



MINISTRY OF AGRICULTURE AND FORESTRY

FARM MONITORING OVERVIEW

2010



Ministry of Agriculture and Forestry
Te Manatū Ahuwhenua, Ngāherehere

ACKNOWLEDGEMENTS

Alice Marfell-Jones, Angela Bell, Anna Jackson, Annette Carey, Colin Page, Deane Carsons, Gemma Birse, Gillian Mangin, John Greer, Karl Barclay, Ken Muscroft-Taylor, Kerri Ball, Loretta Dobbs, Nick Dalgety, Peter Andrew, Phil Journeaux, Russell Knutson, Tony Schischka, Trish Burborough.

Front cover image (cow) by Bob Zuur. Thanks to Tony Pearse, Producer Manager, Deer Industry New Zealand for use of deer images.

FURTHER COPIES

This report can be downloaded from www.maf.govt.nz

You can request hard copies from:

Policy Publications

MAF Policy

PO Box 2526

Wellington 6140

Tel: +64 4 894 0100 or 0800 008 333

Email: policy.publications@maf.govt.nz

Copies of individual regional models are available on MAF's website and can be downloaded in a printable PDF format.

PUBLISHED BY

Ministry of Agriculture and Forestry

Pastoral House, 25 The Terrace

PO Box 2526, Wellington 6140, New Zealand

Tel: +64 4 894 0100 or 0800 008 333

Fax: +64 4 894 0742

Web: www.maf.govt.nz

ISBN 978-0-478-37099-7 (Print)

ISBN 978-0-478-37500-8 (Online)

© Crown copyright October 2010 – Ministry of Agriculture and Forestry.

This document may be copied for non-commercial purposes providing its source is acknowledged.

DISCLAIMER

The information in this publication is for consultation only: it is not government policy. While every effort has been made to ensure the information in this publication is accurate, the Ministry of Agriculture and Forestry does not accept any responsibility or liability for error of fact, omission, interpretation or opinion that may be present, nor for the consequences of any decisions based on this information. Any view or opinion expressed does not necessarily represent the view of the Ministry of Agriculture and Forestry.

CONTENTS

LIST OF TABLES	iv	4 SHEEP AND BEEF SECTOR OVERVIEW	28
LIST OF FIGURES	iv	National sheep and beef model	28
ABOUT THE FARM MONITORING PROGRAMME	1	Key points	28
1 PASTORAL SECTOR OVERVIEW	2	FINANCIAL PERFORMANCE OF THE NATIONAL SHEEP AND BEEF FARM MODEL IN 2009/10	30
Income	2	Falling income main concern	30
Expenditure	3	Farm working expenses increase six percent	32
Drought 2010	4	BUDGET FINANCIAL PERFORMANCE OF THE NATIONAL SHEEP AND BEEF FARM MODEL IN 2010/11	33
2 DAIRY SECTOR OVERVIEW	9	Sheep revenue expected to fall, wool income up	33
National dairy model	9	Farm working expenses increase slightly	34
Key points	9	Cash surplus falls slightly	34
National dairy percentile analysis	14	SHEEP AND BEEF INDUSTRY ISSUES AND DEVELOPMENTS	38
Breakeven analysis	15	Income	38
Debt and debt servicing	16	Debt levels	38
Farm working expenses	17	Farm working expenses	39
DAIRY INDUSTRY ISSUES AND DEVELOPMENTS	19	Emissions Trading Scheme	40
Fonterra capital structure	19	Developing other income sources	40
Rural debt	19	The future of meat	40
Farmer morale	19	5 HORTICULTURE AND ARABLE OVERVIEW	43
Supplementary feed	20	FACTORS AFFECTING FINANCIAL PERFORMANCE	44
Impact on servicing firms	20	Market demand	44
Environmental issues	20	Exchange rate	45
Water	21	Crop performance	46
Labour issues	21	Operating costs	47
3 DEER SECTOR OVERVIEW	22	SECTORAL AND REGIONAL VARIATION IN OUTCOMES	48
Cool spring and drought effects linger	22	APPENDIX 1: FARM MONITORING TEAM	55
Expenditure	22		
A similar year hoped for	23		
Deer sector and models changed	24		
DEER INDUSTRY ISSUES AND DEVELOPMENTS	25		
Venison down and velvet up	25		
Long-term prospects for the industry	25		
Compliance costs	26		
Environmental issues	27		
Impact of global recession and credit crisis	27		

LIST OF TABLES

1.1: COMPARISON OF SHEEP AND BEEF AND DAIRY NATIONAL MODELS	4
1.2: COMPARISON OF DAIRY MODEL FARM RESULTS, 2009/10 AND 2010/11 BUDGET	5
2.1: KEY PARAMETERS, FINANCIAL RESULTS AND BUDGET FOR THE NATIONAL DAIRY MODEL	11
2.2: NATIONAL DAIRY MODEL BUDGET	12
2.3: NATIONAL DAIRY MODEL EXPENDITURE	13
2.4: PERCENTILE ASSESSMENT OF FINANCIAL DATA FROM MONITORED DAIRY FARMS, 2009/10	14
2.5: PERCENTILE ASSESSMENT OF PRODUCTION DATA FROM MONITORED DAIRY FARMS, 2009/10	15
2.6: BREAKEVEN ANALYSIS OF PRODUCTION DATA FROM MONITORED DAIRY FARMS	15
2.7: COMPARISON BETWEEN LOW AND HIGH DECILE FARMS 2009/10	16
3.1: COMPARISON OF DEER MODEL FARM RESULTS, 2009/10 AND 2010/11 BUDGET	24
4.1: KEY PARAMETERS, FINANCIAL RESULTS AND BUDGET FOR THE NATIONAL SHEEP AND BEEF MODEL	29
4.2: NATIONAL SHEEP AND BEEF MODEL BUDGET	36
4.3: NATIONAL SHEEP AND BEEF MODEL EXPENDITURE	37
4.4: COMPARISON OF INTENSIVE SHEEP AND BEEF MODEL FARM RESULTS, 2009/10 AND 2010/11 BUDGET	41
4.5: COMPARISON OF EXTENSIVE SHEEP AND BEEF MODEL FARM RESULTS, 2009/10 AND 2010/11 BUDGET	42
5.1: KEY PARAMETERS AND FINANCIAL RESULTS FOR HORTICULTURE AND ARABLE MODELS, 2009/10 AND 2010/11 BUDGET	49

LIST OF FIGURES

1.1: FARM PROFIT BEFORE TAX PER HECTARE FOR THE DEER, DAIRY AND SHEEP AND BEEF FARM MODELS, 1999/00–2010/11 BUDGET	3
1.2: NATIONAL SHEEP AND BEEF MODEL TRENDS IN PROFIT AND FARM SURPLUS FOR REINVESTMENT	3
1.3: NEW ZEALAND CLIMATIC CONDITIONS	6
1.4: NORTH ISLAND PASTORAL PRODUCTION STATISTICS, 2008 AND 2009	7
1.5: SOUTH ISLAND PASTORAL PRODUCTION STATISTICS, 2008 AND 2009	8
2.1: NATIONAL DAIRY MODEL PROFITABILITY TRENDS	10
2.2: DISTRIBUTION OF TOTAL DEBT BY DOLLARS PER KILOGRAM OF MILKSOLIDS	16
2.3: DEBT SERVICING DISTRIBUTION	17
2.4: FARM WORKING EXPENSES DISTRIBUTION	17
2.5: ECONOMIC FARM SURPLUS VERSUS PRODUCTION	18
3.1: VENISON AND VELVET CONTRIBUTION TO NET CASH INCOME, 1990–2011 BUDGET	23
3.2: NORTH ISLAND DEER FARM MODEL REVENUE VERSUS EXPENDITURE, 1990–2011 BUDGET	23
4.1: NATIONAL SHEEP AND BEEF MODEL PROFITABILITY TRENDS	35
5.1: TRENDS IN NEW ZEALAND'S TRADE WEIGHTED INDEX	45
5.2: PROFIT BEFORE TAX PER BUSINESS UNIT, 2006/07 TO 2010/11 BUDGET	50
5.3: PROFIT BEFORE TAX PER PLANTED HECTARE, 2006/07 TO 2010/11 BUDGET	50
5.4: NORTH ISLAND HORTICULTURE STATISTICS, 2002 AND 2007	51
5.5: SOUTH ISLAND HORTICULTURE STATISTICS, 2002 AND 2007	52
5.6: NORTH ISLAND ARABLE STATISTICS, JUNE 2007	53
5.7: SOUTH ISLAND ARABLE STATISTICS, JUNE 2007	54

ABOUT THE FARM MONITORING PROGRAMME

The Farm Monitoring Programme provides a short-term view of the financial and production status of a range of farm types throughout New Zealand. It examines revenue and expenditure for the past season and outlines what farmers are budgeting for the year ahead.

The programme collects data from a range of farm types throughout New Zealand and is supplemented with farmer and industry expectations. One use of this data is to produce model budgets. Each model budget is representative of a farm type in a given region and is modelled on how a real farm would operate, as opposed to using an average of results from the monitored farms. Each model budget is then augmented with feedback gathered from regional industry meetings and other information sources to best represent the current situation and expectations in each region.

In August 2010, the dairy, deer, sheep and beef, and horticulture and arable model budgets and supporting commentary were released on the Ministry of Agriculture and Forestry's (MAF's) website. *The Farm Monitoring Overview 2010* outlines the year just been and the year ahead, providing information on trends and issues facing the sectors.

Individual regional model budgets are available on MAF's website and can be downloaded in a printable PDF format from www.maf.govt.nz

Please note: the sample of farms in the Farm Monitoring Programme has changed between 2008/09 and 2009/10. Caution should be taken when comparing data between these two years.

PASTORAL SECTOR OVERVIEW

1

Mild early spring conditions resulted in a record lambing percentage but the cooler, late spring period in 2009 compromised early season milksolids production and lamb weaning weights in many areas. Widespread drought conditions in the upper North Island and parts of the South Island from October to May 2010 led to the early drying-off of dairy herds in many regions as well as poor growth rates and forced early sales of some sheep and beef animals. Deer carcass weights were also lighter due to the cool spring and dry conditions.

Farms went into the 2010 winter with lower than desired pasture covers and the very wet winter in some areas has resulted in a struggle to maintain stock liveweights. With some pasture damage apparent, it will be a challenge to maintain spring production, although early lambing conditions in 2010 have been relatively mild.

INCOME

The 2009/10 dairy season opened with the concerning prospect of a payout of just \$4.55 per kilogram of milksolids. By September 2009, the forecast payout had been revised up to near breakeven levels. Further increases during 2009/10 saw the milk payout end up at \$6.10 per kilogram of milksolids, and as a consequence farm cash operating surpluses and profits rose.

Farmers are adopting a cautious attitude to the expected milk payout in 2010/11, but are generally expecting to restore inputs to maintenance levels on the back of a hoped for sustained improvement in incomes. Debt repayment continues to be a priority for any surplus cash.

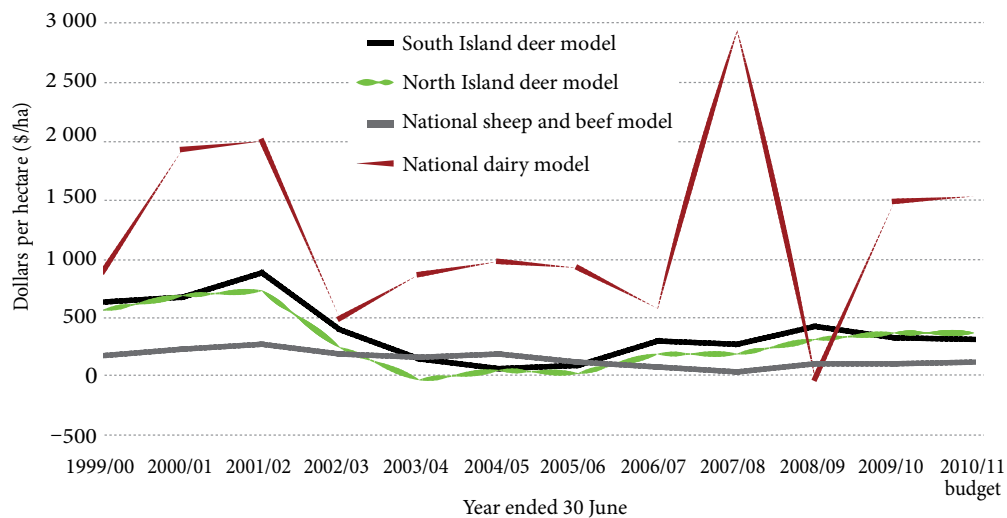
Despite good demand, the average lamb price fell in 2009/10, mostly due to movements in the exchange rate. Sheep and beef farm incomes fell with fewer stock for sale as a result of lower opening numbers and some herd and flock rebuilding in areas recovering from earlier droughts. Expenditure rose slightly from the very low levels of the previous years and, combined with falling incomes, led to a reduction in farm cash operating surpluses.

The profitability of sheep and beef farms remains at a low level. The high relative profitability of dairy farming and the interest in “carbon farming” on poorer land classes is increasing the potential for changes in land use in the sheep and beef sector. Income from dairy grazing and the sale of hay and silage to dairy farmers has become a larger proportion of sheep and beef farm budgets.

In response to reasonable and steady venison prices and improved velvet returns, deer farms are rebuilding herds following recent droughts and the earlier culling of velvetting stags. Fewer animals for sale combined with slightly lower average venison prices outweighed the improved velvet prices. This resulted in slightly reduced deer farm incomes in 2009/10.



FIGURE 1.1: FARM PROFIT BEFORE TAX PER HECTARE FOR THE DEER, DAIRY AND SHEEP AND BEEF FARM MODELS, 1999/00–2010/11 BUDGET

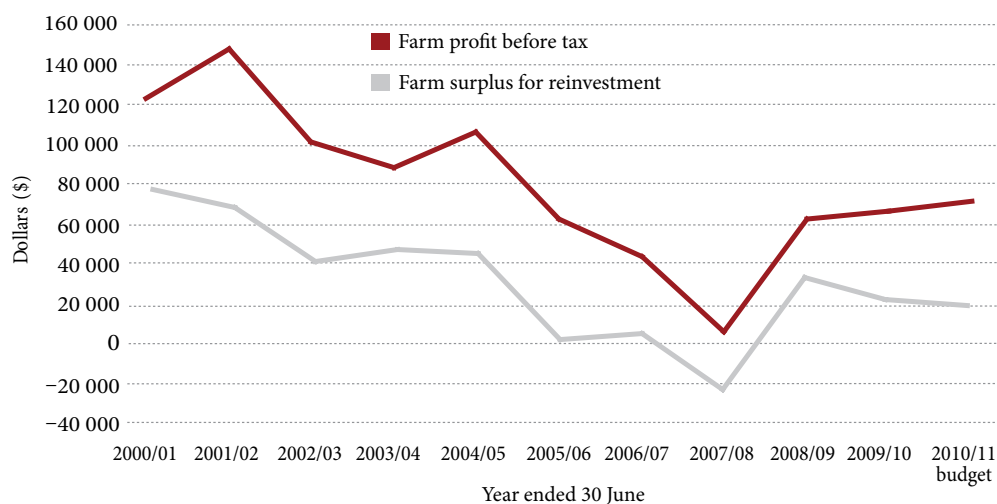


EXPENDITURE

Costs on sheep and beef farms have continued to increase but expenditure has generally followed income with cuts to “discretionary” items such as fertiliser, regrassing, and repairs and maintenance being common ways to balance farm budgets. Lower fertiliser prices in 2009/10 enabled farmers to increase fertiliser rates. Expenditure on capital and development remains inadequate as farm assets continue to depreciate at a rate that exceeds investment.

Dairy farms managed expenditure very tightly in 2009/10. Losses sustained in 2008/09 and the resulting high overdrafts, a tight financial market, the low opening payout forecast and low advance payments led to close scrutiny

FIGURE 1.2: NATIONAL SHEEP AND BEEF MODEL TRENDS IN PROFIT AND FARM SURPLUS FOR REINVESTMENT





of expenses. While farmers had budgeted an 11 percent decrease in farm working expenses, the final result was an average reduction of 7 percent. This was largely achieved by: cutting spring fertiliser applications and expenditure on repairs and maintenance; reducing the use of AI and herd testing; and careful management of feed expenditure, which saw many farmers bail out of contracts for feed such as for maize silage.

DROUGHT 2010

Drought conditions affected a number of regions throughout the country over the summer and autumn. The worst affected region was Northland, where drought was declared in February and didn't break until May. Production was reduced on many Northland, Central Otago, North Otago and South Canterbury sheep and beef farms which saw the early sale of stock in these regions.

Production in many of the major dairying regions (Northland, Waikato, Bay of Plenty and south Taranaki) was also affected by the drought. However, given that many farms in the South Island (especially Canterbury) are irrigated, the effects of the drought in these regions were relatively minor.

TABLE 1.1: COMPARISON OF SHEEP AND BEEF AND DAIRY NATIONAL MODELS

	SHEEP AND BEEF NATIONAL MODEL			DAIRY NATIONAL MODEL		
	2008/09	2009/10	2010/11 BUDGET	2008/09	2009/10	2010/11 BUDGET
National model hectares	716	771	771	135	138	138
National model stock units or cows milked	4 185	4 716	4 747	392	404	408
Net cash income (\$)	327 481	362 550	360 686	749 977	931 703	984 326
Farm working expenses (\$)	179 412	215 082	215 395	528 625	492 162	531 723
Cash operating surplus (\$)	148 069	147 468	145 291	221 351	439 541	452 603
Farm profit before tax (\$)	62 357	66 587	71 895	-6 329	202 800	208 479
Farm surplus for reinvestment ¹ (\$)	30 442	19 251	16 930	-50 416	134 935	120 824
Farm assets (\$)	4 976 692	4 726 181	4 414 517	7 170 033	6 687 831	6 407 114
Farm debt (\$)	565 801	688 634	682 535	2 240 285	2 711 743	2 693 072
Equity ratio ² (%)	88.6	85.4	84.5	68.8	59.5	58.0
Rate of return on equity ³ (%)	-0.2	-0.2	-0.1	-2.2	3.0	3.4

Notes

1 Farm surplus for reinvestment represents the cash available from the farming business, after meeting living costs, which is available for investment on-farm or for principal repayments. It is calculated as discretionary cash less off-farm income and drawings.

2 Ratio of farm assets less debt (equity) to farm assets.

3 Economic farm surplus less interest and lease as a percentage of equity.

Many farms have recovered from the drought more quickly than originally anticipated due to relatively mild winter conditions. However, many farms are going into calving and lambing with pasture covers and livestock condition below target levels, which will likely adversely affect production in the 2010/11 season.

Table 1.2 compares the regional dairy farm models on a variety of parameters. The impact of the 2009/10 drought is clear from comparing the dairy farm models from the different regions. Northland was worst affected with a severe impact on its profit and surplus, while Taranaki, Lower North Island and Southland fared much better.

TABLE 1.2: COMPARISON OF DAIRY MODEL FARM RESULTS, 2009/10 AND 2010/11 BUDGET

	NORTHLAND	WAIKATO/ BAY OF PLENTY	TARANAKI	LOWER NORTH ISLAND	CANTERBURY	SOUTHLAND
Effective area (hectares)	121	112	96	135	210	192
Cows wintered (head)	278	328	284	380	739	548
Cows milked 15th December (head)	276	322	267	370	711	518
Total milksolids (kg)	71 950	97 000	89 100	117 850	291 510	202 752
Milksolids per cow milked (kg per cow)	261	301	334	319	410	391
FARM PROFIT BEFORE TAX (\$)						
2009/10	59 394	127 132	150 794	211 029	376 866	383 180
2010/11 budget	91 214	134 517	165 631	192 920	393 198	356 762
2009/10 (\$ PER KILOGRAM OF MILKSOLIDS)						
Cash operating surplus ¹	2.82	3.06	3.24	3.43	2.93	3.55
Farm profit before tax	0.83	1.31	1.69	1.79	1.29	1.89
Farm surplus for reinvestment ²	0.22	0.75	1.19	1.23	0.96	1.30
Farm working expenses plus interest	5.73	4.85	4.57	4.64	5.04	4.84
2010/11 BUDGET (\$ PER KILOGRAM OF MILKSOLIDS)						
Cash operating surplus ¹	2.88	3.11	3.28	3.09	3.00	3.42
Farm profit before tax	1.14	1.33	1.82	1.59	1.33	1.69
Farm surplus for reinvestment ²	0.63	0.75	1.11	0.75	0.87	0.72
Farm working expenses plus interest	5.40	4.98	4.66	5.03	5.23	4.92
2009/10 ECONOMIC FARM SURPLUS (\$)						
Per hectare	954	1 535	1 887	2 120	3 347	3 304
Per cow	418	534	640	774	988	1 225
Per kilogram of milksolids	1.60	1.77	1.92	2.43	2.41	3.13
RATIOS 2009/10 (%)						
Equity ratio ³	48	64	71	68	55	48
Return on equity ⁴	-0.7	1.3	1.8	2.8	4.4	7.0
Return on assets ⁵	3.6	3.4	3.4	4.4	5.8	7.1

Notes

1 Net cash income less farm working expenses.

2 Farm surplus for reinvestment represents the cash available from the farming business, after meeting living costs, which is available for investment on-farm or for principal repayments. It is calculated as discretionary cash less off-farm income and drawings.

3 Ratio of farm assets less debt (equity) to farm assets.

4 Economic farm surplus less interest and lease as a percentage of equity.

5 Economic farm surplus divided by total assets.

FIGURE 1.3: NEW ZEALAND CLIMATIC CONDITIONS

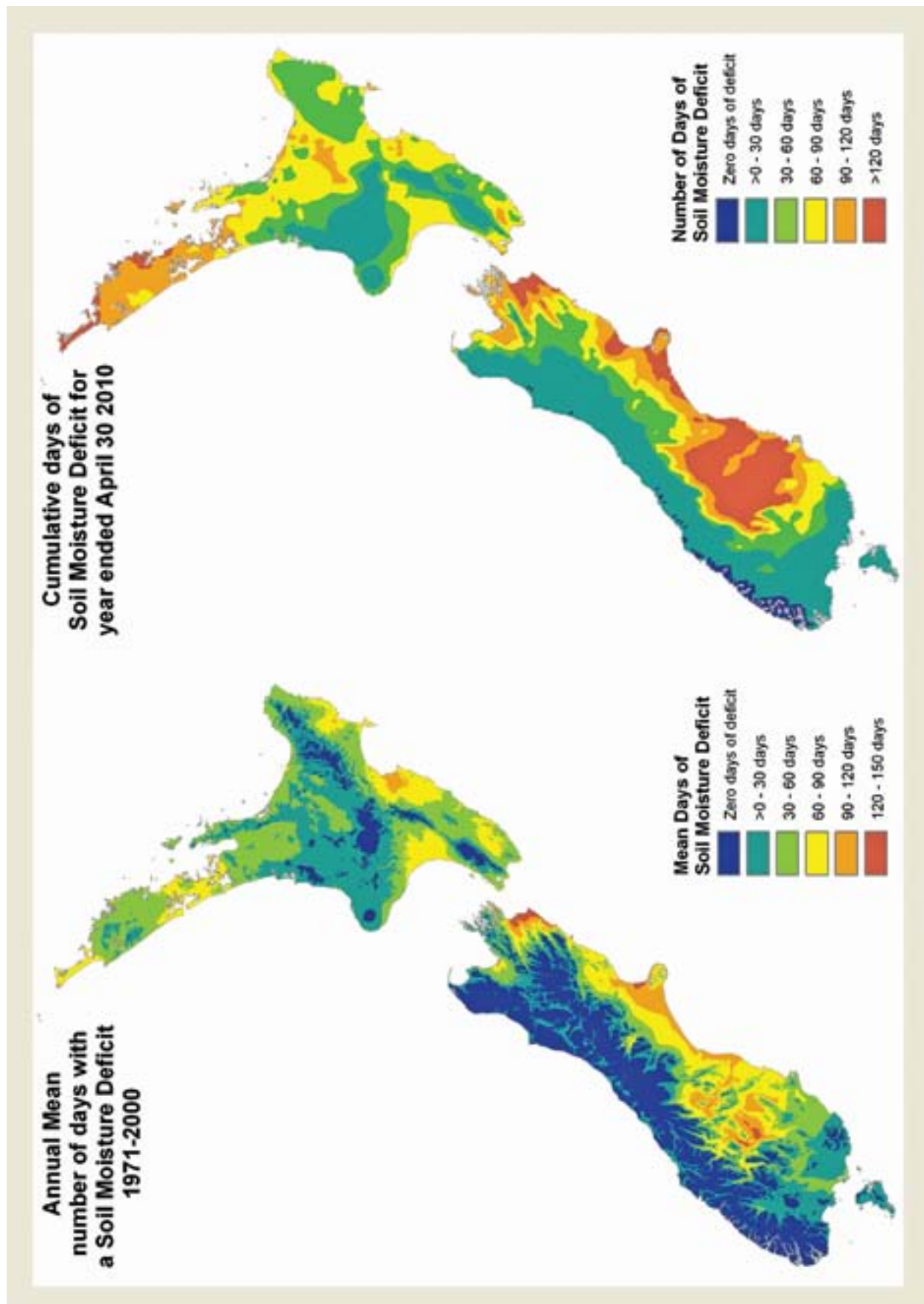
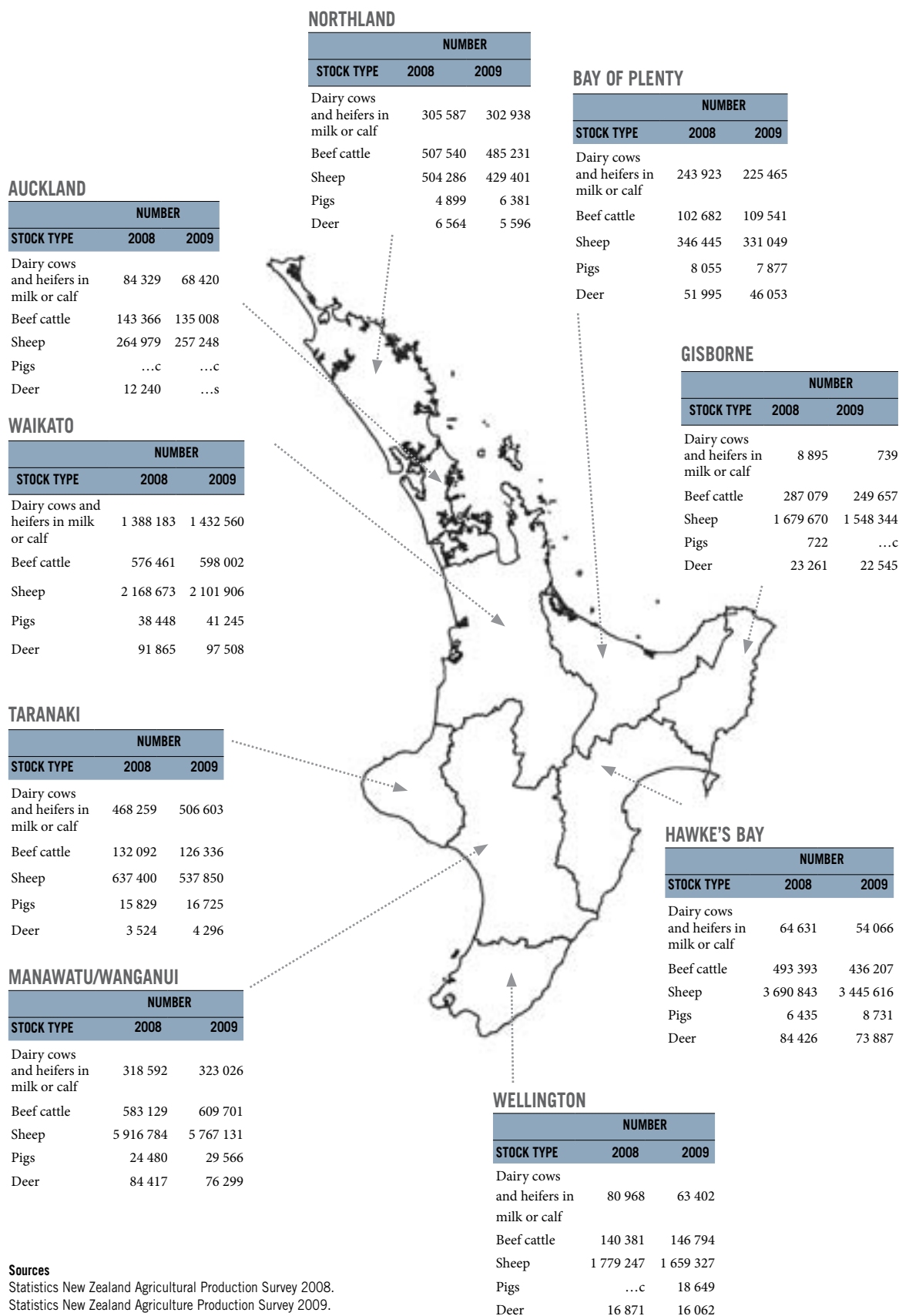


FIGURE 1.4: NORTH ISLAND PASTORAL PRODUCTION STATISTICS, 2008 AND 2009



Sources

Statistics New Zealand Agricultural Production Survey 2008.
Statistics New Zealand Agriculture Production Survey 2009.

Symbol

...c Confidential.
...s Suppressed.

FIGURE 1.5: SOUTH ISLAND PASTORAL PRODUCTION STATISTICS, 2008 AND 2009

TASMAN

STOCK TYPE	NUMBER	
	2008	2009
Dairy cows and heifers in milk or calf	49 823	55 650
Beef cattle	49 869	59 543
Sheep	...s	327 770
Pigs	...s	...s
Deer	19 307	13 039

WEST COAST

STOCK TYPE	NUMBER	
	2008	2009
Dairy cows and heifers in milk or calf	117 269	141 090
Beef cattle	34 713	35 892
Sheep	43 156	42 889
Pigs	...s	...s
Deer	34 955	40 162

MARLBOROUGH

STOCK TYPE	NUMBER	
	2008	2009
Dairy cows and heifers in milk or calf	27 100	...c
Beef cattle	56 859	...c
Sheep	517 526	516 391
Pigs	...c	...c
Deer	...c	8 099

CANTERBURY

STOCK TYPE	NUMBER	
	2008	2009
Dairy cows and heifers in milk or calf	634 289	713 917
Beef cattle	533 665	529 467
Sheep	6 063 300	5 504 718
Pigs	177 306	163 878
Deer	340 882	323 257

OTAGO

STOCK TYPE	NUMBER	
	2008	2009
Dairy cows and heifers in milk or calf	180 453	209 668
Beef cattle	291 234	291 585
Sheep	5 343 380	5 281 730
Pigs	13 001	14 638
Deer	166 856	166 424

SOUTHLAND

STOCK TYPE	NUMBER	
	2008	2009
Dairy cows and heifers in milk or calf	372 657	459 657
Beef cattle	190 562	214 927
Sheep	4 739 003	4 556 206
Pigs	4 086	...c
Deer	270 072	242 288

TOTAL NEW ZEALAND

STOCK TYPE	NUMBER	
	2008	2009
Dairy cows and heifers in milk or calf	4 347 657	4 557 201
Beef cattle	4 136 872	4 027 891
Sheep	34 087 864	32 307 576
Pigs	324 594	307 690
Deer	1 223 324	1 135 515

Sources

Statistics New Zealand Agricultural Production Survey 2008.
Statistics New Zealand Agriculture Production Survey 2009.

Symbol

...c Confidential.
...s Suppressed.

DAIRY SECTOR OVERVIEW

2

NATIONAL DAIRY MODEL

The national dairy budget depicted below has been constructed via a weighted average of the MAF dairy farm monitoring models. The weighting is based on the number of dairy cows in each region from the 2009 Livestock Improvement Corporation survey. The weightings, on the model basis, are as follows:

› Northland	8.0 percent
› Waikato/Bay of Plenty	41.5 percent
› Taranaki	12.3 percent
› Lower North Island	10.8 percent
› Canterbury	17.4 percent
› Southland	10.0 percent

KEY POINTS

2009/10

- › 2009/10 was a difficult year climatically, especially with the upper North Island and some parts of the South Island affected by a late-summer/autumn drought.
- › Milksolids production in the North Island was down 2 percent, compared with 2008/09, while it was up 13 percent in the South Island, and up 3 percent nationally.
- › A low (\$4.55 per kilogram of milksolids) initial Fonterra payout forecast caused some angst in the industry. The payout improved markedly throughout the season to \$6.10 per kilogram of milksolids plus a dividend of up to 30 cents per share.
- › As a result of the lift in payout, net cash income for the national model increased 24 percent compared with 2008/09.
- › Farm working expenses decreased 7 percent compared with 2008/09, largely due to farmers keeping a very tight reign on expenditure, spurred on by the initial low payout announcement. On a per kilogram of milksolids basis, farm working expenses dropped from \$3.86 in 2008/09 to \$3.50 per kilogram of milksolids in 2009/10.
- › The profitability of the model improved markedly compared with 2008/09, particularly given that 2008/09 was a very poor year financially. Farm profit before tax increased 3300 percent, to \$202 800 in 2009/10, from a loss of \$6300 in 2008/09; the cash surplus increased to \$89 800, up 254 percent from a deficit of \$58 500; and the farm surplus for reinvestment increased to \$134 900, up 368 percent from a deficit of \$50 400.
- › The general economic downturn has made farmers very aware of debt issues, and repayment of debt is a top priority for surplus funds on many farms.

2010/11

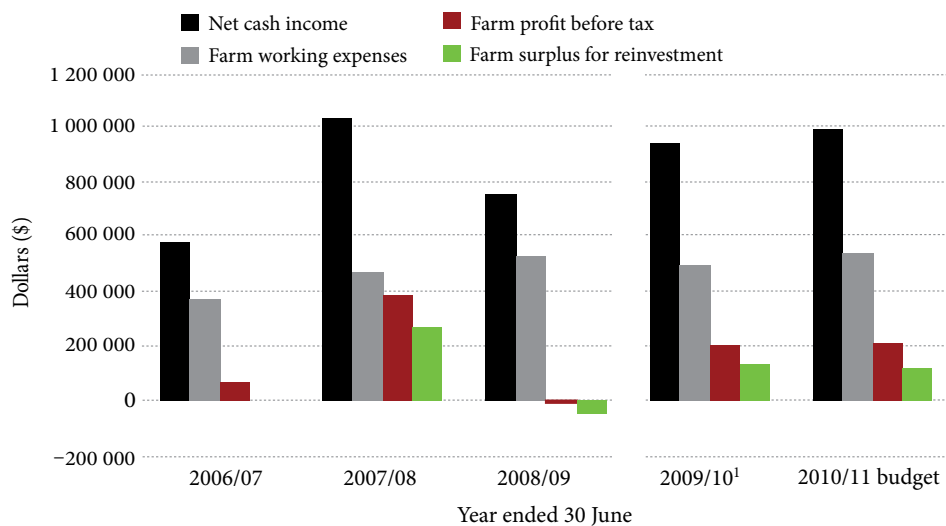
- › Relatively mild early winter conditions saw North Island pastures recover from the drought earlier than anticipated, although many farms will go into calving with pasture covers and cow condition below target levels. In the South Island, pasture cover and cow condition are much more on target.
- › Farmers were buoyed by the initial forecast of a Fonterra milk price payout of \$6.60 per kilogram of milksolids, plus a dividend of up to 30 cents per share. This along with an expectation of a 3 percent increase



in production sees the budgeted net cash income for the national model increase almost 6 percent to \$984 300.

- › Farm working expenses are budgeted to increase 8 percent, to the equivalent of \$3.66 per kilogram of milksolids. This is based around an expectation of price increases, and the need to increase expenditure on inputs such as fertiliser and repairs and maintenance.
- › While farm profit before tax is predicted to be up 3 percent over 2009/10, farm profit after tax is down 10 percent, due to farmers budgeting for much higher tax payments flowing through as a result of the lift in profitability in 2009/10.
- › Budgeted principal debt repayments have increased 62 percent over 2009/10, up from \$36 700 to \$60 900, as farmers continue to focus on debt repayments. Overall, the model is budgeted to finish the year with a cash surplus of \$30 000 and a farm surplus for reinvestment of \$120 800.
- › While optimism within the industry has improved in line with the increased payout forecast and Fonterra's capital restructuring, farmers are still cautious given recent fluctuations in payout.

FIGURE 2.1: NATIONAL DAIRY MODEL PROFITABILITY TRENDS



Note

¹ The sample of farms used to compile this model changed between 2008/09 and 2009/10. Caution is advised if comparing data between these two years.

TABLE 2.1: KEY PARAMETERS, FINANCIAL RESULTS AND BUDGET FOR THE NATIONAL DAIRY MODEL

YEAR ENDED 30 JUNE	2006/07	2007/08	2008/09	2009/10 ¹	2010/11 BUDGET
Total milksolids revenue/cow (\$)	1 488	2538	1 788	2 160	2 215
Kg milksolids/ha	1 034	992	1 014	1 020	1 053
Kg milksolids/cow milked	361	342	349	348	356
Milksolids advance to end June (\$/kg)	3.65	6.62	4.15	5.15	5.30
Milksolids deferred payment (\$/kg)	0.50	0.81	1.00	1.05	0.95
Cattle income (\$)	40 004	55 854	50 025	45 457	48 054
Other farm income (\$)	2 347	2 690	5 842	2 229	4 676
Net cash income (\$)	577 858	1 021 886	749 977	931 703	984 326
Farm working expenses (\$)	369 084	468 449	528 625	492 162	531 723
Cash operating surplus	208 774	553 438	221 351	439 541	452 603
Farm profit before tax (\$)	70 014	384 034	-6 329	202 800	208 479
Farm surplus for reinvestment ²	1 677	263 472	-50 416	134 935	120 824
EFS ³ per cow (\$)	300	1 175	244	788	803
FWE ⁴ /NCI (%)	63.9	45.8	71.2	52.8	54.0
EFS/total farm assets (%)	2.1	7.5	1.1	4.8	5.1

Notes

1 The sample of farms used to compile this model changed between 2008/09 and 2009/10. Caution is advised if comparing data between these two years.

2 Farm surplus for reinvestment is the cash available from the farm business, after meeting living costs, which is available for investment on the farm or for principal repayments. It is calculated as discretionary cash less off-farm income and drawings.

3 EFS is calculated as follows: net cash income plus change in livestock values less farm working expenses less depreciation less wages of management (WOM). WOM is calculated as follows: \$38 000 allowance for labour input plus 1 percent of opening total farm assets to a maximum of \$85 000.

4 Farm working expenses.

TABLE 2.2: NATIONAL DAIRY MODEL BUDGET

	2009/10			2010/11 BUDGET		
	WHOLE FARM (\$)	PER COW (\$)	PER KG OF MILKSOLIDS (\$)	WHOLE FARM (\$)	PER COW (\$)	PER KG OF MILKSOLIDS (\$)
REVENUE						
Milksolids	872 599	2 160	6.20	903 518	2 215	6.22
Dividend on wet shares	16 251	40	0.12	35 187	86	0.24
Cattle	45 457	113	0.32	48 054	118	0.33
Other farm income	2 229	6	0.02	2 242	5	0.02
LESS:						
Cattle purchases	4 833	12	0.03	4 676	11	0.03
Net cash income	931 703	2 306	6.62	984 326	2 413	6.78
Farm working expenses	492 162	1 218	3.50	531 723	1 303	3.66
Cash operating surplus	439 541	1 088	3.12	452 603	1 109	3.12
Interest	199 380	494	1.42	202 858	497	1.40
Rent and/or leases	0	0	0.00	0	0	0.00
Stock value adjustment	3 925	10	0.03	-839	-2	-0.01
Minus depreciation	41 287	102	0.29	40 426	99	0.28
Farm profit before tax	202 800	502	1.44	208 479	511	1.44
Taxation	41 164	102	0.29	63 568	156	0.44
Farm profit after tax	161 636	400	1.15	144 911	355	1.00
Add back depreciation	41 287	102	0.29	40 426	99	0.28
Reverse stock value adjustment	-3 925	-10	-0.03	839	2	0.01
Dividend on dry shares	0	0	0.00	744	2	0.01
Off-farm income	7 905	20	0.06	6 913	17	0.05
Discretionary cash	206 903	512	1.47	193 834	475	1.33
APPLIED TO:						
Net capital purchases	27 206	67	0.19	30 303	74	0.21
Development	14 374	36	0.10	13 525	33	0.09
Principal repayments	37 581	93	0.27	60 920	149	0.42
Drawings	64 063	159	0.46	66 096	162	0.46
New borrowings	26 138	65	0.19	6 970	17	0.05
Introduced funds	0	0	0.00	0	0	0.00
Cash surplus/deficit	89 817	222	0.64	29 959	73	0.21
Farm surplus for reinvestment¹	134 935	334	0.96	120 824	296	0.83
ASSETS AND LIABILITIES						
Farm, forest and building (opening)	5 265 191	13 033	37.41	4 975 277	12 194	34.25
Plant and machinery (opening)	163 198	404	1.16	159 796	392	1.10
Stock valuation (opening)	621 249	1 538	4.41	625 511	1 533	4.31
Dairy company shares	638 193	1 580	4.53	646 530	1 585	4.45
Other farm related investments (opening)	0	0	0.00	0	0	0.00
Total farm assets	6 687 831	16 554	47.52	6 407 114	15 704	44.11
Total liabilities (opening)	2 711 743	6 712	19.27	2 693 072	6 601	18.54
Total equity (assets-liabilities)	3 976 089	9 842	28.25	3 714 041	9 103	25.57

Note

¹ Farm surplus for reinvestment is the cash available from the farm business, after meeting living costs, which is available for investment on the farm or for principal repayments. It is calculated as discretionary cash less off-farm income and drawings.

TABLE 2.3: NATIONAL DAIRY MODEL EXPENDITURE

	2009/10			2010/11 BUDGET		
	WHOLE FARM (\$)	PER COW (\$)	PER KG OF MILKSOLIDS (\$)	WHOLE FARM (\$)	PER COW (\$)	PER KG OF MILKSOLIDS (\$)
FARM WORKING EXPENSES						
Permanent wages	69 838	173	0.50	72 030	177	0.50
Casual wages	13 022	32	0.09	14 606	36	0.10
ACC	2 081	5	0.01	3 513	9	0.02
Total labour expenses	84 940	210	0.60	90 149	221	0.62
Animal health	29 833	74	0.21	30 585	75	0.21
Breeding	15 564	39	0.11	16 288	40	0.11
Dairy shed expenses	8 182	20	0.06	8 283	20	0.06
Electricity	20 645	51	0.15	21 801	53	0.15
Feed (hay and silage)	44 695	111	0.32	52 820	129	0.36
Feed (feed crops)	7 797	19	0.06	7 558	19	0.05
Feed (grazing)	51 925	129	0.37	54 154	133	0.37
Feed (other)	41 430	103	0.29	40 817	100	0.28
Fertiliser	65 646	162	0.47	74 878	184	0.52
Lime	2 693	7	0.02	2 958	7	0.02
Freight (not elsewhere deducted)	4 113	10	0.03	3 887	10	0.03
Regrassing costs	6 316	16	0.04	6 259	15	0.04
Weed and pest control	3 506	9	0.02	3 863	9	0.03
Fuel	11 570	29	0.08	12 604	31	0.09
Vehicle costs (excluding fuel)	13 977	35	0.10	14 202	35	0.10
Repairs and maintenance	33 798	84	0.24	37 040	91	0.26
Total other working expenses	361 690	895	2.57	387 997	951	2.67
Communication costs (phone & mail)	3 365	8	0.02	3 362	8	0.02
Accountancy	4 864	12	0.03	4 934	12	0.03
Legal and consultancy	3 708	9	0.03	3 584	9	0.02
Other administration	4 779	12	0.03	4 755	12	0.03
Water charges (irrigation)	2 184	5	0.02	2 267	6	0.02
Rates	11 816	29	0.08	12 220	30	0.08
Insurance	7 656	19	0.05	8 140	20	0.06
Other expenditure ¹	2 375	6	0.02	9 086	22	0.06
Total overhead expenses	4 785	12	0.03	5 229	13	0.04
Total farm working expenses	45 531	113	0.32	53 578	131	0.37
Total farm operating expenses	492 162	1 218	3.50	531 723	1 303	3.66
CALCULATED RATIOS						
Economic farm surplus (EFS ²)	318 405	788	2.26	327 563	803	2.26
Farm working expenses/NCI ³	53%			54%		
EFS/total farm assets	4.8%			5.1%		
EFS less interest and lease/equity	3.0%			3.4%		
Interest+rent+lease/NCI	21.4%			20.6%		
EFS/NCI	34.2%			32.3%		
PHYSICAL PARAMETERS						
Effective area (ha)	138			138		
Cows milked	404			408		
Milksolids (kg)	140 749			145 246		

Notes

¹ Includes DairyNZ levy.

² EFS is calculated as follows: net cash income plus change in livestock values less farm working expenses less depreciation less wages of management (WOM). WOM is calculated as follows: \$38 000 allowance for labour input plus 1 percent of opening total farm assets to a maximum of \$85 000.

³ Net cash income.

NATIONAL DAIRY PERCENTILE ANALYSIS

The following tables and graphs are based on an analysis of the total national sample of dairy farms monitored as part of the MAF Farm Monitoring Programme. The analysis compares the bottom 10 percent of farms to the top 10 percent, based on their farm profit before tax per hectare for 2009/10.

PERCENTILE ANALYSIS

TABLE 2.4: PERCENTILE ASSESSMENT OF FINANCIAL DATA FROM MONITORED DAIRY FARMS, 2009/10

	AVERAGE OF					AVERAGE OF		
	BOTTOM 10% (\$)	BOTTOM 25% (\$)	BOTTOM 25-50% (\$)	MEAN (\$)	MEDIAN (\$)	TOP 50-75% (\$)	TOP 25% (\$)	TOP 10% (\$)
REVENUE								
Milksolids	671 545	772 236	835 159	948 489	764 495	1 024 692	1 157 475	1 298 679
Dividend on wet shares	7 842	8 506	10 069	11 112	8 714	12 167	13 583	15 173
Capacity adjustment	3 097	1 527	1 301	1 949	1 300	899	5 190	6 746
Cattle sales	49 805	52 854	56 426	61 806	51 527	59 505	78 201	93 357
Other revenue	7 070	8 353	6 256	6 523	150	5 817	5 292	6 040
Cattle purchases	16 339	14 718	22 728	16 822	9 755	14 849	14 536	17 259
Net cash income	730 406	832 412	891 501	1 016 461	829 967	1 088 756	1 248 555	1 404 585
Farm working expenses	484 989	497 844	467 767	519 193	415 638	545 750	567 623	634 410
Cash operating surplus	245 417	334 567	423 734	497 268	399 082	543 006	680 931	770 174
Rent	18 701	25 718	26 263	24 978	1 000	20 849	25 632	15 468
Interest	237 624	246 545	175 059	204 476	151 680	196 106	200 100	204 334
Stock value adjustment	18 207	9 606	7 470	9 482	992	9 982	10 193	6 235
Depreciation	55 786	51 237	47 828	44 971	35 000	41 060	36 937	42 089
Farm profit before tax	-48 487	24 516	185 555	237 265	181 771	297 734	436 314	524 054
Tax	15 725	16 419	31 776	36 397	23 049	38 116	45 453	47 961
Farm profit after tax	-45 087	26 927	171 537	224 010	170 052	279 189	415 358	512 625
Add back depreciation	55 786	51 237	47 828	44 971	35 000	41 060	36 937	42 089
Reverse stock value adjustment	18 207	9 606	7 470	9 482	992	9 982	10 193	6 235
Dividend on dry shares	126	145	469	255	0	321	83	25
Off-farm Income	41 349	19 011	5 693	11 855	0	13 637	8 559	5 367
Discretionary cash	160 258	143 782	257 349	337 752	265 523	397 450	543 371	674 830
Capital purchases	18 655	18 197	30 339	24 725	8 000	29 540	21 354	30 956
Development	22 500	10 689	29 991	17 235	0	14 925	11 916	13 741
Principal	11 361	60 463	36 286	46 618	12 152	53 407	35 753	47 154
Drawings	45 934	53 593	61 400	62 812	58 807	68 283	66 697	72 402
New borrowing	125 438	56 798	30 751	55 466	0	40 854	89 924	108 496
Cash surplus/deficit	63 312	-2 991	80 885	150 445	90 183	166 993	343 709	432 260
Farm surplus for reinvestment	81 175	76 867	192 781	269 578	197 592	326 867	474 539	601 295
Net farm profit before tax/ha	-393	119	1 326	1 625	1 689	2 039	2 984	3 489

TABLE 2.5: PERCENTILE ASSESSMENT OF PRODUCTION DATA FROM MONITORED DAIRY FARMS, 2009/10

	AVERAGE OF					AVERAGE OF		
	BOTTOM 10% (\$)	BOTTOM 25% (\$)	BOTTOM 25-50% (\$)	MEAN (\$)	MEDIAN (\$)	TOP 50-75% (\$)	TOP 25% (\$)	TOP 10% (\$)
PHYSICAL PERFORMANCE DATA								
Milking area (ha)	136	149	140	145	129	146	146	151
Opening cow numbers	389	419	401	444	384	455	501	533
Closing cow numbers	400	423	411	453	388	465	511	540
Total opening stock numbers	497	530	524	571	486	581	646	679
Total closing stock numbers	514	541	526	578	491	589	653	677
Cows in milk (15 December)	369	397	384	423	367	436	475	510
Total milk production (kgMS)	114 880	128 754	136 692	155 179	123 366	167 010	187 426	210 701
Milksolids per hectare (kg/ha)	891	879	947	1 040	1 024	1 101	1 233	1 345
Milksolids production per cow	298	311	337	350	339	366	384	401
Stocking rate (cows/ha)	3.0	2.9	2.9	3.1	3.1	3.1	3.4	3.5
Opening assets	6 032 127	6 625 955	6 649 211	7 380 105	5 999 649	7 625 633	8 543 936	9 050 979
Opening debt	3 314 988	3 423 530	2 418 636	2 874 203	2 280 113	2 804 993	2 822 771	2 971 144
Equity (%)	45%	48%	67%	63%	64%	65%	70%	67%
FWE/kgMS	4.25	3.92	3.44	3.37	3.26	3.19	2.97	2.90
Debt servicing/kgMS	2.37	2.19	1.39	1.47	1.44	1.23	1.09	0.99
Total debt/KgMS	29.6	26.6	16.9	18.0	17.5	16.0	12.7	12.2
Drawings/kgMS	0.49	0.52	0.60	0.50	0.43	0.46	0.41	0.37
Economic farm surplus/hectare	810	1 302	1 927	2 407	2 205	2 716	3 665	4 155

BREAKEVEN ANALYSIS

TABLE 2.6: BREAKEVEN ANALYSIS OF PRODUCTION DATA FROM MONITORED DAIRY FARMS

	MEAN	MEDIAN	BOTTOM 10%	TOP 10%
Farm working expenses	3.37	3.26	4.25	2.90
Debt servicing	1.47	1.44	2.37	0.99
Drawings	0.50	0.43	0.49	0.37
Total	5.34	5.13	7.11	4.26

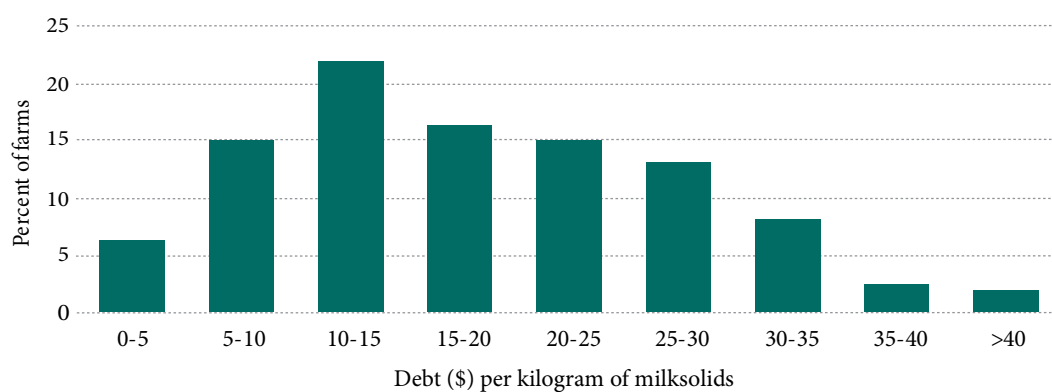
The above table shows the “breakeven” point (covering farm working expenses, debt servicing and personal drawings) for the mean and median farm for 2009/10. This also ignores any capital depreciation, which is worth 31 cents (mean) and 29 cents (median) per kilogram of milksolids in 2009/10. The figures for the bottom and top 10 percent are also illustrated.

TABLE 2.7: COMPARISON BETWEEN LOW AND HIGH DECILE FARMS 2009/10

	AVERAGE OF BOTTOM 10%	AVERAGE OF TOP 10%
Milksolids per hectare (kg/ha)	891	1 345
Milksolids per cow (kg/cow)	298	401
Stocking rate (cows/ha)	3.0	3.5
Farm working expenses per cow (\$)	1 313	1 243
Interest + rent cost per cow (\$)	694	431
Farm profit before tax per hectare (\$)	-358	3 477

This shows that the higher decile farms are winning all the way, with a higher stocking rate, higher per cow and per hectare production, lower farm working expenses, and a farm profit before tax almost 1000 percent higher per hectare than the lower decile farms.

DEBT AND DEBT SERVICING

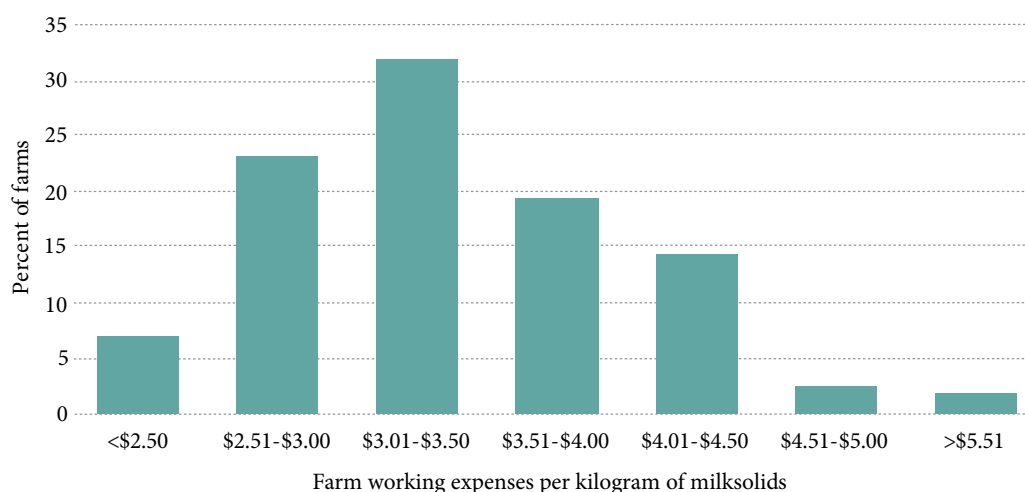
FIGURE 2.2: DISTRIBUTION OF TOTAL DEBT BY DOLLARS PER KILOGRAM OF MILKSOLIDS

The above graph shows the distribution of debt for the 160 monitored farms, with a mean debt level of \$18.03, and median debt level of \$17.51 per kilogram of milksolids.

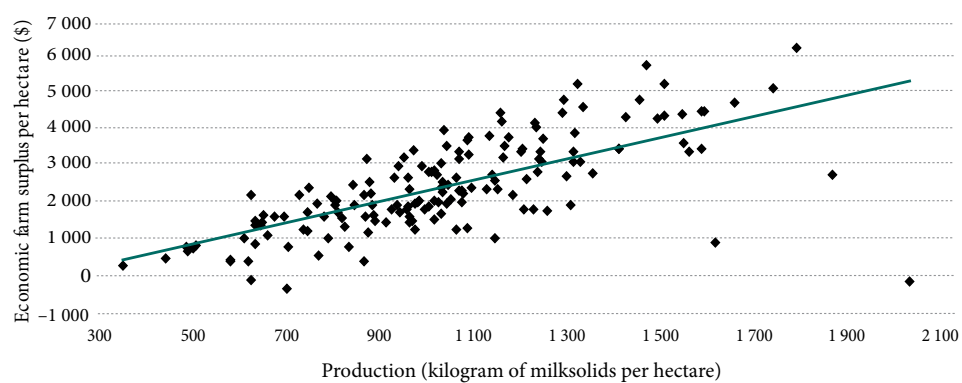
FIGURE 2.3: DEBT SERVICING DISTRIBUTION

This graph shows the debt servicing distribution for the 160 monitored farms for the 2009/10 season. Within the monitored farms, average debt servicing was \$1.47 per kilogram of milksolids, median debt servicing was \$1.44, and the range varied from zero though to \$3.58 per kilogram of milksolids.

FARM WORKING EXPENSES

FIGURE 2.4: FARM WORKING EXPENSES DISTRIBUTION

This graph shows the farm working expenses distribution for the 160 monitored farms for the 2009/10 season. Within the monitored farms, average farm working expenses were \$3.37 per kilogram of milksolids, median farm working expenses were \$3.26, and the range varied from \$2.01 though to \$6.59 per kilogram of milksolids.

FIGURE 2.5: ECONOMIC FARM SURPLUS VERSUS PRODUCTION

This graph shows the relationship between profitability, as indicated by the economic farm surplus per hectare, and production, as indicated by kilograms of milksolids per hectare. While there is some relationship, it is relatively weak, with the regression line having a R^2 value of 0.48.



DAIRY INDUSTRY ISSUES AND DEVELOPMENTS

FONTERRA CAPITAL STRUCTURE

Possibly the most significant issue in the dairy industry this season was the question around Fonterra's capital structure, and the option put to a shareholder vote at the end of the season.

The result was a strong endorsement for the proposals, which will result in share trading between farmers, the formation of the shareholder fund, and a definite split in the milk payout paid on production, and the dividend paid on shares. There is still some concern amongst farmers as to how all this will work and the potential effect on the share price.

The separation of the dividend will have a big impact on the sharemilking industry, and debate and negotiation on how the dividend is incorporated into sharemilking contracts will need to occur. Farm owners are beginning to differentiate the two payments, and reviewing cost structures relative to the milk price, rather than total payments.

Farmers are also likely to sit on overshared positions to allow their production to fluctuate between seasons. Industry people believe it will be useful to farmers to think about the dividend and milk price separately, as they will tend to make spending decisions on farm based only on the milk price. This should cause farmers to focus on expenses in relation to the milk price excluding the dividend.

RURAL DEBT

The 2009/10 season affected farmer attitude to debt, primarily driven by a perceived change in banks' appetite for risk following the credit crunch. Responses to the credit crisis varied considerably, depending on individual circumstances. Some farmers paid large break fees to move onto floating rate mortgages and some made substantial debt repayments.

It is expected that farmers will scale back development/expansion plans and will instead concentrate on generating cash and reducing core debt. There is now a healthy recognition that cash flows and equity are very important to the long-term sustainability of the industry and the appetite for expansion by debt has been constrained by the effects of the global credit crisis. As a result, farmers are more reluctant to approach the banks for more funding.

For many farms one of the impacts of the credit crunch was the drop in interest rates, which represented a significant saving for farmers with non-fixed interest rates. The majority of farms have a portion of their debt on fixed rates, so the impact will continue to flow through as these loans come off fixed rates.

FARMER MORALE

Morale took a hit at the start of the 2009/10 season with the announcement of a forecast payout of \$4.55 per kilogram of milksolids, especially coming out of the 2008/09 season which had been a very poor financial year for many farmers. Morale improved during the year on the back of improving payout announcements, although the drought took its toll during the summer and autumn.



At the end of the season morale had lifted significantly, due to a range of factors: improved payout; a strong payout forecast for the 2010/11 season; the breaking of the drought; and the forward momentum on Fonterra's capital restructuring.

This optimism is tempered, however, by pressure around debt, and cash flows will continue to be tight until the middle of the 2010/11 season. As a result, farmers are still spending cautiously.

SUPPLEMENTARY FEED

Many farmers are increasing their use of supplementary feed, and there is no doubt that the availability and price of Palm Kernel Expeller (PKE) was a critical factor in farmer's response to the drought. Prices for PKE remained reasonably stable through the drought, although availability was limited for short periods and retailers emphasised the need for farmers to commit to contracts to ensure supply. Many farmers who had not fed PKE before the drought are looking at incorporating it into their farm system in the future. There is an issue building with the increasing use of PKE, and the extent to which farmers are building this into their management systems. Many farms are now very reliant on this currently readily available and relatively cheap feed, and would face issues if either of these factors changed.

In Canterbury, many dairy farmers have increased grain use at the cost of silages to capitalise on the low costs and ongoing benefits of grain feeding for cows. At the time of writing, there was still a high inventory of grain in the Canterbury region. The change towards grain and PKE use and away from silage has significantly dropped the requirement for energy and vehicle intensive silage feeding.

IMPACT ON SERVICING FIRMS

With farmers taking a very cautious approach to spending, this has flowed through to servicing firms in most regions. This was also exacerbated by the drought conditions in various regions. Most service industries have had lower activity over the year and some very low. However, most have survived and are picking up slowly with improving prospects.

ENVIRONMENTAL ISSUES

Farmers are well aware of continued pressure from a number of areas for them to become more environmentally sustainable. The main issue of focus at present is effluent systems, with the level of non-compliance rising. Many systems are in need of an upgrade, although a number of farmers are delaying any decisions until they are in a better financial position, and also until it becomes clear what regional council expectations will be.

WATER

Water reliability and security for the future remains a key risk to the viability of Canterbury dairy farms, and expansion of the industry. Water monitoring in management of irrigation is improving as the technology improves and becomes more readily available. Water infrastructure development remains of great interest to the dairy sector, and there are expectations of government sorting out the issues, with the removal of Environment Canterbury councillors seen as the first step to a change to the status quo. There is a lot of significant investment activity in specific schemes extending or in improving efficiency, such as Barrhill-Chertsey, Ashburton-Lyndhurst, Acton, and Rangitata South.

LABOUR ISSUES

Farmers report that labour is more available than in previous years and uncertainty in the sector is helping encourage greater stability of staff between seasons. This stability combined with dampened enthusiasm for development expenditure is expected to impact on the uptake of automation (for example, Protrak).

Labour is a critical part of the financial and general management of the large Canterbury dairy farms. Concern is rising amongst the industry about future management capabilities, given the higher number of international transient staff. The international dairy workers provide an essential service in the current industry, but there are uncertainties around the long-term sustainability of the next level of workers. Overseas workers are often on temporary work permits or do not wish to stay long-term, and there are few New Zealand workers able or available to fill mid-management positions.

With general financial caution prevailing in the dairy industry this year there has been a lower than average change of sharemilking positions. With financial belt-tightening and some farm owners returning to milking themselves, or generally cutting back on staff, there has been a surplus of farm staff this season, a situation not seen for many years. As a result, there has been little or no increase in farm staff wages and, in some cases, when new staff are being employed their salary packages are below those previously paid.

DEER SECTOR OVERVIEW

3

Climate and venison returns are the two key drivers of profitability for deer farmers. The 2009/10 venison national schedule ended with an average schedule price of \$6.85 per kilogram, which was 31 percent above the five-year rolling average price per kilogram for venison. Another feature of the venison schedule in 2009/10 was relatively stable pricing, with less of a dramatic drop after the chilled season ended.

VENISON PRICE DECLINE

The peak price during 2009/10 for a 60 kilogram stag was around \$8.85 per kilogram. The net price received on farm for the North Island and South Island was \$6.86 and \$7.34 per kilogram respectively; this was around a dollar a kilogram less than 2008/09.

The decrease in the venison price contributed to the decrease in farm revenue for both the North and South Island models. Net cash income per stock unit was down 2 percent and 9 percent respectively.

VELVET PRICES RECOVER

Farmers welcomed the increase in velvet returns. Many farmers had reduced velvetting stag numbers in their herds but this trend to decrease numbers has stopped and is likely to reverse slightly. At \$80–\$100 per kilogram velvetting stags are a profitable enterprise especially when compared on a cents-of-profit per kilogram of dry matter eaten. The average net price for velvet in the North and South Island models in 2009/10 was \$81 and \$91 per kilogram respectively.

Key reasons for the increase in velvet price included the reduced volume for export from New Zealand, a more co-ordinated selling strategy by all exporters, and Korea and China weathering the global recession better than other economies. In 2009/10, New Zealand velvet achieved a premium over Russian velvet in the Korean market, an industry first.

Industry and government continue to work on access to markets and reducing tariffs, both important factors in long-term sustainable velvet industry growth.

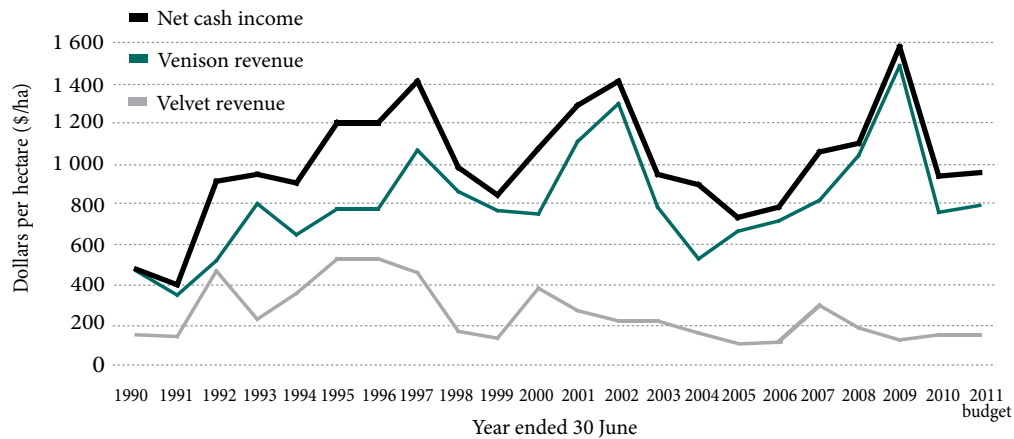
COOL SPRING AND DROUGHT EFFECTS LINGER

Physical production on both the North and South Island deer models was affected by a cool spring with limited spring and summer surplus feed. The North Island was affected by a creeping drought that started in Northland and spread down the Island.

EXPENDITURE

Key items of expenditure for both models were feed, fertiliser, fuel and overhead costs. Farmers in both islands identified increasing overheads as an expense they had little power to control.



FIGURE 3.1: VENISON AND VELVET CONTRIBUTION TO NET CASH INCOME, 1990–2011 BUDGET

A SIMILAR YEAR HOPED FOR

Given a stable, or better, exchange rate farmers are cautiously hoping for a similar year financially in 2010/11.

Farmers and industry are aware that to sustainably grow the industry, venison and velvet prices need to remain at reasonable and repeatable levels.

Physical production per head is expected to be close to average for 2010/11. Although net cash income is budgeted to increase in both islands, this is due to an increase in the number of animals to sell now that rebuilding of deer numbers is slowing.

In the South Island model, farm profit before tax is expected to decrease by 5 percent to \$77 600. The North Island model is predicted to decrease 2 percent to \$76 000.

FIGURE 3.2: NORTH ISLAND DEER FARM MODEL REVENUE VERSUS EXPENDITURE, 1990–2011 BUDGET

DEER SECTOR AND MODELS CHANGED

Both models have changed size and stocking rate in 2009/10 to reflect the change in proportion of deer on highly stocked flats to less intensive but larger hill country units.

TABLE 3.1: COMPARISON OF DEER MODEL FARM RESULTS, 2009/10 AND 2010/11 BUDGET

	NORTH ISLAND	SOUTH ISLAND
Effective area (hectares)	220	272
Deer stock units (at 1 July 2009)	2 203	3 015
FARM PROFIT BEFORE TAX (\$)		
2009/10	77 916	81 268
2010/11 budget	75 979	77 553
2009/10 (\$ PER STOCK UNIT)		
Cash operating surplus ¹	45.00	41.74
Farm profit before tax	35.37	26.96
Farm surplus for reinvestment ²	8.51	7.14
2010/11 BUDGET (\$ PER STOCK UNIT)		
Cash operating surplus ¹	43.26	42.44
Farm profit before tax	33.61	24.64
Farm surplus for reinvestment ²	6.79	11.72
RATIOS 2009/10 (%)		
Equity ratio ³	86	87
Return on equity ⁴	0.6	-1.0
Return on assets ⁵	1.4	0.1

Notes

1 Net cash income less farm working expenses.

2 Farm surplus for reinvestment represents the cash available from the farming business, after meeting living costs, which is available for investment on-farm or for principal repayments. It is calculated as discretionary cash less off-farm income and drawings.

3 Ratio of farm assets less debt (equity) to farm assets.

4 Economic farm surplus less interest and lease as a percentage of equity.

5 Economic farm surplus divided by total assets.



DEER INDUSTRY ISSUES AND DEVELOPMENTS

VENISON DOWN AND VELVET UP

A lower but reasonably steady venison schedule allowed deer farmers to achieve a break-even or small cash surplus in 2009/10. Velvet prices increased with the target price of \$80 to \$100 per kilogram figure likely to be attained for the majority of producers.

VENISON PRICES

The average venison schedule price over the 2009/10 season was 14 percent lower than 2008/09. Many factors outside New Zealand affected the price received for venison on farm. The venison schedule in 2010/11 is expected to be slightly lower than 2009/10.

The exchange rate between the New Zealand dollar and the Euro plays a significant part in deer returns received. Sovereign debt and slow economic recovery in European Union member countries and the flow-on effect of a weaker Euro was a negative influence on farm gate prices. The good news is that demand for venison and in-market prices has remained steady. Exporters are continuing marketing initiatives to place venison as an all-year-round, quality product and to expand non-traditional markets.

VELVET PRODUCTION

In the year ended May 2010, 168 dry tonne equivalents of velvet were exported. This was 14 percent down on the 2008/09 year. Predictions for the 2010/11 velvet season are that production will stabilise. Deer Industry New Zealand (DINZ) reported that lower global production and, more importantly, strong selling stances by exporters were the keys to improving returns to farmers in 2009/10. China is showing continued economic growth and Korea has shown a strong recovery from the global recession. New Zealand velvet received a premium over Russian velvet for the first time ever in the Korean market. Free trade agreement negotiations with Korea and closer co-operation with Taiwanese industry and officials are also positives for the short to medium-term marketing of velvet.

LONG-TERM PROSPECTS FOR THE INDUSTRY

CONSEQUENCES FOR GROWTH

Over recent years, the size of the New Zealand deer herd and the number of deer farmers has declined. The benefits of this decrease were less venison and velvet to market and on-farm there were few issues of booking space for processing. The downside of the reduced numbers is a lowering of critical mass or economies of scale throughout the industry.

Scale and growth are required to provide the on-going investment needed to support better infrastructure, continued industry good functions and research through to marketing. Deer farming is a young industry; it is only 40 years since the first deer farming licence was issued. Although young and relatively small, the deer industry punches above its weight in a number of areas and retains enthusiasm for its products. Projections are for a modest rebuilding of deer numbers in 2010/11 and out years rather than the boom and bust fashion of previous price cycles.



MORE FINISHING ON BREEDING UNITS IN THE NORTH ISLAND

Hill farmers are considering their re-stocking options especially in the North Island. After consecutive years of drought, fluctuating weaner prices and better velvet prices, farmers in the North Island have integrated more finishing stock on their properties. This, of course, will lead to a decrease in the number of weaners for sale to other finishers.

Deer farming is competing with other land uses, especially dairy in the South Island. Any flat, fertile land has potential for dairy conversion including existing deer farms. Dairy farmers often have run-offs on land not suitable for intensive dairy but still relatively high producing and close by. This means that deer farming, along with sheep and beef, is likely to be found proportionately more in the hill to steeper hill properties further away from dairy areas. This change in proportion of production to hill properties has consequences for fawning percentages (usually positive) and the timing of production (usually later). This, in turn, means that farmers, researchers and the meat industry will likely adjust to these timing and geographic changes.

PRODUCTIVITY AND EFFICIENCY GAINS

Focusing on profit is essential for deer farmers. This is achieved through efficiencies such as producing more outputs from the same or fewer inputs and improving the price received for the outputs. The successful deer focus farms project, “Making the Difference”, have drawn good attendances and become a meeting point for discussion and technology transfer on productivity, profitability and environmental issues.

BREEDING AND GENETIC IMPROVEMENT

The increasing access to genetic tools and information to screen and assess deer for desirable traits is an important development for the deer industry. Breeding worth indices are now available and in the future SNP chip technology will enable selection for disease resistance, meat yield, and other productivity traits. These technologies are now a fraction of the price they were as little as five years ago.

COMPLIANCE COSTS

Compliance costs and their increases above the rate of general inflation continue to frustrate deer farmers. The National Animal Identification and Traceability scheme (NAIT) is currently being rolled out. Views differ on the benefits and uses of the identification and traceability scheme. However, all agree an effective, practical and least-cost scheme is desirable.

EMISSIONS TRADING SCHEME (ETS)

Deer farmers, along with many other livestock farmers, have not welcomed the 1 July 2010 requirement of an ETS on fuel and electricity and the associated cost increases to cover the scheme. Farmers see these charges as additional costs they cannot pass along and have to absorb themselves.

ENVIRONMENTAL ISSUES

Environmental issues are still a focus, but are not receiving the same publicity and discussion as previous years. Accountants and industry representatives noted the increase in fencing off waterways and use of nutrient budgeting to improve environmental performance. Regional councils are valuable and enthusiastic members of the deer focus farms using education and demonstration rather than prosecution to get their messages across about land use and water quality.

IMPACT OF GLOBAL RECESSION AND CREDIT CRISIS

Farmers and bankers attending farm monitoring meetings noted that accessing finance for term or additional seasonal lending remains difficult and that “cashflow is king”. The process of application and funding of loans takes longer than in pre-global recession and credit crunch times. However, banks stress that sound proposals with good cashflows and securities will likely be funded. Although a large proportion of deer farmers are in the 50-plus age group and in a comfortable enough equity position to ride out an economic downturn, the credit crunch does increase issues such as succession planning for the next generation of farmers and industry leaders.



SHEEP AND BEEF

SECTOR OVERVIEW

4

NATIONAL SHEEP AND BEEF MODEL

The national sheep and beef budget depicted below has been constructed via a weighted average of the MAF sheep and beef farm monitoring models. The weighting is based on the number of farms each model represents. The weightings, on the model basis, are as follows:

› Canterbury/Marlborough hill country	4 percent
› Canterbury/Marlborough breeding and finishing	14 percent
› Hawke's Bay/Wairarapa hill country	18 percent
› Central North Island hill country	12 percent
› Gisborne hill country	6 percent
› Western lower North Island	4 percent
› Northland	9 percent
› Otago dry hill	4 percent
› South Island high country	2 percent
› Southland/South Otago intensive	15 percent
› Southland/South Otago hill country	7 percent
› Waikato/Bay of Plenty intensive	7 percent

Please note that the sample of farms has changed between 2008/09 and 2009/10. Caution should be taken when comparing data between these two years.

KEY POINTS

- › Seasonal conditions dominated the financial performance of the sheep and beef sector in 2009/10. Mild lambing conditions resulted in a record lambing percentage but drought in Northland, Central Otago, North Otago, and South Canterbury reduced production and forced the early sale of stock in these regions.
- › Despite good demand for lamb, the average price fell \$8.43 from 2008/09 and this has more than offset the increase in lambing percentage.
- › Cash operating surplus for the national sheep and beef model fell 12 percent in 2009/10, or \$4.11 per stock unit, as a result of decreased income per stock unit and increased farm working expenses. It is predicted to fall a further 1 percent in 2010/11.
- › Dairy grazing makes up an increasing proportion of net cash income in both 2009/10 and 2010/11.
- › Interest expenses per stock unit have fallen as a result of lower interest rates flowing through to farm mortgages as they are renewed.
- › Farmers faced with reduced discretionary cash kept a tight rein on drawings, capital purchases and development but the national model budget still shows very low profitability for sheep and beef farming.
- › Sheep and beef farmers are taking a flexible approach to stocking policies as they seek to increase the returns per kilogram of dry matter from the land uses available to them.



TABLE 4.1: KEY PARAMETERS, FINANCIAL RESULTS AND BUDGET FOR THE NATIONAL SHEEP AND BEEF MODEL

YEAR ENDED 30 JUNE	2006/07	2007/08 ^R	2008/09	2009/10 ¹	2010/11 BUDGET
Effective area (ha)	708	706	716	771	771
Opening total stock units (su)	4 588	4 404	4 185	4 716	4 747
Stocking rate (su/ha)	6.5	6.2	5.8	6.1	6.2
Ewe lambing (%)	126	116	116	129	128
Average lamb price (\$/head)	50.55	51.51	82	73.65	75.19
Average store lamb price (\$/head)	...	...	...	64.04	64.04
Average prime lamb price (\$/head)	...	...	...	76.47	77.45
Average wool price (\$/kg)	2.48	2.44	2.38	2.52	2.60
Total wool produced (kg)	15 923	14 311	13 263	14 726	15 080
Sheep income (\$)	154 314	141 523	192 214	226 098	224 148
Wool income (\$)	42 461	37 419	33 531	42 090	44 289
Cattle income (\$)	131 256	129 058	135 801	117 907	116 413
Net cash income (NCI) (\$)	293 543	274 973	327 481	362 550	360 686
Farm working expenses (FWE) (\$)	172 783	178 716	179 412	215 082	215 395
Cash operating surplus (\$)	120 760	96 258	148 069	147 468	145 291
Farm profit before tax (\$)	43 849	6 096	62 357	66 587	71 895
Discretionary cash (\$)	79 076	46 741	104 012	84 051	79 577
Farm surplus for reinvestment ² (\$)	3 158	-25 571	30 442	19 251	16 930
EFS ³ /ha (\$)	27	-20	65	66	71
EFS/su (\$)	4.11	-3.13	11.09	10.72	11.59
FWE/NCI (%)	59	65	55	59	62
EFS/Total farm assets (%)	0.5	-0.3	0.9	1.1	1.2

Notes

1 The sample of farms used to compile this model changed between 2008/09 and 2009/10. Caution is advised if comparing data between these two years.

2 Farm surplus for reinvestment represents the cash available from the farming business, after meeting living costs, which is available for investment on-farm or for principal repayments. It is calculated as discretionary cash less off-farm income and drawings.

3 EFS is calculated as follows: net cash income plus change in livestock values less farm working expenses less depreciation less wages of management (WOM). WOM is calculated as follows: \$31 000 allowance for labour input plus 1 percent of opening total farm assets to a maximum of \$75 000.

Symbol

R The model parameters have been revised so the data for 2007/08 will not match that published in the *Pastoral Monitoring Report 2008*.

... Not available.



FINANCIAL PERFORMANCE OF THE NATIONAL SHEEP AND BEEF FARM MODEL IN 2009/10

The outlook for sheep and beef farming, as shown by the actual budget for 2009/10 and the prediction for 2010/11, is not bright. Despite the national model budget in 2009/10 reflecting structural soundness, profitability is still low. Farm working expenses and debt servicing are 59 percent and 16 percent of net cash income respectively. Both ratios are around industry best practice levels.

Farmers have shown spending restraint in 2009/10 to achieve small cash surpluses despite falling incomes. The cash surplus for the national farm model is \$6900, a 69 percent decrease compared with 2008/09. Return on capital is very low, at 1 percent, even though land prices per stock unit have been reduced 20 percent or \$209. Many farmers have higher debt servicing and operating costs than shown in this model and some are struggling to achieve profitability.

FALLING INCOME MAIN CONCERN

The profitability problem is simply a lack of income and this explains farmers' frustration with their product marketers and industry bodies. Wool represents around one-eighth of income in 2009/10 and many feel that if this could be lifted to a quarter or a third then the sheep industry's prospects would be improved. Farmers felt that lamb prices achieved in 2008/09 provided some profitability and were looking forward to further lifts at the time. The \$8.43 drop in average lamb price in 2009/10, to \$73.65 compared with \$82.08 in 2008/09, has disappointed farmers even if most of the reduction can be explained by movements in the exchange rate. They are also disappointed that the outlook for 2010/11 is no better. In fact, industry commentators consider that farmers' expectation of prices similar to 2009/10 are optimistic so farmers may be further disappointed. This disappointment is exacerbated when they compare their situation with the performance of the dairy industry.

The cash operating surplus per stock unit for the national sheep and beef model fell 12 percent or \$4.11 to \$31.27 per stock unit in 2009/10 as a result of decreased income per stock unit and increased farm working expenses.

RECORD LAMBING PERCENTAGE

Mild lambing conditions over the whole of the country gave a record lambing percentage on the national model of 129 percent; however, this was not enough to overcome the drop in lamb price

in 2009/10. Sheep revenue (sales less purchases) per sheep stock unit fell 5 percent to \$62.93 per sheep stock unit in 2009/10.

Lower lamb schedule prices, generally attributed to the higher exchange rate for the New Zealand dollar, caused the average lamb price to fall \$8.43 compared with 2008/09. Most regions had slow lamb growth over spring and summer because of a cool late spring inhibiting pasture growth. However, most parts of the country were able to finish lambs to typical weights or even above-average weights because of good summer rains. In Southland, the cool moist season delayed lamb finishing while in Northland, South Canterbury, North Otago and Central Otago drought from late October until May reduced lamb growth and increased the number of lambs sold store.

STORE LAMB PRICES ABOVE USUAL LEVELS

The store lamb price was well above usual levels at \$64.00 in 2009/10 and on average only \$12.43 below the prime lamb price compared with a traditional margin of around \$20.00. This was due to a shortage of stock at the processing plants and strong demand for stock in areas with good rainfall.

DROUGHT AFFECTED AREAS REDUCE STOCK NUMBERS

The drought-affected models of Northland, Otago dry hill and, to a lesser extent, Canterbury/Marlborough hill country all reduced stock numbers over 2009/10. Those areas recovering from previous droughts such as Hawke's Bay/Wairarapa, Gisborne, Waikato/Bay of Plenty and, to a lesser extent, central North Island all increased stock over 2009/10.

WOOL INCOME INCREASES

Wool income on the national model increased to \$42 100 in 2009/10 due to the average wool price increasing slightly from \$2.38 in 2008/09 to \$2.52 in 2009/10. In some regions this has given farmers hope for the wool industry but most still lack confidence in the industry. On average, shearing expenses were 43 percent of wool income in 2009/10. Many farmers held wool over from previous years in the hope of improved prices but these farmers have sold much of these reserves during the year. Wool stores report substantially less wool in stock than a year ago.

DROUGHT DECREASES CATTLE INCOME

Drought has also affected cattle income with drought-affected areas selling cattle earlier and at lighter weights. Some areas had inflated income from drought sales while others were rebuilding herds or opened with fewer animals and had fewer to sell. In 2009/10, cattle income decreased 13 percent to \$117 900 compared with \$135 800 in 2008/09. Farmers have adopted flexible cattle policies in order to optimise profits. On average, the rising two-year-cattle price has increased 5 percent or \$36.00.



Grazing income has increased to \$16 200, as sheep and beef farmers increased their sales of hay and silage to dairy farmers and took on more dairy grazers. Industry commentators feel that the relationship between dairy farmers and sheep and beef farmers has matured somewhat. Along with the improved dairy payout, this has given sheep and beef farmers the confidence to increase their reliance on dairy grazing.

FARM WORKING EXPENSES INCREASE SIX PERCENT

Farm working expenses per stock unit have increased 6 percent or \$2.74 per stock unit to \$45.61. In general, costs increased in most models except for drought-affected farmers who had to severely constrain spending to offset reduced income.

COSTS INCREASING

Comparisons of individual expense items with the 2008/09 year are difficult with the change in farmers monitored. Feed costs increased in 2009/10 as farmers who had a good season took the opportunity to refill hay barns and spent more on feed conservation and those affected by drought bought in more feed.

Fertiliser spending also increased as farmers took advantage of lower fertiliser prices to increase applications to near to maintenance fertiliser levels. The trend for some farmers to use lime as a substitute for fertiliser has continued. Farmers have increased spending on repairs and maintenance in many models with repairs and maintenance on the national model increasing 5 percent or 19 cents per stock unit compared with 2008/09. Most other costs increased slightly, mainly through inflation.

Overall, farm working expenses represent 59 percent of net cash income compared with 55 percent in 2008/09.

INTEREST RATES FALL SLIGHTLY

Farmers report lower interest expenditure with loans being refinanced at lower rates as they come up for renewal. While the official cash rate has started to rise, most loans renewed during the year have achieved reduced interest rates with average rates reducing by 0.8 percentage points (10 percent). The effect is masked slightly by the change in farms monitored as interest expenses per stock unit have fallen only 2 percent but debt per stock unit has increased 8 percent. Interest and lease costs represent 16 percent of net cash income, the same as 2008/09 with the drop in interest expenditure in proportion to the drop in income.

DECREASE IN CASH SURPLUS IN 2009/10

Cash disposal appears to have been restrained during the 2009/10 year with spending on

drawings and capital purchases reduced and development held at the same level. Despite this the farm surplus for reinvestment and the cash surplus have both fallen to \$19 300 and \$6900 respectively. Tax has increased substantially with low provisional tax paid in 2008/09 causing higher terminal tax payments in 2009/10 along with higher provisional tax. However, tax for sheep and beef farmers is still relatively low.

BUDGET FINANCIAL PERFORMANCE OF THE NATIONAL SHEEP AND BEEF FARM MODEL IN 2010/11

Cash operating surplus in 2010/11 is predicted to be very similar to 2009/10 with farmers expecting incomes to fall 1 percent while they hold farm working expenses down to the same amount as 2009/10.

SHEEP REVENUE EXPECTED TO FALL, WOOL INCOME UP

Sheep revenue (sales less purchases) is expected to fall 1 percent in 2010/11 to \$202 000. Farmers expect the lambing percentage to be similar to 2009/10 (the best year on record for the national model) at 128 percent. Areas affected by autumn drought are predicting a drop in lambing percentage while those that recovered from previous droughts in 2009/10 are predicting a lift in lambing. Across the country farmers were more optimistic about lambing than industry commentators. It appears most farmers are expecting similar lamb survival in 2010 as in spring 2009, which was one of the best ever. Farmers also expect both prime and store lamb prices to be similar to 2009/10. Again, industry commentators think this is optimistic, particularly for store lambs.

Wool income is expected to rise 5 percent to \$44 300 due to an expected lift in wool weights and wool price.

CATTLE INCOME EXPECTED TO FALL, GRAZING INCOME UP

Cattle revenue (sales less purchases) is expected to fall 3 percent to \$81 600 compared with \$84 400 in 2009/10. Prices per head are expected to improve but following destocking for drought and implementation of more flexible purchase policies farmers have younger, lighter stock on hand in July 2010 compared with July 2009 so the average sale price is expected to be lower. Numbers sold are also down slightly as farmers plan to retain more stock by June 2011.

Grazing income is expected to increase a further 16 percent in 2010/11 to \$18 800 compared with \$16 200 in 2009/10. Other farm income is expected to fall slightly to \$14 100 compared with \$15 800 in 2009/10.



FARM WORKING EXPENSES INCREASE SLIGHTLY

Farmers plan to restrict farm working expenses and cash disposal in 2010/11 but expect that many expenses will increase with inflation. Total farm working expenses on the national model are expected to increase slightly to \$215 400. Electricity and fuel costs are predicted to increase as a result of implementation of the ETS. Other costs such as freight and contracting are also expected to rise because of the ETS.

Feed costs are expected to reduce a little. Initially farmers thought they would have good carry-over of supplementary feed into the 2010/11 year but farmers have already fed out more than expected through the dry autumn and cold first half of the winter. Feed conservation is therefore likely to be similar to 2009/10.

Fertiliser prices are expected to increase but farmers plan to apply similar amounts of fertiliser to 2009/10. This will result in an expected 7 percent or \$2500 increase in fertiliser expenditure to \$39 900 compared with \$37 400 in 2009/10.

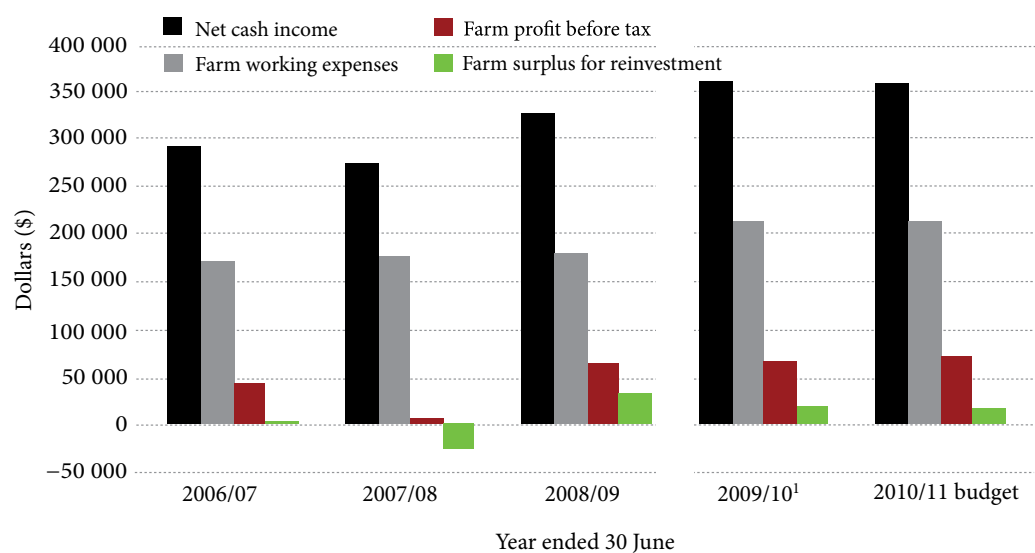
Repairs and maintenance is likely to be reduced 9 percent or \$1800 in 2010/11 as a way of holding costs overall.

INTEREST COSTS EXPECTED TO DECREASE

Interest costs are expected to fall a further 1 percent to \$53 100 in 2010/11 as lower interest rates flow through into farm mortgages. This enables interest costs to remain at 16 percent of net cash income despite the fall in income.

CASH SURPLUS FALLS SLIGHTLY

Cash disposal is expected to be further reduced with drawings budgeted to be reduced 1 percent and capital purchases and development to be further cut. The final outcome is that the cash surplus and farm surplus for reinvestment are slightly down on the levels in 2009/10.

FIGURE 4.1: NATIONAL SHEEP AND BEEF MODEL PROFITABILITY TRENDS**Note**

¹ The sample of farms used to compile this model changed between 2008/09 and 2009/10. Caution is advised if comparing data between these two years.



TABLE 4.2: NATIONAL SHEEP AND BEEF MODEL BUDGET

	2009/10			2010/11 BUDGET		
	WHOLE FARM (\$)	PER HECTARE (\$)	PER STOCK UNIT ¹ (\$)	WHOLE FARM (\$)	PER HECTARE (\$)	PER STOCK UNIT ¹ (\$)
REVENUE						
Sheep	226 098	293	69.69	224 148	291	68.77
Wool	42 090	55	12.97	44 289	57	13.59
Cattle	117 907	153	80.70	116 413	151	78.79
Grazing income (including hay and silage sales)	16 177	21	3.43	18 770	24	3.95
Other farm income	15 757	20	3.34	14 077	18	2.97
LESS:						
Sheep purchases	21 927	28	6.76	22 175	29	6.80
Cattle purchases	33 552	44	22.96	34 835	45	23.58
Net cash income	362 550	470	76.88	360 686	468	75.98
Farm working expenses	215 082	279	45.61	215 395	279	45.37
Cash operating surplus	147 468	191	31.27	145 291	188	30.60
Interest	53 678	70	11.38	53 113	69	11.19
Rent and/or leases	5 313	7	1.13	5 022	7	1.06
Stock value adjustment	2 871	4	0.61	10 278	13	2.16
Minus depreciation	24 761	32	5.25	25 539	33	5.38
Farm profit before tax	66 587	86	14.12	71 895	93	15.14
Taxation	10 520	14	2.23	14 475	19	3.05
Farm profit after tax	56 068	73	11.89	57 419	74	12.10
ALLOCATION OF FUNDS						
Add back depreciation	24 761	32	5.25	25 539	33	5.38
Reverse stock value adjustment	-2 871	-4	-0.61	-10 278	-13	-2.16
Income equalisation	-1 752	-2	-0.37	527	1	0.11
Off-farm income	7 846	10	1.66	6 370	8	1.34
Discretionary cash	84 051	109	17.82	79 577	103	16.76
APPLIED TO:						
Net capital purchases	10 218	13	2.17	10 114	13	2.13
Development	4 978	6	1.06	4 356	6	0.92
Principal repayments	10 217	13	2.17	9 708	13	2.04
Drawings	56 955	74	12.08	56 277	73	11.85
New borrowings	3 757	5	0.80	5 116	7	1.08
Introduced funds	1 443	2	0.31	191	0.25	0.04
Cash surplus/deficit	6 883	9	1.46	4 429	6	0.93
Farm surplus for reinvestment²	19 251	25	4.08	16 930	22	3.57
ASSETS AND LIABILITIES						
Farm, forest and building (opening)	4 077 894	5 288	864.69	3 771 285	4 890	794.40
Plant and machinery (opening)	125 081	162	26.52	121 277	157	25.55
Stock valuation (opening)	521 929	677	110.67	520 677	675	109.68
Other produce on hand (opening)	1 277	2	0.27	1 277	2	0.27
Total farm assets (opening)	4 726 181	6 128	1 002.15	4 414 517	5 724	929.89
Total assets (opening)	4 811 945	6 240	1 020.34	4 487 973	5 820	945.37
Total liabilities (opening)	688 634	893	146.02	682 535	885	143.77
Total equity (farm assets - liabilities)	4 037 547	5 236	856.13	3 731 981	4 839	786.12

Notes

1 Sheep stock units are used in the per stock calculation for sheep and wool income and sheep purchases. Cattle stock units are used for cattle income and purchases. The remainder of the time total stock units are used.

2 Farm surplus for reinvestment represents the cash available from the farming business, after meeting living costs, which is available for investment on-farm or for principal repayments. It is calculated as discretionary cash less off-farm income and drawings.

TABLE 4.3: NATIONAL SHEEP AND BEEF MODEL EXPENDITURE

	2009/10			2010/11 BUDGET		
	WHOLE FARM (\$)	PER HECTARE (\$)	PER STOCK UNIT ¹ (\$)	WHOLE FARM (\$)	PER HECTARE (\$)	PER STOCK UNIT ¹ (\$)
FARM WORKING EXPENSES						
Permanent wages	17 246	22	3.66	17 803	23	3.75
Casual wages	5 996	8	1.27	6 052	8	1.27
ACC	789	1	0.17	1 252	2	0.26
Total labour expenses	24 032	31	5.10	25 107	33	5.29
Animal health	15 415	20	3.27	15 961	21	3.36
Breeding	1 983	3	0.42	2 036	3	0.43
Electricity	4 937	6	1.05	5 517	7	1.16
Feed (hay and silage)	7 754	10	1.64	8 040	10	1.69
Feed (feed crops)	3 560	5	0.75	3 490	5	0.74
Feed (grazing)	1 193	2	0.25	860	1	0.18
Feed (other)	1 955	3	0.41	1 675	2	0.35
Fertiliser	37 403	49	7.93	39 903	52	8.41
Lime	4 910	6	1.04	6 340	8	1.34
Cash crop expenses ²	2 721	4	0.58	2 081	3	0.44
Freight (not elsewhere deducted)	5 034	7	1.07	5 321	7	1.12
Regrassing costs	5 827	8	1.24	5 718	7	1.20
Shearing expenses	18 072	23	5.57	18 695	24	5.74
Weed and pest control	6 686	9	1.42	6 760	9	1.42
Fuel	10 142	13	2.15	10 764	14	2.27
Vehicle costs (excluding fuel)	9 822	13	2.08	9 943	13	2.09
Repairs and maintenance	20 620	27	4.37	18 802	24	3.96
Total other working expenses	158 034	205	33.51	161 904	210	34.10
Communication costs (phone and mail)	2 574	3	0.55	2 887	4	0.61
Accountancy	3 823	5	0.81	3 846	5	0.81
Legal and consultancy	2 269	3	0.48	1 984	3	0.42
Other administration	2 117	3	0.45	2 346	3	0.49
Water charges (irrigation)	317	0	0.07	314	0	0.07
Rates	10 362	13	2.20	10 925	14	2.30
Insurance	5 948	8	1.26	6 188	8	1.30
ACC employer	2 988	4	0.63	4 495	6	0.95
Other expenditure	2 618	3	0.56	2 538	3	0.53
Total overhead expenses	33 016	43	7.00	35 524	46	7.48
Total farm working expenses	215 082	279	45.61	222 535	289	46.88
CALCULATED RATIOS						
Economic farm surplus (EFS ³)	50 578	66	10.72	55 030	71	11.59
Farm working expenses/NCI ⁴	59%			62%		
EFS/total farm assets	1.1%			1.2%		
EFS less interest and lease/equity	-0.2%			-0.1%		
Interest+rent+lease/NCI	16%			16%		
EFS/NCI	14%			15%		
Wages of management	75 000	97	15.90	75 000	97	15.80

Notes

1 Shearing expenses per stock unit based on sheep stock units.

2 Includes forestry expenses.

3 EFS is calculated as follows: net cash income plus change in livestock values less farm working expenses less depreciation less wages of management (WOM). WOM is calculated as follows: \$31 000 allowance for labour input plus 1 percent of opening total farm assets to a maximum of \$75 000.

4 Net cash income.

SHEEP AND BEEF INDUSTRY ISSUES AND DEVELOPMENTS

Sheep and beef farmers are under pressure from four different forces: low and static product prices; extreme weather events; tightly restricted finance from banks; and steadily rising farm expenses. They are responding to these forces as best they can by changing to more profitable livestock policies, improving farm performance, changing land use, rigorously cutting costs wherever they can, and developing other sources of income. While these changes will enable most to survive and many to make a modest profit, they are no substitute for pursuing a sound and viable industry strategy.

INCOME

Farm gate prices for lamb, wool and sheep have been static with farmers in some regions experiencing a lift in income following a favourable season and farmers in others suffering a drop in income (often a year after the event) because of adverse weather (usually either drought or floods). In fact, the net cash income at nearly \$80 per stock unit in 2008/09 was no more than that achieved in 2001/02 in nominal terms. In 2009/10, net cash income on the national model was around \$77 per stock unit.

With the decline in income from wool, farm incomes have been much more reliant on lamb and beef income. Drought has occurred over a number of regions in each of the last four years reducing stock numbers for sale, forcing farmers to sell lambs and cattle at lower prices and reducing lambing percentage in the subsequent year. While these effects are masked somewhat in the national model by regions unaffected by drought, at the regional and individual level they have a big impact on farm incomes.

DEBT LEVELS

Historically, when farm incomes have been down, farmers have borrowed against their equity as they were confident that rising land prices were insulating them. Despite this, debt levels in the industry are low with 83 percent equity in the national model budget. Over the last year many farmers have found it hard to borrow additional money. During the international credit crisis and subsequent recession, banks have tightened their lending criteria and will not lend more money to farms that cannot show a reasonable profit. In addition, lending margins have increased. Some farmers have cut costs and pursued stock policies with a lower capital requirement. Selling grazing to dairy farms or taking on beef grazing earns a reasonable return but does not require overdraft finance to fund the purchase of stock and this partly explains the increase in grazing income in the national budget.

The decline in land values has also reduced banks preparedness to lend further funds to sheep and beef farmers. While there have been very few sales, the general view of the industry is that sheep and beef farm prices have probably moved downward about \$200 per stock unit over the last two years.



As a result of lower average interest rates and less additional borrowing, interest costs on farms have fallen slightly from \$11.63 per stock unit in 2008/09 to a predicted \$11.19 in 2010/11.

FARM WORKING EXPENSES

Beef and Lamb New Zealand (previously Meat and Wool New Zealand) report¹ that farm input prices actually fell 3.5 percent from March 2009 to March 2010. Fertiliser prices and interest rates showed the biggest fall and drove most of the overall reduction with 12 of the 16 expense categories actually showing increased prices.

Over the longer term, farm working expenses in the national model have increased 43 percent from \$31.79 per stock unit in 2000/01 to \$45.61 per stock unit in 2009/10. This long-term trend is putting pressure on farmers.

Sheep and beef farmers have shown their resilience in the face of these pressures by adapting their management. They have become more flexible in their stocking policies, carrying fewer breeding ewes and cattle to give increased flexibility in the case of adverse weather and also giving flexibility to trade stock when it is profitable. For instance, farmers have moved to trading more cattle, and where possible, to trading store lambs. They are constantly reviewing the performance of their stock with some movement back to traditional breeds because they are easier to sell and cope better with adversity. Meat companies are another source of grazing income as they have become more involved in stock ownership as a way of securing stock for their plants, buying store stock and paying finishing farmers a grazing fee to finish them to their target weight.

Many farmers have partially changed land use by switching from beef finishing to dairy grazing. In the national model, grazing income has increased over the last two years.

In 2009/10, a drop in fertiliser prices allowed farmers to increase the amount of fertiliser applied and get back to near maintenance application levels. However, lack of fertiliser over a number of years, particularly in areas where spending has been cut during drought, is showing its effects on pastures. Farmers are concerned that pastures have not persisted over dry autumns and also that they may have trouble finishing stock because of the deterioration in pastures. Fertiliser is treated as a discretionary spending item and most farmers plan to increase spending a little in 2010/11 to hold fertiliser inputs despite expected price increases. As always, this decision will not be implemented until the autumn when income levels are known.

In fact, farmers are reducing spending wherever they can as they are under pressure from their banks to stay within previously approved overdraft limits. The budget for 2010/11 shows reductions in spending on feed, regrassing, and repairs and maintenance. However, cost increases are expected in most categories of spending because of inflation. Administration expenditure is expected to increase as are rates and insurance, animal health and shearing. There is a real concern about the flow-on costs of the ETS with increases in fuel and electricity costs allowed for but flow-on increases in freight and contracting costs also expected.

¹ Meat and Wool New Zealand (2010) *Movements in Sheep and Beef Farm Input Prices 2009 to 2010*. Meat and Wool New Zealand Economic Service: Paper No.P10025; Wellington.



EMISSIONS TRADING SCHEME

Agribusiness professionals noted that they have been fielding many questions from farmers regarding their obligations under the ETS and how they can mitigate emissions through forestry. On hill country farms there is some temptation to move into afforestation to tap into carbon trading opportunities. While this is gathering momentum, farmers are well aware that this would be a permanent change in land use based on a non-physical market and are nervous about this prospect.

DEVELOPING OTHER INCOME SOURCES

Farmers are pursuing opportunities for development or other sources of income where they have them. For instance, in the high country they are setting up tourism ventures as part of their farming business. The most common activity is remote accommodation, either lakeside, or back-country huts and cottages. Farmers in Southland and South Otago are taking advantage of selling kale crops for winter grazing of dairy cows as a way of funding their pasture development.

THE FUTURE OF MEAT

MAF's recent report *MEAT: The future. Opportunities and challenges for the New Zealand sheep meat and beef sector over the next 10 to 15 years*² evaluated four scenarios for the future:

- › Slippery slope.
- › A new market orientation.
- › Shrink-to-fit.
- › The knowledge industry.

Farmers fear that in the absence of a better alternative to the common saying “you can't shrink to success” the current sheep and beef sector approach seems to be falling somewhere between the “slippery slope” and “shrink to fit”. Most farmers believe passionately in their industry and are frustrated with the lack of progress towards a sound industry strategy. Those with options are changing their policies to improve performance and often this means moving away from sheep. Industry commentators are concerned that as this occurs the loss of innovative farmers with investment capital to other industries will further limit the ability of the sheep and beef sector to recover its strength.

² Ministry of Agriculture and Forestry (2009) *MEAT: The future. Opportunities and challenges for the New Zealand sheep meat and beef sector over the next 10 to 15 years*, Wellington. Available at: www.maf.govt.nz.

TABLE 4.4: COMPARISON OF INTENSIVE SHEEP AND BEEF MODEL FARM RESULTS, 2009/10 AND 2010/11 BUDGET

	NORTHLAND	WAIKATO/ BAY OF PLENTY	WESTERN LOWER NORTH ISLAND	CANTERBURY/ MARLBOROUGH	SOUTHLAND/ SOUTH OTAGO
Effective area (hectares)	314	300	368	469	234
Stock units (at 1 July 2009)	3 140	2 897	3 890	4 125	3 227
Sheep to cattle ratio (at 1 July 2009)	23:77	44:56	60:40	78:22	97:03
Lambing percentage (2009/10)	125	124	134	138	142
FARM PROFIT BEFORE TAX (\$)					
2009/10	19 270	53 444	30 728	47 547	72 433
2010/11 budget	42 290	52 008	23 372	51 484	82 211
2009/10 (\$ PER STOCK UNIT)					
Cash operating surplus ¹	29.89	30.62	49.28	45.10	38.42
Farm profit before tax	6.14	18.45	7.90	11.53	22.45
Farm surplus for reinvestment ²	-4.00	-7.26	5.32	5.45	5.00
2010/11 BUDGET (\$ PER STOCK UNIT)					
Cash operating surplus ¹	58.48	35.61	50.49	43.07	40.27
Farm profit before tax	14.77	16.71	6.64	12.26	24.91
Farm surplus for reinvestment ²	-6.48	-0.88	5.47	6.03	6.80
2009/10 ECONOMIC FARM SURPLUS (\$)					
Per hectare	-39	60	140	153	165
Per stock unit	-3.85	6.18	13.27	17.38	12.00
RATIOS 2009/10 (%)					
Equity ratio ³	89	91	79	85	87
Return on equity ⁴	-1.6	-0.5	-1.0	-0.5	0.1
Return on assets ⁵	-0.4	0.4	0.9	1.2	1.0

Notes

1 Net cash income less farm working expenses.

2 Farm surplus for reinvestment represents the cash available from the farming business, after meeting living costs, which is available for investment on-farm or for principal repayments. It is calculated as discretionary cash less off-farm income and drawings.

3 Ratio of farm assets less debt (equity) to farm assets.

4 Economic farm surplus less interest and lease as a percentage of equity.

5 Economic farm surplus divided by total assets.

TABLE 4.5: COMPARISON OF EXTENSIVE SHEEP AND BEEF MODEL FARM RESULTS, 2009/10 AND 2010/11 BUDGET

	CENTRAL NORTH ISLAND	GISBORNE	HAWKES BAY/ WAIRARAPA	SOUTH ISLAND HIGH COUNTRY	CANTERBURY/ MARLBOROUGH	OTAGO DRY HILL	SOUTHLAND/ SOUTH OTAGO
Effective area (hectares)	635	829	570	10 212	1 397	2 000	723
Stock units (at 1 July 2009)	5 326	7 214	5 043	10 659	5 487	6 103	6 538
Sheep to cattle ratio (at 1 July 2009)	65:35	54:46	68:32	76:24	62:38	82:18	85:15
Lambing percentage (2009/10)	126	124	122	86	118	122	136
FARM PROFIT BEFORE TAX (\$)							
2009/10	104 532	32 544	63 184	81 811	71 179	74 010	146 053
2010/11 budget	89 720	120 257	87 405	93 257	49 973	66 969	157 167
2009/10 (\$ PER STOCK UNIT)							
Cash operating surplus ¹	29.65	13.59	26.72	23.62	26.45	34.17	32.60
Farm profit before tax	19.63	4.51	12.53	7.68	12.97	12.13	22.34
Farm surplus for reinvestment ²	8.14	-0.71	-1.83	5.27	7.70	12.64	9.68
2010/11 BUDGET (\$ PER STOCK UNIT)							
Cash operating surplus ¹	25.26	22.21	31.99	22.04	20.35	30.62	35.06
Farm profit before tax	16.51	16.00	16.78	8.68	9.15	12.22	23.22
Farm surplus for reinvestment ²	0.73	7.69	3.66	1.23	0.96	5.20	14.01
2009/10 ECONOMIC FARM SURPLUS (\$)							
Per hectare	125	26	95	12	28	28	168
Per stock unit	14.90	2.94	10.74	11.84	7.08	9.30	18.58
RATIOS 2009/10 (%)							
Equity ratio ³	86	85	80	90	90	85	87
Return on equity ⁴	0.8	-1.1	-0.3	0.1	-0.1	0.0	1.6
Return on assets ⁵	1.8	0.4	1.2	1.1	0.7	1.3	2.4

Notes

1 Net cash income less farm working expenses.

2 Farm surplus for reinvestment represents the cash available from the farming business, after meeting living costs, which is available for investment on-farm or for principal repayments. It is calculated as discretionary cash less off-farm income and drawings.

3 Ratio of farm assets less debt (equity) to farm assets.

4 Economic farm surplus less interest and lease as a percentage of equity.

5 Economic farm surplus divided by total assets.

HORTICULTURE AND ARABLE OVERVIEW

5

The *Horticulture and Arable Monitoring Programme* 2010 shows mixed outcomes for the sectors reported on, despite downward pressure on prices in most overseas markets.

Profitability decreased for many wine grape growers in 2009/10 as grape prices fell due to supply exceeding demand.

A poor cereal market significantly impacted on cash flow for arable cropping farmers. Land use pressure from other industries, in particular dairying, continues.

The depressed markets in Europe and the United States during 2009 eroded premiums for higher priced pipfruit varieties.

In contrast, strong market demand and an improved exchange rate with the Japanese Yen underpinned the significant increase in gold kiwifruit returns.

Growers are cautiously optimistic about the year ahead as the world continues to recover from the global economic crisis. Generally, growers are budgeting for steady to increased profitability in their businesses in 2010/11 (2010 year for pipfruit) although for some sectors the outlook is more uncertain.

Growers are focused on keeping tight constraints on expenses and continuing efforts to improve productivity, product quality, and targeting marketing strategies that aim to extract premiums in the marketplace.

Budgeted results for 2010/11 are based on grower views collected in May 2010. These views are combined with input from those servicing the sector to create short-term physical and financial forecasts for model enterprises in the kiwifruit, pipfruit, viticulture and arable farming sectors.

The most significant factors affecting financial performance of the horticultural and arable sectors are market demand, exchange rates, crop performance, and operating costs.



FACTORS AFFECTING FINANCIAL PERFORMANCE

MARKET DEMAND

KIWIFRUIT

Grower returns for green kiwifruit stabilised in 2009/10. Strong market demand in Asia helped to lift returns for gold kiwifruit by 37 percent, in turn improving the profitability of the average orchard in 2009/10.

Growers are confident that prices for green and gold kiwifruit will be maintained or increase slightly in 2010/11.

PIPFRUIT

The high in-market prices reached in 2008 continued into 2009 for fruit sold into Asian markets. In contrast, in the UK and Continental Europe (the main markets for New Zealand apples) weaker consumer demand and a plentiful supply of competing fruit led to price falls of up to 30 percent in 2009 compared with the previous year. As a result, premiums were eroded for higher priced varieties, as well as for organic apples. Late season varieties such as Braeburn and Jazz™ were affected the most.

Growers with a variety mix more suited to Asian markets (predominantly Hawke's Bay growers) would have achieved a profitable outcome in 2009. However, those more reliant on European markets (predominantly Nelson growers) would have struggled to cover costs – most would have made a loss.

Good prices have been achieved in 2010 for early season fixed price sales into Asian markets. European and UK markets are expected to be challenging due to on-going recessionary pressures and some overhang of fruit from the Northern Hemisphere season. Despite the challenging market conditions, growers and industry leaders are predicting average export returns to be at least 10 percent higher in 2010 than in 2009, assisted by a smaller export crop from New Zealand.

VITICULTURE

In 2009/10 grape supply, especially of the Sauvignon Blanc varietal, continued to exceed market demand. This forced wineries to restrict yields and reduce prices paid per tonne. The price for Marlborough Sauvignon Blanc grapes fell 20 percent to \$1345 per tonne. Red wine grape varieties generally maintained their prices.

Grape growers are hopeful that the lower than expected national vintage of 266 000 tonnes in 2010 will achieve some supply-side stability, following the record vintage of 2008. Hence, growers are cautiously anticipating small improvements in yield and price parameters to be negotiated with wineries in 2010/11.



ARABLE

Domestic grain production was stimulated in 2008/09 by the high grain prices globally in 2008. Prices subsequently fell in response to the global economic crisis, increased international stocks, and reduced demand from dairy farmers. As a result, many farmers were forced to take cereals to market at low spot prices in 2009/10 to make way for the crops harvested in 2010.

Most cereal farmers have increased crop on hand at the start of 2010/11. Whilst there is short-term uncertainty and weekly volatility in feed grain markets, farmers are hopeful that the positive outlook for milk prices will increase demand for grain feedstuffs.

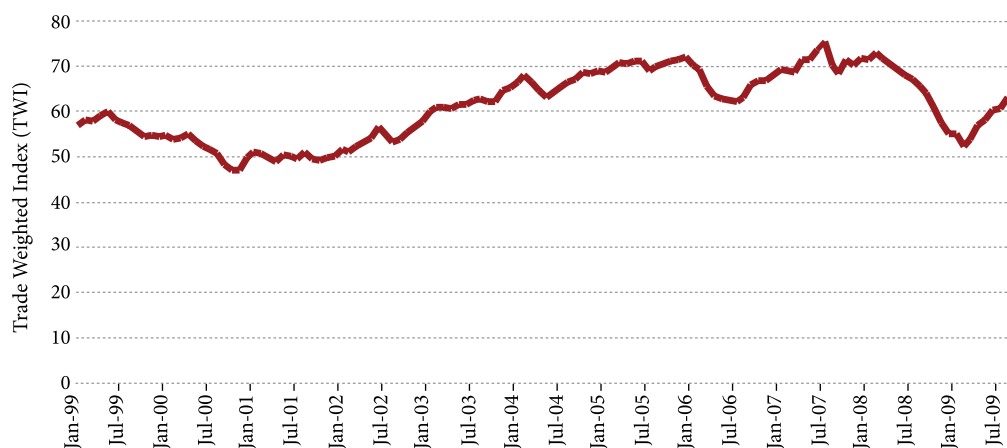
EXCHANGE RATE

Favourable exchange rates against the United States dollar and Japanese yen in the early months of 2009 helped to deliver significantly higher export returns for early apple sales into Asia and gold kiwifruit into Japan.

However, the buffering effect of a weaker New Zealand dollar against reduced prices in many overseas markets was short-lived. The dollar strengthened considerably from June 2009 against the currencies of our main trading nations, impacting on grower returns.

The Euro and UK pound remain very weak against the New Zealand dollar, reflecting the weak performance of European economies. Any significant increases in market prices to compensate for the high exchange rate will likely be resisted by retailers. Export returns for wine, pipfruit and kiwifruit sold in these markets during 2010/11

FIGURE 5.1: TRENDS IN NEW ZEALAND'S TRADE WEIGHTED INDEX¹



Note

¹ The Trade Weighted Index (TWI) is the weighted value of the New Zealand dollar in relation to the currencies of our major trading partners. Data shown are monthly TWI values from January 1999 to August 2010.

Source

Reserve Bank of New Zealand.

are expected to be impacted, particularly where little or no forward exchange rate options are undertaken.

CROP PERFORMANCE

KIWIFRUIT

Good growing conditions in the Bay of Plenty during the 2008/09 growing season resulted in high spring crop estimations so growers thinned excess flowers and small fruit to enhance fruit size at harvest. A severe hailstorm in May 2009 significantly impacted some un-harvested orchards.

Overall, average production per hectare fell by 2 to 5 percent in 2009/10 from the previous season's record high levels.

The cold winter of 2009 induced good bud break. However, the main period of flowering and fruit set in October was much colder than average. Rainfall was 40 percent of normal levels for the six months to April 2010, resulting in a significant period of drought in the Bay of Plenty. As a result, in 2010/11 average production per hectare for green kiwifruit is expected to fall by 2 percent compared with 2009/10, and by 5 percent for gold kiwifruit. Average fruit size is expected to be lower, with higher dry matter levels.

PIPFRUIT

The 2008/09 growing season was one of the best in both the Hawke's Bay and Nelson regions for many years. An absence of damaging spring frosts and hail events, along with favourable fruit set and fruit finish conditions resulted in good brix levels, good colour, high gross yields and good export recovery rates.

The 2009/10 growing season in both Hawke's Bay and Nelson was extremely challenging with mixed results. Unfavourable weather conditions during spring 2009 (including hail damage in the Hawke's Bay region in late October 2009), and an increased presence of pests and diseases, significantly reduced gross yields and export recovery rates for many varieties.

VITICULTURE

Growing conditions in Marlborough in 2009/10 were generally good following delayed flowering. In Hawke's Bay, cooler weather in December with a significant rain event at flowering resulted in a low fruit set and subsequently decreased yields across the region. Favourable conditions during ripening delivered excellent quality for all varieties.

Growers have been limiting yields from their vines, using pruning as their main tool for achieving their yield caps but also shoot thinning on some varieties. Growers are hoping for average yields to increase slightly in 2010/11 with some easing in yield caps by wineries.



ARABLE

Cereals thrived during a mild 2009 winter and warm, dry spring conditions in Canterbury. Crops were able to be planted on time and disease pressure was low. Grass seed yields improved and brassica, vegetables, carrot and radish seed yields were at average levels. Irrigation systems were more efficient with very few drying north-westerly winds.

Cereal and small seed yields are expected to return to average levels in 2010/11.

OPERATING COSTS

Good yields and export recovery rates generated cost efficiencies for pipfruit growers in 2009. In early winter 2009, growers were still optimistic about good market returns so many spent large on deferred repairs and maintenance. An increase in expenditure on weed and pest control was due to the wet spring in 2009. Higher costs of production in the Nelson region compared with Hawke's Bay are linked to the increasing proportion of intensive orchard systems in Nelson.

The additional thinning required on the 2010 kiwifruit crop to manage seasonal conditions increased labour expenditure.

Reduced fertiliser prices assisted arable farmers to reduce working expenses in 2009/10. Farmers are continuing to focus on nutrient budgeting to optimise nutrient inputs, in order to manage costs and increase efficiencies.

Wine grape growers responded to lower grape income in 2009/10 by cutting back on wages, reducing inputs and deferring unnecessary expenditure. Labour inputs are being replaced by contract machine work such as the use of stripping machines to mechanically remove the previous season's unwanted canes. In both the Marlborough and Hawke's Bay regions, vineyard working expenses per hectare dropped to an average of \$8500 per hectare, a level similar to three years ago (2006/07).

Some growers have been able to take advantage of lower interest rates when re-fixing term debt while others have chosen to ride the floating rate for a period of time.

KIWIFRUIT

Profitability of the Bay of Plenty kiwifruit orchard model improved in 2009/10, driven by higher returns for gold kiwifruit. Growers expect similar profit levels in 2010/11, with price improvements compensating for the drop in yield.

SECTORAL AND REGIONAL VARIATION IN OUTCOMES

Kiwifruit growers are excited about the potential for new varieties to continue the growth of the industry in coming years.

PIPFruit

Variety mix had a major influence on the financial outcome of pipfruit businesses in 2009. The orchard model representing the pipfruit sector in Hawke's Bay achieved a level of profitability similar to recent years. However, most growers in the Nelson region would have struggled to cover costs of production – due to a combination of poor market returns from varieties mainly sold in Europe, and increased operating costs.

Growers are expecting pipfruit prices to improve in 2010. Because of the reduced yield and packout, the profitability of Hawke's Bay orchards is expected to only improve slightly, whilst Nelson orchards are expected to make a small loss. Development and capital expenditure are expected to drop back significantly as growers take stock of their redevelopment plans.

VITICULTURE

Vineyard profitability fell significantly in 2009/10 on the back of low grape prices. Growers in Hawke's Bay were also impacted by reduced yields due to poor weather conditions at flowering. New plantings have all but ceased.

There is a lot of uncertainty amongst grape growers about the year ahead (2010/11). Growers believe they have cut their costs back as far as they can without impacting severely on vineyard health and have deferred all non-essential repairs and maintenance. There is an increasing reliance on income sourced from off-vineyard wages, other businesses and investments. Many in the industry expect that it will take a further two to three years to achieve better alignment between grape supply and market demand.

ARABLE

Profitability improved slightly for Canterbury arable farmers in 2009/10. However, much of the increase comes from crop on hand rather than cash in the bank. Farmer morale is low due to the poor cereal market and limited grass and clover seed growing opportunities for 2010/11. There is persistent land use pressure on arable farmers from other industries, particularly dairy.



TABLE 5.1: KEY PARAMETERS AND FINANCIAL RESULTS FOR HORTICULTURE AND ARABLE MODELS, 2009/10¹ AND 2010/11¹ BUDGET

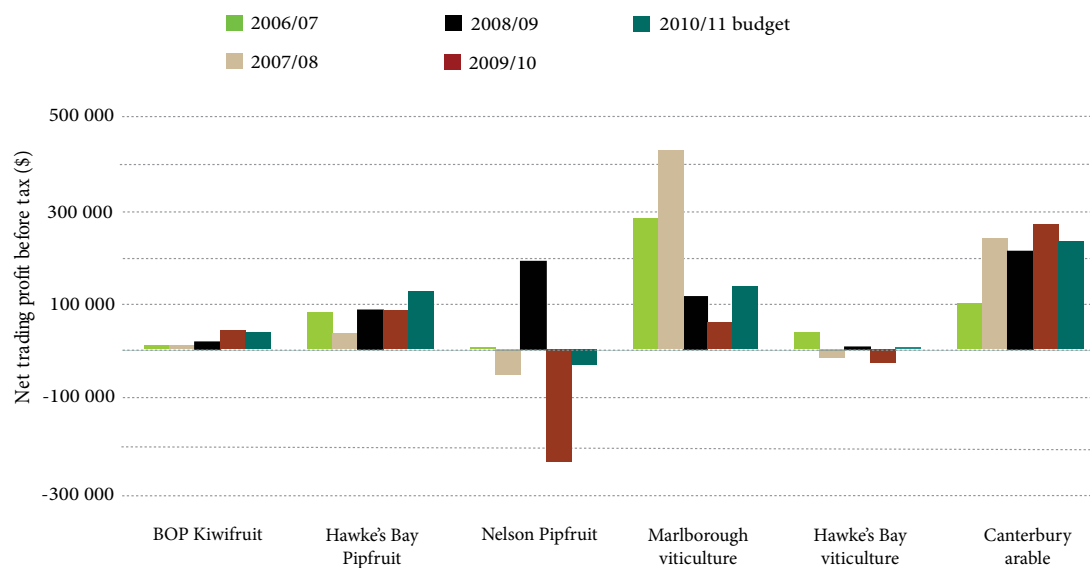
MODEL	BOP KIWIFRUIT	HAWKE'S BAY PIPFRUIT	NELSON PIPFRUIT	MARLBOROUGH VITICULTURE	HAWKE'S BAY VITICULTURE	CANTERBURY ARABLE
YEAR END	MARCH	DECEMBER	DECEMBER	JUNE	JUNE	JUNE
Effective area (ha)	5	22	27	30	10	300
Total production 2009/10	44 130 trays ²	68 135 cartons ³	80 500 cartons ³	285 tonnes	73 tonnes	...
NET CASH INCOME (\$)						
2009/10	208 580	1 130 050	1 208 100	417 680	98 965	1 041 300
2010/11 budget	205 830	1 034 250	1 376 660	479 495	129 070	1 012 500
ORCHARD/FARM WORKING EXPENSES (\$)						
2009/10	141 800	952 850	1 284 740	257 550	82 320	566 000
2010/11 budget	139 680	820 400	1 267 195	251 190	82 990	564 700
CASH OPERATING SURPLUS⁴						
2009/10	66 780	177 200	-76 640	160 130	16 645	475 300
2010/11 budget	66 150	213 850	109 465	228 305	46 080	447 800
CASH OPERATING SURPLUS (HA)						
2009/10	13 356	8 054	-2 839	5 338	1 700	1 585
2010/11 budget	13 230	9 720	4 054	7 610	4 608	1 492
ORCHARD/FARM PROFIT BEFORE TAX (\$)						
2009/10	37 120	78 700	-226 540	55 730	-28 055	254 700
2010/11 budget	36 310	118 600	-28 335	127 405	4 180	218 400
ORCHARD/FARM SURPLUS FOR REINVESTMENT (\$)⁵						
2009/10	-1 250	31 700	-228 640	54 530	-6 855	116 300
2010/11 budget	-2 460	68 850	-38 335	126 405	22 680	159 200
RATIOS 2009/10 (%)						
Working expenses/net cash income	68	84	106	62	83	54
Equity ratio ⁶	86	66	64	88	79	83
Return on equity ⁷	-0.7	2.6	-16.4	-0.4	-6.1	2.6
Return on assets ⁸	0.7	5.8	-6.3	0.7	-3.2	3.6

Notes

- 1 The pipfruit models use a December year end. Hence data for 2009/10 and 2010/11 for the pipfruit models refer to the years ending December 2009 and 2010, respectively.
- 2 A tray contains approximately 3.6 kilograms of kiwifruit.
- 3 Carton refers to a tray carton equivalent (TCE) which is a measure of apple and pear weight. A TCE is defined as 18.6 kg packed weight which equates to 18.0 kg sale weight.
- 4 Net cash income less orchard/vineyard/farm working expenses.
- 5 Orchard/vineyard/farm surplus for reinvestment represents cash available from the orchard business, after meeting living costs, which is available for investment on the orchard/vineyard/farm or for principal repayments. It is calculated as discretionary cash less off-orchard income and drawings.
- 6 Ratio of orchard/vineyard/farm assets less debt (equity) to total assets.
- 7 Economic orchard/vineyard/farm surplus less interest and lease as a percentage of equity.
- 8 Economic orchard/vineyard/farm surplus divided by total assets.

Symbol

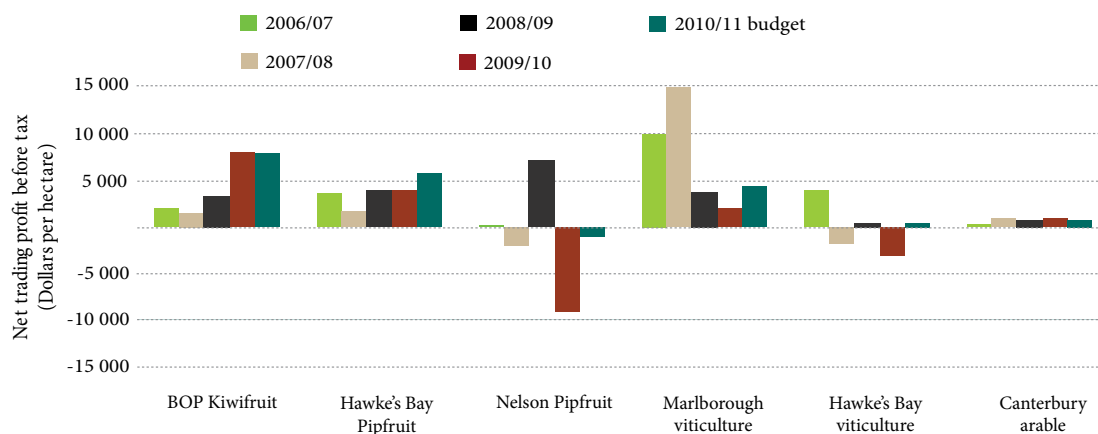
... Not applicable.

FIGURE 5.2: PROFIT BEFORE TAX PER BUSINESS UNIT, 2006/07¹ TO 2010/11¹ BUDGET**Source**

MAF Monitoring Reports; 2007 to 2010.

Note

¹ The pipfruit models use a December year end. Hence data for 2006/07 to 2010/11 budget for the pipfruit models refer to the years ending December 2006 to 2010, respectively.

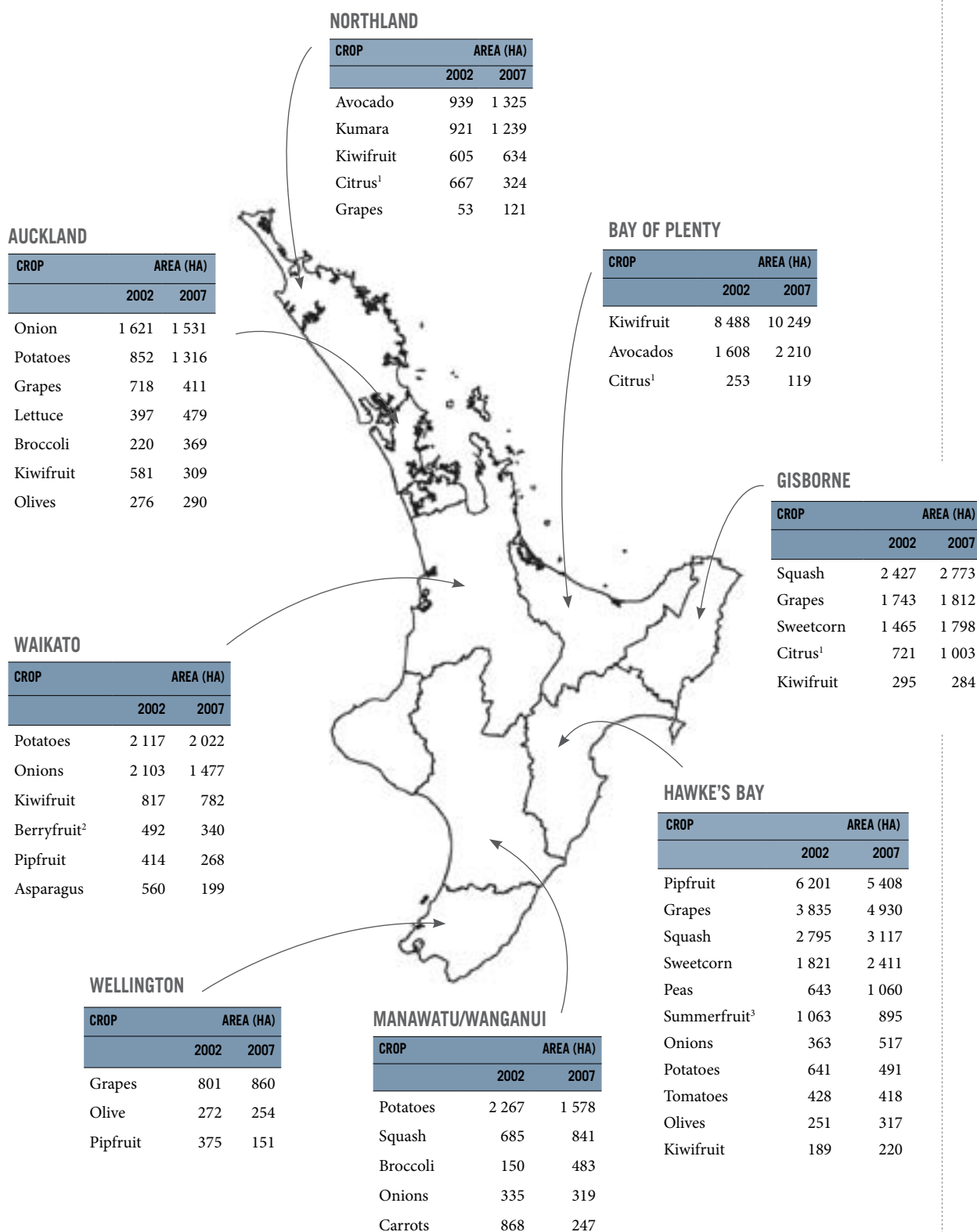
FIGURE 5.3: PROFIT BEFORE TAX PER PLANTED HECTARE, 2006/07¹ TO 2010/11¹ BUDGET**Source**

MAF Monitoring Reports; 2007 to 2010.

Note

¹ The pipfruit models use a December year end. Hence data for 2006/07 to 2010/11 budget for the pipfruit models refer to the years ending December 2006 to 2010, respectively.

FIGURE 5.4: NORTH ISLAND HORTICULTURE STATISTICS, 2002 AND 2007

**Source**

Agricultural Production Statistics, Statistics New Zealand.

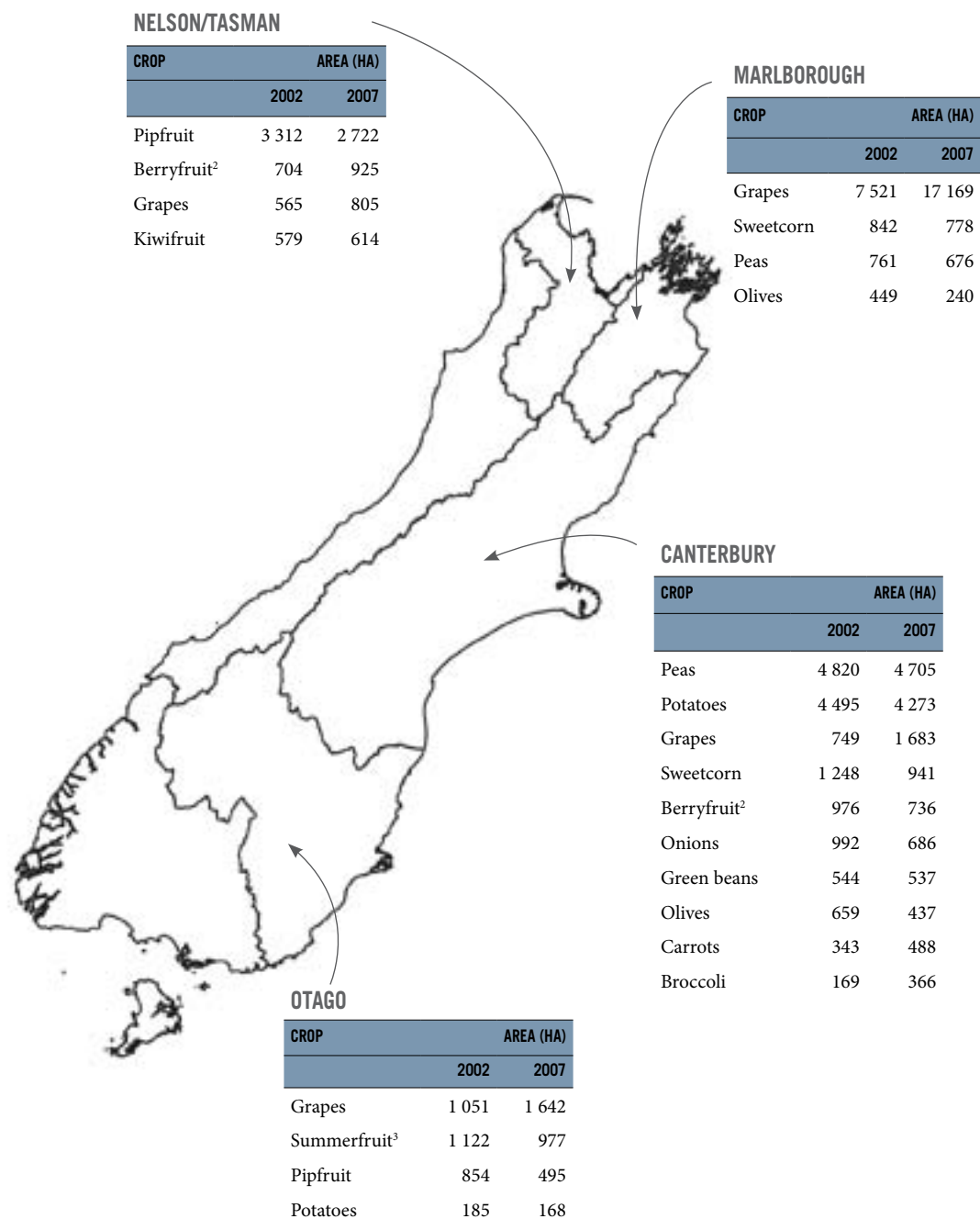
Notes

1 Citrus includes: oranges, grapefruit/goldfruit, lemons, mandarins and tangelos.

2 Berryfruit includes: blackcurrants, blueberries, boysenberries, raspberries and strawberries.

3 Summerfruit includes: peaches, apricots, nectarines, cherries and plums.

FIGURE 5.5: SOUTH ISLAND HORTICULTURE STATISTICS, 2002 AND 2007

**Source**

Agricultural Production Statistics, Statistics New Zealand.

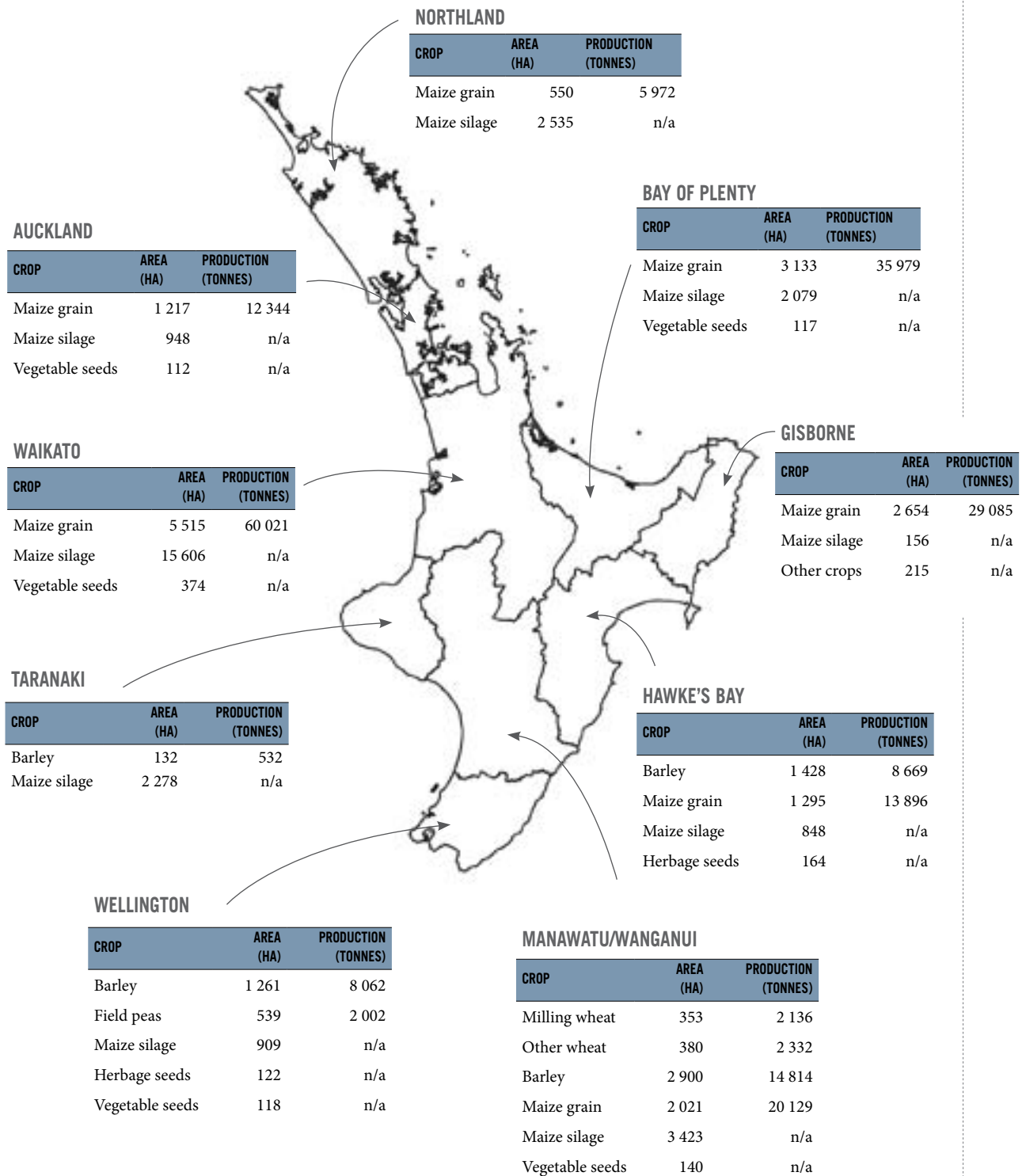
Notes

1 Citrus includes: oranges, grapefruit/goldfruit, lemons, mandarins and tangelos.

2 Berryfruit includes: blackcurrants, blueberries, boysenberries, raspberries and strawberries.

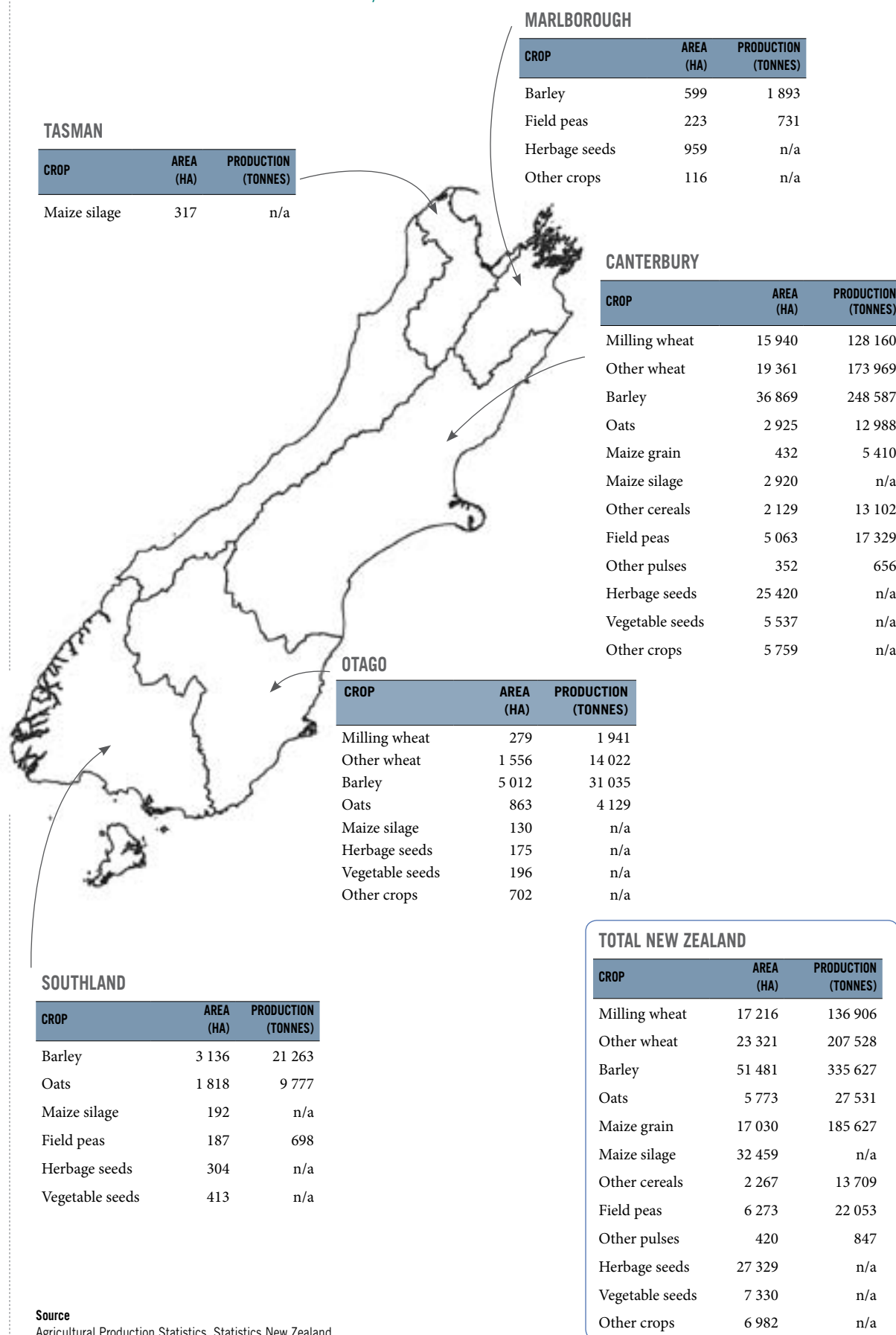
3 Summerfruit includes: peaches, apricots, nectarines, cherries and plums.

FIGURE 5.6: NORTH ISLAND ARABLE STATISTICS, JUNE 2007

**Source**

Agricultural Production Statistics, Statistics New Zealand.

FIGURE 5.7: SOUTH ISLAND ARABLE STATISTICS, JUNE 2007



APPENDIX 1: FARM MONITORING TEAM

FARM MONITORING PROGRAMME MANAGER

Gemma Birse, MAF Policy, Wellington Gemma.Birse@maf.govt.nz

PUBLICATION EDITORS

Gillian Mangin, MAF Policy, Hastings Gillian.Mangin@maf.govt.nz
Annette Carey, MAF Policy, Hastings Annette.Carey@maf.govt.nz
Gemma Birse, MAF Policy, Wellington Gemma.Birse@maf.govt.nz

MODEL CONTROLLERS

DAIRY	CONTACT	EMAIL
Northland	Phil Journeaux	Phil.Journeaux@maf.govt.nz
Waikato/Bay of Plenty	Phil Journeaux	Phil.Journeaux@maf.govt.nz
Taranaki	Loretta Dobbs	Loretta.Dobbs@maf.govt.nz
Lower North Island	Gillian Mangin	Gillian.Mangin@maf.govt.nz
Canterbury	Murray Doak	Murray.Doak@maf.govt.nz
Southland	Trish Burborough	Trish.Burborough@maf.govt.nz
West Coast – commentary	Murray Doak	Murray.Doak@maf.govt.nz
DEER	CONTACT	EMAIL
North Island	Trish Burborough	Trish.Burborough@maf.govt.nz
South Island	Angela Bell	Angela.Bell@maf.govt.nz
SHEEP AND BEEF	CONTACT	EMAIL
Northland	Phil Journeaux	Phil.Journeaux@maf.govt.nz
Waikato/Bay of Plenty	Tony Schischka	Tony.Schischka@maf.govt.nz
Central North Island	Phil Journeaux	Phil.Journeaux@maf.govt.nz
Gisborne Hill Country	Angela Bell	Angela.Bell@maf.govt.nz
Hawke's Bay/Wairarapa	Gillian Mangin	Gillian.Mangin@maf.govt.nz
Western Lower North Island	Kerri Ball	Kerri.Ball@maf.govt.nz
South Island high country	Trish Burborough	Trish.Burborough@maf.govt.nz
Canterbury/Marlborough hill country	John Greer	John.Greer@maf.govt.nz
Canterbury/Marlborough breeding and finishing	John Greer	John.Greer@maf.govt.nz
Otago dry hill	Trish Burborough	Trish.Burborough@maf.govt.nz
Southland/South Otago hill country	Trish Burborough	Trish.Burborough@maf.govt.nz
Southland/South Otago intensive	Trish Burborough	Trish.Burborough@maf.govt.nz
HORTICULTURE AND ARABLE	CONTACT	EMAIL
Viticulture	Nick Dalgety	Nick.Dalgety@maf.govt.nz
Pipfruit	Annette Carey	Annette.Carey@maf.govt.nz
Kiwifruit	Tony Schischka	Tony.Schischka@maf.govt.nz
Arable	Murray Doak	Murray.Doak@maf.govt.nz