

MINISTRY OF AGRICULTURE AND FORESTRY

FARM MONITORING OVERVIEW





Ministry of Agriculture and Forestry Te Manatū Ahuwhenua, Ngāherehere



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Copies of individual regional models are available on MAF's website and can be downloaded in a printable PDF format from www.maf.govt.nz/mafnet/rural-nz/statistics-and-forecasts/farm-monitoring/

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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 2011, the dairy, deer and sheep and beef model budgets and supporting commentary were released on the Ministry of Agriculture and Forestry's (MAF's) website. The *Farm Monitoring Overview 2011* outlines the year just been and the year ahead for the pastoral sector and provides information on trends and issues facing the sector.

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

The pastoral sector experienced a significant lift in profitability in 2010/11 which is enabling farmers to restore bank balances. Over time, farm inputs are expected to return to maintenance levels and there will be more investment in development and capital to lift productivity.

The improved profitability in 2010/11 was a good outcome after a very variable year weather-wise. Drought affected many areas in autumn 2010 only to be followed by a cold, wet winter. Spring was also generally wet and cold with a significant snow storm in mid-September in the middle of lambing affecting Southland, south Otago and the Central North Island with particular severity. Peak milk production on dairy farms was also compromised in many areas.

Then in late spring and early summer conditions quickly became very dry in the upper North Island causing drought to be declared in Northland, Waikato region and Ruapehu district in late 2010. Rainfall in summer 2011 gradually improved pasture growth rates leading into a very mild late summer and autumn with generally excellent autumn growth conditions. Sheep and beef farmers finished stock to higher weights to take advantage of improved prices. Dairy farmers were able to milk part of their herd for longer than normal to make up for production lost earlier in the season.

INCOMES

Dairy incomes lifted significantly in 2010/11 despite a variable year climatically in many parts of the country. Nationally, dairy production increased and, coupled with a record payout of \$7.50 per kilogram of milksolids, lifted gross incomes by 23 percent. This continues a trend of improving returns since the low of 2008/09.

Dairy farmers are budgeting on a slightly lower payout in 2011/12, but with improved production are expecting net cash income to be similar to 2010/11. Debt reduction remains a priority for any surplus cash.

Better product prices also increased sheep and beef farm profits to record levels in 2010/11. In the national sheep and beef model, farm profit before tax more than doubled to \$148 000 – the highest level for ten years.

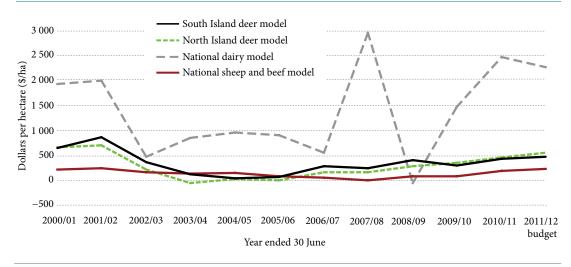
Although the national sheep and beef model's lambing was down 10 percentage points (from 129 percent in 2009/10 to 119 percent in 2010/11), this disappointing result was more than offset by the better prices for lamb (up 37 percent), wool (up 56 percent) and beef.

Sheep and beef farmers are budgeting for an even better 2011/12 income with increased lamb sales after a generally very favourable 2011 autumn mating season. Farmers are predicting prices to be

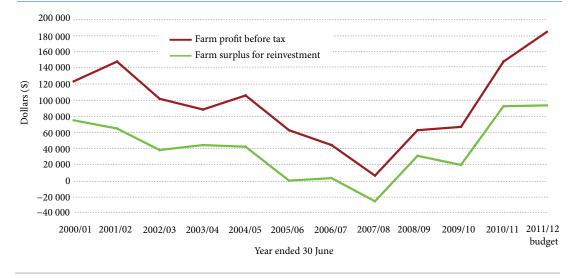




>>> FIGURE 1.1: FARM PROFIT BEFORE TAX PER HECTARE FOR THE DEER, DAIRY AND SHEEP AND BEEF FARM MODELS, 2000/01–2011/12 BUDGET



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



almost as good as in 2010/11, while aware the increasing strength of the New Zealand dollar may undermine this.

Venison and velvet returns at above five-year-average levels enabled deer farmers to achieve a good financial result in 2010/11. Once again, weather conditions had a significant impact on North Island deer farms with the dry autumn and wet spring in 2010 reducing the average fawning rate to just 80 percent. Many North Island farmers are rebuilding stock numbers and this contributed to the farm profit before tax increasing 29 percent in the North Island deer model.

The South Island deer model largely maintained productivity despite a cold spring. However, finishing animals were slower than usual to achieve slaughter weights. Farm profit before tax increased 45 percent primarily due to the higher average venison prices and lower interest payments.

The more stable income in the past few years has deer farmers feeling positive. Improved venison prices are again expected in 2011/12 while velvet prices are expected to be stable. Farm profit before tax is expected to improve 22 percent and 10 percent respectively on North and South Island deer farm models.



SHEEP AND BEEF NATIONAL MODEL DAIRY NATIONAL MODEL 2009/10 2010/11 2011/12 2009/10 2010/11 2011/12 BUDGET BUDGET National model hectares 771 772 772 138 141143 National model stock units 4716 4729 4 9 2 8 404 414 415 or cows milked Net cash income (\$) 362 550 461 267 512 462 931 703 1 146 118 1 140 936 Farm working expenses (\$) 215 082 235 061 255 800 492 162 576 403 593 914 Cash operating surplus (\$) 147 468 226 206 256 662 439 541 569 715 547 022 Farm profit before tax (\$) 66 587 345 352 148 148 184 209 202 800 322 893 Farm surplus for reinvestment¹ (\$) 19 251 92 749 93 056 134 935 227 008 164 064 4 514 073 4 602 914 Farm assets (\$) 4 726 181 6 687 831 6 762 067 6 853 655 Farm debt (\$) 688 634 681 703 2 711 743 2 778 735 2717194 722 164 Equity ratio²(%) 84.0 85.2 59.5 58.9 60.4 85.4 Rate of return on equity³ (%) 2.9 11.5 10.3 -0.22.0 8.0

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

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.

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

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

5

EXPENDITURE

Spending on many dairy farms remained quite tight despite the increase in dairy income. Farmers are likely to continue with this cautious approach until some time into the 2011/12 season when farmers see how the season – and payout – is progressing.

Nevertheless, dairy industry morale and optimism has improved significantly and many farmers are now concentrating on debt reduction and looking to further boost productivity. The mild autumn saw dairy farms going into winter 2011 with good pasture covers and cows in good condition.

	NORTHLAND	WAIKATO/ Bay of plenty	TARANAKI	LOWER North Island	CANTERBURY	SOUTHLAND
Effective area (hectares)	121	112	96	135	210	192
Cows wintered (head)	288	328	286	380	750	562
Cows milked 15th December (head)	282	322	270	370	711	529
Total milksolids (kg)	79 013	104 000	92 600	119 000	283 080	198 000
Milksolids per cow milked (kg per cow)	280	323	343	322	398	374
FARM PROFIT BEFORE TAX (\$)						
2010/11	188 534	246 425	278 614	293 051	605 039	478 610
2011/12 budget	141 908	255 198	253 638	254 547	512 640	481 050
2010/11 (\$ PER KILOGRAM OF MILKSOLIDS)						
Cash operating surplus ¹	3.91	3.87	4.30	3.87	3.67	4.12
Farm profit before tax	2.39	2.37	3.01	2.46	2.14	2.42
Farm surplus for reinvestment ²	1.53	1.70	1.17	1.49	1.47	1.64
Farm working expenses plus interest	5.38	5.04	4.61	5.25	5.53	5.42
2011/12 BUDGET (\$ PER KILOGRAM OF MILKSOLIDS)						
Cash operating surplus ¹	3.35	3.87	3.97	3.44	3.27	3.82
Farm profit before tax	1.76	2.39	2.70	2.10	1.75	2.31
Farm surplus for reinvestment ²	0.64	1.06	0.98	1.00	0.93	1.55
Farm working expenses plus interest	5.75	4.79	4.69	5.35	5.48	5.04
2010/11 ECONOMIC FARM SURPLUS (\$)						
Per hectare	1 956	2 567	3 064	2 539	4 336	3 755
Per cow	839	893	1090	926	1281	1363
Per kilogram of milksolids	3.00	2.76	3.18	2.88	3.22	3.64
RATIOS 2010/11 (%)						
Equity ratio ³	42	66	72	69	51	52
Return on equity ⁴	10.7	4.7	5.2	4.9	8.9	8.4
Return on assets ⁵	8.6	5.5	5.7	5.5	8.0	7.9

>>> TABLE 1.2: COMPARISON OF DAIRY MODEL FARM RESULTS, 2010/11 AND 2011/12 BUDGET

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.

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.

Improved incomes on sheep and beef farms in 2010/11 resulted in farmers increasing spending later in the season on productive inputs, particularly fertiliser, putting agricultural contractors under pressure in some areas. Farmers also reduced debt through principal repayments and lowering overdrafts. While some farmers took advantage of the good year to purchase capital equipment such as tractors and vehicles many are likely to wait and see how the 2011/12 season unfolds before committing to significant capital expenditure.

Sheep and beef farmers are still conservative about spending because they feel there has been no substantial change to industry structure or strategies, and they are very conscious that their returns can fall equally as quickly as they rose.

	NORTHLAND	WAIKATO/ Bay of plenty	WESTERN LOWER North Island	CANTERBURY/ Marlborough	SOUTHLAND/ South otago
Effective area (hectares)	314	300	368	475	234
Stock units (at 1 July 2010)	2 883	2 932	3 987	4 552	3 060
Sheep to cattle ratio (at 1 July 2010)	25:75	36:64	60:40	68:32	96:04
Lambing percentage (2010)	124	110	112	136	122
FARM PROFIT BEFORE TAX (\$)					
2010/11	54 567	121 947	141 289	111 496	159 223
2011/12 budget	86 804	122 507	201 075	138 361	216 029
2010/11 (\$ PER STOCK UNIT)					
Cash operating surplus ¹	32.58	64.35	61.91	51.54	64.94
Farm profit before tax	18.93	41.59	65.44	24.49	52.04
Farm surplus for reinvestment ²	7.80	27.46	22.03	15.36	24.84
2011/12 BUDGET (\$ PER STOCK UNIT)					
Cash operating surplus ¹	38.17	55.13	79.47	54.55	80.45
Farm profit before tax	30.10	40.62	46.65	28.58	62.09
Farm surplus for reinvestment ²	6.61	9.72	33.17	14.88	36.35
2010/11 ECONOMIC FARM SURPLUS (\$)					
Per hectare	82	315	449	285	535
Per stock unit	8.99	32.28	41.43	29.78	40.91
RATIOS 2010/11 (%)					
Equity ratio ³	84	86	81	82	88
Return on equity ⁴	0.2	1.8	1.5	0.7	2.5
Return on assets ⁵	1.3	2.7	3.0	2.2	3.1

>>> TABLE 1.3: COMPARISON OF INTENSIVE SHEEP AND BEEF MODEL FARM RESULTS, 2010/11 AND 2011/12 BUDGET

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.

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 1.4: COMPARISON OF EXTENSIVE SHEEP AND BEEF MODEL FARM RESULTS, 2010/11 AND 2011/12 BUDGET

	CENTRAL North Island	GISBORNE	HAWKE'S BAY WAIRARAPA	SOUTH ISLAND High Country	CANTERBURY/ Marlborough	OTAGO Dry Hill	SOUTHLAND/ South Otago
Effective area (hectares)	635	829	570	10 212	1397	2000	723
Stock units (at 1 July 2010)	5 408	7 569	4 928	10 742	5 268	5 913	6 419
Sheep to cattle ratio (at 1 July 2010)	63:37	55:45	66:34	77:23	62:38	85:15	85:15
Lambing percentage (2010)	108	134	114	81	116	122	121
FARM PROFIT BEFORE TAX (\$)							
2010/11	148 172	190 575	128 779	181 800	108 346	271 935	314 323
2011/12 budget	150 927	203 522	174 498	286 176	148 804	317 912	373 125
2010/11 (\$ PER STOCK UNIT)							
Cash operating surplus ¹	41.60	35.15	43.23	36.38	33.45	59.25	59.43
Farm profit before tax	27.40	25.18	26.13	16.92	20.57	45.99	48.97
Farm surplus for reinvestment ²	17.14	18.60	13.61	16.50	7.15	36.91	33.67
2011/12 BUDGET (\$ PER STOCK UNIT)							
Cash operating surplus ¹	38.18	35.02	49.46	39.28	40.76	55.05	63.08
Farm profit before tax	28.54	26.61	33.57	27.06	26.48	53.00	54.11
Farm surplus for reinvestment ²	11.41	12.72	16.20	15.77	15.14	16.15	37.01
2010/11 ECONOMIC FARM SURPLUS (\$)							
Per hectare	194	221	210	23	69	123	394
Per stock unit	22.79	24.19	24.30	21.76	18.35	41.50	44.38
RATIOS 2010/11 (%)							
Equity ratio ³	83	86	79	90	84	86	89
Return on equity ⁴	2.8	2.7	1.7	1.2	0.7	5.5	5.0
Return on assets ⁵	3.5	3.7	2.9	1.9	1.8	5.8	5.4

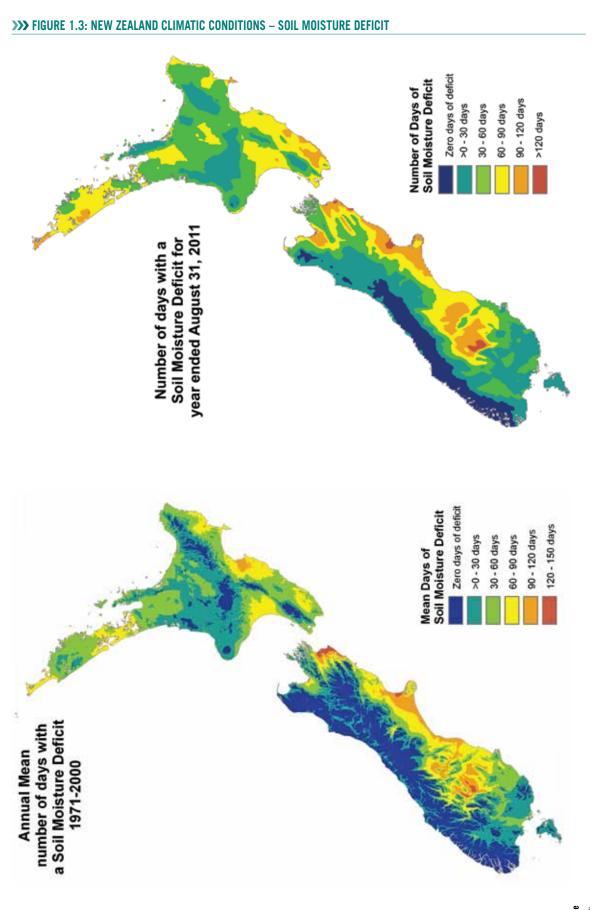
Notes

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.

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.

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>>> FIGURE 1.4: NORTH ISLAND PASTORAL PRODUCTION STATISTICS, 2009 AND 2010

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	NUMBER			
STOCK TYPE	2009	2010		
Dairy cows and heifers in milk or calf	68 420	72 276		
Beef cattle	135 008	133 998		
Sheep	257 248	235 414		
Pigs	c	c		
Deer	s	s		

WAIKATO

NUMBER			
STOCK TYPE	2009	2010	
Dairy cows and heifers in milk or calf	1 432 560	1 422 958	
Beef cattle	598 002	535 350	
Sheep	2 101 906	1 982 414	
Pigs	41 245	48 304	
Deer	97 508	83 952	

TARANAKI

NUMBER		
STOCK TYPE	2009	2010
Dairy cows and heifers in milk or calf	506 603	523 332
Beef cattle	126 336	133 687
Sheep	537 850	583 467
Pigs	16 725	15 850
Deer	4 296	4 468

MANAWATU/WANGANUI

	NUMB	ER	•
STOCK TYPE	2009	2010	
Dairy cows and heifers in milk or calf	323 026	384 202	
Beef cattle	609 701	626 533	
Sheep	5 767 131	5 796 023	
Pigs	29 566	31 735	
Deer	76 299	75 437	

Sources

Statistics New Zealand Agricultural Production Survey 2009. Statistics New Zealand Agriculture Production Survey 2010.

Symbol

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	NUMB	ER
STOCK TYPE	2009	2010
Dairy cows and heifers in milk or calf	302 938	273 713
Beef cattle	485 231	465 169
Sheep	429 401	430 740
Pigs	6 381	2 902
Pigs Deer	5 596	6 663
		۰. د چنز
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BAY OF PLENTY

	NUMBER				
STOCK TYPE	2009	2010			
Dairy cows and heifers in milk or calf	225 465	234 027			
Beef cattle	109 541	82 840			
Sheep	331 049	347 973			
Pigs	7 877	6 574			
Deer	46 053	44 893			

GISBORNE

	NUMBER				
STOCK TYPE	2009	2010			
Dairy cows and heifers in milk or calf	739	2 693			
Beef cattle	249 657	262 073			
Sheep	1 548 344	1 589 785			
Pigs	c	s			
Deer	22 545	15 093			

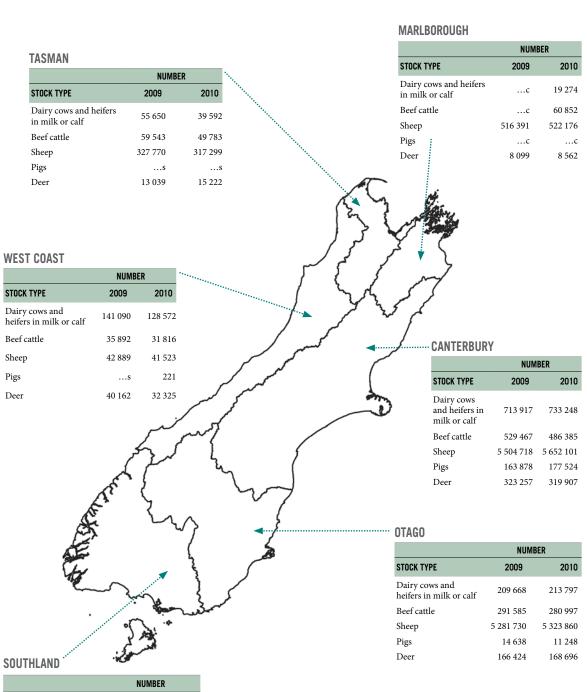
HAWKE'S BAY

NUMBER					
	STOCK TYPE	2009	2010		
	Dairy cows and heifers in milk or calf	54 066	65 691		
	Beef cattle	436 207	454 204		
	Sheep	3 445 616	3 429 382		
	Pigs	8 731	6 723		
	Deer	73 887	66 573		

WELLINGTON

	NUMBER				
STOCK TYPE	2009	2010			
Dairy cows and heifers in milk or calf	63 402	60 678			
Beef cattle	146 794	143 398			
Sheep	1 659 327	1 633 879			
Pigs	18 649	0			
Deer	16 062	16 062			

>>> FIGURE 1.5: SOUTH ISLAND PASTORAL PRODUCTION STATISTICS, 2009 AND 2010



TOTAL NEW ZEALAND

	NUMBER				
STOCK TYPE	2009	2010			
Dairy cows and heifers in milk or calf	4 557 201	4 641 811			
Beef cattle	4 027 891	3 933 242			
Sheep	32 307 576	32 483 371			
Pigs	307 690	302 058			
Deer	1 135 515	1 106 585			

NUMBER				
2009	2010			
459 657	467 758			
214 927	186 157			
4 556 206	4 597 335			
c	977			
242 288	245 975			
	2009 459 657 214 927 4 556 206 c			

Sources

Statistics New Zealand Agricultural Production Survey 2009. Statistics New Zealand Agriculture Production Survey 2010.

Symbol

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DAIRY SECTOR



NATIONAL DAIRY MODEL

The national dairy budget depicted in the following pages 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 2010 Livestock Improvement Corporation survey. The weightings, on the model basis, are as follows:

 Northland 	7.5%	Waikato/Bay of Plenty	39.6%
› Taranaki	11.5%	Lower North Island	9.9%
> Canterbury	17.4%	Southland	14.0%

KEY POINTS

2010/11

- > 2010/11 was a variable year climatically, with a wet and cold spring, a drought in the upper North Island through the late spring/early summer, followed by a very mild later summer/autumn.
- > Despite the variable weather, milksolids production nationally was up approximately 4 percent.
- An improving milk payout throughout the season, to \$7.50 per kilogram of milksolids, coupled with the increased production saw milk income lift by 20 percent compared with 2009/10. With the addition of increased cattle returns and the first full year of dividend payments, net cash income at \$1.146 million rose 23 percent in 2010/11 compared with the previous year.
- Farm working expenditure increased by 17 percent compared with 2009/10, largely due to expenditure on bought-in feed and general price increases across most items. On a per kilogram of milksolids basis, farm working expenditure increased from \$3.50 in 2009/10 to \$3.93 in 2010/11.
- The model's profitability improved markedly compared with 2009/10, itself an improvement over 2008/09. Farm profit before tax increased 70 percent, to \$345 400 in 2010/11, and the farm surplus for reinvestment increased to \$227 000, up 68 percent from 2009/10. Many farmers will likely face an increased tax liability as a result of the improved profitability.
- > The improved profitability was very welcome, with debt repayment and further on-farm spending a priority for many farmers.

2011/12

- > The very mild autumn has seen most farms go into the 2011 winter with good pasture covers and cows in good condition.
- Farmers are buoyed by Fonterra's initial 2011/12 forecast milk price payout of \$6.75 per kilogram of milksolids, plus a dividend of up to 30 cents per share. Although this payout is lower than 2010/11, an expectation of a 3 percent increase in production saw the budgeted net cash income for the national model on a par with 2010/11.
- > Farm working expenditure is budgeted to increase 3 percent to \$593 900; while farmers remain cautious on spending, they expect unit price increases on most items.
- Farm profit before tax is predicted to be down 7 percent on 2010/11 to \$322 900, while farm profit after tax at \$199 200 is expected to be down 27 percent, due to farmers budgeting for much higher tax payments flowing through as a result of increased profitability in 2010/11.
- > Many farmers are again budgeting for further debt reduction, and overall, the model is budgeted to finish the year with a cash surplus of \$45 100 and a farm surplus for reinvestment of \$164 100.
- > While optimism within the industry has improved in line with the increased forecast payout, farmers are still cautious given recent payout fluctuations.

YEAR ENDED 30 JUNE	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12 BUDGET
Total milksolids revenue/cow (\$)	1 488	2538	1 788	2 160	2 532	2 504
Kg milksolids/ha	1 034	992	1 014	1 020	1 040	1 060
Kg milksolids/cow milked	361	342	349	348	354	365
Milksolids advance to end June (\$/kg)	3.65	6.62	4.15	5.15	6.20	5.60
Milksolids deferred payment (\$/kg)	0.50	0.81	1.00	1.05	0.95	1.30
Cattle income (\$)	40 004	55 854	50 025	45 457	60 536	59 548
Other farm income (\$)	2 347	2 690	5 842	2 229	2 570	4 582
Net cash income (\$)	577 858	1 021 886	749 977	931 703	1 146 118	1 140 936
Farm working expenses (\$)	369 084	468 449	528 625	492 162	576 403	593 914
Cash operating surplus	208 774	553 438	221 351	439 541	569 715	547 022
Farm profit before tax (\$)	70 014	384 034	-6 329	202 800	345 352	322 893
Farm surplus for reinvestment ¹	1 677	263 472	-50 416	134 935	227 008	164 064
EFS ² per cow (\$)	300	1 175	244	788	1 109	1 024
FWE ³ /NCI (%)	63	45	71	53	50	52
EFS/total farm assets (%)	2.1	7.5	1.1	4.8	6.8	6.2

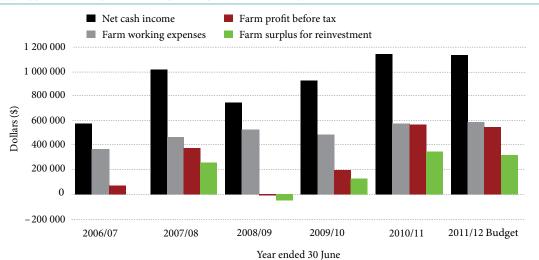
>>> TABLE 2.1: KEY PARAMETERS, FINANCIAL RESULTS AND BUDGET FOR THE NATIONAL DAIRY MODEL

Notes

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 farm profit after tax plus depreciation plus stock adjustments less drawings. 2 Economic farm surplus.

3 Farm working expenses.

>>> FIGURE 2.1: NATIONAL DAIRY MODEL PROFITABILITY TRENDS



Notes

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. 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 farm profit after tax plus depreciation plus stock adjustments less drawings.

>>> TABLE 2.2: NATIONAL DAIRY MODEL BUDGET

			2010/11	2011/12 BUDGET			
	WHOLE FARM (\$)	PER COW (\$)	PER KG OF Milksolids (\$)	WHOLE FARM (\$)	PER COW (\$)	PER KG O Milksolids (\$	
REVENUE Milksolids	1 048 128	2 5 2 2	7.15	1 020 107	2 504	()	
		2 532	7.15	1 039 107	2 504	6.86	
Dividend on wet shares Cattle	39 704	96	0.27	43 993	106	0.29	
Other farm income	60 536 2 570	146 6	0.41 0.02	59 548 2 870	143 7	0.39	
LESS:							
Cattle purchases	4 820	12	0.03	4 582	11	0.03	
Net cash income	1 146 118	2 768	7.82	1 140 936	2 749	7.53	
Farm working expenses	576 403	1 392	3.93	593 914	1 431	3.92	
Cash operating surplus	569 715	1 376	3.89	547 022	1 318	3.6	
Interest	197 345	477	1.35	185 806	448	1.2	
Rent and/or leases	0	0	0.00	0	0	0.0	
Stock value adjustment	12 049	29	0.08	467	1	0.0	
Minus depreciation	39 067	94	0.27	38 790	93	0.2	
Farm profit before tax	345 352	834	2.36	322 893	778	2.1	
Income equalisation	6 892	17	0.05	2 871	7	0.0	
Taxation	67 063	162	0.46	120 807	291	0.8	
Farm profit after tax	271 398	656	1.85	199 214	480	1.3	
LLOCATION OF FUNDS							
Add back depreciation	39 067	94	0.27	38 790	93	0.2	
Reverse stock value adjustment	-12 049	-29	-0.08	-467	-1	0.0	
Drawings	71 408	172	0.49	73 473	177	0.4	
Farm surplus for reinvestment ¹	227 008	548	1.55	164 064	395	1.0	
REINVESTMENT							
Net capital purchases	34 476	83	0.24	34 761	84	0.2	
Development	31 145	75	0.21	30 407	73	0.2	
Principal repayments	65 634	159	0.45	53 835	130	0.3	
Farm cash surplus/deficit	95 753	231	0.65	45 060	109	0.3	
DTHER CASH SOURCES							
Dividend on dry shares	186	0	0.00	777	2	0.0	
introduced funds	0	0	0.00	0	0	0.0	
New borrowings	0	0	0.00	0	0	0.0	
Off-farm income	6 466	16	0.04	6 211	15	0.0	
Net cash position	102 406	247	0.70	52 048	125	0.3	
SSETS AND LIABILITIES							
Farm, forest and building (opening)	5 093 137	392	34.73	5 196 323	12 521	34.3	
Plant and machinery (opening)	162 375	1 953	1.11	161 727	390	1.0	
Stock valuation (opening)	808 538	1 685	4.76	820 587	1 977	5.4	
Dairy company shares	697 520	1 685	4.76	674 521	1 625	4.4	
Other farm related investments (opening)	497	1	0.00	497	1	0.0	
Fotal farm assets	6 762 067	16 333	46.11	6 853 655	16 515	45.2	
Total liabilities (opening)	2 778 735	6 712	18.95	2 717 194	6 547	17.9	
Total equity (assets-liabilities)	3 983 332	9 622	27.16	4 136 461	9 967	27.3	

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 farm profit after tax plus depreciation plus stock adjustments less drawings.

Please note that several budget parameters have changed between 2009/10 and 2010/11. These changes have been made to better reflect the financial position of the farm. New and adjusted definitions include farm surplus for reinvestment, farm cash surplus/deficit and net cash position. Caution should be taken when comparing this year's data to previous years.

>>> TABLE 2.3: NATIONAL DAIRY MODEL EXPENDITURE

			2010/11		20	11/12 BUDGET
	WHOLE FARM (\$)	PER COW (\$)	PER KG OF Milksolids (\$)	WHOLE Farm (\$)	PER COW (\$)	PER KG OI Milksolids (\$
FARM WORKING EXPENSES						
Permanent wages	77 373	187	0.53	84 210	203	0.56
Casual wages	14 747	36	0.10	12 494	30	0.08
ACC	3 059	7	0.02	3 528	9	0.02
Total labour expenses	95 179	230	0.65	100 232	242	0.66
Animal health	32 265	78	0.22	34 353	83	0.23
Breeding	17 632	43	0.12	18 276	44	0.12
Dairy shed expenses	9 350	23	0.06	9 800	24	0.0
Electricity	21 383	52	0.15	24 093	58	0.10
Feed (hay and silage)	56 570	137	0.39	66 362	160	0.4
Feed (feed crops)	3 832	9	0.03	4 355	10	0.0
Feed (grazing)	52 965	128	0.36	57 598	139	0.3
Feed (other)	70 257	170	0.48	47 708	115	0.3
Fertiliser	69 297	167	0.47	76 728	185	0.5
Lime	3 337	8	0.02	3 354	8	0.0
Freight (not elsewhere deducted)	4 917	12	0.03	5 529	13	0.0
Regrassing costs	7 088	17	0.05	7 383	18	0.0
Weed and pest control	4 109	10	0.03	4 287	10	0.0
Fuel	12 800	31	0.09	13 839	33	0.0
Vehicle costs (excluding fuel)	15 593	38	0.11	14 974	36	0.1
Repairs and maintenance	47 046	114	0.32	47 594	115	0.3
Total other working expenses	428 442	1 035	2.92	436 234	1 051	2.8
Communication costs (phone & mail)	3 536	9	0.02	3 285	8	0.0
Accountancy	5 582	13	0.04	5 835	14	0.0
Legal and consultancy	4 555	11	0.03	4 263	10	0.0
Other administration	4 082	10	0.03	4 445	11	0.0
Water charges (irrigation)	2 286	6	0.02	2 372	6	0.02
Rates	12 875	31	0.09	13 465	32	0.0
Insurance	9 536	23	0.07	11 160	27	0.0
ACC Employer	4 635	11	0.03	4 914	12	0.0
Other expenditure ¹	5 695	14	0.04	7 709	19	0.0
Total overhead expenses	52 782	127	0.36	57 447	138	0.3
Total farm working expenses	576 403	1 392	3.93	593 914	1 431	3.9
CALCULATED RATIOS						
Economic farm surplus (EFS ²)	459 151	1 109	3.13	425 142	1 024	2.8
Farm working expenses/NCI ³	439 131	1 107	5.15	423 142	1 024	2.0
EFS/total farm assets	6.8%			6.2%		
EFS less interest and lease/equity	11.5%			10.3%		
Interest+rent+lease/NCI	17.2%			16.3%		
EFS/NCI	40.1%			10.3%		
Wages of management	40.1% 83 546			83 557		
mages of management	05 540			05 557		
PHYSICAL PARAMETERS						
Effective area (ha)	141			143		
Cows milked	414			415		
Milksolids (kg)	146 642			151 513		

Notes
1 Includes Dairy Insight levy and employers ACC.

2 EFS (or earnings before interest and tax) 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% 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 with the top 10 percent, based on their farm profit before tax per hectare for 2010/11.

PERCENTILE ANALYSIS

>>> TABLE 2.4: PERCENTILE ASSESSMENT OF FINANCIAL DATA FROM MONITORED DAIRY FARMS, 2010/11

		AVERAGE ()F	MEAN MEDIAN (\$) (\$)			AVERAGE OF	•
	BOTTOM 10% (\$)	BOTTOM 25% (\$)	BOTTOM 25–50% (\$)			TOP 50–75% (\$)	TOP 25% (\$)	TOP 10% (\$)
REVENUE								
Milksolids	807 518	906 640	878 831	1 105 541	866 923	1 096 617	1 563 274	1 686 663
Dividend on wet shares	31 239	34 316	32 141	40 583	32 431	39 706	57 136	61 476
Cattle sales	77 830	77 364	55 057	74 318	58 145	68 948	96 540	102 475
Other revenue	7 767	4 217	3 585	3 389	0	2 624	3 378	561
Cattle purchases	5 094	18 988	11 559	13 949	3 390	10 301	15 110	13 753
Net cash income	918 934	1 005 202	955 749	1 208 745	945 118	1 194 007	1 705 153	1 838 247
Farm working expenses	527 281	573 352	512 678	601 241	469 390	571 356	764 444	763 881
Cash operating surplus	391 654	431 851	443 071	607 504	459 283	622 651	940 709	1 074 366
Interest	274 820	240 422	167 787	198 974	164 958	173 339	220 600	203 625
Rent/Lease	27 901	23 093	6 094	15 636	0	17 598	21 626	8 837
Stock value adjustment	-20 753	-8 469	20 676	10 595	1 895	18 031	19 428	16 717
Depreciation	60 795	66 202	44 074	47 059	35 231	40 523	38 696	46 088
Farm profit before tax	7 384	93 665	245 792	356 430	258 375	409 221	679 214	832 533
Tax	11 567	9 730	19 377	34 861	15 500	31 516	75 660	81 912
Farm profit after tax	-4 183	83 936	226 415	321 569	233 014	377 705	603 554	750 620
Add back depreciation	20 753	8 469	20 676	10 595	1 895	18 031	19 428	16 717
Reverse stock value adjustment	60 795	66 202	44 074	47 059	35 231	40 523	38 696	46 088
Drawings	58 858	58 528	65 701	73 783	63 671	70 888	98 283	73 434
Farm surplus for reinvestment	130 789	216 541	258 402	410 266	246 900	410 465	747 247	885 381
Capital purchases	15 618	13 514	18 075	61 148	8 900	71 805	137 076	206 830
Development	107 959	89 152	59 824	50 695	0	34 017	17 503	11 345
Principal repayments	20 135	72 453	36 202	99 497	31 413	86 213	196 846	233 717
Farm cash surplus/deficit	3 986	44 052	143 498	162 852	113 381	208 113	264 039	372 524
Introduced funds	3 844	2 288	171	3 116	0	9 756	0	0
New borrowings	108 438	114 175	74 118	122 902	0	71 400	222 707	178 824
Dividend on dry shares	2 829	2 610	2 619	2 062	1 483	2 158	1 163	1 122
Off-farm income	16 044	10 426	8 411	8 086	0	6 358	6 612	6 085
Net farm profit before tax per hectare	12	579	1 842	2 411	2 314	2 886	4 285	5 137

		AVERAGE OF	F				AVERAGE OF	
	BOTTOM 10% (\$)	BOTTOM 25% (\$)	BOTTOM 25–50% (\$)	MEAN (\$)	MEDIAN (\$)	TOP 50–75% (\$)	TOP 25% (\$)	TOP 10% (\$)
PHYSICAL PERFORMANCE DATA								
Milking area (ha)	144	151	131	144	129	142	157	160
Opening cow numbers	413	425	386	449	384	458	549	576
Closing cow numbers	403	421	400	456	395	466	562	582
Total opening stock numbers	525	530	486	561	485	572	687	714
Total closing stock numbers	513	523	499	568	493	588	700	727
Cows in milk (15 December)	385	394	365	425	367	430	529	551
Total milk production (kgMS)	112 055	126 391	123 478	155 198	123 747	153 905	220 214	237 471
Milksolids per hectare (kg/ha)	791	847	929	1 049	1 053	1 075	1 339	1 436
Milksolids production per cow	278	309	332	352	350	355	406	419
Stocking rate (cows/ha)	2.8	2.7	2.8	3.0	2.9	3.0	3.3	3.4
Opening assets	5 978 004	6 140 155	6 432 899	6 984 739	5 955 406	6 896 014	8 539 994	9 463 360
Opening debt	3 661 848	3 261 658	2 482 141	2 875 941	2 337 851	2 578 422	3 291 357	3 240 058
Equity (%)	37%	44%	64%	59%	62%	63%	62%	66%
FWE/kgMS	4.63	4.47	4.08	3.87	3.78	3.61	3.36	3.17
Debt servicing/kgMS	2.59	2.03	1.30	1.32	1.23	1.05	0.90	0.75
Total debt/KgMS	35.29	27.69	19.24	19.05	18.85	15.59	14.00	13.02
Drawings/kgMS	0.67	0.58	0.71	0.60	0.52	0.55	0.52	0.39
Economic farm surplus/hectare	1 963	2 105	2 500	3 382	3 138	3 680	5 205	5 856

>>> TABLE 2.5: PERCENTILE ASSESSMENT OF PRODUCTION DATA FROM MONITORED DAIRY FARMS, 2010/11

BREAKEVEN ANALYSIS

Table 2.6 shows the "breakeven" point (covering farm working expenditure, debt servicing, depreciation, and personal drawings) for the mean and median farm for 2010/11. The figures for the bottom and top 10 percent are also illustrated.

>>> TABLE 2.6: BREAKEVEN ANALYSIS OF PRODUCTION DATA FROM MONITORED DAIRY FARMS (DOLLARS PER KILOGRAM OF MILKSOLIDS)

	MEAN	MEDIAN	BOTTOM 10%	TOP 10%
Farm working expenses	3.87	3.78	4.63	3.17
Debt servicing	1.32	1.23	2.59	0.75
Depreciation	0.37	0.31	0.59	0.24
Drawings	0.60	0.52	0.67	0.39
Total	6.15	5.84	8.48	4.56

DEBT AND DEBT SERVICING

Figure 2.2 shows the distribution of debt for the 160 monitored farms, with a mean debt level of \$19.05, and median debt level of \$18.85 per kilogram of milksolids.



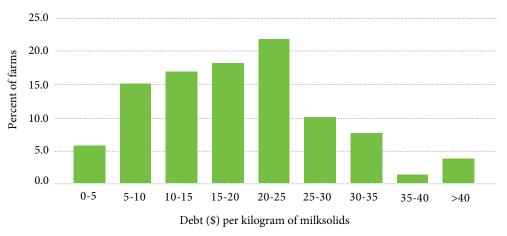
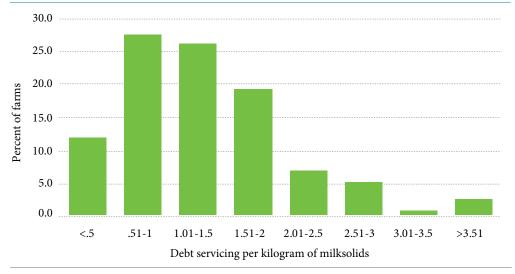
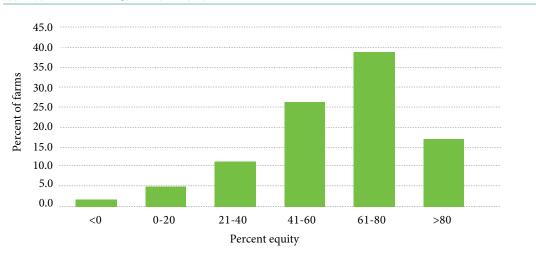


Figure 2.3 shows the debt servicing distribution for the 160 monitored farms for the 2010/11 season. Within the monitored farms, mean debt servicing was \$1.32 per kilogram of milksolids, median debt servicing was \$1.23, and the range varied from zero though to \$4.62 per kilogram of milksolids.



>>> FIGURE 2.3: DEBT SERVICING DISTRIBUTION

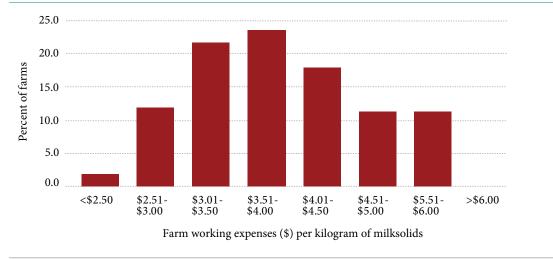
Figure 2.4 shows the distribution of equity across the monitored farms for 2010/11. Mean equity was 59 percent, with a range of -22 percent through to 100 percent.



>>> FIGURE 2.4: FARM EQUITY DISTRIBUTION

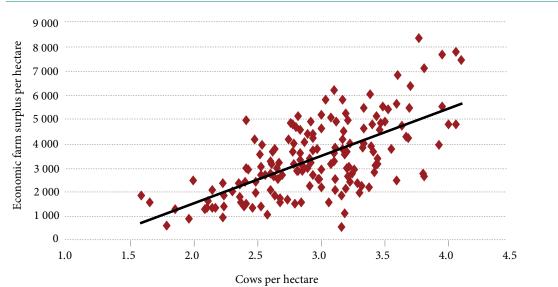
FARM WORKING EXPENDITURE

Figure 2.5 shows the farm working expenditure distribution for the 160 monitored farms for the 2010/11 season. Within the monitored farms, mean farm working expenditure was \$3.87 per kilogram of milksolids, median farm working expenditure was \$3.78, and the range varied from \$1.89 though to \$5.85 per kilogram of milksolids.



>>> FIGURE 2.5: FARM WORKING EXPENDITURE DISTRIBUTION

Figure 2.6 shows the relationship between profitability, as indicated by the economic farm surplus per hectare, and stocking rate, as indicated by cows per hectare. While there is some relationship, it is relatively weak, with the regression line having a R² value of 0.41.



>>> FIGURE 2.6: ECONOMIC FARM SURPLUS VERSUS STOCKING RATE

DAIRY INDUSTRY **ISSUES AND TRENDS**

FARMER MORALE

Morale was low through the spring and early summer, due in large part to the very difficult climatic conditions. However, with very favourable autumn weather and prospects of good payouts, farmer morale has definitely lifted. While many farmers remain cautious around spending as a result of previous payout fluctuations, it is almost inevitable that should the 2011/12 be another good season, spending will increase as farmers seek to reinvest in their businesses or expand them.

Morale has also lifted due to farmers' perception and confidence that Fonterra is performing well, its balance sheet has strengthened significantly, the capital restructuring process is on track, and the company as a whole is moving forward.

Another anecdotal indicator of confidence and lift in morale is the number of farms that were previously for sale being withdrawn from the market.

DEBT

While cash surpluses increased and enabled some welcome debt repayment, some fundamental debt issues in the dairy sector have only changed slightly in the past 12 months. In particular, there are still a significant number of farms with a high debt loading. As shown in the previous figures, 18 percent of the farms monitored have an equity level less than 40 percent, and 15 percent have a debt servicing level above \$2.00 per kilogram of milksolids. In other words there is a significant "tail" of dairy farms in a somewhat precarious position due to their debt situation.

While this situation is manageable at high payout levels, these farms are extremely vulnerable should the milk payout drop. As shown in Table 2.6, the breakeven point for the average farm in 2010/11 was \$6.15 per kilogram of milksolids, indicating that if payouts drop below the \$6 mark, some significant belt tightening would be required.

DAIRY INDUSTRY LEGISLATION

The biggest issue in this area continues to be the proposed changes to Fonterra's capital structure to allow share trading amongst Fonterra farmers (TAF - Trading Amongst Farmers). The amendment to the Dairy Industry Restructuring Act (DIRA) to accompany TAF is ongoing as government and Fonterra continue to work through regulatory issues. An amendment to DIRA to enable the proposed transfer of the dairy core database from Livestock Improvement to DairyNZ is also being worked on.

Another area of the DIRA legislation creating a lot of debate is the current review of the raw milk regulations. These are the regulations requiring Fonterra to provide up to 600 million litres of milk to competitors. Fonterra farmers are somewhat averse to these regulations and are awaiting the outcome of the review.

ENVIRONMENTAL ISSUES

Resource management and compliance is an ongoing issue in all regions. Effluent management is an issue in all regions and is generally improving. However, farmers are frustrated that non-





compliance notices are sometimes being issued for what they feel are minor administration issues. In noting this, there is little farmer sympathy for major or repeat offenders.

The industry is hoping the new nationwide code of compliance will help achieve greater consistency of compliance, with Fonterra playing an active role. There continues to be some discontent and confusion amongst farmers with the different effluent management requirements; regional councils appear more concerned with day-to-day management issues and Fonterra intend to put in place a 365-compliance merit system that includes dairy shed and effluent pond inspections, with the latter considered more stringent.

DAIRY FARMING IMAGE

Given the positive rural community and economic impacts of the industry, many dairy farmers are frustrated by what they perceive as the negative views on dairy farming espoused in some parts of the media. Farmers noted that local newspapers appear more balanced and generally supportive, whereas national media seem more likely to portray dairy farmers and the sector in a negative light. Farmers believe that the media gives very little recognition of the significance to the wider economy of high dairy export returns. Farmers said they found the lack of reporting on the examples of good practice evident on many modern dairy farms equally frustrating.

For some years the media has highlighted dairy farming's environmental impact issues, but this year the insinuation of tax avoidance and the domestic milk price setting issues added frustration. The "Farmy Army" and Fonterra's efforts in supplying water and cleaning up some of the damage following the Christchurch earthquakes is believed to have helped improve the image, but farmers expect the media to continue negatively targeting the dairy sector.

Farmers are aware that the future expansion of the sector depends on mutual trust and acceptance throughout the community and are keen to prevent disharmony between dairying and other sectors of the community increasing. An example of this is the need for some level of mutual acceptance for achieving the multiple objectives of the Canterbury Water Management Strategy.

Within Canterbury, the September earthquake showed how the sector and community can pull together to restore operations to sheds that had had platforms dislodged or lost electricity. This had a cost through the season on those affected and those who helped, but the efforts were very much appreciated and lifted morale within the industry.

FARM OWNERSHIP BY OVERSEAS INTERESTS

A hot topic in dairying areas is the level of support for overseas owners of dairy farms. Normally, farmers are protective of their right to sell to the highest bidder, providing they meet all the legislative requirements. However, those with an awareness of overseas drivers, particularly the longer-term strategic positioning for food security and for access to technology, management expertise and industry value, are nervous about the motives of some purchasers. They see greater overseas ownership as something that New Zealand may regret later and once it occurs incrementally is too late to unwind. Currently, the high New Zealand dollar is keeping a lid on some buyer interest.

DEER SECTOR



The continuation of an above average and longer peak venison schedule allowed most deer farmers to achieve a good financial result in 2010/11. Consecutive droughts in the central and eastern side of the North Island eroded revenue and increased expenses for affected farmers. Overall, the reduced supply of venison and velvet over the last few years has brought greater stability and higher prices for New Zealand deer farmers.

Farm profit before tax was positive for both models, increasing 29 percent (\$9.17 per stock unit) in the North Island model and 45 percent (\$10.46 per stock unit) in the South Island model.

VENISON PRICE

The net average venison price for the North and South Island models was \$7.54 and \$7.78 respectively, providing a good revenue base for well stocked deer farms. The average price received by monitored farmers was in line with the 2011 national venison schedule which averaged around \$8 per kilogram.

Poor weather conditions during 2010 affected the North Island deer model's production, lowering the fawning rate to just 80 percent and increasing stock deaths by 2 percent. This led to a greater number of deer purchases and a fall in net cash income, down 7 percent compared with 2009/10 to \$89.56 per stock unit. The South Island model largely maintained its production for 2010/11, despite a cold spring, and allowed these farmers to capitalise on the good venison prices. The South Island net cash income for 2010/11 was \$104.93 per stock unit, a 19 percent increase compared with 2009/10.

VELVET

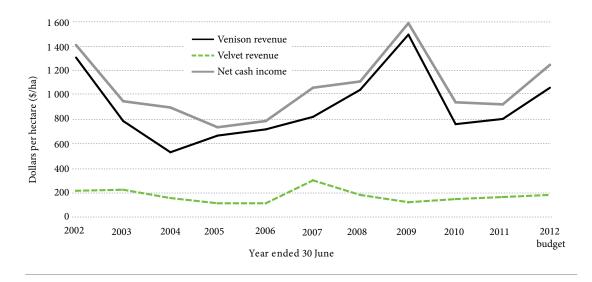
The average net price for velvet in the North and South Island models in 2010/11 was \$95 and \$87 respectively. The North Island model showed an increase in the average net price for velvet of 17 percent when compared with 2009/10. In contrast, the average price in the South Island model decreased \$4 per kilogram or 5 percent. Monitored farmers for both models reported similar velvet production levels to last year.

Farmers noted the price differential between grades in 2010/11 was minimal. This may be a result of different harvesting times or more deer farmers selling to road buyers where they can obtain revenue earlier and in a single payment.

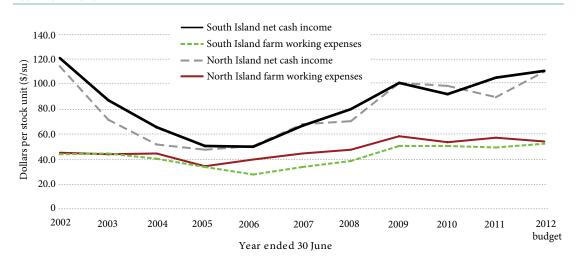
New Zealand is the largest producer of farmed velvet in the world and our velvet is recognised and sold as the best in its class in South Korea and other Asian markets. The industry continues to strengthen ties with China, a growing market for velvet, which is helping specialist velvet producers to remain optimistic and continue to invest in quality genetics for production.

3 DEER SECTOR OVERVIEV

>>> FIGURE 3.1: NORTH ISLAND VENISON AND VELVET CONTRIBUTION TO NET CASH INCOME, 2002–2012 BUDGET



>>> FIGURE 3.2: NORTH AND SOUTH ISLAND DEER MODEL COMPARISON OF FARM REVENUE VERSUS EXPENDITURE, 2002–2012 BUDGET





WEATHER

Adverse climatic conditions hampered deer production in 2010/11. Deer farms in both Islands went into the winter with low pasture covers, however hind condition and feed reserves were better in the South Island and this allowed South Island deer farmers to better manage the cold 2010 spring. The South Island deer model maintained carcass weights in older stock but a two kilogram drop in carcass weight for yearling stags was recorded despite extended finishing times. Hind condition was lighter than ideal in the North Island after three consecutive droughts and carcass weights were down for all stock classes.

EXPENDITURE

Deer farmers were cautious spenders in 2010/11. However, cost increases in feed, fertiliser, freight, rates and insurance were unavoidable for both models. The South Island model continues to keep expenses contained. Over the last nine years the South Island model expenses have increased by just under \$10 per stock unit, almost half of what the North Island model has managed. The impact of consecutive droughts in the North Island has significantly increased farm working expenses and affected production reducing the North Island deer model's revenue. North Island deer farmers will look to reign in expenses for the June end 2012 year.

EVEN BETTER FOR 2011/12 EXPECTED

With better weather conditions expected and improved hind condition in the North Island, deer farmers anticipate an even better financial year in 2011/12. Net cash income in 2011/12 is budgeted to increase for both deer models, especially for the North Island model with a return to a normal production season and a one stock unit increase in stocking rate. Net cash income is expected to increase by 35 percent and 5 percent respectively for the North Island and South Island deer models in 2011/12.

There was little change in 2010/11 from the issues affecting deer farmers in 2009/10. Generally, deer farmers are happy with current prices received for venison and velvet and this was reflected in good morale and optimism for the 2011/12 season. The main issues are those deer farmers have little control over, such as the high exchange rate of the NZ dollar and changes in government legislation. Some deer farmers, although generally supportive of the National Animal Identification and Tracing scheme (NAIT), still have reservations about what it will cost them once implemented and how they can derive on-farm benefits from the scheme.

DEER INDUSTRY ISSUES AND DEVELOPMENTS

VENISON BUOYANT AND VELVET STEADY

The continuation of an above average and flatter venison schedule allowed deer farmers to achieve a good financial result in 2010/11. Venison producers along with sheep meat, wool, beef and dairy producers are enjoying a favourable period where product prices are above average, prospects for food production looks good and adverse climatic events in spring 2010 were counterbalanced by a warm autumn in 2011. The high exchange rate is affecting how much of the increased in-market price is returned to New Zealand farmers. A two percent appreciation in the currency results in a three percent drop in the venison schedule.

Velvet prices were steady compared with the previous year, averaging around \$87 to \$95 per kilogram. Industry commentators noted that specialist velvet producers would have achieved even better prices with their significantly higher weights and grades than the typical deer farm which has its main breeding objectives around venison production. Frustration continues in the velvet industry around grading methods and payment systems. The range of prices received between the different velvet grades was less in 2010/11 than previous years. More deer farmers monitored were opting to sell to road buyers in 2010/11 to ensure earlier payments and cash in the pocket.

LONG-TERM PROSPECTS FOR THE INDUSTRY

CONSEQUENCES FOR GROWTH

The size of the New Zealand deer herd and the number of deer farmers has stabilised after a period of decline. The down side of the reduction in deer numbers is a lowering of critical mass and economies of scale throughout this industry. This is a concern for farmers who fear their current industry size provides an impediment to the development of deer specific animal health products, such as drench, and for efficient processing plants.

Small increases in North Island deer stock numbers, especially hinds, are expected over the next few years as some of the major deer regions in the North Island rebuild numbers after adverse weather events. This will not make a big difference overall for the national industry however, as the majority of deer farms are in the South Island and deer numbers there are expected to be stable.

There were few farm sales of any description throughout the country in 2010/11. Competition with other land uses, especially dairy in the South Island, means that in the future deer farming (along with sheep and beef) is likely to be found proportionately more on hill to steeper-hill properties. This change in geographic distribution of where deer are farmed means farmers and researchers will now be looking to find the genetics and management systems to best suit these environments.

SUCCESSION PLANNING

The 2011 National Deer Industry conference noted some growing interest in deer by younger farmers and new faces attending farm focus field days. This is a positive sign for the industry but it is clear deer farming succession is a long-term strategy which has some work ahead of it. Currently, out of ninety-five agriculture students at Polytechnic training institutions (Telford and Massey), only five are involved in deer.





PRODUCTIVITY AND EFFICIENCY GAINS

Focusing on profit is essential for deer farmers and a 2011 gross margin analysis by farm consultants has provided finishing deer farmers with continued confidence in buying and finishing weaner deer, on a cent per kilogram of dry matter consumed basis, as one of the more profitable land use options in the South Island.

BREEDING AND GENETIC IMPROVEMENT

Access to genetic tools and information to screen and assess deer for desirable traits is an important development for the deer industry. A centralised deer progeny test will help existing initiatives to identify the superior and desirable genetic traits of sires.

Breeding worth indices are available and it is expected that in 2012 single nucleotide polymorphisms (SNP) chip technology will also be available and refined for deer. The next step for researchers and the deer industry will be to show the financial benefit provided by these new tools and achieve wider adoption of these technologies.

GOVERNMENT LEGISLATION: EMISSIONS TRADING SCHEME (ETS)

In contrast to 2009/10, few deer farmers mentioned the ETS and its future implications for their sector at industry meetings held in June 2011. The 1 July 2010 requirement for an ETS that includes fuel and electricity, and the associated cost increases to cover the scheme, are still seen by farmers as additional costs that are beyond their control and have to be absorbed. Generally deer farmers felt there was not enough one-on-one support around making decisions on carbon farming and what farmers need to do to if they enter this new market.

GOVERNMENT LEGISLATION: NATIONAL ANIMAL IDENTIFICATION TECHNOLOGY (NAIT)

Most deer farmers recognize the benefit of NAIT and support its introduction. However, the delay in starting the scheme frustrated farmers who had already bought tags in preparation for its implementation. NAIT implementation for deer has now been delayed till 1 March 2013.

>>> TABLE 3.1: COMPARISON OF DEER MODEL FARM RESULTS, 2010/11 AND 2011/12 BUDGET

	NORTH ISLAND	SOUTH ISLAND
Effective area (hectares)	220	272
Deer stock units (at 1 July 2010)	2 261	3 148
FARM PROFIT BEFORE TAX (\$)		
2010/11	100 693	117 786
2011/12 budget	123 110	130 047
2010/11 (\$ PER STOCK UNIT)		
Cash operating surplus ¹	32.25	55.45
Farm profit before tax	44.54	37.42
Farm surplus for reinvestment ²	-7.56	25.31
2011/12 BUDGET (\$ PER STOCK UNIT)		
Cash operating surplus ¹	55.60	58.12
Farm profit before tax	49.56	41.26
Farm surplus for reinvestment ²	14.80	26.39
RATIOS 2010/11 (%)		
Equity ratio ³	86.7	86.6
Return on equity ⁴	-3.1	1.5
Return on assets ⁵	-1.9	2.2

 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.

 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.



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

KEY POINTS

- > Improved prices for lamb, other sheep, beef and wool lifted net cash income 27 percent in 2010/11.
- Lambing fell 10 percentage points following drought in many areas in autumn 2010, a cold wet winter and a severe spring storm. Very good conditions in autumn 2011 increased carcass weights on finishing stock which contributed to the lift in prices.
- > Net cash income is predicted to increase a further \$51 200 (11 percent) in 2011/12 mainly as a result of an expected 10 percentage point increase in lambing.
- Farmers have budgeted conservatively for 2011/12 expecting stock prices to be similar to the averages in 2010/11.
- > Farm working expenses have increased 9 percent in 2010/11 and are predicted to increase a further 9 percent in 2011/12. Most of the increases are on productive inputs with the largest increase being on fertiliser in both years.
- While farmers are pleased with the return to good profits they are aware that their industry has not changed fundamentally and that prices and profits could fall as quickly as they rose.





SHEEP AND BEEF

29

YEAR ENDED 30 JUNE	2007/08 ^R	2008/09	2009/10 ¹	2010/11	2011/12 BUDGET
Effective area (ha)	706	716	771	772	772
Opening total stock units (su)	4 404	4 185	4 716	4 729	4 928
Stocking rate (su/ha)	6.2	5.8	6.1	6.1	6.4
Ewe lambing (%)	116	116	129	119	130
Average lamb price (\$/head)	51.51	82.08	73.65	100.87	100.33
Average store lamb price (\$/head)			64.04	82.22	82.22
Average prime lamb price (\$/head)			76.47	104.38	103.11
Average wool price (\$/kg)	2.44	2.38	2.52	3.93	4.22
Total wool produced (kg)	14311	13 263	14 726	14 333	14 866
Sheep income (\$)	141 523	192 214	226 098	289 006	324 821
Wool income (\$)	37 419	33 531	42 090	59 193	66 310
Cattle income (\$)	129 058	135 801	117 907	146 211	153 066
Net cash income (NCI) (\$)	274 973	327 481	362 550	461 267	512 462
Farm working expenses (FWE) (\$)	178 716	179 412	215 082	235 061	255 800
Cash operating surplus (\$)	96 258	148 069	147 468	226 206	256 662
Farm profit before tax (\$)	6 096	62 357	66 587	148 148	184 209
Farm surplus for reinvestment ² (\$)	-25 571	30 442	19 251	92 749	93 056
Farm cash surplus/deficit (\$)	-37 666	3 270	-6 163	44 411	40 448
EFS ³ /ha (\$)	-20	65	66	175	219
EFS/su (\$)	-3.13	11.09	10.72	28.62	34.25
FWE/NCI (%)	65	55	59	51	50
EFS/Total farm assets (%)	-0.3	0.9	1.1	3.0	3.7

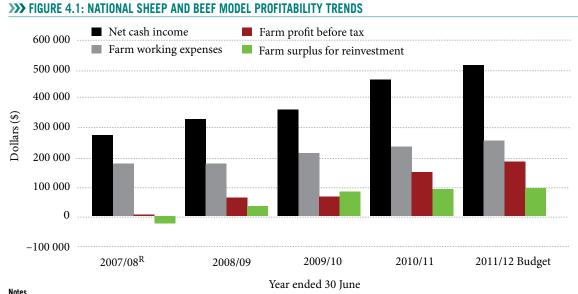
>>> TABLE 4.1: KEY PARAMETERS, FINANCIAL RESULTS AND BUDGET FOR THE NATIONAL SHEEP AND BEEF MODEL

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 farm profit after tax plus depreciation plus stock adjustments less drawings. 3 Economic farm surplus.

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.



Notes

R The model parameters have been revised so the data for 2007/08 will not match that published in the Pastoral Monitoring Report 2008. 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 farm profit after tax plus depreciation plus stock adjustments less drawings.

>>> TABLE 4.2 NATIONAL SHEEP AND BEEF MODEL BUDGET

			2010/11	2011/12 BUDGET			
	WHOLE FARM (\$)	PER HA (\$)	PER STOCK UNIT ¹ (\$)	WHOLE Farm (\$)	PER HA (\$)	PER STOCK Unit ¹ (\$)	
REVENUE							
Sheep	289 006	374	91.17	324 821	420	97.24	
Wool	59 193	77	18.67	66 310	86	19.85	
Cattle	146 211	189	96.26	153 066	198	98.61	
Grazing income (including hay and silage sales)	20 512	27	4.34	27 585	36	5.60	
Other farm income	19 239	25	4.07	20 017	26	4.06	
LESS:							
Sheep purchases	27 902	36	8.80	28 888	37	8.65	
Cattle purchases	44 993	58	29.62	50 449	65	32.50	
Net cash income	461 267	597	97.54	512 462	663	104.00	
Farm working expenses	235 061	304	49.71	255 800	331	51.91	
Cash operating surplus	226 206	293	47.83	256 662	332	52.09	
Interest	52 501	68	11.10	49 411	64	10.03	
Rent and/or leases	4 949	6	1.05	5 723	7	1.16	
Stock value adjustment	3 004		0.64	6 435	8	1.31	
Minus depreciation	23 612	31	4.99	23 754	31	4.82	
Farm profit before tax	148 148	192	31.33	184 209	238	37.38	
Income equalisation			0.00			0.00	
Taxation	16 505	21	3.49	46 799	61	9.50	
Farm profit after tax	131 643	170	27.84	137 410	178	27.89	
LLOCATION OF FUNDS							
Add back depreciation	23 612	31	4.99	23 754	31	4.82	
Reverse stock value adjustment	-3 004	-4	-0.64	-6 435	-8	-1.31	
Drawings	59 502	77	12.58	61 672	80	12.52	
Farm surplus for reinvestment ²	92 749	120	19.61	93 056	120	18.88	
REINVESTMENT							
Net capital purchases	23 710	31	5.01	20 978	27	4.26	
Development	3 244	4	0.69	2 856	4	0.58	
Principal repayments	21 385	28	4.52	28 774	37	5.84	
Farm cash surplus/deficit	44 411	58	9.39	40 448	52	8.21	
DTHER CASH SOURCES							
Off-farm income	5 380	7	1.14	4 729	6	0.96	
New borrowings	6 341	8	1.34	2 793	4	0.57	
Introduced funds			0.00			0.00	
Net cash position	56 132	73	11.87	47 970	62	9.73	
ISSETS AND LIABILITIES							
Farm, forest and building (opening)	3 725 441	4 825	787.77	3 803 651	4 924	771.90	
Plant and machinery (opening)	121 579	157	25.71	123 421	160	25.05	
Stock valuation (opening)	666 738	864	140.99	675 412	874	137.07	
Other produce on hand (opening)	315		0.07	430	1	0.09	
Total farm assets (opening)	4 514 073	5 846	954.53	4 602 914	5 959	934.10	
Total assets (opening)	4 669 563	6 048	987.41	4 687 604	6 068	951.28	
Total liabilities (opening)	722 164	935	152.71	681 703	882	138.34	
Total equity (farm assets - liabilities)	3 865 478	5 006	817.38	3 921 211	5 076	795.75	

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 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 farm profit after tax plus depreciation plus stock adjustments less drawings.

Symbol

... Not available.

Please note that several budget parameters have changed between 2009/10 and 2010/11. These changes have been made to better reflect the financial position of the farm. New and adjusted definitions include farm surplus for reinvestment, farm cash surplus/deficit and net cash position. Caution should be taken when comparing this year's data to previous years.

>>> TABLE 4.3: NATIONAL SHEEP AND BEEF MODEL EXPENDITURE

			2010/11	2011/12 BUDGET			
	WHOLE FARM (\$)	PER HA (\$)	PER STOCK UNIT (\$)	WHOLE FARM (\$)	PER HA (\$)	PER STOCK Unit (\$	
ARM WORKING EXPENSES							
Permanent wages	18 501	24	3.91	19 397	25	3.94	
Casual wages	6 236	8	1.32	6 597	9	1.34	
ACC	1 073	1	0.23	1 117	1	0.23	
Fotal labour expenses	25 810	33	5.46	27 111	35	5.50	
Animal health	16 661	22	3.52	17 905	23	3.63	
Breeding	1 943	3	0.41	2 165	3	0.44	
Electricity	4 911	6	1.04	5 425	7	1.10	
Feed (hay and silage)	7 800	10	1.65	8 247	11	1.6	
Feed (feed crops)	3 267	4	0.69	3 353	4	0.6	
Feed (grazing)	1 645	2	0.35	1 429	2	0.29	
Feed (other)	2 689	3	0.57	2 345	3	0.4	
Fertiliser	45 557	59	9.63	51 839	67	10.5	
Lime	4 775	6	1.01	5 988	8	1.2	
Cash crop expenses ¹	2 124	3	0.45	2 1 3 6	3	0.4	
Freight (not elsewhere deducted)	5 454	7	1.15	5 824	8	1.13	
Regrassing costs	7 096	9	1.50	7 289	9	1.4	
Shearing expenses ²	19 358	25	6.11	20 941	27	6.2	
Weed and pest control	6 779	9	1.43	7 576	10	1.5	
Fuel	11 543	15	2.44	12 851	17	2.6	
Vehicle costs (excluding fuel)	9 730	13	2.06	9 637	12	1.9	
Repairs and maintenance	22 028	29	4.66	22 279	29	4.5	
Total other working expenses	173 361	225	36.66	187 229	242	38.0	
Communication costs (phone and mail)	2 662	3	0.56	2 766	4	0.50	
Accountancy	3 918	5	0.83	3 983	5	0.8	
Legal and consultancy	2 215	3	0.47	2 1 3 5	3	0.4	
Other administration	2 658	3	0.56	2 7 3 7	4	0.5	
Water charges (irrigation)	652	1	0.14	732	1	0.1	
Rates	10 803	14	2.28	11 279	15	2.2	
Insurance	6 433	8	1.36	7 933	10	1.6	
ACC Employeer	3 822	5	0.81	7 402	10	1.5	
Other expenditure	2 726	4	0.58	2 492	3	0.5	
Total overhead expenses	35 890	46	7.59	41 460	54	8.4	
Total farm working expenses	235 061	304	49.71	255 800	331	51.9	
CALCULATED RATIOS							
Economic farm surplus (EFS ³)	135 352	175	28.62	168 797	219	34.2	
Farm working expenses/NCI ⁴	51%	175	20.02	50%	21)	51.2.	
EFS/total farm assets	3.0%			3.7%			
EFS/total failly assets EFS less interest and lease/equity	2.0%			2.9%			
Interest+rent+lease/NCI	2.0% 12%			2.9% 11%			
EFS/NCI	29%			33%			
EFO/INGI	29%			33%			
Wages of management	70 246	91	14.85	70 547	91	14.32	

Notes

Notes 1 Includes forestry expenses. 2 Shearing expenses per stock unit based on sheep stock units. 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.



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

BEST FARM PROFIT IN 11 YEARS

Better prices for lamb, sheep, beef and wool dramatically improved the fortunes of the sheep and beef sector in 2010/11. Farm profit before tax at \$148 100 reached the highest level in the last eleven years and is on a par with the previous best year in 2001/02. The average lamb price lifted \$27 to \$101. Prices for cull ewes also lifted significantly. Prices for all classes of beef lifted with 2-year cattle prices lifting 17 percent to \$977 and cull cow prices lifting 34 percent to \$866. The average wool price lifted more than 50 percent to \$3.93.

BETTER PRICES FOR ALL PRODUCTS

Net cash income lifted 27 percent to \$461 300 with good product prices more than offsetting the effects of poor production in the first half of the year. Drought in many areas in autumn 2010, followed by a cold wet winter and poor spring, reduced lambing performance and growth rates of finishing stock. Lambing was reduced most significantly by a cold southerly storm in mid-September which caused high lamb losses in Southland and South Otago but also in the central North Island. Lambing was 10 percentage points below the previous year and averaged only 119 percent. Lambing fell between 15 and 20 percent in four of the twelve models (Central North Island, Western Lower North Island, Southland/South Otago intensive and Southland/South Otago hill country).

The total wool volume produced also fell slightly because of drought effects from the previous year and because of feed shortages in the spring. However, with the 55 percent lift in price, wool income increased 41 percent to \$59 200 but this still represents only 13 percent of net cash income. Many farmers were sufficiently encouraged by the lift in wool prices to move back to 6-month or 8-month shearing and this will give better quality wool in the coming year.

Much of the lift in farm income occurred in the later part of the financial year, when the whole country received good weather with adequate rain and warm temperatures. Farmers were able to finish stock to higher carcass weights than normal, contributing to the lift in prices. Ewes went to the ram in excellent condition in autumn 2011, although there was evidence that the warm moist autumn caused facial eczema in some North Island stock and this could reduce lambing percentage in the budget year.

MODEST INCREASE IN FARM WORKING EXPENSES

Farmers were restrained in their spending during 2010/11 with farm working expenses increasing by only 9 percent to \$235 100. Fertiliser spending increased 22 percent to \$45 600 as farmers increased super phosphate applications to pasture (see Figure 4.4). There was also a small increase in the use of nitrogen. Repairs and maintenance increased 7 percent with farmers in some models catching up on deferred maintenance. Other significant increases included wages (7 percent), animal health (8 percent), feed (6 percent), regrassing (22 percent), shearing (7 percent) and fuel (14 percent). Most of these increases were caused by cost inflation. Animal health increased as farmers considered the improved prices justified more animal health inputs. Feed increased as

farmers took advantage of the good autumn weather to conserve additional feed. Some also incurred extra feed costs associated with increased numbers of dairy cattle being grazed.

Total farm working expenses as a proportion of net cash income fell from 59 percent in 2009/10 to 51 in 2010/11.

Interest costs have fallen with slightly lower average interest rates and lower average overdraft levels. Interest rates fell as fixed term loans came off higher rates and moved to lower-interest floating or short-term fixed loans. Interest and rent now represent 12 percent of net cash income mainly because of the improved income.

Tax payments increased to \$16 500 in 2010/11. Accountants reported that many farmers will have substantial terminal tax due in 2011/12 as a result of the improved profitability.

The increased profits have been used for additional capital spending and principal repayments. Capital purchases more than doubled to \$23 700, but this is very similar to capital spending in 2008/09 and is roughly equivalent to the amount of depreciation. Principal repayments also doubled to \$21 400 as many farmers sought to reduce debt after several years of increased borrowing to refinance deficits. The net cash position of \$56 100 shows a healthy improvement in farmers' current account levels. Industry commentators expect that farmers will carry this surplus forward until the income for the 2011/12 year is known.

BUDGET FINANCIAL PERFORMANCE OF THE NATIONAL SHEEP AND BEEF MODEL IN 2011/12

The cash operating surplus is predicted to increase 13 percent to \$256 700, with farmers expecting net cash income to increase 11 percent and planning for a 9 percent increase in farm working expenses.

GOOD PRICES EXPECTED TO CONTINUE

Farmers expect prices in 2011/12 to be very similar to the average prices achieved in 2010/11. Prices at the end of the 2010/11 year were well above this level but farmers chose to budget somewhat conservatively. Farmers selling wool, lamb and beef at the start of last year missed out on the high prices but they expect to get good prices at the start of the coming year and this will improve average profitability.

Farmers expressed the view that while prices had improved, the structure and performance of the meat and wool sectors had not changed substantially and this added to conservatism in budgeting for the 2011/12 year. Since the farmer survey was carried out in May 2011 the value of the New Zealand dollar has continued to appreciate against the US dollar and this may also contribute to lower prices.

FARM SPENDING RESTRAINED

Farm working expenses are expected to increase a further 9 percent to \$255 800 or almost \$52 per stock unit. Animal health is expected to increase 7 percent as farmers consider higher prices justify further inputs to improve performance. Spending on fertiliser and lime is expected to increase \$7500. This includes some allowance for fertiliser price increases but also some increase in fertiliser applications. Spending in this area will remain uncommitted until later in the year when incomes are known.





Shearing expenditure is expected to increase 8 percent with some of the increase justified by higher wool prices. Fuel payments are expected to increase as a result of rising fuel prices. Most other expense items show only small increases budgeted except for insurance which farmers expect to increase \$1500 (23 percent) following the Christchurch earthquakes and other natural disasters.

Interest costs are expected to fall \$3100 (6 percent) as a result of lower overdraft levels and slightly lower term debt levels following principal repayments in 2010/11. On average interest rates are predicted to rise 0.13 percentage points. Farmers in some regions, particularly in the North Island, expect a small rise in interest rates following predictions by economists that the Official Cash Rate will increase in the second half of the financial year. Others expect rates to continue to fall slightly as longer term fixed loans continue to be renewed at lower rates.

Tax is predicted to treble from \$16 500 in 2010 to \$46 800 in 2011/12 as terminal tax and provisional tax rise following the increased profit in the actual year.

Farmers have indicated that they will be restrained in cash disposal in the coming year with capital spending and developed and budgeted to reduce slightly. However, they plan to increase principal repayments to \$28 800 as they strive to reduce debt. Much of this will depend how the season plays out with anecdotal evidence that farmers who had spent little extra before the end of the 2010/11 year have now made additional capital purchases. As one farmer put it, "This may be the only year I will ever get a new tractor!"

FARMERS CAUTIOUS ABOUT COMING YEAR

Farm profit before tax is predicted to rise a further 24 percent to \$184 200. Farm surplus for reinvestment is expected to be very similar to 2010/11 because of the increased tax payments. Farmers expect their net cash position to improve by \$50 000 at the end of 2011/12. However, it is likely that spending on capital, development and other productive inputs will increase in the second half of the year when prices and incomes are more clear.

Performance ratios for the national sheep and beef model appear very sound on the basis of the 2011/12 budget with farm working expenses just 50 percent of net cash income and debt servicing 10 percent of net cash income.

While farmers have enjoyed the return to good profits with high prices and a good season, they have taken a conservative approach to their spending. They are aware that there has been little fundamental change in the meat and wool industries and that prices could fall as quickly as they rose.

SHEEP AND BEEF SECTOR ISSUES AND DEVELOPMENTS

IMPROVED FARM GATE RETURNS HAVE REVITALISED FARMER MORALE

Improved product prices combined with a very good autumn in 2011 have boosted farm bank balances and farmer morale. Some farmers have increased spending on productive inputs such as fertiliser and animal health but many have taken a conservative approach to spending and are happy to see lower overdrafts and to pay off term debt.

Typically, farmers who had been through several years of drought were more conservative in their attitude to increased spending.

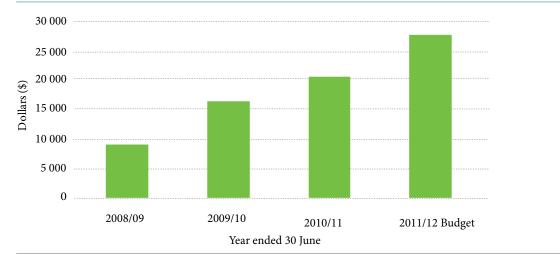
FARMERS CAUTIOUS ABOUT WOOL AND MEAT INDUSTRY STRUCTURE

During the 2010/11 year, a *Red Meat Sector Strategy* was developed and released. Additionally, an attempt was made to establish a New Zealand Wool Co-operative. Farmers remain cautious about both initiatives. It would seem that many farmers supported the concept of a wool co-operative but were unhappy with the particular proposal and/or did not feel they could commit funds to it. At the same time farmers commented that they have little confidence in the higher prices for wool being sustained given the current structure of the wool industry and with no fundamental change to the structure imminent. In contrast, those farmers surveyed for the South Island high country model are positive about the outlook for wool and the performance of their value-added contracts, branding and industry partnership initiatives.

Farmers have similar concerns for the meat industry and feel that the *Red Meat Sector Strategy* has not gone far enough to help farmers. They will remain cautious until they see substantive change in the industry.

INCREASE IN DAIRY SUPPORT

Despite the increase in sheep, beef and wool prices there was still an increase in dairy support activities through wintering dairy cows on kale crops, selling surplus hay and baleage to dairy farmers and increased heifer grazing. Figure 4.2 shows the marked increase in income from dairy support over the last four years. In some cases, dairy



>>> FIGURE 4.2: NATIONAL SHEEP AND BEEF MODEL GRAZING INCOME (INCLUDING HAY AND SILAGE SALES)

grazing allowed farmers to maintain their stocking rate when they couldn't afford to purchase high priced trading cattle.

FOCUS ON PER HEAD PERFORMANCE AND RESILIENCE

Many regions were affected by adverse events in recent years including droughts and severe storms. Consequently, farmers are choosing to operate at a slightly lower stocking rate and retain flexibility in their farming system. Nationally, the stocking rate increased from 6.1 stock units per hectare to 6.4 stock units per hectare over 2010/11, but this is more than one stock unit per hectare less than levels in the first half of the decade (see Figure 4.3).

The improved product prices have encouraged farmers to increase inputs such as animal health, feed, fertiliser, regrassing, weed and pest control and repairs and maintenance in an attempt to increase per animal performance.

NATIONAL ANIMAL IDENTIFICATION AND TRACING SCHEME (NAIT)

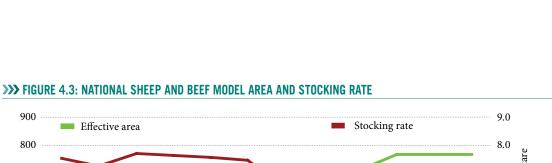
The NAIT scheme continues to cause some concern to farmers who perceive that they will incur increased costs for little gain, particularly for those with small numbers of cattle. However, those with larger farms and more progressive farmers can see benefits and are tagging more age groups than required over the next two years. Overall, there is disappointment in the delay in NAIT with increasing levels of frustration as farmers perceive the goal posts are continually shifting, leading to a loss of creditability for the scheme.

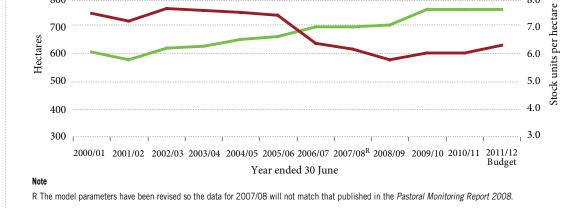
LIMITED UNDERSTANDING OF THE EMISSIONS TRADING SCHEME (ETS)

Industry commentators report that many farmers have little understanding of the ETS and are struggling to understand how carbon markets operate. At industry meetings held in May 2011, it would seem that many have yet to register their pre-1990 forests or apply for an exemption. Some who have taken the time to understand the scheme see opportunities for another income stream on their farm.





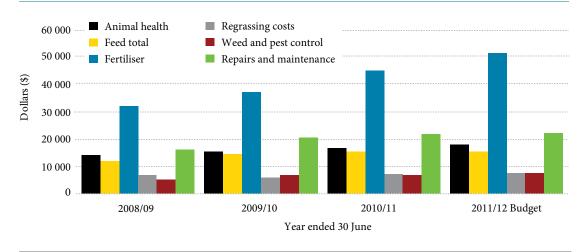




>>> FIGURE 4.4: NATIONAL SHEEP AND BEEF MODEL CHANGE IN SELECTED EXPENSES

900

800





HORTICULTURE AND ARABLE OVERVIEW

The Horticulture and Arable Monitoring Programme 2011 shows mixed outcomes for the sectors reported on.

Higher prices from Asian markets helped to lift returns for kiwifruit in the 2010/11 financial year ended 31 March, compensating for a drop in yields. Favourable climatic conditions have lifted kiwifruit yields for the 2011 harvest to record levels (2011/12 financial year), helping to buffer against the expected reduction in grower returns and increase in orchard expenses.

Kiwifruit growers are dealing with considerable uncertainty in the ongoing battle against the vine disease Psa (*Pseudomonas syringae* pv. *actinidiae*). Psa, in particular the virulent strain Psa-V, has spread further and faster than was hoped for in parts of the Bay of Plenty region over the autumn and winter months. The short-term impacts will become better known once the vines come into flower in October/November 2011. The medium to long-term impacts are less certain at this stage. Psa management programmes necessary to prevent the spread of Psa are contributing to a significant increase in budgeted orchard working expenses for 2011/12.

Many pipfruit growers suffered a financial loss in the 2010 calendar year as a result of adverse climatic conditions reducing yields combined with insufficient returns for late-season varieties sold in Europe. Despite most markets performing well in 2011, and higher export yields, pipfruit growers expect the high New Zealand dollar to erode export returns resulting in poor financial outcomes again for many in the year to December 2011.

Global oversupply of wine and tough economic conditions in the main markets continued to place downward pressure on grape prices in 2010/11 (year ended June). In Marlborough, favourable climatic conditions led to higher yields, more than compensating for the lower prices. Contract grape growers in Hawke's Bay suffered the impact of low yields as well as low prices.

As a result of low profitability, pipfruit and wine growers are deferring expenditure where they can and assessing alternative business models. Further rationalisation is likely to occur due to some unsustainable balance sheets.

Strong global commodity prices lifted uncontracted cereal prices in 2010/11 (year ended June) helping to compensate in part for lower cereal yields in the Canterbury region. Profit before tax fell 28 percent compared with 2009/10 but the cash position at year end improved due to a sell down of grain and seed stocks on hand. Cropping specialists are budgeting for a substantial increase in profit this coming year (2011/12) based on a return to better-than-average yields





and the continuation of strong cereal prices. There is increasing interest amongst arable farmers in converting some of their land to dairying.

Budgeted results for 2011/12 are based on grower views collected in May 2011. These views are combined with input from those servicing the sectors to create short-term physical and financial forecasts for model enterprises in the kiwifruit, pipfruit, viticulture and arable farming sectors.

FACTORS AFFECTING FINANCIAL PERFORMANCE

MARKET DEMAND

KIWIFRUIT

Prices paid to growers for green and gold kiwifruit improved further in 2010/11, with a record return for gold kiwifruit and the highest green kiwifruit returns since 2004/05. This was driven by strong market demand in Asia, a smaller than expected gold crop and the implementation of exchange rate policies that mitigated the impact of the weak euro.

Growers expect returns for green and gold kiwifruit to be lower in 2011/12, due to a combination of increased export volumes from New Zealand, particularly of gold kiwifruit, and unfavourable exchange rates.

PIPFRUIT

Average export returns for most pipfruit varieties improved in 2010. However, they were less than growers had expected given the smaller export crop from New Zealand. Asian markets performed well with price increases compensating somewhat for the high New Zealand dollar.

The outcome from European markets for mid to late-season varieties like Braeburn, Jazz[™] and Pink Lady[®] was disappointing for many growers in 2010. The lower than anticipated export returns were the result of an overhang of fruit from the Northern Hemisphere selling season, ongoing weaker consumer demand, a reduction in spot market opportunities for Braeburn, and the weak euro and UK pound.

Market performance in 2011 is generally good. Sales volumes into Europe are in line with expectations. New Zealand Royal Gala and Fuji experienced greater competition this season in Asian markets, however, demand is strong for the Pacific series of apple that is almost uniquely grown in New Zealand. Despite most markets performing well, the high New Zealand dollar will erode export returns with growers budgeting on lower export returns in 2011 compared with last year.

VITICULTURE

Grape supply continues to exceed market demand, resulting in an average reduction of 8 percent in grape prices per tonne paid to growers in 2010/11. Since the 2008 vintage, the average grape price per tonne for Marlborough Sauvignon Blanc has halved to \$1190 per tonne.

In the Hawke's Bay region, prices for red wine grape varieties softened as a result of not meeting ripeness requirements.

With indications that much of the historic wine surplus for Marlborough Sauvignon Blanc has been cleared and with new markets being developed, growers are hopeful of a lift in average grape prices in 2011/12 of around 5 percent.

ARABLE

Grain prices began to rise from October 2010 in response to a general lift in commodity prices as well as concerns about limited global cereal supplies due to dry conditions in the main growing regions of the US, Australia and Canada. Pasture seed prices also increased during 2010/11 as global stocks cleared. Rising prices assisted with the clearance of grain and seed stocks on hand in New Zealand from the 2009/10 season.

Arable farmers are optimistic about the year ahead with expectations of cereal prices remaining at 2010/11 levels and good demand for pasture seed and other small seed crops. The improved dairy payout outlook in June 2011 compared to the same time last year is also providing more options for dairy support.



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

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 2000 to August 2011.

Source Reserve Bank of New Zealand.

EXCHANGE RATE

The relative value of the New Zealand dollar increased against the euro, UK pound and US dollar from July 2010 and reached unprecedented levels against these main currencies in late July/early August 2011. Over the same time period, the New Zealand dollar remained below the five-year average level against the Australian dollar and Japanese yen.

The weak performance of many large western economies and market concerns about sovereign debt levels are contributing to a weakening of the economic outlook and currencies of these countries. In contrast, recent economic data for New Zealand suggests stronger economic performance than previously expected, with relatively high global commodity prices a key driver. Inflation in New Zealand was also higher than anticipated in the first half of 2011 raising expectations of an earlier lift in interest rates and contributing to a strengthening of the New Zealand dollar.

Any significant increases in market prices for pipfruit, kiwifruit and wine to compensate for the high exchange rate will likely be resisted by overseas retailers, who have the option to revert to competing suppliers, and by consumers, who have options to substitute products.

The high value of the New Zealand dollar in the main selling period for pipfruit and kiwifruit has caused growers and exporters to revise their expectations downwards for 2011/12. The impact will be greatest where little or no forward exchange rate cover has been undertaken.

CROP PERFORMANCE

KIWIFRUIT

Unfavourable climatic conditions during the growing season for the 2010 crop resulted in production per hectare falling in 2010/11; by 3 percent for green kiwifruit and by 8 percent for gold kiwifruit. Average fruit size was lower with higher dry matter levels.

Favourable climatic conditions for flowering and fruit production of the 2011 crop have driven kiwifruit yields across the Bay of Plenty region to record levels.

PIPFRUIT

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 in 2010.

Favourable climatic conditions are expected to lift export volumes in 2011 by 17 percent and 9 percent for the Hawke's Bay and Nelson regions, respectively.





VITICULTURE

Growing conditions in Marlborough were favourable for the 2011 vintage with a warm dry period for flowering, timely rainfall events that helped to increase berry size and a long dry harvest period. Many growers were able to harvest Marlborough Sauvignon Blanc at the higher end of the yield caps set for premium wine.

Whilst growing conditions were generally favourable in Hawke's Bay during the flowering period, crops were impacted by the La Nina weather pattern delivering continuous rain events at harvest. Rain fell when the berries were at their most vulnerable, resulting in crop losses from *Botrytis* infections particularly in the later harvested 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 to achieve average yields in 2011/12 within winery yield caps.

ARABLE

Cereal yields in the year ended June 2010/11 in the Canterbury region fell on average by 15 percent due to unfavourable weather conditions; a wet autumn and winter, followed by a cold spring and then a hot dry period in early summer. Grass seed yields were also impacted by unfavourable weather conditions whilst later season crops such as brassica seed yielded well.

Cereal and small seed yields are expected to return to average levels in 2011/12, assisted by favourable rainfall and temperatures in autumn 2011.

OPERATING COSTS

In spring 2010 kiwifruit growers refrained from using supplementary pollination when it came time to pollinate their green orchard blocks, concerned that it may be a vector for Psa. Pruning costs increased in 2010/11 as a result of significant vegetative growth during the wet summer.

Kiwifruit growers are being advised to budget for a programme of protectant sprays in 2011 which are required to help prevent Psa infection and spread. The cost of an intensive management programme of \$3000 per hectare is budgeted in the model for 2011/12 which, in part, drives a 14 percent increase in budgeted orchard working expenses.

The lower pipfruit crop of 2010 had a significant impact on unit costs for pipfruit growers. As a result of the poor financial outcomes in recent years and expectations of lower prices in 2011, growers are deferring expenditure where they can and assessing alternative business models.

Winegrowers are also keeping a tight rein on expenditure, with growers responding to lower grape prices by cutting back on wages, reducing inputs and deferring expenditure. Seasonal



factors helped with the reduction in expenditure on frost protection and on electricity for irrigation in 2010/11.

For Canterbury arable farmers, farm working expenses in 2010/11 remained at similar levels to the previous season with price rises for some inputs being offset by the reduced crop area and lower yields requiring less contracted work. Irrigation demand declined over the early and late parts of the season in Canterbury due to regular rains and the absence of strong north-west winds apart from a period in early December. Arable farmers benefited from reduced chemical prices as some key products came off patent protection.

Most growers and farmers have switched to floating interest rates and are carefully considering when to re-fix term debt.

SECTORAL AND REGIONAL VARIATION IN OUTCOMES

KIWIFRUIT

The profitability of the Bay of Plenty kiwifruit orchard model improved again in 2010/11 with price increases more than compensating for lower yields. The orchard profit before tax on the model increased 48 percent in 2010/11 to levels not seen on the model since 2003/04.

The bacterial canker disease Psa, specific to kiwifruit, was confirmed in the Bay of Plenty region in November 2010. This disease has also been confirmed in other kiwifruit growing regions of New Zealand but the virulent strain of Psa, Psa-V, as at the end of August 2011, has only been detected in parts of the Bay of Plenty region. A pan-industry organisation jointly funded by government and industry, Kiwifruit Vine Health Incorporated, was set up in December 2010 to lead the New Zealand response to Psa.

For most growers to date, the impact of Psa is an increased cost of prevention, with protectant sprays and paints that are required to prevent further spread of the disease to buy time for research and development solutions. However, growers whose orchards are infected with Psa-V will be more severely impacted; many are likely facing vine removal and hence a significant loss of income. Some will be forced into a change of land use. The Psa disease has resulted in much uncertainty around orchard values, in particular in the parts of the Bay of Plenty region where Psa-V has been detected, with some being restricted to bare land values.

The kiwifruit model does not register an infection of Psa for the 2011/12 budget year. The model's profitability in 2011/12 is expected to reduce as a result of lower returns for both green and gold kiwifruit and additional orchard operating expenses for the Psa management programme.





PIPFRUIT

A combination of lower export yields and below average returns for some varieties resulted in a small pre-tax loss in the Hawke's Bay pipfruit model in 2010. The Nelson model suffered its third year of pre-tax losses, due largely to poor market returns from varieties mainly sold in Europe.

Growers in the Nelson region are offsetting orchard losses through the sale of assets such as houses on orchards, land for sub-division or cash injections from other businesses and investments.

Several growers took up the 16 cents per kilogram price offers by juice processors as part of their business management strategy in 2011 to better manage orchard and post-harvest costs against anticipated reductions in export returns.

For 2011, growers in Hawke's Bay are budgeting for a small pre-tax profit. However, Nelson growers are looking at another loss-making year.

VITICULTURE

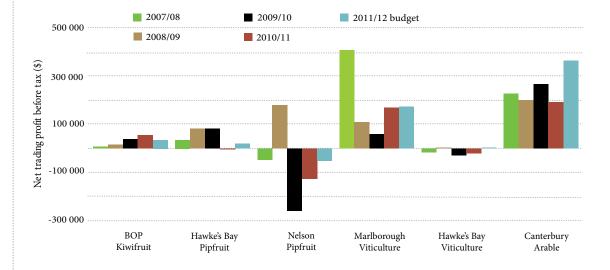
Vineyard profitability lifted in Marlborough in 2010/11 as higher yields more than compensated for the drop in the average price paid for grapes. Contract grape growers in Hawke's Bay suffered the impact of low yields as well as low prices, resulting in a second consecutive year of losses for this model.

Growers believe they have cut their costs back as far as they can without impacting severely on vine health and fruit quality, 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, and potentially up to five years for the industry to return to more sustainable profit levels. In the meantime, businesses with high debt levels may be forced into asset sales.

ARABLE

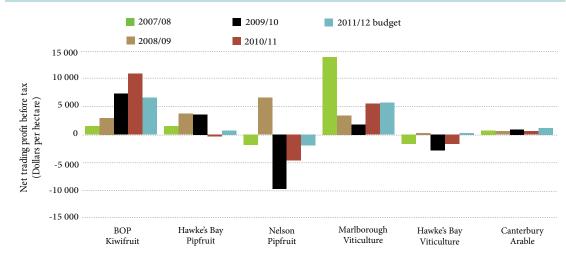
The profitability of Canterbury cropping farms fell in 2010/11 as a result of lower yields and a reduction in cropping area. The outlook for 2011/12 is positive as farmers expect strong market demand for a wide range of crops, giving them more options.

Canterbury arable farmers are moving away from livestock income, such as sheep breeding or lamb finishing, and moving towards contract grazing income linked to the dairy sector.



>>> FIGURE 5.2: PROFIT BEFORE TAX PER BUSINESS UNIT, 2007/08¹ TO 2011/12¹ BUDGET





>>> TABLE 5.1: KEY PARAMETERS AND FINANCIAL RESULTS FOR HORTICULTURE AND ARABLE MODELS, 2010/11¹ AND 2011/12¹ BUDGET

MODEL	BAY OF PLENTY KIWIFRUIT		NELSON PIPFRUIT ²	MARLBOROUGH VITICULTURE	HAWKE'S BAY VITICULTURE	CANTERBUR) ARABLE
YEAR END	MARCH	DECEMBER	DECEMBER	JUNE	JUNE	JUN
Effective area (hectares)	5	22	27	30	12.5	300
Total production 2010/11	42 300		54 730	363	106	
		export cartons ⁴	export cartons*	tonnes	tonnes	
Total production 2011/12 budget	45 700 export travs	44 680 export cartons	59 515 export cartons	349 tonnes	120 tonnes	
Weighted average unit price 2010/11	\$4.24 per	-	\$21.10 per	\$1350	\$1240	
weighted average unit price 2010/11	tray Green	export TCE	export TCE	per tonne	per tonne	
	\$8.57 per					
	tray Gold					
Weighted average unit price 2011/12 budget	\$4.10 per	-	\$20.65 per	\$1415	\$1320	
	tray Green	export TCE	export TCE	per tonne	per tonne	
	\$7.50 per tray Gold					
NET CASH INCOME (\$)	220 770	0.41.200	1 201 000	480 700	121 700	1 005 40
2010/11 2011/12 budget	228 770 226 540	941 300 1 011 700	1 201 900 1 274 300	489 700 494 300	131 700 158 650	1 005 40
c	220 0 10	1011/00	12/1500	171 500	150 050	1 212 30
ORCHARD/FARM WORKING EXPENSES (\$) 2010/11	148 050	848 000	1 143 100	230 200	99 450	567 00
2011/12 budget	168 300	892 500	1 193 400	235 400	104 500	612 70
CASH OPERATING SURPLUS⁵						
2010/11	80 720	93 300	58 800	259 500	32 250	438 40
2011/12 budget	58 240	119 200	80 900	258 900	54 150	599 80
CASH OPERATING SURPLUS/HECTARE						
2010/11	16 144	4 241	2 178	8 650	2 580	1 46
2011/12 budget	11 648	5 418	2 996	8 630	4 332	1 99
ORCHARD/FARM PROFIT BEFORE TAX (\$)						
2010/11	54 840	-5 000	-126 200	167 300	-20 100	190 400
2011/12 budget	33 010	15 700	-54 100	171 700	3 900	362 700
ORCHARD/FARM SURPLUS FOR REINVESTMENT (\$) ⁶						
2010/11	-1 760	-25 000	-101 200	117 800	-48 600	208 90
2011/12 budget	-17 350	-4 900	-59 100	115 400	-25 600	213 300
RATIOS 2010/11 (%)						
Working expenses/net cash income	65	90	95	47	76	5
Equity ratio ⁷ Return on equity ⁸	85 2.6	64 -5.0	54 -12.9	86 2.3	73 -5.9	7
iccum on equity	2.0	-5.0	-12.9	2.5	-5.9	1.

Notes

Budgeted results for 2011/12 are based on grower views collected in May 2011, combined with input in June 2011 from those servicing the sectors. 1 The pipfruit models use a December year end. Hence data for 2010/11 and 2011/12 budget for the pipfruit models refer to the years ending December

2010 and 2011, respectively.

2 Prices (and hence net cash income) and orchard working expenses for the pipfruit models are at free alongside ship (FAS). Other models report prices and expenses at the orchard/vineyard/farm gate.

3 A tray contains approximately 3.6 kilograms of kiwifruit.

4 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.

5 Net cash income less orchard/vineyard/farm working expenses.

6 Orchard/vineyard/farm surplus for reinvestment is the cash available from the business, after meeting living costs, which is available for investment on the orchard/vineyard/farm or for principal repayments. It is calculated as profit after tax plus depreciaton, plus stock value adjustments if any, less drawings/living expenses.

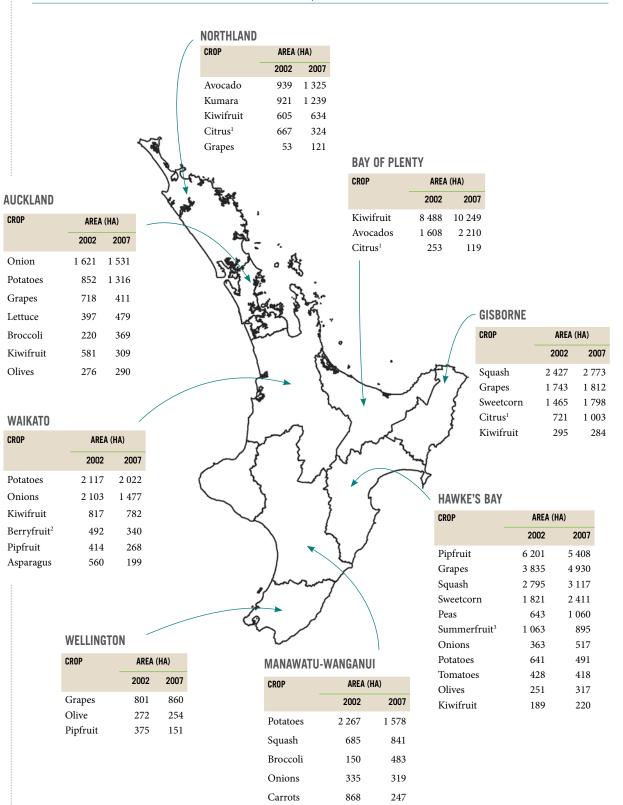
7 Ratio of orchard/vineyard/farm assets less debt (equity) to total assets.

8 Economic orchard/vineyard/farm surplus less interest and lease as a percentage of equity.

9 Economic orchard/vineyard/farm surplus divided by total assets.

Symbol

... Not applicable.



>>> FIGURE 5.4: NORTH ISLAND HORTICULTURE STATISTICS, 2002 AND 2007

Notes

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

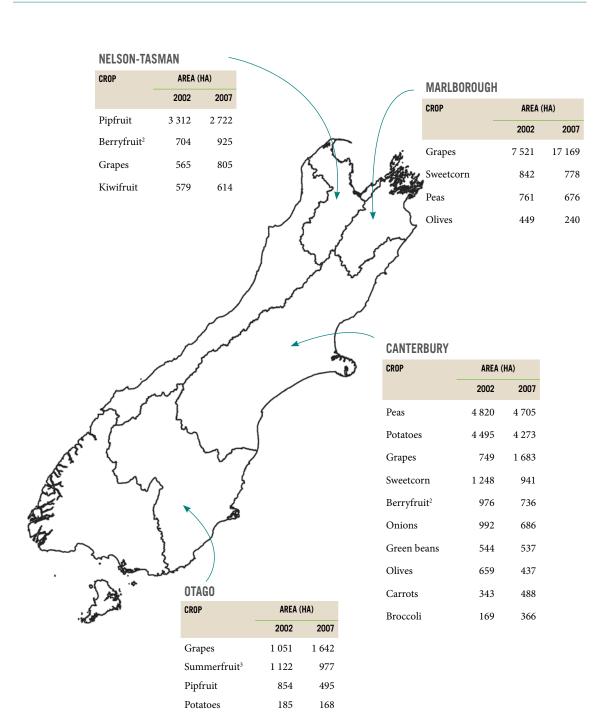
2 Berryfruit includes: blackcurrants, blueberries, boysenberries, raspberries and strawberries.

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

Source

Agricultural Production Statistics (census), Statistics New Zealand.

>>> FIGURE 5.5: SOUTH ISLAND HORTICULTURE STATISTICS, 2002 AND 2007



Notes

- Citrus includes: oranges, grapefruit/goldfruit, lemons, mandarins and tangelos.
 Berryfruit includes: blackcurrants, blueberries, boysenberries, raspberries and strawberries.
- 3 Summerfruit includes: peaches, apricots, nectarines, cherries and plums.

Source

Agricultural Production Statistics (census), Statistics New Zealand.

>>> FIGURE 5.6: NORTH ISLAND ARABLE STATISTICS, JUNE 2007

			/	NORTHLAND					
				CROP	AREA (HA)	PRODUCTI (Tonne			
		1		Maize grain	550	5 92	72		
		182	en in	Maize silage	2 535	n	/a		
		2				BAY	OF PLENTY		
		n star	۲ ۳ ۳ ۲	i, i		CROF	,	AREA (HA)	PF
JCKLAND		```				Mai	ze grain	3 133	
)P	AREA (HA)	PRODUCTION (TONNES)	Ine				ze silage	2 079	
uze grain	1 217	12 344	UZ	· · · · · · · · · · · · · · · · · · ·		Veg	etable seeds	117	
aize silage	948	n/a	23	widows is a	<u>ار این این این این این این این این این این</u>				
getable seeds	112	n/a	١	53				– GISBOR	NE
getable seeds	112	11/ a		Find				CROP	
IKATO						•	-the	Maize gr	ain
	AREA	PRODUCTION		3	ζ	·	/ / /	Maize si	lage
ize grain	(HA) 5 515	(TONNES) 60 021		}	my '	J		Other cr	ops
-		n/a		how	1	who	3		
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able seeds	374	n/a		S L	1 -	\checkmark	7		
			\sim	}	}	{ \	HAWKE'S B	Δ٧	
ANAKI /				\prec	[F	CROP		AREA (HA)
	AREA (HA)	PRODUCTION (TONNES)			$\left\{ \right\}$		Barley	1	428
ey	132	532			X		, Maize grain		295
e silage	2 278	n/a		m	7		Maize silage		848
				1	/	\backslash	Herbage see	ds	164
				z					
WELLI	NGTON			-	MANAWA	TU-WAN	GANUI		
CROP		AREA (HA)	PRODUCTION (TONNES)		CROP			PRODUCTION (TONNES)	
Barley		1 261	(TUNNES) 8 062		Milling wł	neat	353	2 136	
Field pe	225	539	2 002		Other whe	eat	380	2 332	
Maize s		909	2 002 n/a		Barley		2 900	14 814	
iviaize s	mage	202	11/a						

Maize grain

Maize silage

Vegetable seeds

2 0 2 1

3 4 2 3

140

20 1 29

n/a

n/a

122

118

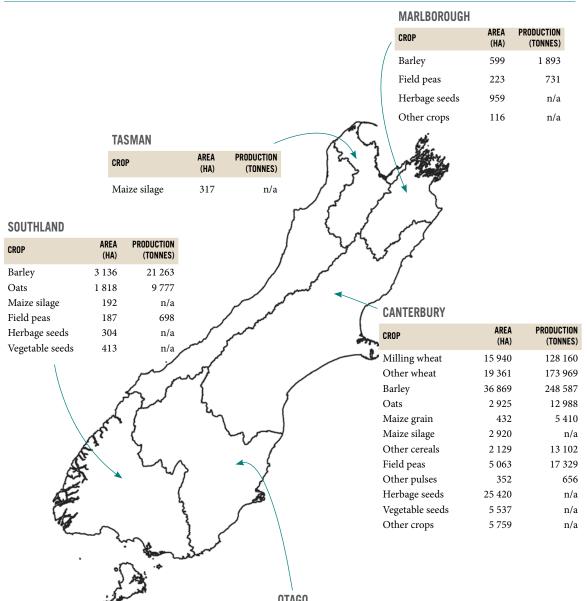
n/a

n/a

Herbage seeds

Vegetable seeds

>>> FIGURE 5.7: SOUTH ISLAND ARABLE STATISTICS, JUNE 2007



TOTAL NEW ZEALAND

CROP	AREA (HA)	PRODUCTION (TONNES)
Milling wheat	17 216	136 906
Other wheat	23 321	207 528
Barley	51 481	335 627
Oats	5 773	27 531
Maize grain	17 030	185 627
Maize silage	32 459	n/a
Other cereals	2 267	13 709
Field peas	6 273	22 053
Other pulses	420	847
Herbage seeds	27 329	n/a
Vegetable seeds	7 330	n/a
Other crops	6 982	n/a

OTAGO

CROP	AREA (HA)	PRODUCTION (TONNES)
Milling wheat	279	1 941
Other wheat	1 556	14 022
Barley	5 012	31 035
Oats	863	4 129
Maize silage	130	n/a
Herbage seeds	175	n/a
Vegetable seeds	196	n/a
Other crops	702	n/a

Source Agricultural Production Statistics (census), Statistics New Zealand.

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