



NATIONAL SHEEP AND BEEF

KEY RESULTS FROM MAF'S 2011 SHEEP AND BEEF MONITORING PROGRAMME. Please note that several budget parameters have changed between 2009/10 and 2010/11. Caution should be taken when comparing this year's publication to previous years. Refer to the budget table footnotes for more detail.

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.

►►► **TABLE 1: KEY PARAMETERS, FINANCIAL RESULTS AND BUDGET FOR THE NATIONAL SHEEP AND BEEF MODEL**

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

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.



»» TABLE 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
ALLOCATION 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 reinvestment²	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
OTHER 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
ASSETS 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 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 (\$)
FARM 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
Total 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	1.67
Feed (feed crops)	3 267	4	0.69	3 353	4	0.68
Feed (grazing)	1 645	2	0.35	1 429	2	0.29
Feed (other)	2 689	3	0.57	2 345	3	0.48
Fertiliser	45 557	59	9.63	51 839	67	10.52
Lime	4 775	6	1.01	5 988	8	1.22
Cash crop expenses ¹	2 124	3	0.45	2 136	3	0.43
Freight (not elsewhere deducted)	5 454	7	1.15	5 824	8	1.18
Regrassing costs	7 096	9	1.50	7 289	9	1.48
Shearing expenses ²	19 358	25	6.11	20 941	27	6.27
Weed and pest control	6 779	9	1.43	7 576	10	1.54
Fuel	11 543	15	2.44	12 851	17	2.61
Vehicle costs (excluding fuel)	9 730	13	2.06	9 637	12	1.96
Repairs and maintenance	22 028	29	4.66	22 279	29	4.52
Total other working expenses	173 361	225	36.66	187 229	242	38.00
Communication costs (phone and mail)	2 662	3	0.56	2 766	4	0.56
Accountancy	3 918	5	0.83	3 983	5	0.81
Legal and consultancy	2 215	3	0.47	2 135	3	0.43
Other administration	2 658	3	0.56	2 737	4	0.56
Water charges (irrigation)	652	1	0.14	732	1	0.15
Rates	10 803	14	2.28	11 279	15	2.29
Insurance	6 433	8	1.36	7 933	10	1.61
ACC Employer	3 822	5	0.81	7 402	10	1.50
Other expenditure	2 726	4	0.58	2 492	3	0.51
Total overhead expenses	35 890	46	7.59	41 460	54	8.41
Total farm working expenses	235 061	304	49.71	255 800	331	51.91
CALCULATED RATIOS						
Economic farm surplus (EFS ³)	135 352	175	28.62	168 797	219	34.25
Farm working expenses/NCI ⁴	51%			50%		
EFS/total farm assets	3.0%			3.7%		
EFS less interest and lease/equity	2.0%			2.9%		
Interest+rent+lease/NCI	12%			11%		
EFS/NCI	29%			33%		
Wages of management	70 246	91	14.85	70 547	91	14.32

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, other 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). 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

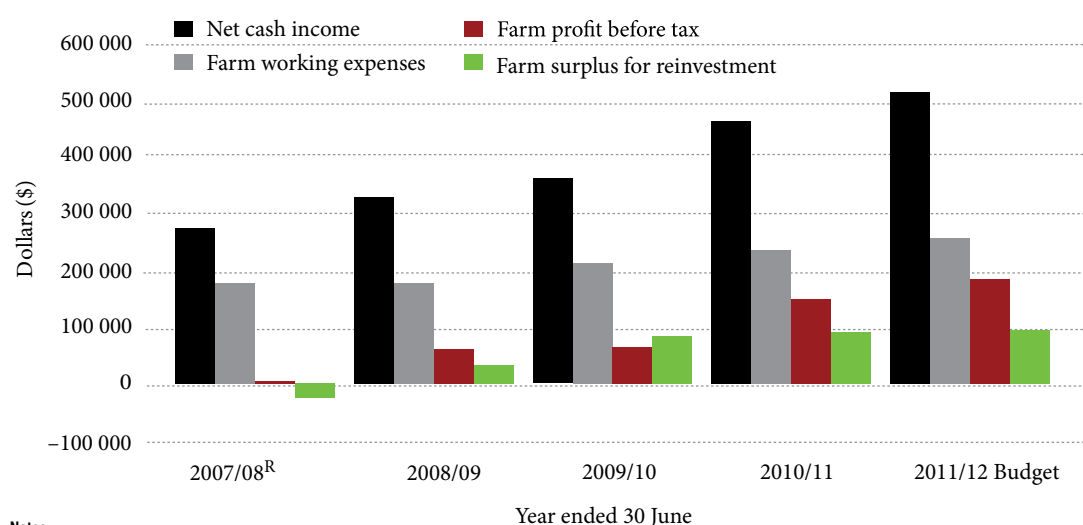
survey was carried out in May 2011 the value of the New Zealand dollar has continued to appreciate against the US dollar and this may also contribute to lower prices.

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

»» FIGURE 1: NATIONAL SHEEP AND BEEF MODEL PROFITABILITY TRENDS



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.

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.

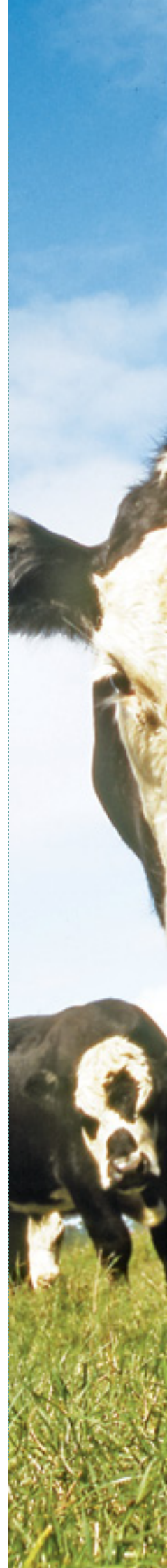
SHEEP AND BEEF ISSUES AND DEVELOPMENTS

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

»» FIGURE 2: NATIONAL SHEEP AND BEEF MODEL GRAZING INCOME (INCLUDING HAY AND SILAGE SALES)



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 cooperative 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 2 shows the marked increase in income from dairy support over the last four years. In some cases dairy 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 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

»» FIGURE 3: NATIONAL SHEEP AND BEEF MODEL AREA AND STOCKING RATE



Note

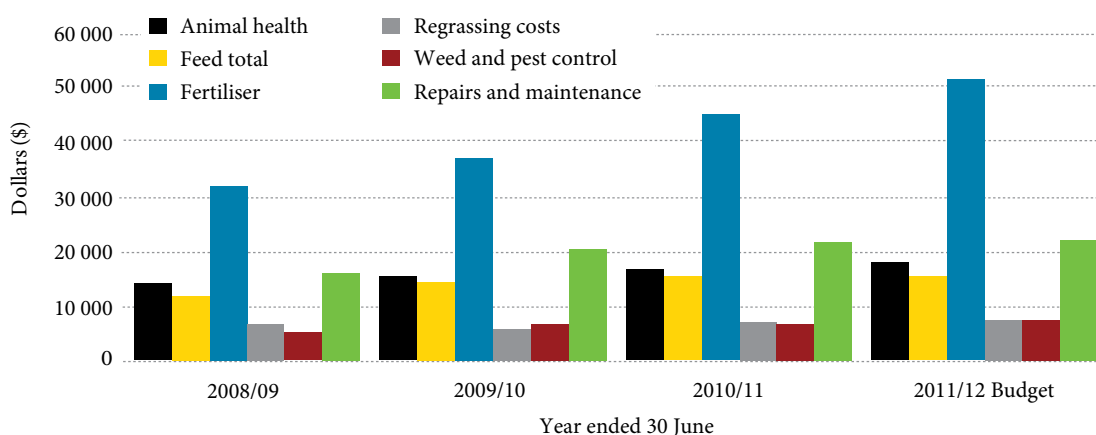
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incur increased costs for little gain, particularly for those with small numbers of cattle. However, those with larger farms and more progressive farmers can see benefits and are tagging more age groups than required over the next two years. Overall, 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: NATIONAL SHEEP AND BEEF MODEL CHANGE IN SELECTED EXPENSES



FURTHER INFORMATION

For more information on this model contact john.greer@maf.govt.nz

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