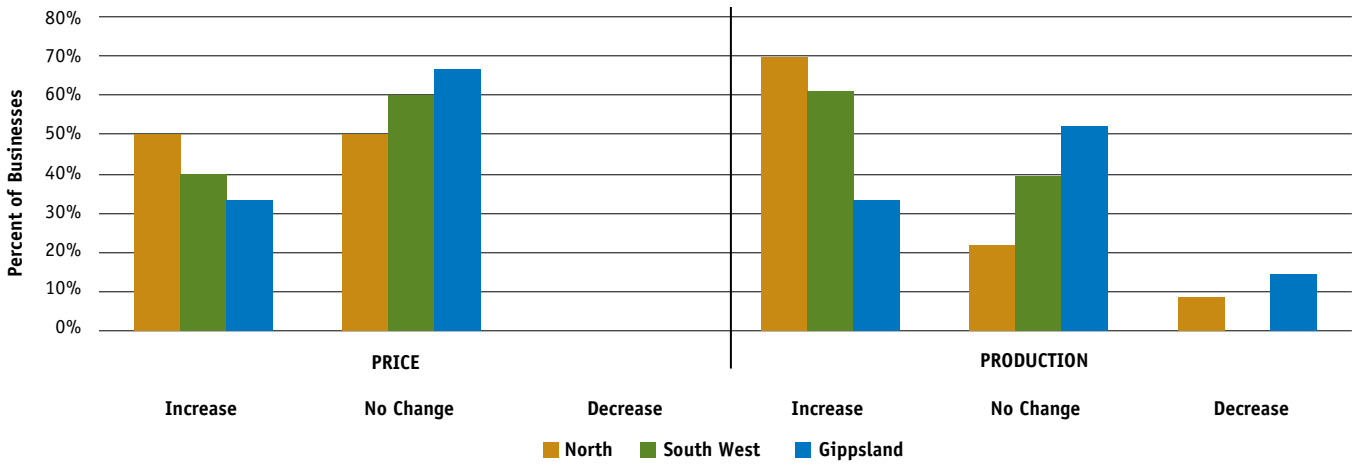
FIGURE 48: PRODUCER EXPECTATIONS OF PRICES AND PRODUCTION OF MILK IN 2012/13



Price and production expectations – fodder

Over 50% of all farms are expecting fodder prices to remain unchanged next year (Figure 49). Reflecting the depletion of fodder inventories, particularly in the North and South West, over 60% of farmers in these two regions expect fodder production to increase as they rebuild reserves. Around half of the participants in Gippsland are expecting no change to fodder production.

FIGURE 49: PRODUCER EXPECTATIONS OF PRICES AND PRODUCTION OF FODDER IN 2012/13

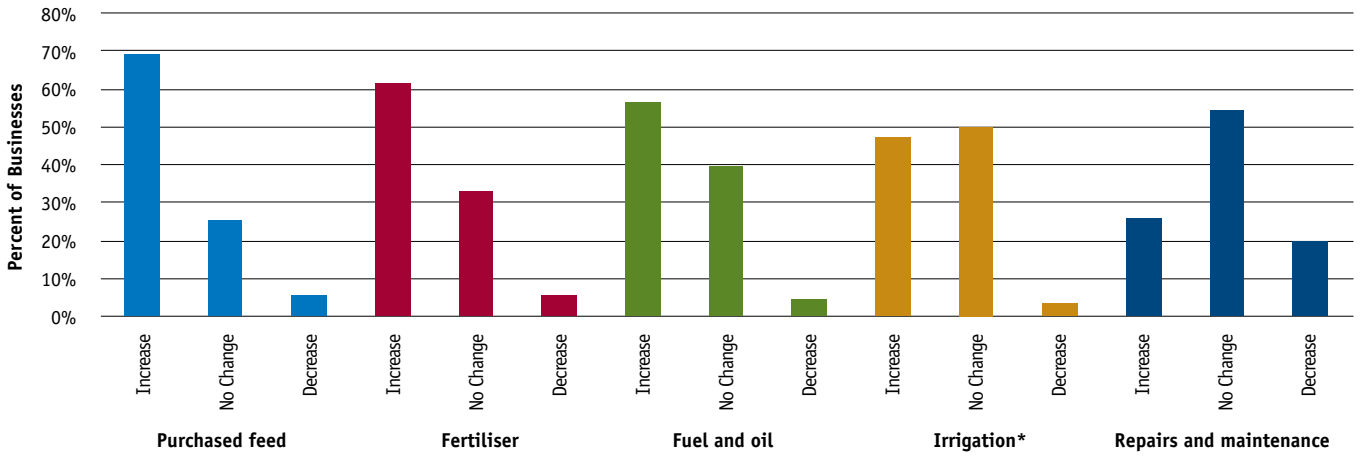


Cost expectations

Data presented in Figure 50 represents the expectations of costs for the dairy industry from 72 of the farms in the project, excluding the costs of irrigation which was answered by 32 farms that have significant irrigation.

There are some clear trends surrounding some of the key costs in the dairy industry with over 50% of participants around the state expecting costs for purchased feed, fertiliser and fuel and oil to rise. For irrigation costs participants are almost evenly split with half expecting no change to costs and the other half expecting costs to rise. The majority of participants expect the cost of repairs and maintenance to remain stable.

FIGURE 50: PRODUCER EXPECTATIONS OF COSTS FOR THE DAIRY INDUSTRY IN 2012/13



**only includes 32 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 136 responses were recorded from 74 farms. All participating farms had at least one response.

Not surprisingly, milk price (30% of responses) was the dominant concern for farmers over the coming 12 months. Following this the price of inputs, especially grain was the second most common response for farmers with 18% of response indicating this was an issue. The impact of the carbon tax and seasonal variability (10%) were the other key issues facing dairy farmers over the next 12 months. Interestingly farm expansion (6%) was also listed as an issue by 11 participants who are looking to grow their businesses. One farmer also noted international trade arrangements and the need for Australia to gain the free trade status afforded to key competitors to enable local producers to compete in the world market

Major issues in the dairy industry – The next 5 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 74 farms.

As has been the case in previous years milk price (18%) and input costs (13%) were identified as the key issues in the dairy industry over the next five years. Succession planning (13%), farm expansion and development (10%) and labour (7%) were also common concerns. Ten of 21 farmers (7% overall) in the irrigation region of the North listed water security and availability as another key issue as the Federal and State governments continue to work towards finalising the Murray Darling Basin Plan. Declining land price was also mentioned as an issue in the South West as farmers look to retire but are delaying the sale of properties in the hope that the market will rise to the levels of a couple of years ago.

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

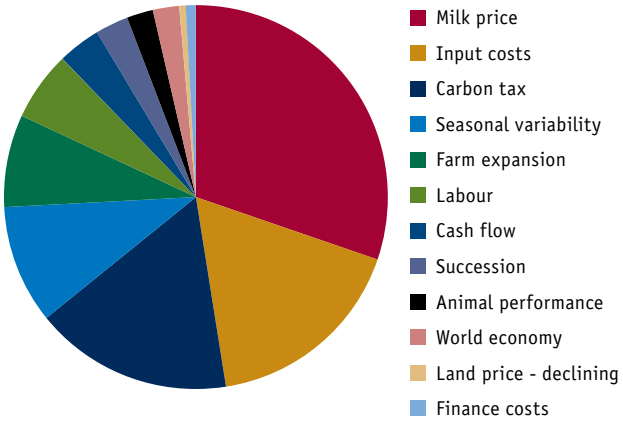
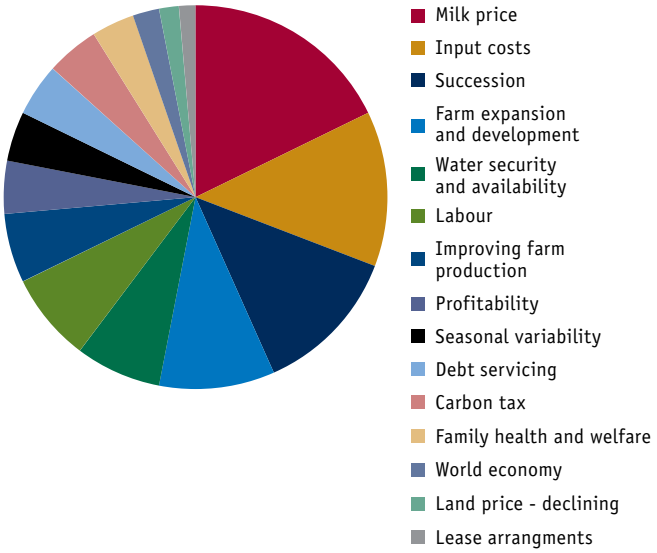


FIGURE 52: MAJOR ISSUES FOR INDIVIDUAL BUSINESSES – 5 YEAR OUTLOOK



Part Six: Greenhouse

2011/12 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 2011/12 is shown in Figure 53. Greenhouse gas emissions per tonne of milk solids produced ranged from 2.9 t/t MS to 16.5 t/t MS and the average level of emission was 10.7 t/t MS. This is slightly higher than the average from last year's greenhouse gas emissions audit of 10.6 t/t MS.

Methane (CH_4) was identified as the main greenhouse gas emitted from dairy farms, accounting for 68% 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 62% of total emissions. Methane from effluent ponds accounted for 6% 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 21% of total emissions or 2.3 t/t MS. Nitrous oxide 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.

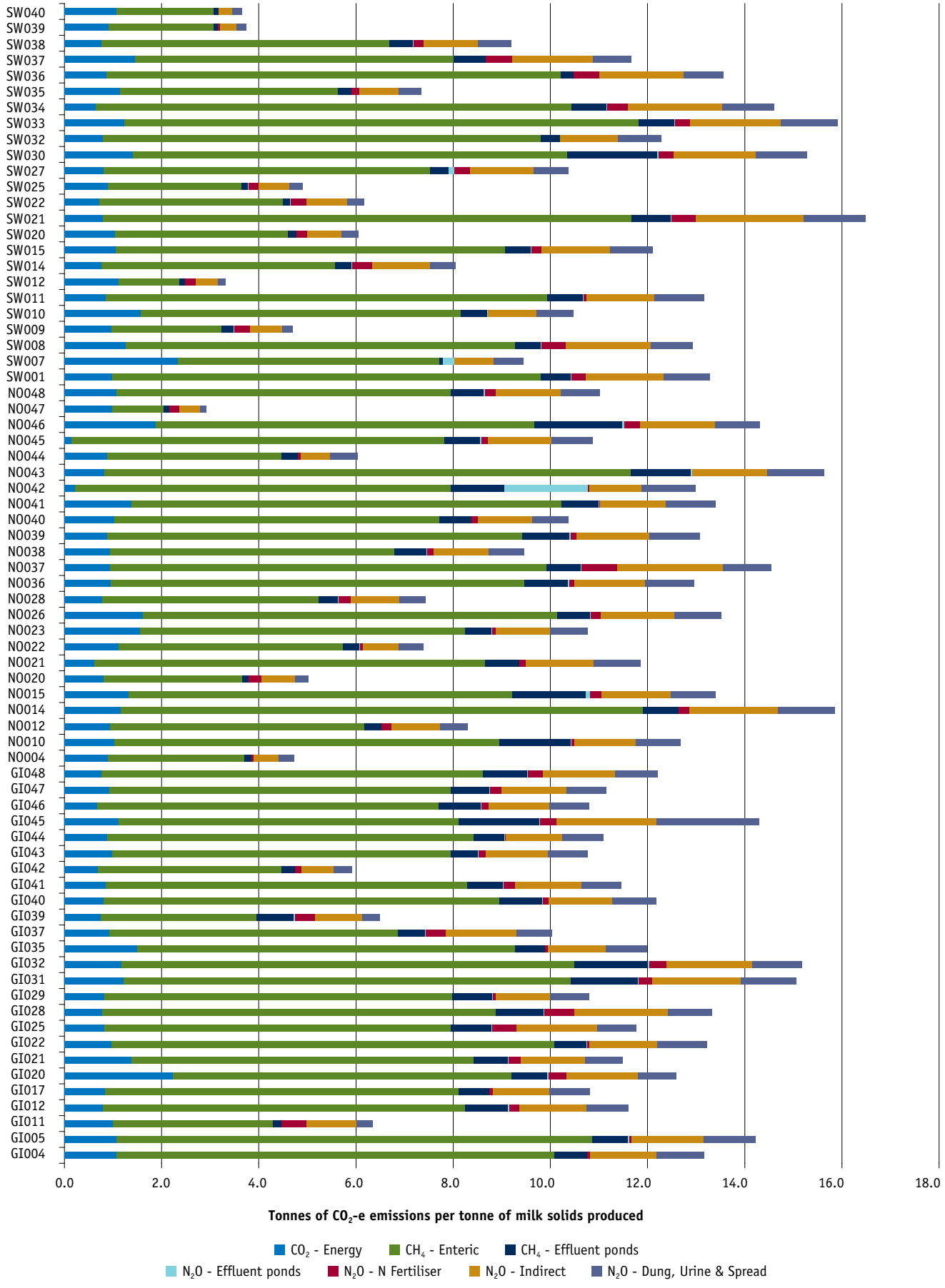
Nitrous oxide emissions from fertiliser accounted for 2% of total emissions, effluent ponds accounted for 0.3% and excreta accounted for 7%. N_2O from indirect emissions were 12%. N_2O emissions are greatest in warm, waterlogged soils with readily available nitrogen. Over application of nitrogen, high stocking intensity and flood irrigation are all potential causes of increased nitrogen loss as nitrous oxide. 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 11% of total emissions or 1.02 t/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, strategies for reducing greenhouse gasses and more details on sources of greenhouse gases on dairy farms visit the Australian Greenhouse Office's website at www.climatechange.gov.au.

Methane (CH_4) was identified as the main greenhouse gas emitted from dairy farms, accounting for 68% of all greenhouse gas emissions.

FIGURE 53: 2011/12 GREENHOUSE GAS EMISSIONS PER TONNE OF MILK SOLIDS SOLD (CO_2 EQUIVALENT)



Part Seven: Historical analysis

Historical analysis

This section looks back at the profitability performance of participant farms in the Dairy Industry Farm Monitor Project over the last six 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

In the North farm profitability has been affected by the drought, low water allocations and the volatility of the milk price including the impacts of the milk price step down in 2008/09. However in 2010/11 it was a year of recovery with farms posting much healthier profits and in 2011/12 farms in the North have consolidated and recorded profits similar to that recorded in 2007/08 at a time of the highest milk price on record.

The difference between earnings before interest and tax (EBIT) and net farm income is interest and lease costs. In the North interest and lease costs have followed a similar trend as EBIT and net farm income. There has been a slight increase in interest and lease costs over the last three years as shown by the diverging lines in Figure 54.

Return on equity has jumped above return on assets in the last two years in the North as shown in Figure 55. 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 on assets managed. An example of this in practice would be a farmer paying seven per cent interest on money borrowed but only making a four percent return on the same money. Return on equity increased to 8.4% in 2011/12, which is the highest for this sample period in the North.

The six year average for return on assets in the North is 4.1% and return on equity is 2.1%.

FIGURE 54: HISTORICAL FARM PROFITABILITY (REAL $) - NORTH

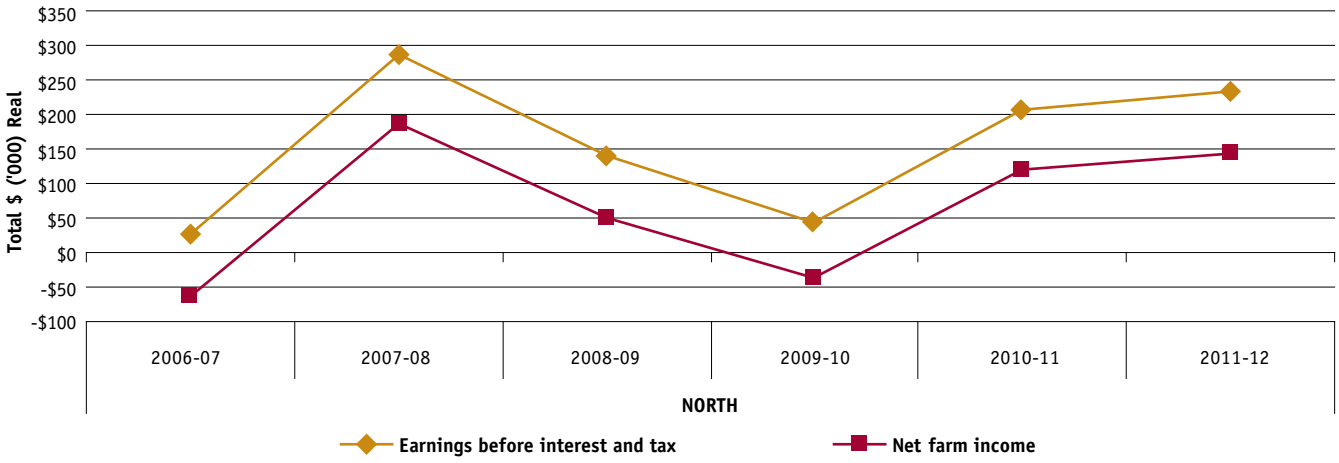
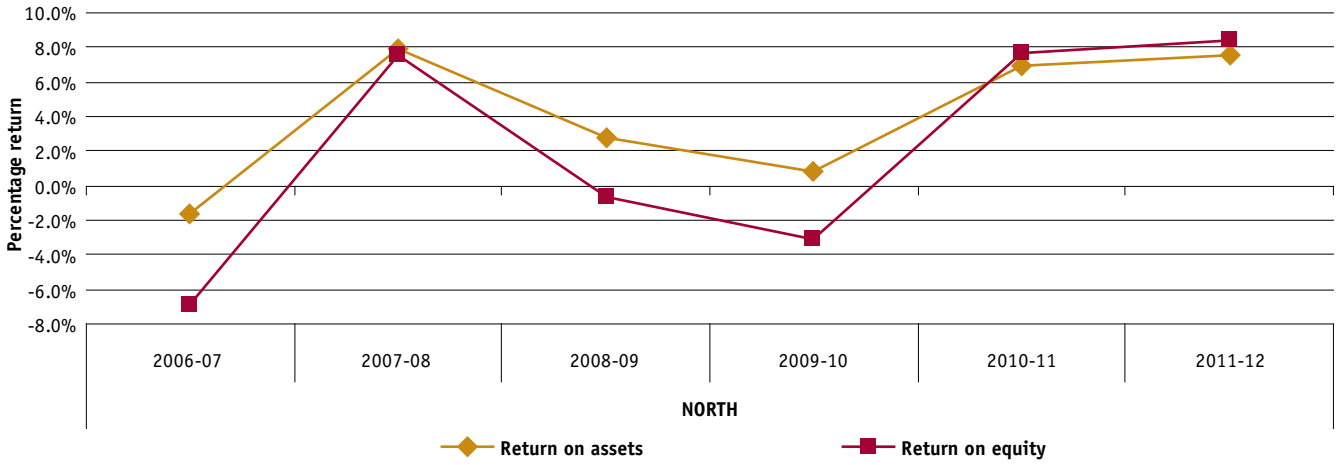


FIGURE 55: HISTORICAL WHOLE FARM PERFORMANCE - NORTH



South West

In each of the six 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 six years. However the gap between EBIT and net farm income has been increasing. This is because interest and lease costs have progressively increased over the period as shown by the diverging EBIT and net farm income lines in Figure 56.

Return on assets and return on equity were very similar last year at 5.5% and 5.8% respectively (Figure 57). However in 2011/12 return on equity has fallen to -0.2%, below that of return on assets at 3.3% indicating interest and lease costs are greater than the income generated by the assets they finance. While average equity has decreased between the years, so has net farm income as shown in Figure 56 reflective of the challenging year in the South West.

The six year average for return on assets in South West Victoria is 4.8% and return on equity is 3.7%.

FIGURE 56: HISTORICAL FARM PROFITABILITY (REAL $) - SOUTH WEST

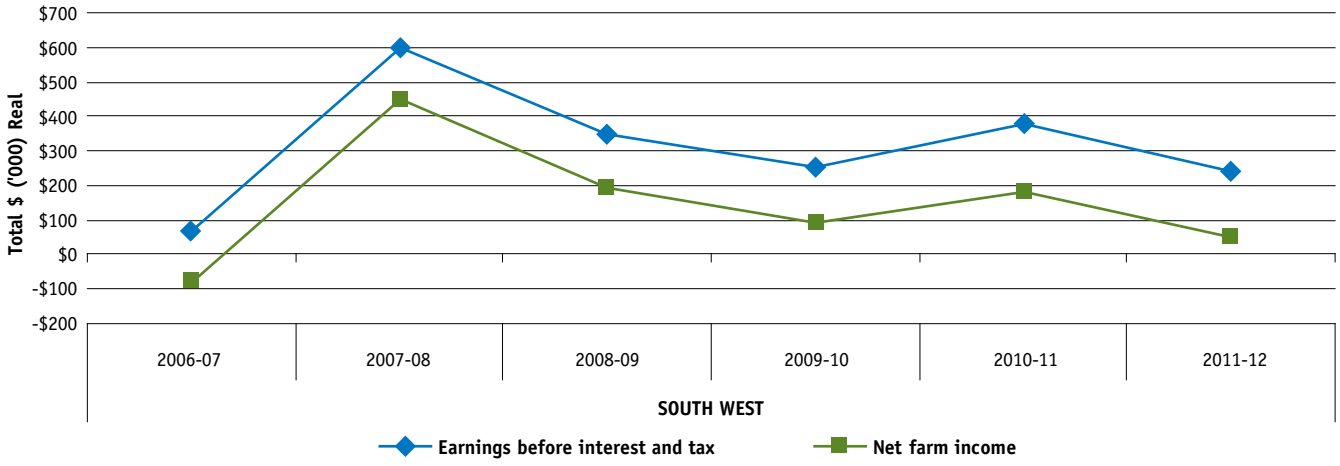
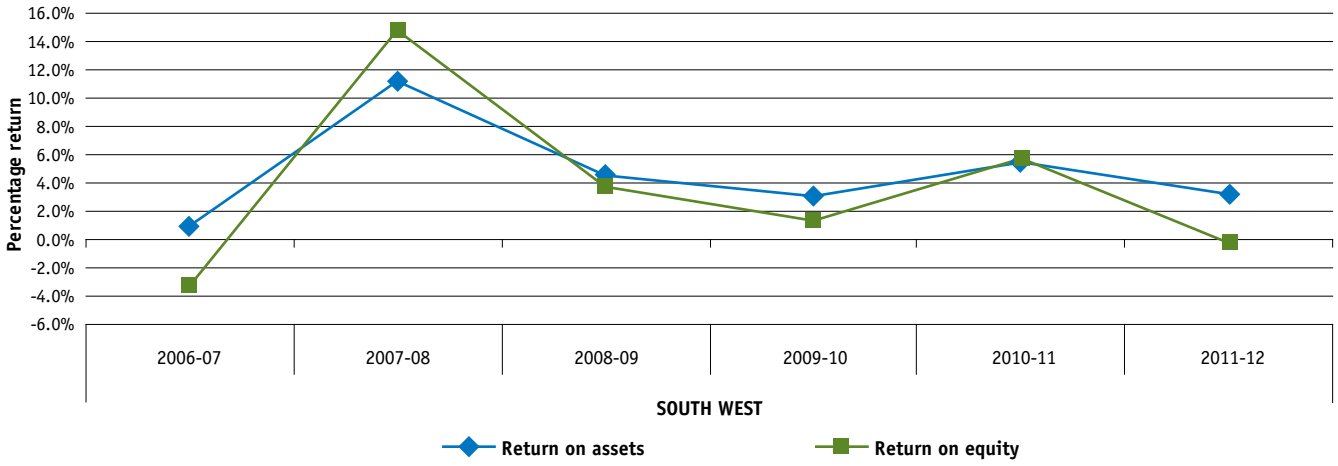


FIGURE 57: HISTORICAL WHOLE FARM PERFORMANCE - SOUTH WEST



Gippsland

The reduction in EBIT and net farm income for Gippsland farms in 2011/12 as discussed in part one and part four is highlighted in Figure 58. The lower milk price, two wet winters and the corresponding increase in supplementary feed have been some of the factors for this lower performance this year.

Similar to the other regions interest and lease costs have increased over the period. The EBIT and net farm income lines move further apart as you move from left to right in Figure 58.

Figure 59 displays return on asset and return on equity both excluding capital appreciation. The two years of high farm returns, 2007/08 and 2010/11, return on equity is noticeably higher than return on assets. In these years farms that managed a significant portion of the leased land or that have low total equity recorded considerably higher return on equity pulling up the average. While the average farm has increased their returns from borrowed capital and grown their equity at a greater rate that than of their total assets, the rate of return is more closely aligned to return on total assets.

The six year average for return on assets in Gippsland is 4.6% and return on equity is 5.3%.

FIGURE 58: HISTORICAL FARM PROFITABILITY (REAL $) - GIPPSLAND

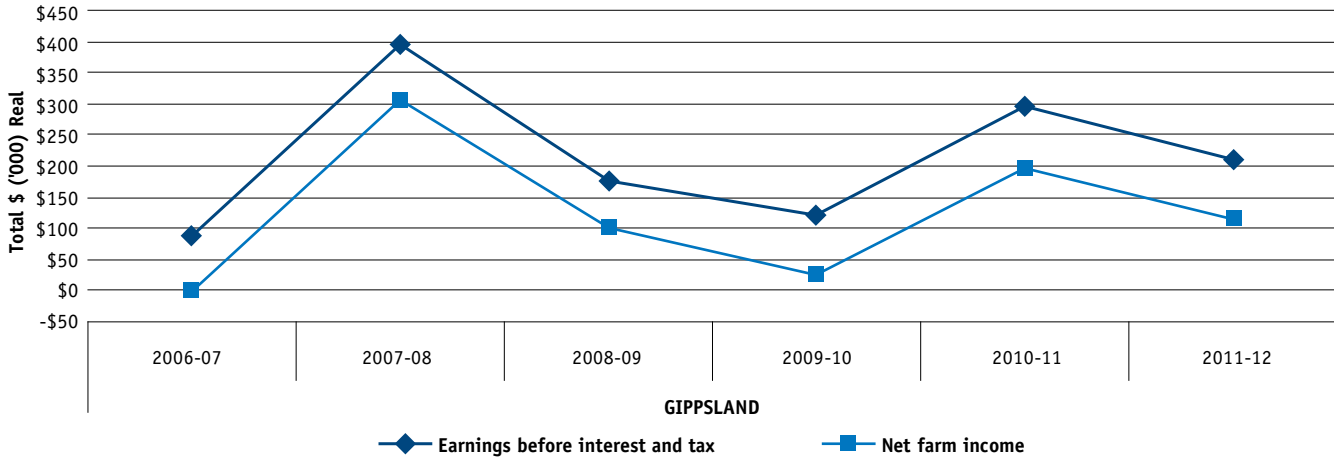
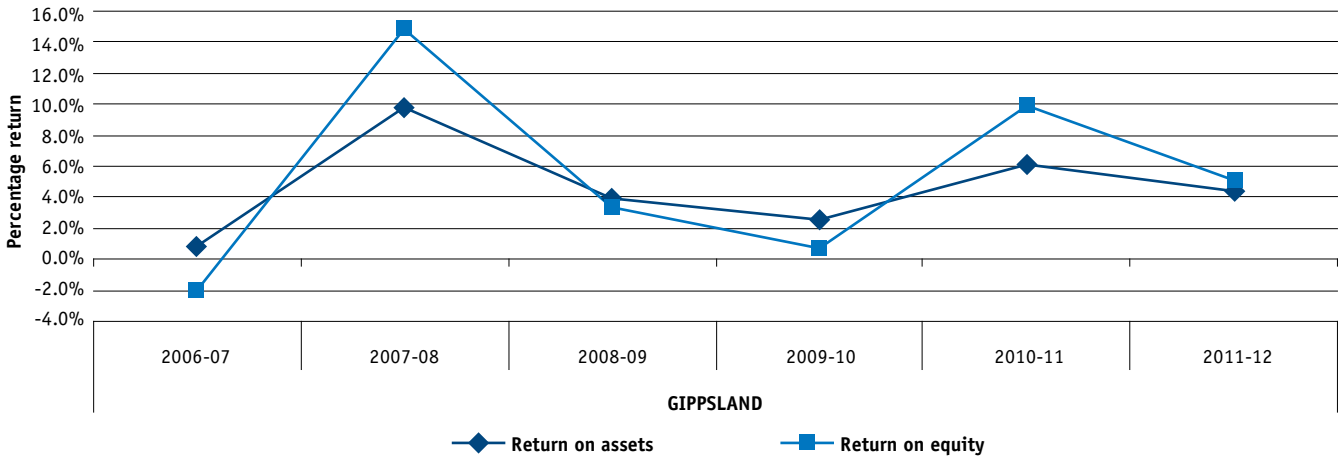


FIGURE 59: HISTORICAL WHOLE FARM PERFORMANCE - GIPPSLAND



Regional comparison

The profitability and performance of the three regions over the last six years are compared simultaneously in Figures 60 to 63.

There has been a reversal of fortunes for the North which has had improved performance compared to the other two regions in 2011/12. In all four profitability measures the North has consistently been lower on average, however in 2011/12 the profitability in the North has trended upwards compared to the downward trend in the South West and Gippsland. This was the first year the North has had the highest return on assets and return on equity over the last six years.

In the North there was a return to traditional seasonal conditions, 100% irrigation water allocations and farms had good pasture growth and high milk production. While milk price was slightly lower and input costs rose compared to 2010/11, farms were able to take advantage of the season and record strong profits.

The South West stands out as a strong performer in terms of EBIT and net farm income during the middle years of the project thanks largely to their greater farm size (Figure 60 and 61). The larger usable area of South West farms on average contributes to this higher overall profit. However the long, dry summer in 2012 and fall in milk price has reduced the profitability of the South West to similar levels as the other regions in 2011/12.

Gippsland farms have been a strong performer in their own right, sitting among the top two regions for all profitability measures. However whole farm EBIT fell slightly below the other two regions in 2011/12. The lower performance of Gippsland farms this year compared to the previous year is reflective of the challenge of two wet winters and repeated flooding. These wet conditions are opposite to that experienced during the hot summer in the South West however they were both difficult to manage and have reduced their profitability on average.

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

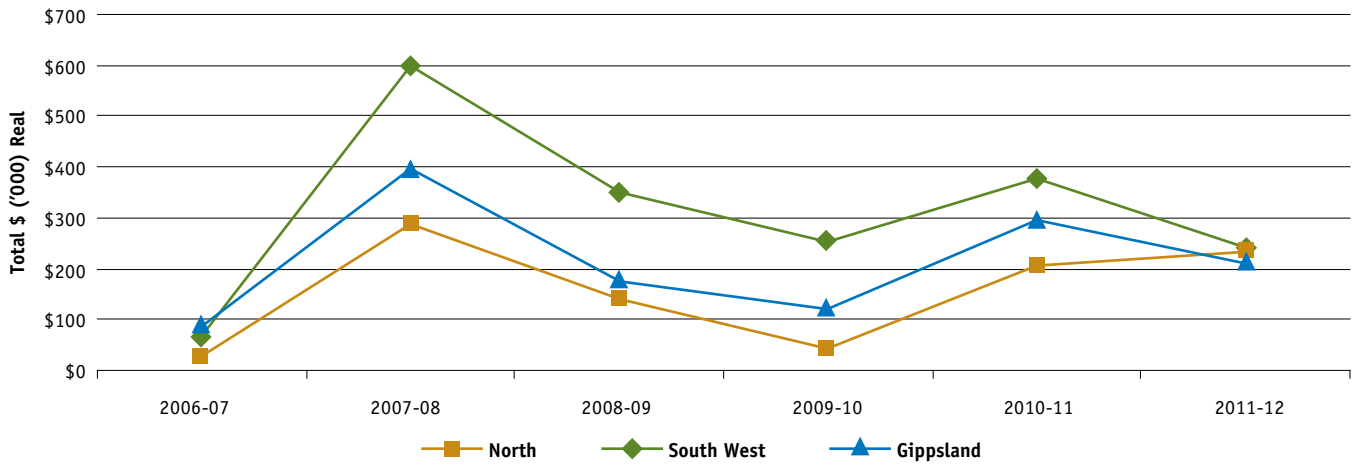


FIGURE 61: REGIONAL HISTORICAL NET FARM INCOME (REAL $)

FIGURE 62: REGIONAL HISTORICAL RETURN ON ASSETS

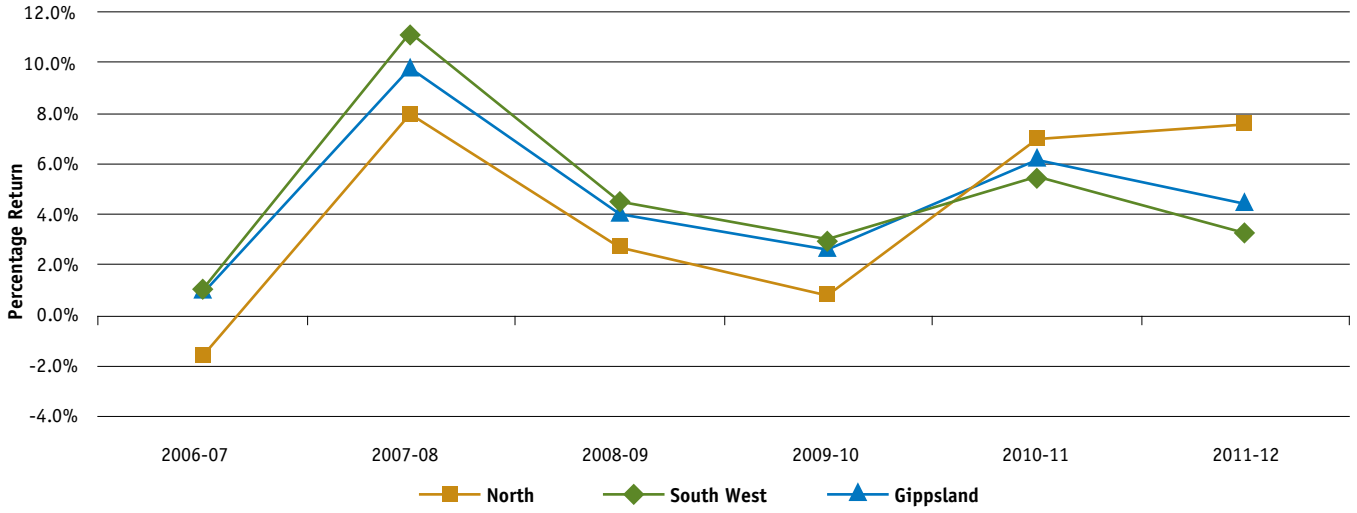
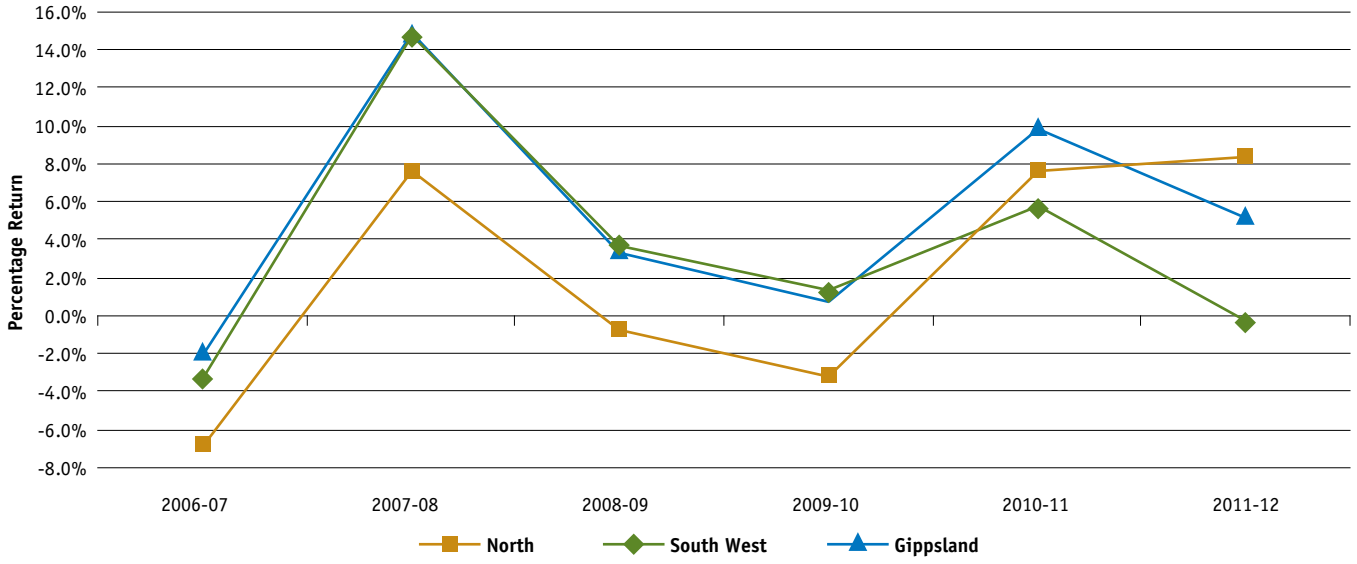


FIGURE 63: REGIONAL HISTORICAL RETURN ON EQUITY



Appendices

TABLE A1

Main Financial Indicators — 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	%	%
N0004	$5.47	$0.11	$5.58	$2.82	$1.98	59%	$0.78	5.1%	$0.61	10.9%	$0.17	1.8%	-1.6%
N0010	$5.33	$0.53	$5.86	$1.93	$2.18	47%	$1.76	7.0%	$1.05	17.9%	$0.71	4.7%	4.9%
N0012	$5.89	$0.72	$6.61	$3.07	$1.58	66%	$1.96	10.9%	$0.41	6.2%	$1.55	14.7%	13.5%
N0014	$5.41	$1.23	$6.64	$2.62	$2.60	50%	$1.42	5.2%	$0.48	7.2%	$0.94	4.5%	4.7%
N0015	$5.52	-$0.19	$5.33	$2.66	$1.57	63%	$1.10	4.5%	$0.86	16.2%	$0.24	1.4%	0.3%
N0020	$6.33	$0.43	$6.76	$2.62	$1.34	66%	$2.80	14.1%	$0.67	9.9%	$2.13	22.6%	21.9%
N0021	$5.70	$0.57	$6.27	$1.95	$1.53	56%	$2.79	10.3%	$0.40	6.4%	$2.39	11.3%	11.9%
N0022	$5.39	$0.70	$6.09	$2.56	$1.67	61%	$1.87	8.1%	$0.28	4.7%	$1.58	8.1%	8.0%
N0023	$5.74	$0.27	$6.02	$2.22	$1.56	59%	$2.24	11.1%	$0.58	9.6%	$1.66	14.5%	2.9%
N0026	$5.83	-$0.11	$5.72	$2.89	$2.06	58%	$0.76	3.2%	$0.44	7.7%	$0.32	1.8%	1.6%
N0028	$5.49	$0.65	$6.13	$2.72	$1.92	59%	$1.49	9.5%	$0.45	7.3%	$1.05	10.1%	2.7%
N0036	$5.48	$0.30	$5.78	$3.53	$1.47	71%	$0.78	3.6%	$0.94	16.3%	-$0.16	-1.5%	-1.6%
N0037	$5.48	$0.02	$5.50	$3.79	$1.59	70%	$0.11	0.7%	$0.67	12.2%	-$0.56	-7.2%	-10.0%
N0038	$5.98	$0.50	$6.48	$3.61	$1.84	66%	$1.04	11.0%	$0.80	12.3%	$0.24	20.8%	27.1%
N0039	$5.33	$0.68	$6.01	$4.12	$1.69	71%	$0.20	1.6%	$0.39	6.4%	-$0.19	-2.5%	-18.1%
N0040	$5.42	$0.28	$5.69	$2.91	$1.79	62%	$0.99	6.3%	$0.60	10.5%	$0.40	10.1%	10.7%
N0041	$5.46	$0.30	$5.76	$3.10	$1.53	67%	$1.13	6.8%	$0.73	12.6%	$0.41	7.6%	7.5%
N0042	$5.97	$0.63	$6.61	$3.78	$2.37	61%	$0.45	2.4%	$0.45	6.7%	$0.01	0.0%	0.0%
N0043	$5.38	$0.37	$5.75	$2.60	$2.10	55%	$1.05	4.5%	$0.59	10.3%	$0.46	3.2%	0.8%
N0044	$6.29	$0.34	$6.63	$3.16	$1.47	68%	$2.00	11.1%	$0.37	5.5%	$1.64	12.4%	12.8%
N0045	$5.77	$0.62	$6.39	$3.42	$1.54	69%	$1.42	8.8%	$0.73	11.4%	$0.70	6.5%	5.5%
N0046	$5.91	$0.74	$6.64	$2.64	$1.83	59%	$2.17	16.0%	$0.70	10.6%	$1.47	31.6%	34.0%
N0047	$5.46	$0.51	$5.97	$3.34	$1.22	73%	$1.41	16.7%	$0.23	3.9%	$1.18	22.3%	24.8%
N0048	$5.31	-$0.06	$5.25	$2.79	$1.62	63%	$0.83	3.0%	$0.38	7.2%	$0.45	2.1%	0.9%
Average	$5.64	$0.42	$6.06	$2.95	$1.75	63%	$1.36	7.6%	$0.57	9.6%	$0.78	8.4%	6.9%
Top 25%	$5.95	$0.47	$6.42	$2.93	$1.54	65%	$1.94	13.3%	$0.56	8.6%	$1.39	20.7%	20.6%

TABLE A2

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	%	%
N0004	65	52	1,248	154	2.4	566	1,342	3.8%	3.1%
N0010	188	110	847	267	1.4	464	660	4.4%	3.4%
N0012	452	290	965	720	1.6	612	974	3.7%	3.3%
N0014	440	380	1,239	412	0.9	500	468	4.0%	3.4%
N0015	230	92	907	316	1.4	450	618	4.1%	3.4%
N0020	280	280	1,093	450	1.6	568	913	3.6%	3.3%
N0021	299	299	1,064	316	1.1	605	639	4.1%	3.4%
N0022	133	90	1,165	260	2.0	503	983	4.4%	3.3%
N0023	299	110	785	300	1.0	545	546	4.2%	3.5%
N0026	540	220	642	576	1.1	449	479	3.5%	3.4%
N0028	140	75	954	270	1.9	473	914	3.8%	3.5%
N0036	120	100	1,108	245	2.0	548	1,118	3.9%	3.3%
N0037	204	140	1,056	450	2.2	431	951	4.8%	3.8%
N0038	95	50	911	301	3.2	537	1,701	4.0%	3.4%
N0039	90	54	937	270	3.0	478	1,434	4.4%	3.4%
N0040	142	142	1,247	250	1.8	524	923	4.2%	3.5%
N0041	178	114	898	233	1.3	513	671	4.2%	3.4%
N0042	151	62	786	185	1.2	604	740	4.5%	3.5%
N0043	103	48	908	204	2.0	346	685	5.1%	3.7%
N0044	93	86	1,258	243	2.6	561	1,466	4.0%	3.4%
N0045	107	42	1,224	201	1.9	544	1,022	3.8%	3.3%
N0046	129	104	1,205	290	2.2	556	1,250	4.5%	3.7%
N0047	76	73	1,411	200	2.6	628	1,661	4.0%	3.4%
N0048	85	55	994	183	2.2	381	821	4.5%	3.4%
Average	193	128	1,035	304	1.9	516	957	4.1%	3.4%
Top 25%	162	117	1,110	297	2.2	566	1,256	4.0%	3.4%

TABLE A2

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
N0004	4.2	2.8	34%	40.9	25.1	0.0	24.2	63	35,887
N0010	8.0	0.2	69%	20.6	3.1	9.7	1.6	101	46,692
N0012	7.4	3.9	53%	108.1	24.3	0.0	7.7	107	65,234
N0014	3.9	2.9	64%	54.0	20.6	19.5	16.9	80	40,204
N0015	8.1	1.0	60%	73.2	19.7	0.0	11.5	130	58,291
N0020	5.2	1.3	55%	121.9	31.0	25.2	38.6	132	75,041
N0021	4.2	1.0	57%	40.5	22.0	11.7	24.8	112	67,601
N0022	9.1	1.2	65%	33.1	11.3	8.1	6.6	113	56,759
N0023	4.8	0.4	61%	24.3	22.9	13.3	18.3	90	49,264
N0026	5.0	0.5	52%	53.6	0.6	1.8	0.7	98	43,924
N0028	10.5	3.5	59%	118.3	36.3	0.0	0.0	92	43,622
N0036	5.4	0.1	45%	63.5	25.7	0.0	107.7	134	73,153
N0037	10.5	0.0	54%	361.4	26.5	53.9	35.3	111	47,740
N0038	6.4	0.0	33%	144.6	8.4	0.0	0.7	93	50,051
N0039	10.8	0.0	40%	95.1	0.0	1.5	0.0	112	53,590
N0040	5.3	2.6	62%	56.8	13.0	1.8	1.4	90	47,029
N0041	5.7	0.8	59%	4.7	4.7	4.7	8.6	114	58,308
N0042	4.7	0.0	40%	15.2	4.3	0.0	1.1	73	44,213
N0043	12.2	0.3	57%	0.0	0.0	0.0	0.0	132	45,682
N0044	6.0	0.7	38%	38.7	43.0	0.0	3.4	151	84,494
N0045	12.1	0.0	54%	74.4	24.7	11.2	164.5	120	65,153
N0046	7.1	1.7	54%	213.8	71.1	23.3	32.5	87	48,644
N0047	8.7	0.0	48%	177.7	63.7	0.0	79.7	113	71,029
N0048	5.5	1.1	54%	99.9	14.6	0.0	1.2	119	45,394
Average	7.1	1.1	53%	84.8	21.5	7.7	24.5	107	54,875
Top 25%	6.4	0.7	48%	120.2	40.0	10.3	28.9	111	63,087

**on milking area*

TABLE A3

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
N0004	3.7	$283	-	$167	$160	$213	11.8	2.0	66%
N0010	1.5	$234	-	-	-	$234	12.8	1.8	31%
N0012	2.5	$267	-	$130	$150	$253	12.5	2.1	47%
N0014	1.9	$216	-	$177	$177	$212	13.1	1.6	36%
N0015	2.4	$233	-	$208	$144	$204	11.8	1.8	40%
N0020	2.5	$241	-	$128	$128	$233	12.6	1.9	45%
N0021	2.1	$287	-	$199	$225	$279	12.5	2.3	43%
N0022	2.4	$332	-	$124	$124	$255	10.9	2.5	35%
N0023	2.0	$246	-	$150	$150	$244	12.0	2.1	39%
N0026	2.0	$212	-	$170	$170	$211	12.0	1.8	48%
N0028	2.1	$208	$180	$129	-	$204	12.2	1.7	41%
N0036	5.4	$336	-	$125	$147	$205	10.1	2.5	55%
N0037	3.4	$290	$140	$159	$159	$240	11.7	2.2	46%
N0038	4.3	$239	-	$167	$132	$204	10.7	2.0	67%
N0039	4.3	$319	-	$210	$120	$255	10.0	2.8	60%
N0040	2.4	$311	-	$208	$224	$292	11.4	2.6	38%
N0041	2.4	$307	-	$180	$180	$291	11.8	2.5	41%
N0042	4.0	$302	$104	$250	$250	$274	11.3	2.7	60%
N0043	2.0	$284	$82	$113	$113	$244	11.6	2.2	43%
N0044	3.5	$236	$167	$201	$201	$219	11.8	2.0	62%
N0045	2.6	$306	$132	$180	$180	$271	11.7	2.5	46%
N0046	2.7	$213	$128	$120	$120	$175	11.7	1.6	46%
N0047	4.0	$280	$174	$120	$123	$205	11.2	2.2	52%
N0048	0.9	$223	$105	$205	$205	$206	12.0	1.8	46%
Average	2.8	$267	$135	$166	$163	$234	11.7	2.1	47%
Top 25%	3.2	$242	-	-	-	$213	11.7	2.0	52%

TABLE A4

Variable costs — North

Farm number	AI & herd test	Animal health	Calf rearing	Shed power	Dairy supplies	Total herd & shed costs	Fertiliser	Irrigation	Hay & silage making
	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS
N0004	$0.07	$0.10	$0.03	$0.07	$0.06	$0.32	$0.09	$0.27	$0.07
N0010	$0.07	$0.10	$0.00	$0.10	$0.14	$0.41	$0.09	$0.23	$0.16
N0012	$0.10	$0.21	$0.02	$0.07	$0.08	$0.48	$0.30	$0.22	$0.30
N0014	$0.08	$0.21	$0.15	$0.10	$0.07	$0.61	$0.50	$0.00	$0.07
N0015	$0.15	$0.13	$0.01	$0.10	$0.06	$0.45	$0.26	$0.33	$0.07
N0020	$0.25	$0.05	$0.04	$0.07	$0.13	$0.54	$0.40	$0.00	$0.08
N0021	$0.07	$0.07	$0.05	$0.09	$0.07	$0.35	$0.27	$0.00	$0.04
N0022	$0.09	$0.15	$0.00	$0.10	$0.06	$0.41	$0.12	$0.31	$0.03
N0023	$0.12	$0.12	$0.01	$0.05	$0.06	$0.36	$0.18	$0.18	$0.05
N0026	$0.16	$0.12	$0.00	$0.13	$0.09	$0.48	$0.15	$0.43	$0.06
N0028	$0.12	$0.16	$0.05	$0.07	$0.07	$0.46	$0.23	$0.18	$0.18
N0036	$0.10	$0.07	$0.03	$0.07	$0.07	$0.35	$0.21	$0.29	$0.00
N0037	$0.06	$0.18	$0.06	$0.11	$0.09	$0.49	$0.68	$0.37	$0.00
N0038	$0.14	$0.26	$0.00	$0.09	$0.09	$0.57	$0.17	$0.13	$0.16
N0039	$0.11	$0.21	$0.02	$0.08	$0.24	$0.65	$0.14	$0.22	$0.00
N0040	$0.09	$0.09	$0.01	$0.11	$0.07	$0.38	$0.28	$0.32	$0.09
N0041	$0.10	$0.16	$0.00	$0.08	$0.08	$0.43	$0.11	$0.35	$0.27
N0042	$0.06	$0.24	$0.02	$0.07	$0.04	$0.43	$0.06	$0.25	$0.13
N0043	$0.07	$0.01	$0.07	$0.12	$0.13	$0.39	$0.01	$0.23	$0.06
N0044	$0.11	$0.08	$0.01	$0.08	$0.04	$0.32	$0.10	$0.26	$0.18
N0045	$0.12	$0.10	$0.04	$0.13	$0.06	$0.46	$0.19	$0.36	$0.04
N0046	$0.08	$0.10	$0.00	$0.10	$0.06	$0.34	$0.35	$0.25	$0.09
N0047	$0.04	$0.09	$0.01	$0.08	$0.13	$0.36	$0.37	$0.31	$0.31
N0048	$0.09	$0.10	$0.02	$0.12	$0.07	$0.40	$0.34	$0.43	$0.29
Average	$0.10	$0.13	$0.03	$0.09	$0.09	$0.44	$0.23	$0.25	$0.11
Top 25%	$0.12	$0.12	$0.01	$0.08	$0.09	$0.41	$0.26	$0.19	$0.15

Farm number	Fuel & 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
N0004	$0.11	$0.14	$0.00	$0.69	$0.95	$0.18	$2.51	$2.82
N0010	$0.07	$0.09	$0.01	$0.00	$0.87	$0.00	$1.52	$1.93
N0012	$0.15	$0.16	$0.00	$0.11	$1.17	$0.19	$2.59	$3.07
N0014	$0.21	$0.07	$0.28	$0.08	$0.81	$0.00	$2.02	$2.62
N0015	$0.11	$0.18	$0.00	$0.24	$1.01	$0.00	$2.21	$2.66
N0020	$0.11	$0.16	$0.13	$0.07	$1.09	$0.05	$2.08	$2.62
N0021	$0.09	$0.07	$0.00	$0.09	$1.04	$0.00	$1.60	$1.95
N0022	$0.07	$0.10	$0.00	$0.30	$1.12	$0.10	$2.14	$2.56
N0023	$0.11	$0.13	$0.16	$0.01	$1.02	$0.00	$1.85	$2.22
N0026	$0.24	$0.39	$0.10	$0.01	$1.04	$0.00	$2.41	$2.89
N0028	$0.11	$0.15	$0.07	$0.07	$0.95	$0.32	$2.26	$2.72
N0036	$0.12	$0.04	$0.04	$0.89	$1.39	$0.20	$3.18	$3.53
N0037	$0.05	$0.16	$0.00	$0.43	$1.61	$0.00	$3.30	$3.79
N0038	$0.17	$0.22	$0.28	$0.79	$1.14	$0.00	$3.04	$3.61
N0039	$0.09	$0.14	$0.00	$1.38	$1.33	$0.17	$3.47	$4.12
N0040	$0.15	$0.10	$0.00	$0.23	$1.32	$0.06	$2.54	$2.91
N0041	$0.09	$0.33	$0.04	$0.13	$1.37	$0.00	$2.68	$3.10
N0042	$0.24	$0.11	$0.20	$1.16	$1.14	$0.06	$3.35	$3.78
N0043	$0.15	$0.10	$0.00	$0.23	$1.42	$0.00	$2.21	$2.60
N0044	$0.04	$0.20	$0.00	$0.60	$1.10	$0.36	$2.84	$3.16
N0045	$0.08	$0.21	$0.00	$0.27	$1.31	$0.50	$2.96	$3.42
N0046	$0.11	$0.13	$0.00	$0.46	$0.65	$0.27	$2.31	$2.64
N0047	$0.10	$0.10	$0.06	$0.64	$0.98	$0.11	$2.98	$3.34
N0048	$0.08	$0.29	$0.06	$0.25	$0.40	$0.27	$2.39	$2.79
Average	$0.12	$0.16	$0.06	$0.38	$1.09	$0.12	$2.52	$2.95
Top 25%	$0.10	$0.16	$0.11	$0.43	$1.00	$0.13	$2.52	$2.93

TABLE A5

Overhead costs — North

Farm number	Rates	Registration & insurance	Farm insurance	Repairs & 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
N0004	$0.03	$0.01	$0.09	$0.34	$0.02	$0.20	$0.26	$0.97	$0.18	$0.83	$1.98
N0010	$0.03	$0.01	$0.06	$0.15	$0.02	$0.12	$0.76	$1.15	$0.49	$0.53	$2.18
N0012	$0.03	$0.00	$0.00	$0.27	$0.01	$0.14	$0.90	$1.35	$0.23	$0.00	$1.58
N0014	$0.07	$0.02	$0.03	$0.43	$0.01	$0.17	$0.77	$1.50	$0.41	$0.68	$2.60
N0015	$0.03	$0.02	$0.04	$0.25	$0.00	$0.11	$0.63	$1.08	$0.08	$0.41	$1.57
N0020	$0.01	$0.03	$0.01	$0.23	$0.00	$0.11	$0.41	$0.81	$0.16	$0.38	$1.34
N0021	$0.04	$0.01	$0.04	$0.21	$0.00	$0.07	$0.17	$0.54	$0.31	$0.68	$1.53
N0022	$0.04	$0.01	$0.07	$0.32	$0.01	$0.12	$0.33	$0.89	$0.10	$0.67	$1.67
N0023	$0.05	$0.02	$0.03	$0.25	$0.00	$0.12	$0.42	$0.88	$0.07	$0.61	$1.56
N0026	$0.06	$0.01	$0.05	$0.37	$0.00	$0.06	$0.96	$1.51	$0.16	$0.39	$2.06
N0028	$0.03	$0.16	$0.02	$0.07	$0.00	$0.12	$0.48	$0.87	$0.24	$0.81	$1.92
N0036	$0.03	$0.01	$0.11	$0.20	$0.01	$0.09	$0.18	$0.63	$0.20	$0.65	$1.47
N0037	$0.03	$0.05	$0.04	$0.23	$0.00	$0.03	$0.48	$0.86	$0.09	$0.65	$1.59
N0038	$0.02	$0.03	$0.00	$0.31	$0.00	$0.08	$1.13	$1.57	$0.12	$0.15	$1.84
N0039	$0.02	$0.00	$0.07	$0.38	$0.00	$0.06	$0.05	$0.58	$0.05	$1.07	$1.69
N0040	$0.01	$0.01	$0.04	$0.33	$0.00	$0.08	$0.23	$0.70	$0.09	$1.00	$1.79
N0041	$0.03	$0.05	$0.00	$0.24	$0.04	$0.15	$0.00	$0.50	$0.24	$0.78	$1.53
N0042	$0.04	$0.02	$0.08	$0.39	$0.01	$0.20	$0.54	$1.28	$0.25	$0.84	$2.37
N0043	$0.03	$0.02	$0.08	$0.44	$0.01	$0.14	$0.00	$0.72	$0.07	$1.30	$2.10
N0044	$0.03	$0.01	$0.04	$0.52	$0.00	$0.06	$0.14	$0.80	$0.10	$0.57	$1.47
N0045	$0.03	$0.02	$0.03	$0.35	$0.00	$0.16	$0.20	$0.78	$0.18	$0.58	$1.54
N0046	$0.03	$0.01	$0.08	$0.21	$0.00	$0.07	$0.66	$1.05	$0.15	$0.62	$1.83
N0047	$0.02	$0.06	$0.00	$0.11	$0.00	$0.05	$0.03	$0.26	$0.14	$0.82	$1.22
N0048	$0.04	$0.02	$0.07	$0.17	$0.01	$0.08	$0.00	$0.39	$0.18	$1.05	$1.62
Average	$0.03	$0.02	$0.05	$0.28	$0.01	$0.11	$0.40	$0.90	$0.18	$0.67	$1.75
Top 25%	$0.03	$0.03	$0.03	$0.27	$0.00	$0.08	$0.46	$0.90	$0.12	$0.52	$1.54

TABLE A6

Variable costs % — North

Percentage of total farm costs

Farm number	AI & herd test	Animal health	Calf rearing	Shed power	Dairy supplies	Total herd & shed costs	Fertiliser	Irrigation	Hay & silage making
	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS
N0004	1.4%	2.0%	0.6%	1.4%	1.2%	6.6%	1.9%	4.1%	1.5%
N0010	1.7%	2.6%	0.0%	2.3%	3.4%	10.0%	2.1%	5.5%	4.0%
N0012	2.2%	4.4%	0.4%	1.6%	1.7%	10.3%	6.4%	4.1%	6.4%
N0014	1.5%	4.1%	2.8%	1.8%	1.4%	11.6%	9.5%	0.0%	1.4%
N0015	3.5%	3.1%	0.2%	2.3%	1.4%	10.6%	6.1%	7.9%	1.7%
N0020	6.3%	1.2%	1.0%	1.9%	3.2%	13.5%	10.1%	0.0%	2.0%
N0021	1.9%	2.1%	1.5%	2.5%	1.9%	10.0%	7.8%	0.0%	1.2%
N0022	2.2%	3.7%	0.1%	2.5%	1.4%	9.8%	2.8%	7.3%	0.8%
N0023	3.2%	3.1%	0.3%	1.3%	1.6%	9.6%	4.8%	4.8%	1.4%
N0026	3.1%	2.3%	0.0%	2.6%	1.7%	9.8%	3.1%	6.9%	1.2%
N0028	2.7%	3.4%	1.0%	1.5%	1.4%	10.0%	4.9%	3.1%	3.8%
N0036	2.0%	1.4%	0.7%	1.4%	1.5%	7.0%	4.2%	5.7%	0.0%
N0037	1.0%	3.3%	1.2%	2.0%	1.7%	9.1%	12.6%	6.8%	0.0%
N0038	2.5%	4.7%	0.0%	1.6%	1.6%	10.5%	3.0%	1.7%	2.9%
N0039	1.8%	3.6%	0.3%	1.4%	4.1%	11.2%	2.4%	3.1%	0.0%
N0040	1.9%	2.0%	0.3%	2.4%	1.5%	8.0%	5.9%	5.6%	2.0%
N0041	2.1%	3.6%	0.0%	1.8%	1.7%	9.2%	2.3%	6.8%	5.8%
N0042	1.0%	4.0%	0.3%	1.1%	0.6%	7.1%	1.0%	4.1%	2.1%
N0043	1.6%	0.1%	1.5%	2.5%	2.8%	8.4%	0.3%	4.6%	1.4%
N0044	2.3%	1.6%	0.3%	1.7%	1.0%	6.9%	2.2%	5.0%	3.9%
N0045	2.5%	2.1%	0.9%	2.7%	1.2%	9.3%	3.8%	6.5%	0.8%
N0046	1.8%	2.2%	0.0%	2.2%	1.3%	7.5%	7.9%	3.2%	2.0%
N0047	1.0%	2.1%	0.2%	1.8%	2.9%	7.9%	8.1%	5.8%	6.8%
N0048	1.9%	2.2%	0.5%	2.8%	1.7%	9.1%	7.6%	8.1%	6.6%
Average	2.2%	2.7%	0.6%	2.0%	1.8%	9.3%	5.0%	4.6%	2.5%
Top 25%	2.8%	2.5%	0.3%	1.7%	1.9%	9.3%	6.0%	3.4%	3.2%

Farm Number	Fuel & 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
N0004	2.4%	2.9%	0.0%	14.3%	19.8%	3.8%	52.2%	58.8%
N0010	1.8%	2.1%	0.3%	0.0%	21.2%	0.0%	37.0%	47.0%
N0012	3.3%	3.4%	0.0%	2.3%	25.2%	4.0%	55.8%	66.0%
N0014	4.0%	1.3%	5.3%	1.6%	15.4%	0.0%	38.6%	50.2%
N0015	2.5%	4.4%	0.0%	5.6%	24.0%	0.0%	52.3%	62.9%
N0020	2.7%	4.0%	3.4%	1.7%	27.4%	1.2%	52.6%	66.2%
N0021	2.5%	2.1%	0.0%	2.5%	30.0%	0.0%	46.1%	56.1%
N0022	1.7%	2.3%	0.0%	7.1%	26.5%	2.4%	50.7%	60.6%
N0023	3.0%	3.5%	4.2%	0.3%	27.0%	0.0%	49.1%	58.7%
N0026	4.8%	7.9%	1.9%	0.3%	20.9%	0.0%	48.7%	58.5%
N0028	2.4%	3.2%	1.6%	1.5%	20.6%	6.9%	48.7%	58.6%
N0036	2.4%	0.8%	0.8%	17.9%	27.7%	4.0%	63.6%	70.5%
N0037	1.0%	3.0%	0.0%	8.0%	29.8%	0.0%	61.3%	70.5%
N0038	3.1%	4.0%	5.1%	14.5%	20.9%	0.0%	55.8%	66.2%
N0039	1.6%	2.4%	0.0%	23.7%	22.8%	2.9%	59.6%	70.9%
N0040	3.1%	2.1%	0.0%	4.8%	28.1%	1.3%	53.9%	62.0%
N0041	1.9%	7.2%	0.8%	2.7%	29.5%	0.0%	57.8%	67.0%
N0042	3.9%	1.7%	3.3%	18.8%	18.4%	1.0%	54.4%	61.4%
N0043	3.2%	2.0%	0.0%	5.0%	30.2%	0.0%	47.0%	55.4%
N0044	0.8%	4.4%	0.0%	13.0%	23.8%	7.7%	61.4%	68.3%
N0045	1.6%	4.2%	0.0%	5.5%	26.4%	10.2%	59.7%	68.9%
N0046	2.5%	2.8%	0.0%	10.2%	14.5%	6.1%	51.6%	59.1%
N0047	2.1%	2.2%	1.3%	14.1%	21.5%	2.4%	65.3%	73.2%
N0048	1.8%	6.5%	1.3%	5.6%	9.0%	6.0%	54.1%	63.2%
Average	2.5%	3.4%	1.2%	7.5%	23.4%	2.5%	53.2%	62.5%
Top 25%	2.3%	3.5%	2.3%	9.0%	22.5%	2.9%	56.0%	65.3%

TABLE A7

Overhead costs — North

Percentage of total farm costs

Farm number	Rates	Registration & insurance	Farm insurance	Repairs & 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
N0004	0.6%	0.3%	2.0%	7.1%	0.4%	4.2%	5.5%	20.2%	3.7%	17.3%	41.2%
N0010	0.7%	0.3%	1.4%	3.6%	0.4%	3.0%	18.6%	28.0%	12.0%	13.0%	53.0%
N0012	0.6%	0.0%	0.1%	5.9%	0.1%	3.0%	19.4%	29.1%	4.8%	0.0%	34.0%
N0014	1.4%	0.4%	0.6%	8.2%	0.2%	3.2%	14.8%	28.8%	7.9%	13.1%	49.8%
N0015	0.7%	0.4%	1.0%	6.0%	0.1%	2.5%	14.8%	25.6%	1.9%	9.6%	37.1%
N0020	0.3%	0.8%	0.3%	5.9%	0.1%	2.7%	10.3%	20.4%	3.9%	9.5%	33.8%
N0021	1.1%	0.2%	1.2%	6.1%	0.1%	2.1%	4.9%	15.6%	8.8%	19.5%	43.9%
N0022	0.9%	0.3%	1.5%	7.6%	0.2%	2.9%	7.7%	21.2%	2.4%	15.9%	39.4%
N0023	1.3%	0.5%	0.7%	6.5%	0.0%	3.2%	11.0%	23.2%	2.0%	16.1%	41.3%
N0026	1.2%	0.1%	1.1%	7.5%	0.0%	1.1%	19.4%	30.5%	3.2%	7.8%	41.5%
N0028	0.7%	3.5%	0.4%	1.4%	0.0%	2.5%	10.3%	18.7%	5.3%	17.4%	41.4%
N0036	0.6%	0.2%	2.2%	4.1%	0.1%	1.7%	3.6%	12.5%	3.9%	13.0%	29.5%
N0037	0.6%	0.9%	0.7%	4.2%	0.0%	0.6%	8.9%	15.9%	1.6%	12.0%	29.5%
N0038	0.4%	0.5%	0.0%	5.7%	0.1%	1.5%	20.7%	28.9%	2.2%	2.7%	33.8%
N0039	0.3%	0.0%	1.2%	6.5%	0.0%	1.1%	0.8%	10.0%	0.8%	18.3%	29.1%
N0040	0.3%	0.2%	1.0%	7.0%	0.0%	1.6%	4.9%	14.9%	1.9%	21.2%	38.0%
N0041	0.7%	1.0%	0.0%	5.1%	0.9%	3.1%	0.0%	10.9%	5.3%	16.8%	33.0%
N0042	0.6%	0.3%	1.3%	6.4%	0.1%	3.3%	8.7%	20.8%	4.1%	13.6%	38.6%
N0043	0.7%	0.3%	1.7%	9.4%	0.2%	3.1%	0.0%	15.4%	1.5%	27.7%	44.6%
N0044	0.6%	0.3%	0.8%	11.3%	0.0%	1.3%	3.1%	17.3%	2.1%	12.3%	31.7%
N0045	0.6%	0.4%	0.6%	7.0%	0.0%	3.2%	4.0%	15.8%	3.6%	11.7%	31.1%
N0046	0.8%	0.3%	1.8%	4.6%	0.0%	1.5%	14.6%	23.5%	3.4%	13.9%	40.9%
N0047	0.4%	1.2%	0.0%	2.4%	0.1%	1.0%	0.6%	5.7%	3.1%	18.0%	26.8%
N0048	0.8%	0.5%	1.7%	3.9%	0.3%	1.8%	0.0%	8.9%	4.1%	23.8%	36.8%
Average	0.7%	0.5%	1.0%	6.0%	0.1%	2.3%	8.6%	19.2%	3.9%	14.3%	37.5%
Top 25%	0.6%	0.6%	0.6%	6.1%	0.0%	1.9%	10.1%	19.8%	2.8%	12.1%	34.7%

TABLE A8

Capital structure — North

	FARM ASSETS				OTHER ASSETS (PER USABLE HECTARE)					LIABILITIES		EQUITY	
	Land value	Land value	Permanent water value	Permanent water value	Plant & equipment	Livestock	Hay & grain	Other assets	Total assets	Liabilities per usable hectare	Liabilities per milking cow	Equity per usable hectare	Average equity
	$/HA	$/COW	$/HA	$/COW	$/HA	$/HA	$/HA	$/HA	$/HA	$/HA	$/COW	$/HA	%
Average	$7,491	$4,315	$3,449	$1,964	$1,413	$2,605	$243	$344	$15,546	$5,797	$3,138	$9,749	62%
Top 25%	$9,563	$4,712	$1,567	$799	$1,264	$3,046	$312	$241	$15,993	$7,563	$3,493	$8,430	51%

TABLE B1

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	$5.41	$0.28	$5.70	$1.95	$2.15	48%	$1.59	3.7%	$1.41	25%	$0.19	0.7%	-5.3%
SW007	$5.08	-$0.03	$5.05	$2.41	$2.80	46%	-$0.17	-0.9%	$0.00	0%	-$0.17	-0.9%	-16.8%
SW008	$5.72	$0.44	$6.16	$2.96	$1.80	62%	$1.39	5.6%	$0.67	11%	$0.72	4.4%	4.2%
SW009	$5.96	$0.27	$6.23	$2.36	$2.27	51%	$1.60	5.9%	$0.64	10%	$0.96	5.3%	3.1%
SW010	$5.11	$0.15	$5.27	$2.47	$3.16	44%	-$0.36	-1.4%	$0.03	1%	-$0.39	-1.6%	-2.0%
SW011	$5.98	$0.42	$6.40	$3.09	$1.66	65%	$1.64	6.8%	$1.20	19%	$0.44	6.2%	6.6%
SW012	$5.49	$1.90	$7.38	$3.00	$4.01	43%	$0.37	1.3%	$1.92	26%	-$1.55	-21.8%	-27.0%
SW014	$5.47	$0.24	$5.71	$2.63	$1.63	62%	$1.44	5.7%	$0.63	11%	$0.81	6.3%	6.3%
SW015	$6.27	$0.07	$6.34	$2.54	$1.96	56%	$1.84	6.0%	$1.43	23%	$0.41	6.3%	6.2%
SW020	$5.43	$0.60	$6.03	$3.19	$2.48	56%	$0.36	1.4%	$1.07	18%	-$0.71	-7.3%	-8.1%
SW021	$5.67	$0.37	$6.04	$3.02	$1.19	72%	$1.83	8.8%	$0.04	1%	$1.79	9.2%	7.7%
SW022	$5.93	$0.14	$6.07	$3.52	$2.21	61%	$0.34	1.4%	$0.78	13%	-$0.44	-3.1%	-3.1%
SW025	$5.51	$0.72	$6.23	$2.78	$2.40	54%	$1.05	3.3%	$0.90	14%	$0.15	0.8%	-1.8%
SW027	$5.14	-$0.03	$5.11	$2.52	$2.38	51%	$0.21	0.9%	$0.66	13%	-$0.45	-2.9%	-2.9%
SW030	$5.91	$0.26	$6.17	$2.81	$2.63	52%	$0.73	2.1%	$1.15	19%	-$0.42	-2.0%	-1.9%
SW032	$5.24	$0.73	$5.97	$2.32	$3.42	40%	$0.23	0.6%	$1.22	20%	-$0.99	-4.6%	-4.5%
SW033	$5.39	$0.61	$5.99	$3.39	$4.64	42%	-$2.03	-3.1%	$0.02	0%	-$2.05	-4.9%	-7.0%
SW034	$5.37	$0.57	$5.94	$2.49	$3.54	41%	-$0.08	-0.2%	$1.91	32%	-$2.00	-27.4%	-27.3%
SW035	$5.68	$0.16	$5.84	$2.60	$1.62	62%	$1.62	5.8%	$1.40	24%	$0.22	3.2%	3.2%
SW036	$5.08	$0.37	$5.45	$3.48	$2.62	57%	-$0.65	-1.5%	$0.32	6%	-$0.97	-2.5%	9.2%
SW037	$5.63	$0.54	$6.17	$2.87	$1.92	60%	$1.37	6.9%	$0.65	10%	$0.73	9.2%	9.8%
SW038	$5.42	$0.72	$6.15	$2.29	$2.14	52%	$1.72	7.5%	$0.53	9%	$1.18	8.4%	8.7%
SW039	$5.54	$0.31	$5.85	$2.62	$1.64	61%	$1.59	6.1%	$1.89	32%	-$0.31	-12.0%	-11.9%
SW040	$5.46	$0.25	$5.71	$3.37	$1.99	63%	$0.35	1.7%	$0.72	13%	-$0.37	-3.9%	-4.0%
SW041	$5.99	$0.40	$6.39	$3.13	$1.74	64%	$1.51	7.4%	$1.20	19%	$0.31	28.9%	33.1%
Average	$5.56	$0.42	$5.97	$2.79	$2.40	55%	$0.78	3.3%	$0.90	15%	-$0.12	-0.2%	-1.0%
Top 25%	$5.71	$0.46	$6.16	$2.84	$1.72	62%	$1.61	7.2%	$0.92	15%	$0.69	8.3%	9.0%

TABLE B2

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	640	360	0.8	447	351	4.2%	3.1%
SW007	116	115	455	101	0.9	444	387	5.2%	4.1%
SW008	532	250	769	760	1.4	534	763	4.3%	3.4%
SW009	160	125	615	230	1.4	540	776	3.9%	3.2%
SW010	126	126	939	186	1.5	590	872	4.2%	3.3%
SW011	607	425	616	900	1.5	480	712	4.1%	3.4%
SW012	95	95	906	150	1.6	403	637	4.2%	3.3%
SW014	214	193	866	240	1.1	578	648	3.8%	3.2%
SW015	1,481	946	583	1,618	1.1	498	544	3.9%	3.4%
SW020	217	161	782	310	1.4	513	733	3.4%	3.3%
SW021	420	420	618	665	1.6	561	888	3.9%	3.3%
SW022	517	410	540	630	1.2	487	593	4.1%	3.5%
SW025	331	140	648	245	0.7	579	429	4.3%	3.4%
SW027	127	100	720	179	1.4	432	608	5.4%	3.8%
SW030	264	180	613	300	1.1	477	542	3.9%	3.3%
SW032	171	130	637	142	0.8	411	341	5.0%	3.9%
SW033	146	56	616	129	0.9	253	223	4.3%	3.5%
SW034	174	90	731	130	0.7	478	357	4.4%	3.5%
SW035	265	190	713	300	1.1	577	654	3.5%	3.3%
SW036	272	216	629	180	0.7	489	323	4.2%	3.4%
SW037	389	252	764	560	1.4	594	855	3.4%	3.3%
SW038	125	100	884	160	1.3	609	780	4.0%	3.2%
SW039	274	163	613	323	1.2	541	638	3.8%	3.3%
SW040	345	235	552	392	1.1	604	687	3.7%	3.2%
SW041	349	262	733	485	1.4	560	778	3.9%	3.2%
Average	327	225	687	387	1.2	507	605	4.1%	3.4%
Top 25%	361	270	705	516	1.4	558	775	3.8%	3.3%

TABLE B2

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	2.8	0.9	74%	53.1	28.2	31.0	10.9	110	49,169
SW007	1.8	0.0	44%	0.0	0.0	0.0	0.0	46	20,311
SW008	6.6	0.2	54%	202.1	19.8	88.5	24.3	109	58,463
SW009	4.6	2.3	60%	127.9	12.3	13.8	8.4	57	30,686
SW010	5.1	0.5	62%	18.8	16.8	0.0	20.7	59	34,908
SW011	5.3	0.4	52%	19.0	9.1	26.3	11.2	129	61,983
SW012	3.8	0.9	59%	75.1	25.3	38.0	28.9	59	23,618
SW014	3.4	1.2	58%	139.9	19.1	53.9	35.6	93	53,620
SW015	2.7	1.1	47%	59.9	15.6	25.8	16.8	110	54,754
SW020	3.7	0.8	43%	80.6	3.7	12.0	7.4	79	40,662
SW021	5.8	1.1	47%	221.3	2.5	50.8	10.5	186	104,268
SW022	0.1	1.5	34%	115.5	25.6	32.9	4.3	113	55,037
SW025	8.9	0.4	61%	46.9	25.9	28.0	26.1	65	37,379
SW027	5.1	1.1	69%	100.1	24.2	84.9	29.9	91	39,220
SW030	3.6	1.5	67%	84.8	16.1	44.0	19.3	80	38,291
SW032	4.9	0.9	45%	0.0	0.0	0.0	0.0	61	25,216
SW033	4.2	0.5	70%	35.3	9.5	22.0	11.8	77	19,516
SW034	3.5	1.3	77%	79.3	16.0	36.1	19.8	48	22,748
SW035	3.7	0.6	49%	54.0	11.4	16.1	14.1	108	62,423
SW036	2.1	0.8	63%	87.4	14.1	69.5	17.6	56	27,340
SW037	5.5	1.3	52%	253.4	45.7	102.8	56.0	84	49,727
SW038	6.6	1.2	63%	80.1	5.1	5.6	39.5	69	42,126
SW039	3.6	0.3	39%	17.1	11.0	27.9	13.6	103	55,996
SW040	3.6	1.1	38%	54.2	69.3	129.9	84.9	80	48,394
SW041	3.0	2.9	48%	118.6	30.0	30.6	26.0	94	52,733
Average	4.2	1.0	55%	85.0	18.2	38.8	21.5	87	44,344
Top 25%	5.0	1.2	50%	118.3	17.2	40.7	26.1	111	61,139

**on milking area*

TABLE B3

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	1.0	$350	-	$110	$110	$338	12.4	2.8	26%
SW007	2.2	$328	-	$102	$102	$264	12.0	2.3	56%
SW008	2.8	$306	$87	$108	$108	$260	12.4	2.2	46%
SW009	2.3	$315	-	$77	$77	$276	12.1	2.4	40%
SW010	2.4	$320	$70	-	-	$274	11.9	2.4	38%
SW011	3.1	$302	-	$200	$200	$274	11.6	2.5	48%
SW012	1.6	$351	$57	$90	$90	$306	11.7	2.7	41%
SW014	2.2	$382	-	$185	$185	$373	12.3	3.1	42%
SW015	2.3	$285	-	-	-	$285	12.8	2.2	53%
SW020	3.2	$305	$76	$232	$232	$285	12.2	2.4	57%
SW021	2.6	$301	-	-	-	$301	13.0	2.3	53%
SW022	2.8	$258	-	$375	$326	$261	11.9	2.2	66%
SW025	2.1	$315	-	-	-	$315	12.5	2.5	39%
SW027	1.3	$329	-	$175	$175	$306	11.7	2.7	31%
SW030	2.1	$247	-	-	-	$247	11.5	2.2	33%
SW032	1.9	$243	-	$95	-	$238	13.2	1.8	55%
SW033	0.9	$300	-	-	-	$300	13.6	2.2	30%
SW034	0.9	$356	-	-	-	$356	12.5	2.9	23%
SW035	2.9	$303	-	-	-	$303	12.0	2.6	51%
SW036	1.8	$327	-	$165	$165	$322	12.4	2.6	37%
SW037	3.4	$262	-	$165	$165	$260	10.5	2.5	48%
SW038	2.0	$311	-	-	-	$311	12.0	2.6	37%
SW039	2.6	$314	-	-	-	$314	12.5	2.5	61%
SW040	3.1	$338	-	$270	$270	$331	12.6	2.7	62%
SW041	3.5	$290	$52	$148	$177	$227	11.4	2.1	52%
Average	2.3	$309	$68	$166	$170	$293	12.2	2.5	45%
Top 25%	2.9	$297	-	-	-	$281	11.8	2.4	50%

TABLE B4

Variable costs — South West

Farm number	AI & herd test	Animal health	Calf rearing	Shed power	Dairy supplies	Total herd & shed costs	Fertiliser	Irrigation	Hay & silage making
	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS
SW001	$0.07	$0.10	$0.02	$0.10	$0.13	$0.42	$0.34	$0.00	$0.00
SW007	$0.10	$0.13	$0.02	$0.10	$0.03	$0.39	$0.00	$0.00	$0.00
SW008	$0.07	$0.15	$0.00	$0.13	$0.10	$0.45	$0.58	$0.00	$0.05
SW009	$0.10	$0.11	$0.00	$0.07	$0.08	$0.36	$0.34	$0.00	$0.07
SW010	$0.05	$0.14	$0.00	$0.09	$0.09	$0.37	$0.20	$0.00	$0.02
SW011	$0.13	$0.13	$0.10	$0.11	$0.08	$0.55	$0.16	$0.00	$0.13
SW012	$0.08	$0.06	$0.03	$0.19	$0.10	$0.46	$0.47	$0.00	$0.17
SW014	$0.11	$0.07	$0.03	$0.09	$0.04	$0.34	$0.41	$0.00	$0.17
SW015	$0.07	$0.19	$0.00	$0.09	$0.07	$0.42	$0.34	$0.03	$0.03
SW020	$0.12	$0.13	$0.00	$0.16	$0.20	$0.61	$0.23	$0.00	$0.04
SW021	$0.12	$0.13	$0.01	$0.06	$0.06	$0.37	$0.59	$0.00	$0.22
SW022	$0.08	$0.16	$0.18	$0.08	$0.12	$0.62	$0.50	$0.00	$0.15
SW025	$0.07	$0.16	$0.04	$0.15	$0.08	$0.51	$0.56	$0.00	$0.08
SW027	$0.07	$0.08	$0.04	$0.06	$0.19	$0.45	$0.61	$0.00	$0.19
SW030	$0.11	$0.07	$0.00	$0.14	$0.08	$0.39	$0.65	$0.08	$0.04
SW032	$0.06	$0.13	$0.04	$0.13	$0.13	$0.50	$0.28	$0.00	$0.07
SW033	$0.14	$0.10	$0.00	$0.10	$0.28	$0.63	$0.67	$0.00	$0.40
SW034	$0.03	$0.06	$0.00	$0.07	$0.05	$0.21	$0.72	$0.10	$0.42
SW035	$0.07	$0.08	$0.00	$0.09	$0.04	$0.28	$0.26	$0.00	$0.17
SW036	$0.11	$0.12	$0.01	$0.11	$0.17	$0.51	$0.89	$0.00	$0.25
SW037	$0.08	$0.11	$0.00	$0.09	$0.18	$0.47	$0.50	$0.00	$0.02
SW038	$0.09	$0.15	$0.06	$0.07	$0.06	$0.42	$0.36	$0.01	$0.12
SW039	$0.05	$0.12	$0.00	$0.07	$0.22	$0.45	$0.22	$0.15	$0.00
SW040	$0.06	$0.17	$0.01	$0.10	$0.09	$0.43	$0.38	$0.00	$0.25
SW041	$0.09	$0.20	$0.02	$0.10	$0.03	$0.44	$0.41	$0.00	$0.24
Average	$0.09	$0.12	$0.02	$0.10	$0.11	$0.44	$0.43	$0.02	$0.13
Top 25%	$0.09	$0.14	$0.03	$0.08	$0.11	$0.45	$0.37	$0.03	$0.12

Farm number	Fuel & 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	$0.26	$0.06	$0.03	$0.01	$0.82	$0.00	$1.53	$1.95
SW007	$0.05	$0.01	$0.01	$0.23	$1.38	$0.34	$2.03	$2.41
SW008	$0.17	$0.12	$0.05	$0.14	$1.40	$0.00	$2.51	$2.96
SW009	$0.11	$0.15	$0.00	$0.06	$1.26	$0.00	$2.00	$2.36
SW010	$0.24	$0.07	$0.03	$0.11	$1.17	$0.25	$2.10	$2.47
SW011	$0.03	$0.05	$0.08	$0.51	$1.58	$0.00	$2.54	$3.09
SW012	$0.15	$0.11	$0.00	$0.09	$1.45	$0.10	$2.54	$3.00
SW014	$0.12	$0.05	$0.00	$0.00	$1.55	$0.00	$2.30	$2.63
SW015	$0.18	$0.06	$0.00	$0.00	$1.49	$0.01	$2.13	$2.54
SW020	$0.16	$0.09	$0.00	$0.19	$1.87	$0.00	$2.58	$3.19
SW021	$0.07	$0.17	$0.00	$0.00	$1.59	$0.00	$2.64	$3.02
SW022	$0.12	$0.27	$0.16	$0.08	$1.61	$0.00	$2.90	$3.52
SW025	$0.15	$0.17	$0.00	$0.00	$1.31	$0.00	$2.27	$2.78
SW027	$0.07	$0.11	$0.00	$0.11	$0.98	$0.00	$2.07	$2.52
SW030	$0.20	$0.19	$0.00	$0.03	$1.23	$0.00	$2.41	$2.81
SW032	$0.07	$0.03	$0.05	$0.11	$1.20	$0.00	$1.82	$2.32
SW033	$0.14	$0.35	$0.00	$0.00	$1.19	$0.00	$2.76	$3.39
SW034	$0.14	$0.15	$0.00	$0.00	$0.75	$0.00	$2.28	$2.49
SW035	$0.07	$0.13	$0.00	$0.00	$1.69	$0.01	$2.32	$2.60
SW036	$0.18	$0.17	$0.00	$0.17	$1.30	$0.00	$2.96	$3.48
SW037	$0.10	$0.08	$0.00	$0.07	$1.65	$0.00	$2.40	$2.87
SW038	$0.12	$0.05	$0.01	$0.00	$1.19	$0.00	$1.87	$2.29
SW039	$0.09	$0.00	$0.01	$0.00	$1.69	$0.00	$2.16	$2.62
SW040	$0.11	$0.11	$0.19	$0.16	$1.74	$0.00	$2.94	$3.37
SW041	$0.10	$0.17	$0.00	$0.43	$1.28	$0.06	$2.69	$3.13
Average	$0.13	$0.12	$0.03	$0.10	$1.37	$0.03	$2.35	$2.79
Top 25%	$0.08	$0.09	$0.02	$0.17	$1.50	$0.01	$2.39	$2.84

TABLE B5

Overhead costs — South West

Farm number	Rates	Registration & insurance	Farm insurance	Repairs & 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	$0.04	$0.01	$0.07	$0.47	$0.00	$0.13	$0.49	$1.23	$0.21	$0.71	$2.15
SW007	$0.06	$0.01	$0.07	$0.43	$0.00	$0.07	$1.86	$2.49	$0.12	$0.20	$2.80
SW008	$0.03	$0.01	$0.07	$0.38	$0.01	$0.17	$0.64	$1.31	$0.22	$0.27	$1.80
SW009	$0.07	$0.01	$0.03	$0.24	$0.03	$0.05	$0.73	$1.15	$0.22	$0.89	$2.27
SW010	$0.05	$0.05	$0.08	$0.71	$0.01	$0.10	$0.00	$1.00	$0.44	$1.72	$3.16
SW011	$0.04	$0.01	$0.03	$0.29	$0.01	$0.20	$0.97	$1.56	$0.10	$0.00	$1.66
SW012	$0.07	$0.01	$0.12	$0.67	$0.03	$0.32	$0.04	$1.27	$0.29	$2.45	$4.01
SW014	$0.04	$0.01	$0.13	$0.20	$0.00	$0.03	$0.06	$0.46	$0.14	$1.03	$1.63
SW015	$0.03	$0.01	$0.02	$0.46	$0.00	$0.06	$1.06	$1.63	$0.22	$0.11	$1.96
SW020	$0.04	$0.05	$0.07	$0.52	$0.00	$0.11	$0.38	$1.17	$0.36	$0.95	$2.48
SW021	$0.02	$0.01	$0.01	$0.21	$0.00	$0.11	$0.36	$0.72	$0.12	$0.35	$1.19
SW022	$0.06	$0.01	$0.07	$0.49	$0.06	$0.15	$0.35	$1.19	$0.24	$0.78	$2.21
SW025	$0.04	$0.02	$0.08	$0.42	$0.00	$0.12	$0.46	$1.16	$0.16	$1.08	$2.40
SW027	$0.07	$0.02	$0.10	$0.49	$0.01	$0.10	$0.02	$0.80	$0.11	$1.48	$2.38
SW030	$0.08	$0.03	$0.02	$0.32	$0.13	$0.08	$0.00	$0.67	$0.41	$1.55	$2.63
SW032	$0.05	$0.06	$0.08	$0.48	$0.01	$0.22	$0.09	$1.00	$0.15	$2.27	$3.42
SW033	$0.09	$0.05	$0.14	$0.60	$0.00	$0.30	$0.02	$1.20	$0.52	$2.92	$4.64
SW034	$0.05	$0.02	$0.11	$0.24	$0.02	$0.23	$0.02	$0.68	$0.26	$2.60	$3.54
SW035	$0.00	$0.02	$0.00	$0.46	$0.00	$0.08	$0.12	$0.70	$0.11	$0.81	$1.62
SW036	$0.09	$0.00	$0.07	$0.23	$0.01	$0.06	$0.26	$0.72	$0.10	$1.80	$2.62
SW037	$0.04	$0.01	$0.05	$0.48	$0.00	$0.02	$0.66	$1.26	$0.20	$0.46	$1.92
SW038	$0.05	$0.02	$0.02	$0.33	$0.00	$0.11	$0.09	$0.63	$0.19	$1.32	$2.14
SW039	$0.05	$0.01	$0.07	$0.22	$0.01	$0.13	$0.52	$1.00	$0.23	$0.42	$1.64
SW040	$0.04	$0.05	$0.05	$0.34	$0.01	$0.09	$0.80	$1.39	$0.11	$0.49	$1.99
SW041	$0.02	$0.01	$0.04	$0.26	$0.00	$0.17	$0.78	$1.28	$0.11	$0.35	$1.74
Average	$0.05	$0.02	$0.06	$0.40	$0.02	$0.13	$0.43	$1.11	$0.21	$1.08	$2.40
Top 25%	$0.04	$0.01	$0.04	$0.30	$0.01	$0.12	$0.56	$1.07	$0.16	$0.48	$1.72

TABLE B6

Variable costs % — South West

Percentage of total farm costs

Farm number	AI & herd test	Animal health	Calf rearing	Shed power	Dairy supplies	Total herd & shed costs	Fertiliser	Irrigation	Hay & silage making
	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS
SW001	1.7%	2.5%	0.4%	2.6%	3.2%	10.3%	8.4%	0.0%	0.0%
SW007	2.0%	2.5%	0.4%	1.9%	0.6%	7.4%	0.0%	0.0%	0.0%
SW008	1.5%	3.2%	0.0%	2.7%	2.1%	9.5%	12.3%	0.0%	1.0%
SW009	2.3%	2.3%	0.0%	1.6%	1.7%	7.8%	7.4%	0.0%	1.6%
SW010	0.8%	2.5%	0.0%	1.5%	1.7%	6.5%	3.5%	0.0%	0.3%
SW011	2.7%	2.8%	2.1%	2.2%	1.7%	11.6%	3.4%	0.0%	2.7%
SW012	1.2%	0.8%	0.4%	2.7%	1.4%	6.6%	6.7%	0.0%	2.4%
SW014	2.5%	1.6%	0.7%	2.0%	1.0%	7.9%	9.6%	0.0%	4.1%
SW015	1.5%	4.2%	0.0%	2.0%	1.6%	9.3%	7.5%	0.7%	0.6%
SW020	2.2%	2.3%	0.0%	2.8%	3.5%	10.8%	4.0%	0.0%	0.8%
SW021	3.0%	3.0%	0.1%	1.3%	1.5%	8.9%	14.0%	0.0%	5.2%
SW022	1.4%	2.8%	3.1%	1.4%	2.1%	10.9%	8.7%	0.0%	2.6%
SW025	1.4%	3.1%	0.7%	3.0%	1.6%	9.8%	10.9%	0.0%	1.6%
SW027	1.5%	1.6%	0.8%	1.2%	4.0%	9.1%	12.4%	0.0%	3.9%
SW030	2.0%	1.3%	0.0%	2.5%	1.5%	7.2%	11.9%	1.4%	0.7%
SW032	1.1%	2.2%	0.7%	2.3%	2.3%	8.7%	4.9%	0.0%	1.3%
SW033	1.7%	1.3%	0.1%	1.3%	3.5%	7.8%	8.4%	0.0%	5.0%
SW034	0.5%	0.9%	0.0%	1.2%	0.8%	3.4%	12.0%	1.7%	7.0%
SW035	1.8%	1.8%	0.0%	2.0%	0.9%	6.5%	6.2%	0.0%	4.0%
SW036	1.8%	1.9%	0.1%	1.8%	2.8%	8.4%	14.6%	0.0%	4.2%
SW037	1.7%	2.4%	0.0%	2.0%	3.9%	9.8%	10.4%	0.0%	0.4%
SW038	2.0%	3.3%	1.4%	1.5%	1.3%	9.6%	8.2%	0.3%	2.7%
SW039	1.1%	2.7%	0.0%	1.7%	5.1%	10.6%	5.1%	3.6%	0.0%
SW040	1.2%	3.2%	0.1%	1.9%	1.6%	8.1%	7.1%	0.0%	4.7%
SW041	1.8%	4.0%	0.4%	2.1%	0.6%	9.0%	8.4%	0.0%	4.9%
Average	1.7%	2.4%	0.5%	2.0%	2.1%	8.6%	8.2%	0.3%	2.5%
Top 25%	2.0%	3.0%	0.7%	1.8%	2.3%	9.9%	8.2%	0.7%	2.7%

Farm Number	Fuel & 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	6.3%	1.5%	0.8%	0.3%	19.9%	0.0%	37.3%	47.5%
SW007	1.0%	0.2%	0.2%	4.4%	26.5%	6.5%	38.9%	46.3%
SW008	3.5%	2.5%	1.0%	3.0%	29.4%	0.0%	52.6%	62.1%
SW009	2.4%	3.1%	0.0%	1.4%	27.3%	0.0%	43.2%	51.0%
SW010	4.3%	1.3%	0.6%	2.0%	20.7%	4.5%	37.3%	43.8%
SW011	0.6%	1.1%	1.8%	10.7%	33.3%	0.0%	53.5%	65.1%
SW012	2.1%	1.6%	0.0%	1.2%	20.7%	1.5%	36.2%	42.8%
SW014	2.8%	1.1%	0.0%	0.0%	36.3%	0.0%	53.8%	61.7%
SW015	4.0%	1.2%	0.0%	0.0%	33.0%	0.2%	47.2%	56.5%
SW020	2.9%	1.5%	0.0%	3.4%	32.9%	0.0%	45.5%	56.3%
SW021	1.7%	4.0%	0.0%	0.0%	37.9%	0.0%	62.8%	71.7%
SW022	2.2%	4.7%	2.9%	1.5%	28.2%	0.0%	50.6%	61.5%
SW025	2.8%	3.3%	0.1%	0.0%	25.2%	0.0%	43.8%	53.6%
SW027	1.5%	2.2%	0.0%	2.3%	20.0%	0.0%	42.2%	51.4%
SW030	3.7%	3.6%	0.0%	0.5%	22.7%	0.0%	44.4%	51.6%
SW032	1.2%	0.6%	0.9%	2.0%	21.0%	0.0%	31.8%	40.5%
SW033	1.8%	4.4%	0.0%	0.0%	14.8%	0.0%	34.4%	42.2%
SW034	2.3%	2.5%	0.0%	0.0%	12.5%	0.0%	37.9%	41.3%
SW035	1.6%	3.0%	0.0%	0.0%	40.1%	0.2%	55.1%	61.7%
SW036	2.9%	2.8%	0.0%	2.7%	21.3%	0.0%	48.6%	57.0%
SW037	2.1%	1.6%	0.0%	1.4%	34.3%	0.0%	50.1%	60.0%
SW038	2.7%	1.2%	0.2%	0.0%	26.8%	0.0%	42.2%	51.7%
SW039	2.1%	0.0%	0.2%	0.0%	39.7%	0.0%	50.8%	61.4%
SW040	2.1%	2.0%	3.5%	3.0%	32.4%	0.0%	54.8%	62.9%
SW041	2.0%	3.5%	0.0%	8.8%	26.3%	1.3%	55.3%	64.2%
Average	2.5%	2.2%	0.5%	1.9%	27.3%	0.6%	46.0%	54.6%
Top 25%	1.9%	1.9%	0.4%	3.5%	33.0%	0.2%	52.4%	62.4%

TABLE B7

Overhead costs — South West

Percentage of total farm costs

Farm number	Rates	Registration & insurance	Farm insurance	Repairs & 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
SW001	1.1%	0.2%	1.8%	11.6%	0.1%	3.2%	12.1%	30.0%	5.2%	17.3%	52.5%
SW007	1.2%	0.2%	1.3%	8.2%	0.0%	1.3%	35.6%	47.8%	2.2%	3.7%	53.7%
SW008	0.6%	0.3%	1.4%	8.0%	0.2%	3.7%	13.4%	27.5%	4.6%	5.7%	37.9%
SW009	1.5%	0.2%	0.7%	5.2%	0.6%	1.0%	15.7%	24.9%	4.8%	19.3%	49.0%
SW010	1.0%	0.9%	1.5%	12.5%	0.1%	1.8%	0.0%	17.7%	7.9%	30.5%	56.2%
SW011	0.8%	0.2%	0.7%	6.2%	0.3%	4.3%	20.3%	32.8%	2.1%	0.0%	34.9%
SW012	1.0%	0.2%	1.7%	9.6%	0.5%	4.6%	0.6%	18.1%	4.1%	34.9%	57.2%
SW014	1.0%	0.2%	3.0%	4.7%	0.0%	0.6%	1.3%	10.8%	3.3%	24.1%	38.3%
SW015	0.6%	0.1%	0.5%	10.2%	0.1%	1.2%	23.5%	36.3%	4.8%	2.5%	43.5%
SW020	0.6%	0.9%	1.2%	9.2%	0.0%	2.0%	6.7%	20.6%	6.4%	16.7%	43.7%
SW021	0.6%	0.2%	0.2%	4.9%	0.0%	2.5%	8.6%	17.1%	2.9%	8.4%	28.3%
SW022	1.1%	0.1%	1.1%	8.5%	1.1%	2.7%	6.2%	20.8%	4.2%	13.5%	38.5%
SW025	0.9%	0.4%	1.6%	8.1%	0.1%	2.4%	8.9%	22.3%	3.2%	20.9%	46.4%
SW027	1.3%	0.3%	2.1%	10.0%	0.1%	2.0%	0.5%	16.3%	2.2%	30.1%	48.6%
SW030	1.5%	0.6%	0.4%	5.9%	2.4%	1.5%	0.0%	12.3%	7.6%	28.4%	48.4%
SW032	0.9%	1.1%	1.4%	8.4%	0.3%	3.9%	1.5%	17.4%	2.6%	39.5%	59.5%
SW033	1.2%	0.6%	1.7%	7.5%	0.0%	3.7%	0.3%	15.0%	6.5%	36.4%	57.8%
SW034	0.9%	0.3%	1.8%	4.0%	0.3%	3.8%	0.3%	11.3%	4.2%	43.1%	58.7%
SW035	0.0%	0.5%	0.0%	10.9%	0.1%	2.0%	3.0%	16.5%	2.5%	19.3%	38.3%
SW036	1.5%	0.0%	1.2%	3.7%	0.1%	1.0%	4.3%	11.9%	1.7%	29.5%	43.0%
SW037	0.9%	0.2%	1.0%	10.0%	0.1%	0.4%	13.7%	26.3%	4.1%	9.6%	40.0%
SW038	1.2%	0.5%	0.4%	7.6%	0.1%	2.5%	2.1%	14.3%	4.2%	29.8%	48.3%
SW039	1.1%	0.2%	1.6%	5.1%	0.3%	2.9%	12.3%	23.4%	5.3%	9.9%	38.6%
SW040	0.8%	0.9%	1.0%	6.4%	0.2%	1.7%	15.0%	25.9%	2.0%	9.2%	37.1%
SW041	0.5%	0.2%	0.7%	5.4%	0.1%	3.4%	15.9%	26.2%	2.3%	7.3%	35.8%
Average	1.0%	0.4%	1.2%	7.7%	0.3%	2.4%	8.9%	21.7%	4.0%	19.6%	45.4%
Top 25%	0.8%	0.2%	0.8%	6.5%	0.1%	2.7%	12.2%	23.4%	3.5%	10.8%	37.6%

TABLE B8

Capital structure — South West

	FARM ASSETS				OTHER ASSETS (PER USABLE HECTARE)					LIABILITIES		EQUITY	
	Land value	Land value	Permanent water value	Permanent water value	Plant & equipment	Livestock	Hay & grain	Other assets	Total assets	Liabilities per usable hectare	Liabilities per milking cow	Equity per usable hectare	Average equity
	$/HA	$/COW	$/HA	$/COW	$/HA	$/HA	$/HA	$/HA	$/HA	$/HA	$/COW	$/HA	%
Average	$9,811	$8,672	$63	$62	$1,293	$1,961	$160	$374	$13,663	$5,330	$4,507	$8,333	61%
Top 25%	$9,960	$7,171	$-	$-	$1,363	$2,166	$157	$312	$13,957	$7,004	$5,214	$6,953	45%

TABLE C1

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	$5.14	$0.71	$5.86	$2.36	$3.40	41%	$0.10	0.3%	$0.60	10%	-$0.50	-2.5%	-5.3%
GI005	$5.08	$0.24	$5.32	$2.12	$2.87	42%	$0.33	0.8%	$0.95	18%	-$0.63	-3.9%	-4.0%
GI011	$5.34	$0.67	$6.01	$2.83	$1.98	59%	$1.21	3.2%	$0.97	16%	$0.24	1.5%	1.5%
GI012	$5.29	$0.51	$5.80	$1.80	$2.42	43%	$1.57	4.2%	$0.61	11%	$0.96	3.3%	2.8%
GI017	$5.06	$0.76	$5.81	$1.99	$2.46	45%	$1.36	5.0%	$0.28	5%	$1.08	6.8%	7.2%
GI020	$5.62	$0.46	$6.08	$3.54	$1.37	72%	$1.18	4.3%	$0.50	8%	$0.68	3.6%	3.2%
GI021	$5.29	$0.68	$5.97	$2.73	$1.77	61%	$1.47	5.8%	$0.92	15%	$0.56	6.4%	5.1%
GI022	$5.31	$0.62	$5.93	$2.33	$2.29	50%	$1.32	3.6%	$0.96	16%	$0.36	1.6%	1.6%
GI025	$5.14	$0.30	$5.44	$2.16	$1.48	59%	$1.79	5.7%	$0.55	10%	$1.24	8.5%	8.6%
GI028	$5.62	$0.50	$6.13	$3.78	$1.72	69%	$0.63	2.3%	$1.00	16%	-$0.37	-3.6%	-10.0%
GI029	$5.12	$0.37	$5.48	$1.98	$1.54	56%	$1.96	6.9%	$0.47	9%	$1.50	7.7%	7.8%
GI031	$5.35	$0.36	$5.71	$3.26	$1.26	72%	$1.18	7.5%	$0.30	5%	$0.88	7.0%	6.7%
GI032	$5.29	$0.26	$5.55	$2.79	$2.12	57%	$0.63	2.1%	$0.26	5%	$0.37	1.4%	0.7%
GI035	$4.95	$1.07	$6.02	$3.09	$3.64	46%	-$0.71	-2.4%	$1.11	18%	-$1.82	-15.0%	-22.7%
GI037	$5.53	$0.26	$5.79	$2.54	$2.10	55%	$1.16	3.6%	$0.69	12%	$0.47	2.3%	2.3%
GI039	$5.01	$0.81	$5.82	$2.80	$1.71	62%	$1.31	4.7%	$0.88	15%	$0.44	16.1%	0.0%
GI040	$5.99	-$0.12	$5.88	$2.68	$1.89	59%	$1.30	4.9%	$1.35	23%	-$0.05	-0.6%	-0.6%
GI041	$5.27	-$0.02	$5.26	$2.56	$1.74	59%	$0.96	3.5%	$0.44	8%	$0.51	2.3%	2.3%
GI042	$5.19	$1.26	$6.44	$2.34	$2.08	53%	$2.02	6.4%	$0.42	7%	$1.61	6.1%	6.1%
GI043	$5.45	$0.52	$5.97	$2.29	$2.13	52%	$1.55	6.5%	$0.44	7%	$1.11	5.9%	4.7%
GI044	$5.01	$0.26	$5.27	$1.83	$1.85	50%	$1.59	1.8%	$0.16	3%	$1.43	3.6%	3.6%
GI045	$5.92	$0.61	$6.53	$2.63	$1.48	64%	$2.42	8.0%	$0.62	9%	$1.80	42.9%	42.8%
GI046	$5.26	$0.25	$5.51	$2.12	$1.55	58%	$1.84	8.0%	$1.04	19%	$0.80	7.8%	7.8%
GI047	$6.26	$0.64	$6.90	$3.45	$1.83	65%	$1.62	4.7%	$0.49	7%	$1.13	5.2%	5.3%
GI048	$5.71	$1.11	$6.82	$2.70	$1.46	65%	$2.65	8.0%	$0.32	5%	$2.33	12.8%	9.2%
Average	$5.37	$0.52	$5.89	$2.59	$2.01	57%	$1.30	4.4%	$0.65	11%	$0.64	5.1%	3.5%
Top 25%	$5.47	$0.54	$6.00	$2.50	$1.57	61%	$1.93	7.5%	$0.53	9%	$1.40	14.0%	13.2%

TABLE C2

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	91	68	1,471	118	1.3	406	527	4.3%	3.3%
GI005	123	91	1,119	182	1.5	360	532	4.0%	3.2%
GI011	119	85	1,460	160	1.3	521	701	3.8%	3.3%
GI012	88	70	1,038	158	1.8	562	1,009	3.8%	3.4%
GI017	204	161	1,155	210	1.0	496	512	4.1%	3.2%
GI020	445	322	1,173	780	1.8	535	938	4.2%	3.4%
GI021	270	163	897	400	1.5	541	801	5.1%	3.9%
GI022	481	242	1,098	431	0.9	505	453	4.0%	3.5%
GI025	104	60	1,260	220	2.1	488	1,032	4.5%	3.4%
GI028	150	90	1,294	240	1.6	490	784	3.8%	3.5%
GI029	137	78	1,263	246	1.8	485	871	4.5%	3.5%
GI031	73	73	1,291	295	4.0	518	2,093	4.1%	3.5%
GI032	130	110	1,333	243	1.9	519	971	4.2%	3.5%
GI035	55	38	1,092	87	1.6	419	659	4.2%	3.2%
GI037	236	173	1,200	425	1.8	518	932	4.1%	3.5%
GI039	142	127	1,119	240	1.7	440	744	3.8%	3.4%
GI040	323	220	1,123	562	1.7	458	797	3.9%	3.3%
GI041	246	153	1,115	370	1.5	501	754	4.3%	3.5%
GI042	93	65	1,171	240	2.6	469	1,216	4.1%	3.3%
GI043	110	67	1,289	225	2.0	557	1,140	4.3%	3.4%
GI044	138	100	987	160	1.2	493	573	4.4%	3.3%
GI045	205	140	1,151	370	1.8	512	924	4.6%	3.7%
GI046	185	122	1,063	235	1.3	561	713	3.9%	3.5%
GI047	256	198	1,239	300	1.2	608	713	3.3%	2.9%
GI048	310	130	1,139	390	1.3	552	695	4.3%	3.4%
Average	189	126	1,182	291	1.7	501	843	4.1%	3.4%
Top 25%	170	102	1,199	294	2.0	531	1,073	4.3%	3.5%

TABLE C2

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	6.6	1.5	75%	15.2	8.0	21.1	9.9	57	23,121
GI005	6.3	0.5	78%	14.2	10.2	32.1	0.9	80	28,915
GI011	7.4	0.0	67%	180.4	19.7	51.3	24.6	128	66,945
GI012	8.8	0.8	64%	111.7	28.5	58.8	40.0	71	39,671
GI017	4.9	0.0	73%	15.8	13.1	19.5	16.4	71	35,197
GI020	4.4	1.5	41%	181.7	12.2	23.8	0.8	119	63,445
GI021	5.2	1.6	51%	108.1	14.7	41.7	12.5	111	59,777
GI022	4.8	1.5	51%	12.6	1.5	1.5	1.0	115	58,275
GI025	11.8	0.0	63%	264.3	0.0	27.8	11.4	114	55,731
GI028	8.5	0.5	65%	245.4	28.5	73.0	22.9	98	48,106
GI029	10.4	0.3	71%	22.7	5.5	6.8	4.3	106	51,560
GI031	12.8	0.2	53%	300.0	17.0	58.9	21.9	146	75,764
GI032	6.8	1.6	64%	176.5	10.0	9.4	6.0	97	50,146
GI035	4.9	1.0	55%	19.7	20.4	28.4	36.3	60	25,045
GI037	9.5	2.5	67%	257.9	15.7	91.0	26.3	98	50,861
GI039	4.8	0.9	58%	166.8	5.0	23.0	12.4	113	49,861
GI040	6.4	0.6	56%	45.6	0.0	0.9	0.0	140	64,121
GI041	3.2	1.9	44%	93.8	14.5	38.8	21.7	102	51,245
GI042	14.7	0.9	73%	79.6	20.9	40.2	26.0	96	44,774
GI043	11.8	0.3	69%	92.3	15.9	41.1	21.4	82	45,921
GI044	5.7	1.3	71%	8.0	11.6	22.3	14.5	76	37,310
GI045	7.0	0.6	60%	166.8	21.0	75.6	20.7	123	62,876
GI046	6.8	1.1	63%	55.2	17.9	52.8	17.9	116	65,161
GI047	4.1	0.4	53%	84.3	23.6	7.1	8.2	78	47,250
GI048	8.0	0.1	58%	103.9	1.6	8.9	2.0	100	55,012
Average	7.4	0.9	62%	112.9	13.5	34.2	15.2	100	50,244
Top 25%	9.5	0.4	62%	123.5	13.2	40.7	14.7	112	59,383

**on milking area*

TABLE C3

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	1.0	$313	-	-	-	$313	12.5	2.5	25%
GI005	0.9	$364	-	-	-	$364	12.0	3.1	22%
GI011	2.0	$325	-	$142	$142	$310	11.8	2.7	33%
GI012	1.8	$251	-	-	-	$251	13.0	1.9	36%
GI017	1.5	$313	-	$252	$252	$306	11.6	2.7	27%
GI020	2.9	$286	-	$192	-	$273	12.6	2.2	59%
GI021	2.1	$335	$250	-	$67	$289	12.8	2.3	49%
GI022	2.0	$273	-	-	$64	$266	12.7	2.1	49%
GI025	1.7	$291	-	$210	$210	$273	12.4	2.3	37%
GI028	2.4	$429	-	$233	-	$367	11.5	3.4	35%
GI029	1.2	$317	-	-	-	$317	13.0	2.5	29%
GI031	2.7	$330	-	$163	$280	$304	12.0	2.6	47%
GI032	1.5	$308	-	-	-	$308	12.7	2.4	36%
GI035	2.7	$314	$46	$68	$48	$237	11.3	2.2	45%
GI037	1.4	$288	-	-	-	$288	12.8	2.3	33%
GI039	1.9	$263	-	-	-	$263	12.5	2.1	42%
GI040	1.9	$376	-	-	-	$376	13.0	2.9	44%
GI041	2.4	$285	-	$183	$183	$275	12.6	2.2	56%
GI042	1.3	$401	$100	-	-	$386	12.3	3.2	27%
GI043	1.5	$338	-	-	-	$338	13.0	2.6	31%
GI044	1.3	$318	-	-	-	$318	12.0	2.7	29%
GI045	2.4	$222	-	$194	$194	$214	11.9	1.9	40%
GI046	2.0	$268	-	-	-	$268	12.5	2.2	37%
GI047	3.1	$309	$100	$262	$260	$301	12.7	2.4	47%
GI048	3.1	$264	$152	$175	$175	$221	11.3	2.1	42%
Average	1.9	$311	$130	$189	$170	$297	12.3	2.5	38%
Top 25%	2.2	$290	-	-	-	$277	12.3	2.3	38%

TABLE C4

Variable costs — Gippsland

Farm number	AI & herd test	Animal health	Calf rearing	Shed power	Dairy supplies	Total herd & shed costs	Fertiliser	Irrigation	Hay & silage making
	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS
GI004	$0.03	$0.18	$0.01	$0.12	$0.24	$0.58	$0.19	$0.00	$0.25
GI005	$0.11	$0.02	$0.07	$0.13	$0.10	$0.43	$0.48	$0.00	$0.15
GI011	$0.05	$0.04	$0.02	$0.11	$0.14	$0.35	$0.84	$0.00	$0.05
GI012	$0.07	$0.13	$0.06	$0.07	$0.05	$0.38	$0.39	$0.00	$0.00
GI017	$0.08	$0.07	$0.01	$0.09	$0.12	$0.36	$0.24	$0.00	$0.08
GI020	$0.14	$0.13	$0.04	$0.14	$0.03	$0.48	$0.50	$0.30	$0.23
GI021	$0.10	$0.08	$0.06	$0.09	$0.10	$0.43	$0.32	$0.00	$0.26
GI022	$0.16	$0.19	$0.00	$0.10	$0.04	$0.49	$0.04	$0.00	$0.20
GI025	$0.00	$0.04	$0.07	$0.09	$0.10	$0.29	$0.50	$0.01	$0.03
GI028	$0.19	$0.18	$0.07	$0.10	$0.05	$0.59	$0.73	$0.00	$0.06
GI029	$0.08	$0.10	$0.02	$0.04	$0.11	$0.35	$0.24	$0.25	$0.07
GI031	$0.18	$0.18	$0.09	$0.10	$0.13	$0.68	$0.32	$0.20	$0.01
GI032	$0.16	$0.17	$0.07	$0.10	$0.03	$0.52	$1.02	$0.00	$0.06
GI035	$0.16	$0.21	$0.02	$0.15	$0.10	$0.64	$0.15	$0.34	$0.02
GI037	$0.10	$0.19	$0.05	$0.12	$0.08	$0.54	$0.75	$0.01	$0.15
GI039	$0.11	$0.13	$0.03	$0.13	$0.13	$0.53	$0.50	$0.00	$0.12
GI040	$0.13	$0.15	$0.08	$0.11	$0.15	$0.63	$0.09	$0.01	$0.13
GI041	$0.18	$0.22	$0.00	$0.05	$0.01	$0.46	$0.39	$0.00	$0.15
GI042	$0.11	$0.08	$0.02	$0.06	$0.04	$0.32	$0.26	$0.21	$0.05
GI043	$0.06	$0.12	$0.00	$0.06	$0.06	$0.31	$0.31	$0.28	$0.11
GI044	$0.08	$0.04	$0.00	$0.08	$0.05	$0.25	$0.19	$0.00	$0.14
GI045	$0.12	$0.19	$0.03	$0.08	$0.14	$0.55	$0.43	$0.00	$0.03
GI046	$0.09	$0.10	$0.03	$0.05	$0.06	$0.34	$0.32	$0.03	$0.11
GI047	$0.14	$0.34	$0.13	$0.11	$0.15	$0.87	$0.44	$0.00	$0.16
GI048	$0.09	$0.11	$0.05	$0.03	$0.09	$0.37	$0.28	$0.03	$0.12
Average	$0.11	$0.14	$0.04	$0.09	$0.09	$0.47	$0.40	$0.07	$0.11
Top 25%	$0.10	$0.13	$0.04	$0.06	$0.10	$0.43	$0.32	$0.13	$0.08

Farm number	Fuel & 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	$0.14	$0.19	$0.04	$0.00	$0.93	$0.05	$1.78	$2.36
GI005	$0.09	$0.01	$0.00	$0.00	$0.97	$0.00	$1.69	$2.12
GI011	$0.12	$0.01	$0.00	$0.20	$1.25	$0.00	$2.47	$2.83
GI012	$0.10	$0.02	$0.01	$0.02	$0.88	$0.01	$1.42	$1.80
GI017	$0.10	$0.02	$0.00	$0.22	$0.92	$0.04	$1.63	$1.99
GI020	$0.14	$0.18	$0.03	$0.18	$1.49	$0.01	$3.06	$3.54
GI021	$0.11	$0.15	$0.12	$0.23	$1.10	$0.00	$2.30	$2.73
GI022	$0.15	$0.16	$0.00	$0.00	$1.29	$0.00	$1.84	$2.33
GI025	$0.06	$0.07	$0.00	$0.21	$0.90	$0.10	$1.87	$2.16
GI028	$0.08	$0.19	$0.09	$0.43	$1.61	$0.00	$3.19	$3.78
GI029	$0.06	$0.03	$0.00	$0.03	$0.90	$0.05	$1.63	$1.98
GI031	$0.05	$0.01	$0.00	$0.10	$1.51	$0.38	$2.59	$3.26
GI032	$0.10	$0.11	$0.00	$0.00	$0.97	$0.00	$2.27	$2.79
GI035	$0.14	$0.06	$0.00	$0.20	$1.55	$0.00	$2.46	$3.09
GI037	$0.10	$0.06	$0.00	$0.00	$0.94	$0.00	$2.00	$2.54
GI039	$0.06	$0.14	$0.00	$0.00	$1.28	$0.17	$2.27	$2.80
GI040	$0.04	$0.00	$0.03	$0.00	$1.76	$0.00	$2.06	$2.68
GI041	$0.06	$0.01	$0.01	$0.10	$1.38	$0.00	$2.10	$2.56
GI042	$0.07	$0.00	$0.00	$0.08	$1.26	$0.09	$2.02	$2.34
GI043	$0.11	$0.03	$0.00	$0.00	$1.05	$0.10	$1.99	$2.29
GI044	$0.07	$0.03	$0.19	$0.00	$0.96	$0.00	$1.58	$1.83
GI045	$0.13	$0.05	$0.19	$0.32	$0.91	$0.00	$2.08	$2.63
GI046	$0.09	$0.07	$0.10	$0.00	$1.04	$0.01	$1.78	$2.12
GI047	$0.06	$0.02	$0.20	$0.12	$1.57	$0.00	$2.58	$3.45
GI048	$0.06	$0.04	$0.08	$0.75	$0.97	$0.00	$2.33	$2.70
Average	$0.09	$0.07	$0.04	$0.13	$1.18	$0.04	$2.12	$2.59
Top 25%	$0.08	$0.04	$0.06	$0.20	$1.06	$0.09	$2.06	$2.50

TABLE C5

Overhead costs — Gippsland

Farm number	Rates	Registration & insurance	Farm insurance	Repairs & 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	$0.08	$0.03	$0.07	$0.33	$0.01	$0.22	$0.01	$0.75	$0.18	$2.47	$3.40
GI005	$0.08	$0.01	$0.08	$0.40	$0.02	$0.10	$0.01	$0.69	$0.15	$2.03	$2.87
GI011	$0.04	$0.02	$0.04	$0.64	$0.00	$0.08	$0.08	$0.90	$0.30	$0.77	$1.98
GI012	$0.09	$0.05	$0.02	$0.30	$0.00	$0.16	$0.04	$0.66	$0.32	$1.45	$2.42
GI017	$0.04	$0.06	$0.00	$0.28	$0.00	$0.06	$0.59	$1.03	$0.22	$1.20	$2.46
GI020	$0.03	$0.01	$0.02	$0.19	$0.00	$0.05	$0.38	$0.68	$0.14	$0.55	$1.37
GI021	$0.06	$0.02	$0.04	$0.24	$0.01	$0.13	$0.54	$1.05	$0.15	$0.57	$1.77
GI022	$0.11	$0.06	$0.02	$0.60	$0.01	$0.16	$0.84	$1.81	$0.22	$0.25	$2.29
GI025	$0.03	$0.00	$0.07	$0.07	$0.00	$0.08	$0.07	$0.33	$0.18	$0.97	$1.48
GI028	$0.05	$0.04	$0.06	$0.17	$0.01	$0.07	$0.32	$0.73	$0.08	$0.90	$1.72
GI029	$0.03	$0.03	$0.07	$0.08	$0.00	$0.06	$0.51	$0.77	$0.11	$0.66	$1.54
GI031	$0.02	$0.00	$0.03	$0.07	$0.00	$0.10	$0.94	$1.17	$0.09	$0.00	$1.26
GI032	$0.06	$0.03	$0.02	$0.51	$0.00	$0.08	$0.10	$0.81	$0.28	$1.03	$2.12
GI035	$0.05	$0.04	$0.08	$0.75	$0.01	$0.22	$0.39	$1.53	$0.15	$1.96	$3.64
GI037	$0.03	$0.01	$0.05	$0.61	$0.00	$0.07	$0.55	$1.33	$0.25	$0.52	$2.10
GI039	$0.06	$0.04	$0.04	$0.28	$0.01	$0.09	$0.15	$0.66	$0.08	$0.97	$1.71
GI040	$0.06	$0.00	$0.09	$0.39	$0.00	$0.09	$0.50	$1.14	$0.31	$0.44	$1.89
GI041	$0.06	$0.01	$0.06	$0.37	$0.00	$0.07	$0.95	$1.52	$0.13	$0.10	$1.74
GI042	$0.06	$0.02	$0.06	$0.40	$0.01	$0.08	$0.27	$0.89	$0.16	$1.03	$2.08
GI043	$0.04	$0.01	$0.11	$0.27	$0.03	$0.07	$0.50	$1.04	$0.21	$0.88	$2.13
GI044	$0.07	$0.01	$0.04	$0.14	$0.00	$0.05	$0.42	$0.73	$0.10	$1.02	$1.85
GI045	$0.01	$0.01	$0.03	$0.30	$0.00	$0.12	$0.87	$1.34	$0.14	$0.00	$1.48
GI046	$0.04	$0.01	$0.04	$0.30	$0.00	$0.09	$0.19	$0.67	$0.09	$0.79	$1.55
GI047	$0.05	$0.01	$0.02	$0.27	$0.00	$0.06	$0.35	$0.77	$0.19	$0.88	$1.83
GI048	$0.02	$0.02	$0.04	$0.13	$0.00	$0.07	$0.53	$0.81	$0.09	$0.57	$1.46
Average	$0.05	$0.02	$0.05	$0.32	$0.01	$0.10	$0.40	$0.95	$0.17	$0.88	$2.01
Top 25%	$0.03	$0.01	$0.05	$0.19	$0.01	$0.09	$0.59	$0.97	$0.12	$0.48	$1.57

TABLE C6

Variable costs % — Gippsland

Percentage of total farm costs

Farm number	AI & herd test	Animal health	Calf rearing	Shed power	Dairy supplies	Total herd & shed costs	Fertiliser	Irrigation	Hay & silage making
	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS
GI004	0.5%	3.1%	0.2%	2.0%	4.2%	10.1%	3.2%	0.0%	4.4%
GI005	2.1%	0.4%	1.5%	2.6%	1.9%	8.5%	9.7%	0.0%	2.9%
GI011	1.0%	0.8%	0.4%	2.2%	2.9%	7.4%	17.4%	0.1%	1.1%
GI012	1.7%	3.0%	1.4%	1.6%	1.3%	8.9%	9.2%	0.0%	0.1%
GI017	1.7%	1.5%	0.1%	2.0%	2.7%	8.2%	5.4%	0.0%	1.8%
GI020	2.9%	2.6%	0.8%	2.8%	0.7%	9.8%	10.2%	6.0%	4.6%
GI021	2.2%	1.8%	1.4%	2.0%	2.2%	9.6%	7.2%	0.1%	5.8%
GI022	3.4%	4.1%	0.1%	2.2%	0.8%	10.6%	0.8%	0.0%	4.3%
GI025	0.0%	1.2%	1.9%	2.3%	2.7%	8.1%	13.7%	0.2%	0.9%
GI028	3.4%	3.3%	1.2%	1.9%	1.0%	10.8%	13.2%	0.0%	1.2%
GI029	2.3%	2.8%	0.5%	1.2%	3.1%	9.9%	6.9%	7.2%	1.9%
GI031	3.9%	4.0%	2.0%	2.3%	2.8%	15.0%	7.0%	4.5%	0.3%
GI032	3.2%	3.4%	1.4%	2.1%	0.6%	10.6%	20.7%	0.0%	1.3%
GI035	2.4%	3.1%	0.4%	2.2%	1.4%	9.4%	2.2%	5.1%	0.3%
GI037	2.3%	4.1%	1.0%	2.6%	1.6%	11.6%	16.1%	0.3%	3.2%
GI039	2.5%	2.8%	0.7%	2.8%	2.9%	11.8%	11.2%	0.0%	2.7%
GI040	2.9%	3.3%	1.8%	2.4%	3.4%	13.7%	1.9%	0.2%	2.8%
GI041	4.1%	5.1%	0.1%	1.2%	0.2%	10.6%	9.1%	0.0%	3.5%
GI042	2.6%	1.8%	0.4%	1.4%	1.0%	7.1%	5.9%	4.7%	1.2%
GI043	1.4%	2.7%	0.1%	1.4%	1.3%	7.0%	6.9%	6.3%	2.5%
GI044	2.2%	1.1%	0.0%	2.3%	1.3%	6.9%	5.2%	0.0%	3.7%
GI045	2.9%	4.6%	0.7%	1.9%	3.5%	13.5%	10.4%	0.1%	0.8%
GI046	2.6%	2.8%	0.8%	1.4%	1.8%	9.3%	8.8%	0.9%	3.0%
GI047	2.6%	6.5%	2.5%	2.1%	2.8%	16.5%	8.3%	0.0%	3.1%
GI048	2.2%	2.6%	1.1%	0.8%	2.2%	9.0%	6.6%	0.7%	2.8%
Average	2.4%	2.9%	0.9%	2.0%	2.0%	10.2%	8.7%	1.5%	2.4%
Top 25%	2.5%	3.2%	0.9%	1.5%	2.5%	10.6%	7.8%	3.3%	1.9%

Farm number	Fuel & 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	2.4%	3.2%	0.7%	0.0%	16.2%	0.8%	30.9%	41.0%
GI005	1.8%	0.1%	0.0%	0.0%	19.4%	0.0%	33.9%	42.4%
GI011	2.5%	0.1%	0.1%	4.2%	26.0%	0.0%	51.4%	58.8%
GI012	2.4%	0.5%	0.2%	0.4%	20.7%	0.2%	33.7%	42.6%
GI017	2.3%	0.5%	0.0%	5.0%	20.7%	0.9%	36.6%	44.8%
GI020	2.9%	3.7%	0.7%	3.6%	30.4%	0.2%	62.3%	72.1%
GI021	2.5%	3.3%	2.7%	5.0%	24.4%	0.0%	51.0%	60.6%
GI022	3.3%	3.4%	0.0%	0.0%	28.0%	0.0%	39.8%	50.4%
GI025	1.6%	1.9%	0.0%	5.6%	24.6%	2.7%	51.3%	59.4%
GI028	1.4%	3.4%	1.7%	7.8%	29.2%	0.0%	58.0%	68.8%
GI029	1.8%	0.8%	0.0%	0.9%	25.5%	1.4%	46.3%	56.3%
GI031	1.2%	0.3%	0.0%	2.2%	33.3%	8.4%	57.2%	72.1%
GI032	2.0%	2.3%	0.0%	0.0%	19.8%	0.0%	46.2%	56.8%
GI035	2.0%	0.9%	0.0%	2.9%	23.0%	0.0%	36.5%	46.0%
GI037	2.1%	1.2%	0.0%	0.0%	20.3%	0.0%	43.2%	54.8%
GI039	1.4%	3.1%	0.0%	0.0%	28.3%	3.7%	50.3%	62.1%
GI040	0.9%	0.0%	0.6%	0.0%	38.5%	0.0%	44.9%	58.7%
GI041	1.5%	0.2%	0.2%	2.3%	32.1%	0.0%	48.9%	59.5%
GI042	1.7%	0.0%	0.0%	1.7%	28.4%	2.0%	45.7%	52.8%
GI043	2.4%	0.8%	0.0%	0.0%	23.8%	2.2%	44.9%	51.9%
GI044	2.0%	0.7%	5.1%	0.0%	26.1%	0.0%	42.9%	49.8%
GI045	3.2%	1.3%	4.6%	7.9%	22.2%	0.0%	50.6%	64.1%
GI046	2.4%	1.9%	2.7%	0.0%	28.5%	0.3%	48.5%	57.8%
GI047	1.2%	0.4%	3.8%	2.3%	29.7%	0.0%	48.8%	65.3%
GI048	1.4%	0.9%	1.9%	18.0%	23.4%	0.0%	55.8%	64.8%
Average	2.0%	1.4%	1.0%	2.8%	25.7%	0.9%	46.4%	56.5%
Top 25%	2.1%	1.0%	1.5%	4.8%	26.1%	2.0%	50.6%	61.2%

TABLE C7

Overhead costs — Gippsland

Percentage of total farm costs

Farm number	Rates	Registration & insurance	Farm insurance	Repairs & 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
GI004	1.4%	0.6%	1.2%	5.7%	0.2%	3.8%	0.1%	13.0%	3.2%	42.8%	59.0%
GI005	1.6%	0.1%	1.7%	8.0%	0.3%	2.0%	0.2%	13.9%	3.1%	40.6%	57.6%
GI011	0.9%	0.5%	0.8%	13.2%	0.0%	1.7%	1.6%	18.7%	6.3%	16.1%	41.2%
GI012	2.2%	1.1%	0.6%	7.0%	0.0%	3.7%	1.1%	15.6%	7.5%	34.3%	57.4%
GI017	0.9%	1.4%	0.0%	6.2%	0.0%	1.3%	13.3%	23.2%	5.0%	27.0%	55.2%
GI020	0.7%	0.2%	0.4%	4.0%	0.0%	0.9%	7.7%	13.8%	2.8%	11.3%	27.9%
GI021	1.3%	0.5%	0.9%	5.4%	0.3%	2.9%	11.9%	23.3%	3.4%	12.7%	39.4%
GI022	2.5%	1.3%	0.5%	13.1%	0.2%	3.5%	18.2%	39.2%	4.9%	5.5%	49.6%
GI025	0.9%	0.0%	2.0%	2.0%	0.0%	2.2%	2.0%	9.2%	4.9%	26.6%	40.6%
GI028	1.0%	0.8%	1.2%	3.2%	0.1%	1.2%	5.9%	13.4%	1.4%	16.4%	31.2%
GI029	0.8%	0.7%	1.9%	2.2%	0.1%	1.7%	14.4%	21.9%	3.2%	18.7%	43.7%
GI031	0.5%	0.0%	0.6%	1.6%	0.1%	2.3%	20.9%	26.0%	1.9%	0.0%	27.9%
GI032	1.2%	0.7%	0.5%	10.3%	0.0%	1.7%	2.1%	16.5%	5.7%	20.9%	43.2%
GI035	0.7%	0.6%	1.1%	11.1%	0.2%	3.2%	5.8%	22.7%	2.2%	29.1%	54.0%
GI037	0.7%	0.2%	1.1%	13.2%	0.1%	1.4%	11.9%	28.6%	5.3%	11.3%	45.2%
GI039	1.3%	0.9%	0.8%	6.2%	0.1%	2.1%	3.2%	14.7%	1.7%	21.5%	37.9%
GI040	1.4%	0.0%	2.0%	8.6%	0.0%	2.1%	10.9%	24.9%	6.9%	9.6%	41.3%
GI041	1.3%	0.1%	1.5%	8.6%	0.1%	1.6%	22.1%	35.3%	3.0%	2.3%	40.5%
GI042	1.2%	0.4%	1.4%	9.1%	0.2%	1.9%	6.0%	20.2%	3.6%	23.4%	47.2%
GI043	1.0%	0.3%	2.5%	6.0%	0.8%	1.6%	11.2%	23.5%	4.8%	19.9%	48.1%
GI044	1.8%	0.2%	1.0%	3.9%	0.1%	1.3%	11.5%	19.8%	2.6%	27.8%	50.2%
GI045	0.3%	0.3%	0.8%	7.2%	0.1%	2.9%	21.1%	32.6%	3.3%	0.0%	35.9%
GI046	1.1%	0.2%	1.0%	8.3%	0.1%	2.5%	5.2%	18.4%	2.4%	21.5%	42.2%
GI047	0.9%	0.2%	0.4%	5.1%	0.0%	1.2%	6.7%	14.5%	3.6%	16.6%	34.7%
GI048	0.6%	0.4%	0.9%	3.2%	0.1%	1.6%	12.7%	19.4%	2.1%	13.6%	35.2%
Average	1.1%	0.5%	1.1%	6.9%	0.1%	2.1%	9.1%	20.9%	3.8%	18.8%	43.5%
Top 25%	0.7%	0.3%	1.3%	4.7%	0.2%	2.1%	14.2%	23.6%	2.9%	12.3%	38.8%

TABLE C8

Capital structure — Gippsland

	FARM ASSETS				OTHER ASSETS (PER USABLE HECTARE)					LIABILITIES		EQUITY	
	Land value	Land value	Permanent water value	Permanent water value	Plant & equipment	Livestock	Hay & grain	Other assets	Total assets	Liabilities per usable hectare	Liabilities per milking cow	Equity per usable hectare	Average equity
	$/HA	$/COW	$/HA	$/COW	$/HA	$/HA	$/HA	$/HA	$/HA	$/HA	$/COW	$/HA	%
Average	$12,631	$7,946	$1,750	$772	$1,393	$2,458	$250	$510	$18,991	$5,184	$3,159	$13,808	72%
Top 25%	$9,136	$5,029	$3,230	$1,191	$1,162	$2,898	$159	$1,141	$17,727	$3,582	$1,892	$14,144	82%

TABLE D1

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	$5.52	$0.46	$5.97	$2.78	$2.06	58%	$1.14	5.0%	$0.71	12%	$0.43	4.4%	3.1%
Top 25%	$5.73	$0.55	$6.26	$2.76	$1.60	63%	$1.90	10.0%	$0.56	9%	$1.34	15.6%	15.0%

TABLE D2

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	237	160	967	328	1.6	508	800	4.1%	3.4%
Top 25%	208	150	1,040	338	1.9	551	1,032	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	6.2	1.0	57%	94.3	17.7	27.2	20.3	98	49,752
Top 25%	7.3	1.1	55%	113.8	24.1	20.3	27.2	113	62,185

**on milking area*

TABLE D3

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	$296	$116	$171	$163	$275	12.1	2.4	43%
Top 25%	2.7	$267	-	-	-	$243	11.9	2.1	45%

TABLE D4

Variable costs — Statewide

Farm number	AI & herd test	Animal health	Calf rearing	Shed power	Dairy supplies	Total herd & shed costs	Fertiliser	Irrigation	Hay & silage making
	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS	$/ KG MS
Average	$0.10	$0.13	$0.03	$0.10	$0.10	$0.45	$0.35	$0.11	$0.12
Top 25%	$0.11	$0.13	$0.03	$0.08	$0.08	$0.43	$0.29	$0.14	$0.13

Farm number	Fuel & 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	$0.11	$0.04	$0.20	$1.22	$0.06	$2.33	$2.78
Top 25%	$0.10	$0.12	$0.06	$0.26	$1.10	$0.12	$2.32	$2.76

TABLE D5

Overhead costs — Statewide

Farm number	Rates	Registration & insurance	Farm insurance	Repairs & 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	$0.05	$0.34	$0.01	$0.11	$0.41	$0.99	$0.19	$0.88	$2.06
Top 25%	$0.03	$0.02	$0.03	$0.24	$0.00	$0.10	$0.49	$0.93	$0.16	$0.52	$1.60

TABLE D6

Variable costs % — Statewide

Percentage of total farm costs

Farm number	AI & herd test	Animal health	Calf rearing	Shed power	Dairy supplies	Total herd & shed costs	Fertiliser	Irrigation	Hay & silage making
	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS	% OF COSTS
Average	2.1%	2.7%	0.6%	2.0%	2.0%	9.4%	7.4%	2.1%	2.5%
Top 25%	2.6%	3.0%	0.6%	1.8%	1.9%	10.0%	6.7%	2.8%	2.9%

Farm Number	Fuel & 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	2.3%	2.3%	0.9%	4.0%	25.5%	1.3%	48.5%	57.8%
Top 25%	2.2%	2.7%	1.3%	5.8%	25.4%	2.7%	52.9%	62.9%

TABLE D7

Overhead costs — Statewide

Percentage of total farm costs

Farm number	Rates	Registration & insurance	Farm insurance	Repairs & 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	0.9%	0.5%	1.1%	6.9%	0.2%	2.3%	8.9%	20.6%	3.9%	17.6%	42.2%
Top 25%	0.7%	0.5%	0.7%	5.6%	0.1%	2.4%	11.1%	21.1%	3.8%	12.1%	37.1%

TABLE D8

Capital structure — Statewide

	FARM ASSETS				OTHER ASSETS (PER USABLE HECTARE)					LIABILITIES		EQUITY	
	Land value	Land value	Permanent water value	Permanent water value	Plant & equipment	Livestock	Hay & grain	Other assets	Total assets	Liabilities per usable hectare	Liabilities per milking cow	Equity per usable hectare	Average equity
	$/HA	$/COW	$/HA	$/COW	$/HA	$/HA	$/HA	$/HA	$/HA	$/HA	$/COW	$/HA	%
Average	$10,011	$7,014	$1,731	$919	$1,366	$2,338	$218	$410	$16,074	$5,434	$3,610	$10,640	65%
Top 25%	$8,767	$5,234	$2,470	$1,204	$1,365	$2,692	$230	$413	$15,937	$5,539	$3,116	$10,398	64%

Appendix E: Glossary of terms

Important terms used are explained below:

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

Annual hours
Total hours worked by a person during the given twelve month period.

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
Variable costs plus overhead costs. Usually expressed in terms of the main enterprise output ie 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 income minus total variable costs, total overhead costs.

EBIT %
The ratio of EBIT compared to gross 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 grants and rebates.

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
Total usable area minus outblocks or run-off areas.

Net farm income

Previously reported as business profit
Earnings before interest and tax minus interest and lease charges. The amount of profit available for capital investment, loan principal repayments and tax.

Number of milkers
Total number of cows milked for at least three months.

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

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.

Return on assets (RoA)
Earnings before interest and tax divided by the value of total assets.

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

AI	Artificial insemination.
BPR	Break-even price required.
CH_4	Methane gas.
CO_2	Carbon dioxide gas.
CO_2-e	Carbon dioxide equivalents.
CoP	Cost of production.
DIFMP	Dairy Industry Farm Monitor Project.
DM	Dry matter of feed stuffs.
DPI	Department of Primary Industries Victoria.
EBIT	Earnings before interest and tax.
FTE	Full time equivalent.
GWP	Global Warming Potential.
ha	Hectares.
hd	Head of cattle.
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 kilograms.

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