



The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

DAIRY FARM BUSINESS ANALYSIS; CURRENT APPROACHES AND A WAY FORWARD

Nicola Shadbolt

IFNHH College of Sciences, Massey University, Palmerston North, New Zealand

Email: N.M.Shadbolt@massey.ac.nz

Matthew Newman

Dexcel Ltd

Ivan Lines

Agribusiness Ltd

Abstract

In 2003 a voluntary-based industry group, calling itself the KPI Working Group, formed to discuss and address the fragmented approach to measurement of business performance that existed in the dairy industry. The objective they set themselves was to develop a coordinated approach to provide sound, robust data and consistent benchmark calculations which would provide increased clarity of data for the dairy industry and benchmarks that could be relied upon. Group discussion related to the need to provide farmers and wider industry players with timely information on liquidity, profitability and wealth creation/loss as it occurs on farm from year to year. Critical areas that required consistency in how they were determined included the value of family labour and management, changes in feed inventory and the value of land and buildings. Indicators of success for both the property and the farming businesses was needed to ensure a holistic evaluation was made of overall investment strategy. The research provides a useful example of how inter-disciplinary groups can work towards a common goal and suggests a framework for farm analysis that could be used internationally.

Keywords: *liquidity, profitability, wealth creation, dairy farm analysis*

Introduction

In 2003 a voluntary-based industry group, calling itself the KPI Working Group, formed to discuss and address the fragmented approach to measurement of business performance that existed in the dairy industry. It was recognized that not only was the data fragmented and not always robust there were also inconsistencies in both terminology and calculation of key performance indicators (KPIs). The objective they set themselves was to develop a coordinated approach to provide sound, robust data and consistent benchmark calculations which would provide increased clarity of data for the dairy industry and benchmarks that could be relied upon. The purpose of this research was to document and define the variety of methods used to analyse farm businesses that existed, both in New Zealand and overseas, and to determine through group consensus the method and the indicators that would be most beneficial to all stakeholders in the New Zealand dairy industry.

The methodology included a review of both the literature and current practice amongst rural professionals to define the methods used and how they delivered to common business and industry goals. This documentation of the various approaches was followed by rigorous debate and discussion by the group to determine the indicators of most relevance to the dairy industry. This paper summarises that documentation and presents the results of the group consensus.

History

The voluntary working group consisted of representatives from the NZ Institute of Chartered Accountants, Dexcel, NZ Institute of Primary Industry Management, Massey University, Fonterra and trading banks. It is of interest first to note how industry standards have developed in New Zealand and what role the various organizations have played in this development.

The NZ Institute of Chartered Accountants (formerly New Zealand Society of Accountants) has always played an active role in farm management accounting. McEwen (1965) documents the process by which an Agricultural Development Conference resulted in the following recommendations:

1. That the NZ Society of Accountants (NZSA) convene a committee to revise the form of accounts and code of terminology in the 1961 Research Report of Farm Accounting to provide forms for use by the farmer to record essential management and financial information during the year.
2. That to ensure the widest possible adoption of the recommendations regarding minimum standards for farm accounting a publicity campaign among farmers and accountants be sponsored by the NZ Society of Accountants, the Government Producer boards, Federated Farmers and others including lending institutions and farm improvement clubs.

At that time NZ's 73,000 farmers earned over 90% of NZ's total overseas earnings and it was noted with concern how there was a serious lack of information on the economic aspects of farming.

The result of implementing the above recommendation was the publication of Farm Accounting in New Zealand (commonly referred to as the "Green Book") in 1968 in which an agreed chart of accounts was presented as were recommended formats for various accounting reports including a cash flow statement. It is of interest to note that this publication outlines an Economic Farm Surplus statement as the method by which to provide comparison between one farm with another and between years on the same farm. The publication recommends three major reporting statements as critical to business analysis:

- The farm working account (known now as the Statement of Financial Performance)
- The Cash Flow Statement
- The Economic Farm Surplus

In the preface to this NZSA (1968) publication it is stated "...no longer is it sufficient for the accountant to produce only historical records and taxation returns – he must be looking ahead and fulfilling his role as his client's financial adviser". It also notes how the changeover to decimal currency in 1967 and the increasing use of computers "...presages a climate of change and progress and the need for more precise planning of farming operations".

In 1977 the NZSA produced a subsequent publication "Management Accounting for the New Zealand Farmer" (NZSA, 1977). In this they stated that accounts prepared on a purely historical cost basis are misleading to the user and that there was an increased emphasis on accounting to provide information for business management essential to sound decision making. They recommended a move away from accounts drawn up largely for tax assessment and the adoption of net current values for assets and the abandonment of tax values for livestock. The committee preparing this work drew heavily on work completed by the Queensland (Australia) Joint Committee on Standardization of Farm Management Accounting. Of interest is the absence of the Economic Farm Surplus as a recommended key measure and the emphasis on budgeting (cashflow, partial, parametric and gross margin) and enterprise accounting. Many of these concepts draw on the economic approach of separating variable and fixed costs espoused

in the farm management literature from Australia, the UK and the USA at that time that was used to determine optimal enterprise combinations on mixed enterprise farms.

A subsequent NZSA publication 'Financial reporting for Primary Producers' was produced in 1989 to update members on the continuing changes in financial reporting requirements (Clarke, 1989). Its purpose was to recommend accepted accounting principles for primary producers '...with a view to providing guidance on financial reporting and valuation policies and techniques for primary producers and their financial advisers'. Again a sample set of statements is presented including cash flows but no chart of accounts is included this time and, again, no mention is made of Economic Farm Surplus. It presents financial reporting as being primarily historical but suggests a sound accounting and financial reporting system provides a greater degree of precision that will enable better assessment of unprofitable areas and areas where economies can be made. 1984 was when subsidies were removed from NZ agriculture so it is not surprising that it suggests producers' ability to make sound financial decisions as becoming increasingly more important as they deal with variable input costs and volatile market conditions, debt levels and interest rates. Similarly experience in the US during the 'Farm Debt Crisis' years of 1983 to 1987 pointed out that methods used at that time to determine, measure and analyse the financial position and financial performance of agricultural producers were either totally inadequate or seriously underutilized. (FFSC, 1997).

A consistent theme throughout these publications has been the recommendation that accountants produce a cashflow statement in conjunction with other financial statements but this has never become a legislated requirement. McEwen (1965) identified the cashflow statement as a restatement of the accounts in the form of total sales and expenses ignoring the profit concept of accounting; he believed it was in the cashflow form that his farmers thought about finances. He also pointed out how the farm budgets used are simply a projection of the cashflow statement for the following year so providing a cashflow statement of the year that has been assists in the farmer's projection of the year to come. Clark (1989) defines the task of the cashflow statement is to provide information about the operating, financing and investing activities of an entity and the effects of those activities on cash resources.

However despite this early work and subsequent recommendations by the NZSA Angus (1991) identified that the conventional presentation of accounts was still failing to communicate clearly a meaningful cash result. Angus (1991) states that while most farming clients are well served by their accountants in the area of legitimately minimizing tax the "simple objective of defining if earnings exceed spending has been lost sight of".

Since 1965 a dedicated group of farm accountants has developed in NZ; this group has put in to practice many of the recommendations of the various NZSA publications and many of them have also developed various forms of benchmarking for their clients, analyzing the cash result, the profitability and the equity change of their clients and comparing each result with group averages.

In parallel with these developments in the accounting profession and perhaps because of them other rural professionals have also developed various methods of financial reporting. Bankers tend to focus very closely on the cash position of their clients, often using Change in Net Indebtedness (fixed plus current liabilities less current assets) as a key measure. They link this to changes in stock numbers and capital purchases to determine if their clients risk status has changed. They also monitor asset values to determine client debt to asset ratios and, inversely, the increasing or reducing risk of their lending portfolio. Students targeting a banking career have traditionally been expected to have both farm management and valuation qualifications and registration to enable such valuations to be carried out.

Farm consultants commonly assist farmers with their cash budgets so also require details on the cash position of previous years. In the absence of meaningful cashflow statements both they and farm financiers must complete accounts analyses (cash reconciliations) to determine historical cash results from which to base or compare projections. As farm consultants are also often involved in benchmarking

for a group of clients they have tended to calculate economic farm surplus (various versions based on the NZSA (1968) recommendation) and other efficiency ratios (Return on Assets, Return on Equity and various per hectare, per stock unit and per kg output measures).

The Ministry of Agriculture developed FMAS and provided an accounts analysis service with a mainframe computer throughout the 70s before personal computers and spreadsheets made it redundant. They also provided pre-coded sheets for manual cash books to farmers that were based on the NZSA 1968 recommended chart of accounts. The analysis provided by FMAS and subsequent farm extension and consultancy software programmes provided liquidity, profitability and efficiency measures. Over time the definitions of such measures altered at the whim of the people involved and the connection with a common standard or definition was lost. Their varying academic backgrounds (accountancy, farm management or valuation) largely determined the emphasis they placed on liquidity, profitability, efficiency, taxation and equity and the reliability and accuracy of each calculation.

In the US the Farm Financial Standards Council was established in 1989 in order to develop some standardization in financial reporting and financial analysis. The first edition of their report 'Financial Guidelines for Agricultural Producers' was issued in 1991. In it they recommended a list of measures that addressed liquidity, solvency, profitability, repayment capacity and financial efficiency. They made the distinction between net income (taxable income) and operating profit (economic farm surplus) and defined the latter as including an estimated value for family labour and management (FFSC, 1997).

Boehlje(1994) defined operating profit and operating profit margin as critical measures of revenue generation and cost control and added further measures for reinvestment rates and cost containment. Using the Du Pont business model as his base he emphasised the three drivers that impact bottom line performance, as measured by return on investment equity, as operating profit margins, capital turnover and leverage. Each of these drivers are affected by specific decisions on cost control, efficiency and productivity, as well as marketing choices, business structures and management systems.

Operating profit, often termed Economic Farm Surplus in New Zealand, is calculated for both dairy and sheep and beef cattle farms in annual statistics collected by the respective industries (The Economic Survey, 2006, Sheep & Beef Economic Survey, 2006). In Australia it is termed Profit at full Equity and is available for broadacre and dairy farms from ABARE (2005).

The Process

Despite the wide range of measures and definitions used by the various members of the group and a high level of 'patch protection' the group made good progress in the first 12 months deciding on key performance indicators and their standardisation. Most members of the group provided a type of benchmarking service to their clients in which considerable investment had been made in data collection, analysis and interpretation. However all members saw the benefit in pooling their skills and the farm data to enable a national service to be developed. In October 2004 funding for the project was granted by Dairy Insight. This allowed the working group to proceed with the development of the software, the web interface, the reports and database systems and procedures to establish DairyBase.

The buy-in and contribution from all members of the group has been the key reason for the project's success to date. Ultimately the project will only be successful if rural professionals use the database and adopt the calculations and terminology as the industry standard. It is critical that the benchmarks are produced from a system which has integrity and will allow meaningful comparisons. The group determined that integrity resulted from having trained individuals entering standardised and verified data that meets specified quality standards. The volume of data, or number of data sets entered from different

farms, must be high enough to ensure an accurate representative sample. The target was to process 1,800 dairy farm businesses in the 2006 year, building to 5,000 sets of accounts by 2010.

The key objectives of DairyBase are to:

- Standardise terminology, calculations and reporting of key KPIs.
- Provide sufficient volumes of reliable data for farm comparisons
- Develop a National Database for the dairy industry that will provide robust national and regional data for different farm types. This includes producing an annual publication of industry trends.
- Provide improved aggregate data to measure industry progress and for R&D purposes

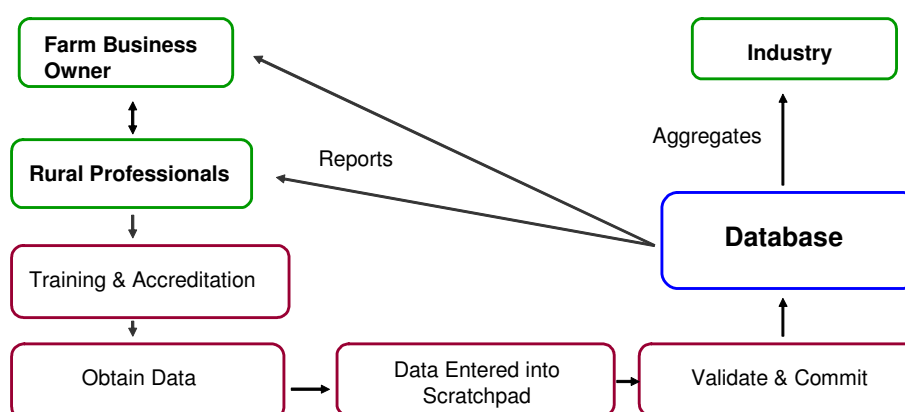
Accredited rural professionals enter farm physical and financial data. It is anticipated that accountants will enter most of the data as they finalise each year's Annual Financial Statements. If accountants do not enter the data it can be entered by accredited consultants or bankers.

Rural professionals are permitted to enter data without authorisation from the farm business owner. The farm business owner is able to authorise any one or more rural professionals to enter data into the system. The initial data is entered over the internet to a validation or scratch pad area. Once the data has been validated or passed through a series of checks it is transferred into the actual database.

Reports are generated after data has been validated and committed to the database. The reports produce data for the individual farm business and the data for a chosen benchmark group. A sample of the available reports is attached as Appendix 1.

Reports of aggregate (not individual farm business) data will be made available to industry bodies as requested. Market research carried out at the commencement of this project confirmed that a National Database for the dairy industry to provide information to industry for research & development and planning purposes, and also provide a basis for benchmarking, was supported by the majority.

Figure 1: The Dairy Base process



Level One Physical and Financial Reports

These reports focus on a physical summary then key performance indicators in the three critical areas:

- Cash (liquidity)
- Profit
- Wealth creation.

The emphasis on cash noted by McEwen in 1965 is as valid today for many farmers and is an essential financial management skill at the operational level (Shadbolt & Gardner, 2005). The focus on profit and efficiency includes the operating profit, return on assets and return on equity as well as the key Du Pont drivers of operating profit margin and asset turnover. Results are stated also on a per hectare, per cow and per kg milksolid. Delivery to these measures is the result of good financial management at the tactical level as managers make revenue generation and cost control decisions as the season unfolds. Wealth creation is recognized as a key financial outcome at the strategic level for many farm businesses and is reliant on a realistic estimate of asset values at opening and closing (Shadbolt & Rawlings, 2001). The important distinction is also made between wealth created from profit retained and invested in the business and that achieved as a result of changing asset (land and shares) values. Various solvency and debt servicing capacity measures are also included to ensure the vulnerability of the business is understood.

More in depth 'Level Two' physical data can also be collected to provide more in-depth analysis of the farming system.

Summary

Essentially discussion related to the need to provide farmers and wider industry players with information on liquidity, profitability and wealth creation/loss as it occurs on farm from year to year. No one area was more important than another and each provided relevant information useful for both off- and on-farm decision making. Critical areas that required consistency in how they were determined included the value of family labour and management, changes in feed inventory and the value of land and buildings. Indicators of success for both the property and the farming businesses was needed to ensure a holistic evaluation was made of overall investment strategy. A timely method of ensuring the analyses were carried out as close to the end of the financial year as possible and to provide comparisons with chosen benchmark groups was also devised.


The research provides a useful example of how inter-disciplinary groups can work towards a common goal and suggests a framework for farm analysis that could be used internationally.


References

- ABARE (2005), Australian Bureau of Agriculture and Resource Economics, Australian Broadacre Agriculture. Agricultural and Grazing Industries Survey, ABARE, Canberra.
- Angus (1991) The Cashflow Statement in Farm Accounts – Lets make it meaningful. A project in fulfilment of the requirements of the NZ Society of Farm Management Study Award.
- Boehlje, M. (1994). Evaluating farm financial performance. Journal of the American Society of Farm Managers & Rural Appraisers 58 (1):109-115.
- Clarke, M. (1989) Financial reporting for Primary Producers; for the Primary Sector Accounting Sub-Committee. Published by The New Zealand Society of Accountants, Wellington, NZ

- FFSC (1997) Financial Guidelines for Agricultural producers. Recommendations of the Farm Financial Standards Council. (Revised) December, 1997.
- Gardner J., Shadbolt N.M. (2005) Financial Management. In: Farm Management in New Zealand. Editors Shadbolt N.M. & Martin S. Oxford University press, Melbourne.
- McEwen (1965) Farm Management Accounting. An address presented to the New Zealand Society of Accountants National Convention, Christchurch, NZ, March 19th, 1965.
- NZSA (1968) Farm Accounting in New Zealand. Prepared by The Farm Research Committee of the New Zealand Society of Accountants' Board of Research and Publications. Published by The New Zealand Society of Accountants, Wellington, NZ
- NZSA (1977) Management Accounting for the New Zealand Farmer. Published by The New Zealand Society of Accountants, Wellington, NZ
- Shadbolt, N.M., Rawlings M. (2001) Successful benchmarking by balanced planning and identifying key performance indicators for goal attainment in dairy farming. DRDC Australia Project MUNZ001.
- Shadbolt N.M. (1997) Key Performance Indicators. Massey Dairy Farmers Conference, Palmerston North.
- The Economic Service (2006) The New Zealand Sheep and Beef Farm Survey. The Economic Service of New Zealand, Wellington.
- Dexcel (2006) Economic Survey of New Zealand Dairy Farmers 2004-2005. Dexcel Ltd, Hamilton.

Appendix I: Sample DairyBase reports

 Physical Data Summary		Date Printed: 21 November 2006 Farm ID: 200393			
Dairy Co Supplied: Fonterra Production System: 3 Business Type: Owner with land and no cows Calving Season: Spring and Autumn Winter Milk: Yes Region: Lower North Island NIWA 10 Yr Av Rainfall (mm): 995 % Milking Area Irrigated: Not Irrigated Farm Dairy Type: H40		Balance Month: June Milking Interval: Twice a day Organic: No District: Manawatu Season's rainfall (mm): 946 est N Applied to pasture (t): 13.8 Predominant Soil Type: Recents/YGE/BGE			
Stock Predominant dairy breed: Friesian Peak Cows Milked: 460 Stocking rate (Cows/ha): 2.8 Replacement Calves Reared: 91 Non-replacement Calves Reared: 118		Land Area (ha) Total Dairying area: 173.0 less Ungrazeable area: 6.0 Effective Dairying area: 167.0 less Defined Young Stock area: 0 Milking area: 167.0 Dairy Run-off effective area: 0.0 Non-dairy effective area: 0.0			
Labour Full time paid labour equivalents: 0.0 Full time unpaid labour equivalents: 0.0 FTE unpaid management: 0.0 Total FTEs: 0.0 Milking Cups per FTE					
Production		Total	Per ha	Per cow	Composition
Milk Litres:	1,933,934	11,580	4,204		
Fat kg:	93,953	563	204		4.9%
Protein kg:	72,262	433	157		3.7%
Milk solids kg:	166,215	995	361		8.6%
Non-replacement calf milk (l):	38,350				
Non-replacement calf MS (kg):	3,296				
Number in Benchmark Group: Benchmark Group Selected by: Benchmark Group Ranked by:					
Data entered by: Financial: Nicola Shadbolt Extended Physical:					

 PLATFORM FOR GROWTH	<h2>Key Performance Indicators</h2>	Dairy Ltd Dairy Season ended: 2006	Date Printed: 21 November 2006 Farm ID: 200393
--	-------------------------------------	---------------------------------------	---

Number in Benchmark Group:

Benchmark Group Selected by:

Benchmark Group Ranked by:


FARM PHYSICAL KPI's	2005-06		2004-05		2003-04	
	Farm	Benchmark	Farm	Benchmark	Farm	Benchmark
Cows/ha	2.8		2.7		2.6	
Kg Milksolids/ha	995		971		925	
Kg Milksolids/cow	361		364		359	
Cows/FTE						
Kg MS/FTE						

PROFITABILITY Dairy	2005-06		2004-05		2003-04	
	Farm	Benchmark	Farm	Benchmark	Farm	Benchmark
Gross Farm Revenue/ha	2,264		2,373		1,994	
Operating Expenses/ha	1,188		1,252		1,010	
Operating Profit (EFS)/ha	1,075		1,120		984	
Gross Farm Revenue/kg MS	2.27		2.44		2.16	
Operating Expenses/kg MS	1.19		1.29		1.09	
Operating Profit (EFS)/kg MS	1.08		1.15		1.06	
FWE/kg MS	1.08		1.12		0.97	
Operating Profit Margin %	47.5%		47.2%		49.3%	
Asset Turnover %	8.0%		9.6%		10.2%	
Interest & Rent/GFR	16.2%		17.4%		21.1%	
Interest & Rent/kg MS	0.37		0.42		0.46	
Return on Dairy Assets %	3.3%		3.9%		4.2%	
Total Business						
Total Return on Assets %	14.7%		17.6%		15.9%	
Return on Equity % (excluding change in capital value)	2.8%		3.4%		3.6%	
Total Return on Equity %	15.4%		19.6%		18.1%	

LIQUIDITY	2005-06		2004-05		2003-04	
	Farm	Benchmark	Farm	Benchmark	Farm	Benchmark
Net Cash Income	378,052		396,213		333,005	
Farm Working Expenses	179,016		181,510		149,633	
Cash Operating Surplus	199,036		214,703		183,372	
Discretionary Cash	100,816		107,140		99,313	
Cash Surplus/Deficit	-97,507		105,719		-8,563	

TOTAL WEALTH	2005-06		2004-05		2003-04	
	Farm	Benchmark	Farm	Benchmark	Farm	Benchmark
Closing Dairy Assets \$	5,310,077		4,704,885		4,109,329	
Closing Total Assets \$	5,310,077		4,704,885		4,109,329	
Closing Total Liabilities \$	404,968		437,461		643,180	
Closing Total Equity \$	4,905,109		4,267,424		3,466,149	
Growth in Equity \$	637,685		801,275		482,047	
Growth from Profit	81,383		79,492		80,266	
Growth from Capital	556,302		721,783		401,781	
	2005-06		2004-05		2003-04	
	Farm	Benchmark	Farm	Benchmark	Farm	Benchmark
Growth in Equity %	14.9%		23.1%		18.3%	
Debt to Assets %	7.6%		9.3%		17.1%	
Liabilities/kg MS	2.63		3.97		4.11	

Comment: Assets include Land and Building values calculated using revalued capital values.

 DAIRY BASE PLATFORM FOR GROWTH	Dairy Ltd Dairy Season ended: 2006	<h2>Cash Flow and Profitability</h2>	Date Printed: 21 November 2006 Farm ID: 200393
--	---------------------------------------	--------------------------------------	---

Number in Benchmark Group:

Benchmark Group Selected by:

Benchmark Group Ranked by:

CASH	\$/KG MS	\$	NON CASH ADJUSTMENTS	\$	CASH + NON CASH	\$
DAIRY SALES					DAIRY GFR	
Net Milk	2.27	378,052	+ Value of Change in Dairy Livestock	0	Net Milk	378,052
Net Livestock	0.00	0			Net Livestock	0
Other Dairy	0.00	0			Other Dairy	0
NET CASH INCOME	2.27	378,052			DAIRY GFR	378,052

CASH FWE	\$/KG MS	\$	NON CASH ADJUSTMENTS	\$	OPERATING EXPENSES	\$
Wages	0.00	0	+ Labour Adj	0	Labour Expenses	0
Stock Expenses	0.00	0	- Feed Inventory Adj	6,000	Stock Expenses	0
Supplementary Feed	0.33	55,399			Total Supplement Expenses	49,399
Grazing and Run-off	0.37	62,242	+ Owned Run-off Adj	0	Total Grazing and Run-off	62,242
Other Working Expenses	0.27	44,153	+ Depreciation	25,433	Other Working Expenses	44,153
Overheads	0.10	17,222			Total Overheads	42,655
FARM WORKING EXPENSES	1.08	179,016			OPERATING EXPENSES	198,449

CASH OPERATING SURPLUS	1.20	199,036	NET ADJUSTMENTS	-19,433	DAIRY OPERATING PROFIT (EFS)	179,603
-------------------------------	-------------	----------------	------------------------	----------------	-------------------------------------	----------------


TOTAL BUSINESS		
- Rent (excl run-off)	0.15	25,746
- Interest	0.21	35,346
- Tax	0.22	37,128
+ Net non Dairy Cash Income	0.00	0
+ Income Equalisation	0.00	0
+ Net off-farm income	0.00	0
DISCRETIONARY CASH	0.61	100,816

Applied to:		
- Net Capital Transactions	0.41	68,323
- Net Debt	0.78	130,000
- Net Drawings	0.00	0
- Extraordinary Expenses	0.00	0
+ Introduced Funds	0.00	0
CASH SURPLUS/DEFICIT	-0.59	-97,507

TOTAL BUSINESS	
+ Labour Adjustment	0
+ Owned Run Off Adjustment	0
+ Non-Dairy Operating Profit	0
+ Net Off Farm Income	0
- Extraordinary Expenses	0
- Rent (excl run-off)	25,746
- Interest	35,346
Business Profit Before Tax	118,511

- Drawings	0
- Tax	37,128
EQUITY GROWTH FROM PROFIT	81,383

Comments:

 DAIRY BASE <small>PLATFORM FOR GROWTH</small>	Dairy Ltd Dairy Season ended: 2006	Financial Detail	Date Printed: 21 November 2006 Farm ID: 200393
---	---------------------------------------	-------------------------	---

Number in Benchmark Group:

Benchmark Group Selected by:

Benchmark Group Ranked by:

	Total \$		\$ Per kg MS		\$ Per Ha		\$ Per Cow	
	Farm	% of GFR	Farm	Benchmark	Farm	Benchmark	Farm	Benchmark
GROSS FARM REVENUE (GFR)								
Net Milk Sales	378,052	100.0%	2.27		2,264		822	
Net Dairy Livestock Sales	0	0.0%	0.00		0		0	
Value of Change in Dairy Livestock	0	0.0%	0.00		0		0	
Other Dairy Revenue	0	0.0%	0.00		0		0	
Dairy Gross Farm Revenue	378,052	100.0%	2.27		2,264		822	
Non-Dairy Cash Income	0	0.0%	0.00		0		0	
Value of Change in Non-dairy livestock	0	0.0%	0.00		0		0	
TOTAL GROSS FARM REVENUE	378,052	100.0%	2.27		2,264		822	
OPERATING EXPENSES								
Labour Expenses								
Wages	0	0.0%	0.00		0		0	
Labour Adjustment - Unpaid	0	0.0%	0.00		0		0	
Labour Adjustment - Management	0	0.0%	0.00		0		0	
Total Labour Expenses	0	0.0%	0.00		0		0	
Stock Expenses								
Animal Health	0	0.0%	0.00		0		0	
Breeding & Herd Improvement	0	0.0%	0.00		0		0	
Farm Dairy	0	0.0%	0.00		0		0	
Electricity (Farm Dairy, Water Supply)	0	0.0%	0.00		0		0	
Total Stock Expenses	0	0.0%	0.00		0		0	
Feed Expenses								
Supplement Expenses								
Net Made, Purchased, Cropped	55,399	14.7%	0.33		332		120	
Less Feed Inventory Adjustment	6,000	1.6%	0.04		36		13	
Calf Feed	0	0.0%	0.00		0		0	
Total Supplement Expenses	49,399	13.1%	0.30		296		107	
Grazing & Run Off Expenses								
Young & Dry Stock Grazing	62,242	16.5%	0.37		373		135	
Winter Cow Grazing	0	0.0%	0.00		0		0	
Run-off Lease	0	0.0%	0.00		0		0	
Owned Run-off Adjustment	0	0.0%	0.00		0		0	
Total Grazing & Run-Off expenses	62,242	16.5%	0.37		373		135	
Total Feed Expenses	111,641	29.5%	0.67		669		243	
Other Working Expenses								
Fertiliser (excluding N)	11,218	3.0%	0.07		67		24	
est N Applied to Pasture	8,994	2.4%	0.05		54		20	
Irrigation	0	0.0%	0.00		0		0	
Regrassing	1,316	0.3%	0.01		8		3	
Weed & Pest	223	0.1%	0.00		1		0	
Vehicles	0	0.0%	0.00		0		0	
Fuel	0	0.0%	0.00		0		0	
R & M - land & buildings	10,915	2.9%	0.07		65		24	
R & M - plant and equipment	11,487	3.0%	0.07		69		25	
Freight and General	0	0.0%	0.00		0		0	
Total Other Working Expenses	44,153	11.7%	0.27		264		96	
Overheads								
Administration	8,750	2.3%	0.05		52		19	
Insurance	2,875	0.8%	0.02		17		6	
ACC	0	0.0%	0.00		0		0	
Rates	5,597	1.5%	0.03		34		12	
Depreciation	25,433	6.7%	0.15		152		55	
Total Overheads	42,655	11.3%	0.26		255		93	
Total Dairy Operating Expenses	198,449	52.5%	1.19		1,188		431	
Non-Dairy Operating Expenses	0							
TOTAL OPERATING EXPENSES	198,449	52.5%	1.19		1,188		431	
OPERATING PROFIT								
DAIRY OPERATING PROFIT (EFS)	179,603	47.5%	1.08		1,075		390	
Non-Dairy Operating Profit	0	0.0%	0.00		0		0	
TOTAL OPERATING PROFIT	179,603	47.5%	1.08		1,075		390	