

### **PASTORAL MONITORING 2010**



# CENTRAL NORTH ISLAND HILL COUNTRY SHEEP AND BEEF

This report contains the key results from MAF's 2010 sheep and beef monitoring programme. Please note that the sample of farms has changed between 2008/09 and 2009/10. Caution should be taken when comparing data between these two years.

#### **KEY POINTS**

- > Farmers experienced a variable climatic year with a cold winter, good early spring and dry autumn.
- > While the 2009/10 budget shows a bottom line profit, this will likely be taken up by reducing overdraft levels and comes at the cost of continuing to apply less than maintenance fertiliser.
- > Farm working expenses increased 9 percent in 2009/10 to \$199 700. Most expenditure items increased, with spending on fertiliser increasing the most, up 56 percent.
- > The 2010/11 budget is back to a breakeven level, with less than maintenance fertiliser and no debt reduction.
- > In the 2010/11 season, farmers are planning to increase stock numbers, especially cattle.

## >>> TABLE 1: KEY PARAMETERS, FINANCIAL RESULTS AND BUDGET FOR THE CENTRAL NORTH ISLAND HILL COUNTRY SHEEP AND BEEF FARM MODEL



YEAR ENDED 30 JUNE	2006/07	2007/08	2008/09	2009/10 <sup>1</sup>	2010/11 BUDGET
Effective area (ha)	635	635	635	635	635
Breeding ewes (head)	2 754	2 727	2 509	2 509	2 463
Replacement ewe hoggets (head)	860	851	723	723	774
Other sheep (head)	77	77	71	57	57
Breeding cows (head)	145	157	149	161	179
Rising 1-year cattle (head)	153	153	137	146	161
Other cattle (head)	120	108	99	82	73
Opening sheep stock units (ssu)	3 348	3 380	3 068	3 439	3 434
Opening cattle stock units	2 002	2 018	1 863	1 887	2 002
Opening total stock units (su)	5 350	5 399	4 931	5 326	5 435
Stocking rate (stock unit/ha)	8.4	8.5	7.8	8.4	8.6
Ewe lambing (%)	123	121	107	126	126
Average lamb price (\$/head)	50.88	45.33	78.87	72.63	73.12
Average store lamb price (\$/head)	40.46	32.30	68.83	63.93	65.60
Average prime lamb price (\$/head)	52.70	55.23	83.35	75.53	75.00
Average wool price (\$/kg)	2.34	2.20	2.19	2.27	2.35
Total wool produced (kg)	18 317	17 032	16 245	15 339	16 001
Wool production (kg/ssu)	5.1	5.0	5.3	4.5	4.7
Average rising 2-year steer (\$/head)	650	611	728	773	819
Average cull cow (\$/head)	567	478	500	590	568
Net cash income (\$)	299 900	292 007	315 743	357 610	357 186
Farm working expenses (\$)	194 106	194 793	183 624	199 689	219 886
Farm profit before tax (\$)	11 021	-28 164	49 045	104 532	89 720
Farm surplus for reinvestment (\$) <sup>2</sup>	-37 065	-42 419	1 085	43 351	3 946
Notes					

#### Notes

<sup>1</sup> The sample of farms used to compile this model changed between 2008/09 and 2009/10. Caution is advised if comparing data between these two years. 2 Farm surplus for reinvestment represents the cash available from the farming business, after meeting living costs, which is available for investment on farm or for principal repayments. It is calculated as discretionary cash less off-farm income and drawings.

### >>> TABLE 2: CENTRAL NORTH ISLAND HILL COUNTRY SHEEP AND BEEF MODEL BUDGET

			2009/10	2010/11 BUDGET			
	WHOLE FARM (\$)	PER HECTARE (\$)	PER STOCK UNIT <sup>1</sup> (\$)	WHOLE FARM (\$)	PER HECTARE (\$)	PER STOCK UNIT <sup>1</sup> (\$)	
REVENUE							
Sheep	217 566	343	63.26	212 727	335	61.95	
Wool	34 821	55	10.12	37 602	59	10.95	
Cattle	125 573	198	66.55	132 081	208	65.98	
Grazing income (including hay and silage sales)	0	0	0.00	0	0	0.00	
Other farm income	4 704	7	0.88	3 314	5	0.61	
LESS:							
Sheep purchases	7 614	12	2.21	8 320	13	2.42	
Cattle purchases	17 439	27	9.24	20 218	32	10.10	
Net cash income	357 610	563	67.14	357 186	562	65.71	
Farm working expenses	199 689	314	37.49	219 886	346	40.45	
Cash operating surplus	157 921	249	29.65	137 300	216	25.26	
Interest	49 254	78	9.25	49 575	78	9.12	
Rent and/or leases	0	0	0.00	0	0	0.00	
Stock value adjustment	14 255	22	2.68	23 520	37	4.33	
Minus depreciation	18 390	29	3.45	21 526	34	3.96	
Farm profit before tax	104 532	165	19.63	89 720	141	16.51	
Taxation	8 316	13	1.56	25 280	40	4.65	
Farm profit after tax	96 216	152	18.06	64 440	101	11.86	
ALLOCATION OF FUNDS							
Add back depreciation	18 390	29	3.45	21 526	34	3.96	
Reverse stock value adjustment	-14 255	-22	-2.68	-23 520	-37	-4.33	
Income equalisation	0	0	0.00	0	0	0.00	
Off-farm income	11 839	19	2.22	7 260	11	1.34	
Discretionary cash	112 191	177	21.06	69 706	110	12.82	
APPLIED TO:							
Net capital purchases	8 117	13	1.52	5 892	9	1.08	
Development	1 598	3	0.30	9 566	15	1.76	
Principal repayments	15 000	24	2.82	0	0	0.00	
Drawings	57 000	90	10.70	58 500	92	10.76	
New borrowings	0	0	0.00	0	0	0.00	
Introduced funds	0	0	0.00	0	0	0.00	
Cash surplus/deficit	30 476	48	5.72	-4 253		-0.78	
Farm surplus for reinvestment <sup>2</sup>	43 351	68	8.14	3 946	6	0.73	
ASSETS AND LIABILITIES							
Farm, forest and building (opening)	3 639 680	5 732	683.33	2 650 000	4 173	487.54	
Plant and machinery (opening)	82 600	130	15.51	103 505	163	19.04	
Stock valuation (opening)	619 514	976	116.31	633 769	998	116.60	
Other produce on hand (opening)	0	0	0.00	0	0	0.00	
Total farm assets (opening)	4 341 794	6 837	815.15	3 387 274	5 334	623.19	
Total assets (opening)	4 341 794	6 837	815.15	3 387 274	5 334	623.19	
Total liabilities (opening)	610.723	962	114.66	611 000	962	112.41	
Total equity (farm assets - liabilities)	3 731 071	5 876	700.49	2 776 274	4 372	510.77	
Notes							

Notes

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

2 Farm surplus for reinvestment represents the cash available from the farming business, after meeting living costs, which is available for investment on farm or for investment represents the cash available for investment on farm or for investment.

principal repayments. It is calculated as discretionary cash less off-farm income and drawings.

#### >>> TABLE 3: CENTRAL NORTH ISLAND HILL COUNTRY SHEEP AND BEEF MODEL EXPENDITURE

		2009/10			2010/11 BUDGET			
	WHOLE FARM (\$)	PER HECTARE (\$)	PER STOCK UNIT <sup>1</sup> (\$)	WHOLE FARM (\$)	PER HECTARE (\$)	PER STOCK UNIT <sup>1</sup> (\$)		
FARM WORKING EXPENSES								
Permanent wages	0	0	0.00	0	0	0.00		
Casual wages	5 380	8	1.01	5 979	9	1.10		
ACC	430	1	0.08	228	0	0.04		
Total labour expenses	5 809	9	1.09	6 207	10	1.14		
Animal health	19 388	31	3.64	20 328	32	3.74		
Breeding	1 545	2	0.29	1 576	2	0.29		
Electricity	4 261	7	0.80	4 674	7	0.86		
Feed (hay and silage)	5 966	9	1.12	6 088	10	1.12		
Feed (feed crops)	7 620	12	1.43	6 523	10	1.20		
Feed (grazing)	0	0	0.00	0	0	0.00		
Feed (other)	1 438	2	0.27	1 685	3	0.31		
Fertiliser	41 360	65	7.77	48 230	76	8.87		
Lime	4 800	8	0.90	8 820	14	1.62		
Cash crop expenses <sup>2</sup>	0	0	0.00	0	0	0.00		
Freight (not elsewhere deducted)	4 155	7	0.78	4 022	6	0.74		
Regrassing costs	5 699	9	1.07	5 653	9	1.04		
Shearing expenses	24 591	39	7.15	25 993	41	7.57		
Weed and pest control	6 019	9	1.13	6 794	11	1.25		
Fuel	7 457	12	1.40	7 881	12	1.45		
Vehicle costs (excluding fuel)	7 191	11	1.35	7 338	12	1.35		
Repairs and maintenance	19 548	31	3.67	18 426	29	3.39		
Total other working expenses	161 036	254	30.23	174 031	274	32.02		
Communication costs (phone and mail)	2 503	4	0.47	2 555	4	0.47		
Accountancy	3 196	5	0.60	3 316	5	0.61		
Legal and consultancy	2 290	4	0.43	2 283	4	0.42		
Other administration	1 704	3	0.32	1 794	3	0.33		
Water charges (irrigation)	0	0	0.00	0	0	0.00		
Rates	13 529	21	2.54	14 676	23	2.70		
Insurance	4 794	8	0.90	5 109	8	0.94		
ACC employer	2 217	3	0.42	7 035	11	1.29		
Other expenditure	2 610	4	0.49	2 881	5	0.53		
Total overhead expenses	32 843	52	6.17	39 648	62	7.29		
Total farm working expenses	199 689	314	37.49	219 886	346	40.45		
CALCULATED RATIOS								
Economic farm surplus (EFS³)	79 369	125	14.90	74 422	117	13.69		
Farm working expenses/NCI <sup>4</sup>	56%			62%				
EFS/total farm assets	1.8%			2.2%				
EFS less interest and lease/equity	0.8%			0.9%				
Interest+rent+lease/NCI	13.8%			13.9%				
EFS/NCI	22.2%			20.8%				
Wages of management	74 418	117	13.97	64 873	102	11.94		
Notes								

<sup>1</sup> Shearing expenses per stock unit based on sheep stock units. 2 Includes forestry expenses.

<sup>3</sup> 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 CENTRAL NORTH ISLAND HILL COUNTRY SHEEP AND BEEF FARM MODEL IN 2009/10

The cash operating surplus for the central North Island hill country sheep and beef farm model in 2009/10 is \$157 900, up 20 percent on the previous year.

### REVENUE UP FOR SHEEP AND CATTLE, BUT DOWN FOR WOOL

#### SHEEP REVENUE UP

Net sheep income (sales less purchases) increased 23 percent in 2009/10 to \$210 000, driven by a significant lift in the lambing percentage to an average of 126 percent, up from 107 percent in 2008/09. This increase was due in part to better feed supplies and ewes in good condition at tupping compared with 2008/09, and a very good lamb survival rate.

A cold 2008 winter was followed by a very mild August and early September; ideal climatic conditions for lamb survival. A cold late September and October followed, with snow storms affecting southern areas, and some farmers suffering significant lamb losses.

With feed supplies tight through late spring, many lambs were weaned lighter and finished later in the season than usual. Good rain in January saw a flush of feed through into March, but lamb growth rates through this period were relatively poor.

While there were some minor fluctuations in the market, the lamb schedule began lifting from late January and this gave farmers confidence that lambs were continuing to gain in value even when growth rates were less than average. Overall carcass lamb weights were around 16.7 kilograms, corresponding to an average meat works price of \$75 per head for the season.

A strong store market both early and late in the season saw many farmers take advantage of prices that in a number of instances offered better value than the equivalent lamb at the works. Monitored farms sold an average of 25 percent of lambs store, averaging \$64 per head over the season.

Cull ewes sold well, averaging \$59 per head in 2009/10. Works prices remained high and there was also high demand for five- and six-year old ewes, with most sales held reporting strong demand.

#### **WOOL REVENUE DOWN**

Most farmers have seen a lift in the wool price this year to an average of \$2.27 per kilogram; while the returns for lambs' wool this year saw a strong lift on average to \$2.90 to \$3.00 per kilogram. Despite this recovery, the cost of shearing lambs has still meant that there is a desire to sell as many lambs as possible before mid-January, to minimise the number that need to be shorn.

With a number of farmers now opting for a mix of eight- and twelve-month shearing policies, on the back of high shearing costs, the average wool production for the year was just 4.5 kilograms per sheep stock unit down 700 grams per stock unit compare with 2008/09. This reduction meant that although prices had improved slightly, overall wool income fell 2 percent.

#### **CATTLE REVENUE UP**

Cattle began the 2009/10 season around 20 to 30 kilograms below typical live weight, and this significantly affected the timing of cattle sales for the season. Many farmers delayed sales until later than usual in order to catch up on desired weights.

Early weaner fairs this year were very buoyant, with a reduced supply of weaners (and buyers looking to get in early), as well as abundant feed supplies in most districts up until late March. The late autumn dry spell reduced feed reserves and store markets dropped accordingly. Cow cull prices averaged \$590 per head in 2009/10, up from \$500 in 2008/09. Manufacturing cow schedules have seen a strong lift through late April and early May, which

rewarded those farmers who delayed culling their cows. There have also been strong store market opportunities for breeding cattle, as farmers in other regions begin to increase their breeding herds again.

#### **CHANGE IN STOCK NUMBERS**

During the 2009/10 season farmers made some changes in stock numbers and types. It appears that monitored farmers took the opportunity to take a heavier cull on older ewes but retained higher numbers of two-tooths and ewe hoggets. Overall, sheep stock units remained relatively static. Cattle numbers increased, with the monitored farms increasing breeding cow numbers by 8 percent and retaining extra rising one year heifers and steers, up 15 percent and 17 percent respectively.

#### EXPENDITURE LIFTS IN LINE WITH INCOME

Overall, farm working expenses increased 9 percent in 2009/10 compared with last season to \$38 per stock unit. Fertiliser expenditure increased 56 percent in 2009/10, as farmers made a conscious effort to increase applications following three low input years. Applications of phosphate and sulphur averaged 80 percent of maintenance, with the model's fertiliser application costing \$65 per hectare, and the range within the monitored farms being \$26 to \$195 per hectare. Many farmers have also continued with lime applications.

Animal health costs, including breeding costs, have increased 9 percent in 2009/10 to \$3.93 per stock unit. While many farmers are making a conscious effort in this area, it continues to be an expenditure item where it is a struggle to contain costs. The range of expenditure on animal health on the monitored farms varied from \$1.29 to \$5.89 per stock unit.

Weed and pest expenditure increased in 2009/10 as farmers look to get back on top of weed issues after three seasons of minimal expenditure. Part of this has been due to the increase of thistle populations after the drought year.

Repairs and maintenance expenditure decreased slightly (6 percent) in the 2009/10 season as farmers continue to spend cautiously. There is very little "major project work" and the expenditure in this area is still deemed to be the minimum required to keep farms functioning.

Shearing costs have increased, with costs in the model farm budget increasing by 10 percent. Most farms in the southern half of the region are paying around \$3.10 to \$3.20 per head for shearing, while those further north averaged \$2.80 to \$2.90 per head.

Rates and insurance charges also continue to rise, with some farmers reporting a 20 percent increase in insurance costs as companies become more proactive in promoting full coverage insurance.

Debt servicing costs decreased in 2009/10 as some farmers continued to come off higher fixed rates. While this is reported as having a significant impact on the industry, there are still a large number of farms with term debt fixed at a rate in excess of 9 percent. With portions of this not due to come up for renewal for one to two years,

#### >>> TABLE 4: CENTRAL NORTH ISLAND HILL COUNTRY SHEEP AND BEEF MODEL CASH FARM INCOME

YEAR ENDED 30 JUNE	2006/07 (\$)	2007/08 (\$)	2008/09 (\$)	2009/10 (\$) <sup>1</sup>	2010/11 BUDGET (\$)
Sheep sales less purchases	148 158	135 166	170 058	209 952	204 407
Cattle sales less purchases	102 668	113 771	102 824	108 134	111 863
Wool	42 750	37 470	35 561	34 821	37 602
Grazing income (including hay and silage sales)	2 411	1 300	2 900	0	0
Other income	3 913	4 300	4 400	4 704	3 314
Net cash income	299 900	292 007	315 743	357 610	357 186
Note					

#### Note

<sup>1</sup> 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.

it is likely that some farmers will see little benefit from the currently reduced interest rates. Debt servicing for the model is 14 percent as a percentage of net cash income. Within the monitored farms, debt servicing ranges from 0 to 30 percent, with a median of 9 percent, and an average of 12 percent.

#### **NET RESULT IS A "PAPER" PROFIT**

Farm profit before tax has more than doubled in 2009/10 to \$104 500. This increase means that many farms will be carrying significant terminal tax into 2010/11.

About half of the monitored farms had made principal debt repayments, which is represented in the model by a payment of \$15 000; this is about two-thirds of what would have been due.

Capital expenditure and development for 2009/10 was kept at a bare minimum at \$8100, with many farms opting to run vehicles and machinery to older ages. This may have some impact on future repairs and maintenance expenditure.

Overall the model finishes the 2009/10 year with a \$30 500 cash surplus, reducing to \$18 600 if off-farm income is ignored. For many, this is in effect a paper profit, as it is mostly reflected in a reduced overdraft balance going into the new season. This situation has only been achieved by applying less than maintenance fertiliser. Of the monitored farms, 25 percent recorded a cash deficit for the year, and 20 percent recorded a negative farm surplus for reinvestment. For any farms showing a true surplus, the priority on spending would be fertiliser, debt reduction, and increased personal drawings.

## BUDGET FINANCIAL PERFORMANCE OF THE CENTRAL NORTH ISLAND HILL COUNTRY SHEEP AND BEEF FARM MODEL IN 2010/11

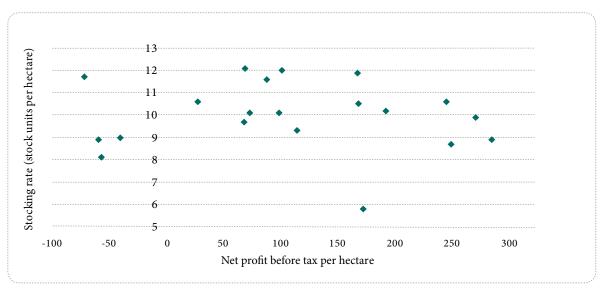
The cash operating surplus for the central North Island hill country model is budgeted to drop 13 percent in 2010/11, to \$137 300, mainly as a result of static income and rising farm working expenditure.

#### WOOL AND BEEF INCOME UP, SHEEP INCOME DOWN

#### SHEEP INCOME DOWN

Ewes were in good condition at the start of the 2010 tupping but the feed situation was deteriorating rapidly due to the dry weather. While some farmers are optimistic of an improved lambing percentage, the lambing percent used

#### >>> FIGURE 1: NET PROFIT PER HECTARE VERSUS STOCKING RATE



Store lamb sales are predicted to drop back to 20 percent of total lamb sales and it is anticipated that these sales will likely occur earlier in the season, to ease the pressure on finishing lambs. Cull ewe prices are expected to decrease slightly in 2010/11, mainly due to the uncertainty around the lamb market, in the next year or two. It is also recognised that the store values achieved in 2009/10 were in many cases significantly above the previous trends. Overall, the result is a 2.5 percent reduction in net sheep income.

#### **WOOL REVENUE LIFTS**

There is slight optimism among farmers for the wool industry in 2010/11. Most farmers hold some hope that they will see a lift in wool value, particularly with the current work being undertaken to promote wool. This corresponds to a lift in the average price budgeted at \$2.35 per kilogram (3.5 percent more than 2009/10). This is a significant turnaround from 12 months ago, when the views of the wool industry were generally negative. With the differing shearing policies in place, the total wool clip is expected to lift to 4.7 kilograms per sheep stock unit through the season.

#### **BEEF REVENUE UP**

With cattle going into the winter of 2010 some 20 to 30 kilograms liveweight heavier than the previous year, this is expected to offer better options for the coming season. While there is a slight lift in budgeted cattle weights in 2010/11, it is anticipated by many farmers that these weights will still be achieved even though the average sale date will occur 30 to 45 days earlier than the 2009/10 season. Average sale weight for rising three-year old steers, are expected to return to above 300 kilograms carcass weight. Farmers have budgeted conservatively for the overall sale value of these animals, which is expected to remain at \$1035 per head.

Weaner prices are expected to ease slightly to \$432 per head, on the back of a more normal grass growing season. However, farmers are optimistic that the drop in breeding cow numbers in recent years may see a lift in weaner prices, as both traders and breeders look to rebuild herds.

Calving percentage is expected to lift by a further 1 percentage point, to 89 percent in 2010/11, as a result of a more favourable mating period in 2010.

#### STOCK NUMBERS CONTINUE TO LIFT

Farmers are looking to increase stock numbers by the end of the 2010/11 season. Sheep numbers are expected to only lift slightly, with total breeding ewes (mostly two-tooth) expected to increase 2 percent. Breeding cows lift 2 percent; and rising one year cattle increase 9 percent. This lifts the stocking rate on the model to 8.8 stock units per hectare, just under the stocking rate prior to the 2008 drought. There is some uncertainty as to whether this increase will be achieved, as financial pressure may force farmers to sell stock rather than retain them.

#### FARM WORKING EXPENDITURE BUDGETED TO INCREASE

Total farm working expenditure is budgeted to increase 10 percent during 2010/11 to \$40.45 per stock unit. Increases are expected across most expenditure items, driven largely by expected unit cost increases. Budgeted farm working expenditure from the monitored farms varied from \$32 to \$64 per stock unit.

Fertiliser expenditure is budgeted to increase 17 percent to \$76 per hectare, due to a combination of expected price increases and farmers hoping to apply more. The model is budgeting to apply 16 kilograms of phosphate and 19 kilograms of sulphur per hectare, still just under maintenance levels at 90 percent. If fertiliser prices lift too much, farmers are expected to yet again reduce fertiliser inputs to match the dollar figure they are targeting. Interest in lime continues to strengthen, with model expenditure budgeted to double in 2010/11.

Repairs and maintenance expenditure is expected to drop 6 percent to \$18 400; a signal that the current level of expenditure is allowing very little improvement in assets.

8

Very few farmers appeared to be budgeting for the impact of the Emissions Trading Scheme, with respect to increasing expenditure on electricity and fuel. The model budget has been adjusted to allow for this.

Interest expenditure for the model remains at similar levels to 2009/10. While interest rates are expected to increase, a number of farmers will be coming off higher fixed rate terms in 2010/11.

#### **NET RESULT DETERIORATES**

The net farm profit before tax is expected to fall 14 percent in 2010/11 to \$89 700, largely a result of the higher farm working expenditure. Tax payments are budgeted to increase, particularly given terminal tax flowing through from 2009/10.

While there is some spending budgeted for capital purchases and development, these are relatively nominal amounts. Principal debt repayments are expected to be suspended, given the poor profitability levels. Drawings are budgeted to increase, mostly to allow for the increase in goods and services tax.

Overall, the model has budgeted a small loss of \$4300 (a \$11 500 loss in the absence of off-farm income). While this could be called a breakeven budget, it is still at the expense of below maintenance fertiliser and overall spending being cut to a minimum. In essence, the model continues to just tread water.

#### 35 Phosphorous applied Sulphur applied 30 Maintenance fertiliser level Kilograms per hectare 25 20 15 10 5 2003/04 2004/05 2005/06 2006/07 2007/08 2008/09 2009/10 2010/11 budget

>>> FIGURE 2: FERTILISER APPLICATION ON THE CENTRAL NORTH ISLAND HILL COUNTRY FARM MODEL

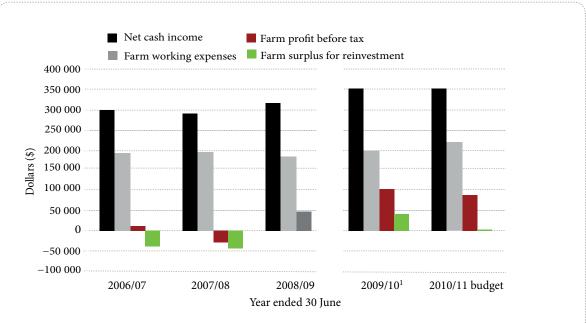
#### INFORMATION ABOUT THE MODEL

The Central North Island hill country model farm represents 1270 hill country farms from across the central area of the North Island. This includes the Waikato, Taranaki and Manawatu/Wanganui regions.

The model represents larger scale units, running breeding ewes and cows, with the vast majority of stock sold prime and some sold locally on the store market. The area represented generally experienced a moist summer and a long, cool winter.

For more information on the model contact: phil.journeaux@maf.govt.nz

#### >>> FIGURE 3: CENTRAL NORTH ISLAND HILL COUNTRY SHEEP AND BEEF MODEL FARM PROFITABILITY TRENDS



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.

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Ministry of Agriculture and Forestry PO Box 2526, Wellington 6140, New Zealand

Tel +64 4 894 0100 or Freephone 0800 008 333

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Web: www.maf.govt.nz

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