

2009 PASTORAL MONITORING

CENTRAL NORTH ISLAND HILL COUNTRY SHEEP AND BEEF



THIS REPORT CONTAINS THE KEY RESULTS FROM THE MINISTRY OF AGRICULTURE AND FORESTRY'S 2009 PASTORAL MONITORING PROGRAMME.

KEY POINTS

- › The effects of the 2007/08 drought are still apparent, with stocking rates down 8 percent, and no indication that farmers are rushing to rebuild stock numbers.
- › The higher prices received for lamb have buoyed farmers' morale, helping to offset the decline in wool returns.
- › While the 2008/09 budget breaks even, it is at the cost of less than half maintenance fertiliser applications. The budget for 2009/10 also breaks even, but again at the cost of less than maintenance fertiliser, and increased borrowing.
- › At its current income/debt/expenditure structure, the model is unsustainable in the longer term.

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

YEAR ENDED 30 JUNE	2005/06	2006/07	2007/08 ^a	2008/09	2009/10 BUDGET
Effective area (ha)	635	635	635	635	635
Breeding ewes (head)	2 700	2 754	2 727	2 509	2 509
Replacement ewe hoggets (head)	850	860	851	723	723
Other sheep (head)	70	77	77	71	57
Breeding cows (head)	145	145	157	149	134
Rising 1-year cattle (head)	153	153	153	137	146
Other cattle (head)	120	120	108	99	111
Opening sheep stock units (ssu)	3 454	3 348	3 380	3 068	3 058
Opening cattle stock units	2 045	2 002	2 018	1 863	1 872
Opening total stock units (su)	5 499	5 350	5 399	4 931	4 930
Stocking rate (stock unit/ha)	8.4	8.4	8.5	7.8	7.8
Ewe lambing (%)	113	123	121	107	121
Average lamb price (\$/head)	58.64	50.88	45.33	78.87	71.40
Average wool price (\$/kg)	2.78	2.34	2.20	2.19	1.99
Total wool produced (kg)	18 065	18 317	17 032	16 245	16 938
Wool production (kg/ssu)	5.23	5.06	5.04	5.29	5.54
Average rising 2-year steer (\$/head)	671	650	611	728	602
Average cull cow (\$/head)	529	567	478	500	484
Net cash income (\$)	321 779	299 900	292 007	315 743	301 570
Farm working expenses (\$)	179 560	194 106	194 793	183 624	196 917
Farm profit before tax (\$)	138 943	11 021	-28 164	49 045	38 371
Farm surplus for reinvestment (\$) ¹	148 514	-37 065	-42 419	1 085	-25 216

Note

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

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*.



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

	2008/09			2009/10 BUDGET			CHANGE BETWEEN 2008/09 AND 2009/10 (%)
	WHOLE FARM (\$)	PER HECTARE (\$)	PER STOCK UNIT¹ (\$)	WHOLE FARM (\$)	PER HECTARE (\$)	PER STOCK UNIT¹ (\$)	
REVENUE							
Sheep	176 430	278	57.50	179 758	283	58.78	2
Wool	35 561	56	11.59	33 707	53	11.02	-5
Cattle	119 042	187	63.89	106 837	168	57.09	-10
Grazing income (including hay and silage sales)	2 900	5	0.59	2 900	5	0.59	0
Other farm income	4 400	7	0.89	4 400	7	0.89	0
LESS:							
Sheep purchases	6 372	10	2.08	6 504	10	2.13	2
Cattle purchases	16 218	26	8.70	19 528	31	10.43	20
Net cash income	315 743	497	64.03	301 570	475	61.17	-4
Farm working expenses	183 624	289	37.24	196 917	310	39.94	7
Cash operating surplus	132 119	208	26.79	104 653	165	21.23	-21
Interest	56 943	90	11.55	48 885	77	9.92	-14
Rent and/or leases	9 200	14	1.87	9 000	14	1.83	-2
Stock value adjustment	1 350	2	0.27	12 379	19	2.51	817
Minus depreciation	18 282	29	3.71	20 777	33	4.21	14
Farm profit before tax	49 045	77	9.95	38 371	60	7.78	-22
Taxation	2 241	4	0.45	8 334	13	1.69	272
Farm profit after tax	46 804	74	9.49	30 037	47	6.09	-36
ALLOCATION OF FUNDS							
Add back depreciation	18 282	29	3.71	20 777	33	4.21	14
Reverse stock value adjustment	-1 350	-2	-0.27	-12 379	-19	-2.51	817
Income equalisation	0	0	0.00	0	0	0.00	...
Off-farm income	16 000	25	3.24	17 100	27	3.47	7
Discretionary cash	79 735	126	16.17	55 534	87	11.26	-30
APPLIED TO:							
Net capital purchases	14 900	23	3.02	16 100	25	3.27	8
Development	5 650	9	1.15	5 450	9	1.11	-4
Principal repayments	0	0	0.00	0	0	0.00	...
Drawings	62 650	99	12.70	63 650	100	12.91	2
New borrowings	0	0	0.00	30 000	47	6.09	...
Introduced funds	0	0	0.00	0	0	0.00	...
Cash surplus/deficit	-3 465	-5	-0.70	334	1	0.07	-110
Farm surplus for reinvestment²	1 085	2	0.22	-25 216	-40	-5.11	-2424
ASSETS AND LIABILITIES							
Farm, forest and building (opening)	4 000 000	6 299	811.12	3 600 000	5 669	730.25	-10
Plant and machinery (opening)	81 885	129	16.60	99 202	156	20.12	21
Stock valuation (opening)	593 118	934	120.27	594 468	936	120.59	0
Other produce on hand (opening)	345	1	0.07	1 047	2	0.21	203
Total farm assets (opening)	4 675 348	7 363	948.07	4 294 717	6 763	871.17	-8
Total assets (opening)	4 887 739	7 697	991.13	4 442 117	6 995	901.07	-9
Total liabilities (opening)	683 723	1 077	138.65	683 723	1 077	138.69	0
Total equity (farm assets - liabilities)	3 991 625	6 286	809.42	3 610 994	5 687	732.48	-10

Notes

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

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

Symbol

... Not applicable.

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

	2008/09			2009/10 BUDGET			CHANGE BETWEEN 2008/09 AND 2009/10 (%)
	WHOLE FARM (\$)	PER HECTARE (\$)	PER STOCK UNIT ¹ (\$)	WHOLE FARM (\$)	PER HECTARE (\$)	PER STOCK UNIT ¹ (\$)	
FARM WORKING EXPENSES							
Permanent wages	0	0	0.00	0	0	0.00	...
Casual wages	16 274	26	3.30	16 761	26	3.40	3
ACC	385	1	0.08	431	1	0.09	12
Total labour expenses	16 659	26	3.38	17 193	27	3.49	3
Animal health	17 753	28	3.60	18 733	30	3.80	6
Breeding	0	0	0.00	0	0	0.00	...
Electricity	2 959	5	0.60	3 155	5	0.64	7
Feed (hay and silage)	10 553	17	2.14	10 846	17	2.20	3
Feed (feed crops)	0	0	0.00	0	0	0.00	...
Feed (grazing)	0	0	0.00	0	0	0.00	...
Feed (other)	0	0	0.00	0	0	0.00	...
Fertiliser	26 460	42	5.37	34 136	54	6.92	29
Lime	4 590	7	0.93	4 590	7	0.93	0
Cash crop expenses	0	0	0.00	0	0	0.00	...
Freight (not elsewhere deducted)	4 488	7	0.91	4 437	7	0.90	-1
Regrassing costs	5 326	8	1.74	5 078	8	1.03	-5
Shearing expenses	22 366	35	7.29	23 671	37	7.74	6
Weed and pest control	5 129	8	1.04	5 373	8	1.09	5
Fuel	8 383	13	1.70	8 627	14	1.75	3
Vehicle costs (excluding fuel)	10 751	17	2.18	10 747	17	2.18	0
Repairs and maintenance	20 860	33	4.23	21 839	34	4.43	5
Total other working expenses	139 618	220	28.31	151 232	238	30.68	8
Communication costs (phone and mail)	2 629	4	0.53	2 696	4	0.55	3
Accountancy	3 475	5	0.70	3 564	6	0.72	3
Legal and consultancy	1 987	3	0.40	2 038	3	0.41	3
Other administration	2 099	3	0.43	2 153	3	0.44	3
Water charges (irrigation)	0	0	0.00	0	0	0.00	...
Rates	10 899	17	2.21	11 585	18	2.35	6
Insurance	4 142	7	0.84	4 240	7	0.86	2
Other expenditure ²	2 115	3	0.43	2 217	3	0.45	5
Total overhead expenses	27 346	43	5.55	28 493	45	5.78	4
Total farm working expenses	183 624	289	37.24	196 917	310	39.94	7
Wages of management	75 000	118	15.21	73 947	116	15.00	-1
Depreciation	18 282	29	3.71	20 777	33	4.21	14
Total farm operating expenses	276 905	436	56.15	291 641	459	59.16	5
CALCULATED RATIOS							
Economic farm surplus (EFS ³)	40 188	63	8.15	22 308	35	4.53	
Farm working expenses/NCI ⁴	58%			65%			
EFS/total farm assets	0.9%			0.5%			
EFS less interest and lease/equity	-0.7%			-1.0%			
Interest+rent+lease/NCI	20.9%			19.2%			
EFS/NCI	12.7%			7.4%			

Notes

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

2 Includes Accident Compensation Corporation (ACC) employer levy.

3 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: \$31 000 allowance for labour input plus 1 percent of opening total farm assets to a maximum of \$75 000.

4 Net cash income.

Symbol

... Not applicable.

FINANCIAL PERFORMANCE OF THE CENTRAL NORTH ISLAND HILL COUNTRY SHEEP AND BEEF MODEL FARM IN 2008/09

The cash operating surplus for the central North Island hill country model farm in 2008/09 is \$132 100, which represents a 36 percent increase compared with 2007/08.

REVENUE UP FOR SHEEP BUT DOWN FOR CATTLE AND WOOL

SHEEP REVENUE UP

Net sheep income (sales less purchases) increased 26 percent in 2008/09, despite 2007/08 returns being boosted by the sale of capital stock. This increase was driven by a significant increase in lamb prices, both prime and store, with many farmers receiving upwards of \$100 for their lambs sold later in the season.

Despite the improved returns from lambs, and good outlook, the monitored farms indicated very little movement to rebuild stock numbers to pre-drought levels.

WOOL RETURNS DROP

Total wool returns dropped 5 percent to \$35 600 in 2008/09 compared with \$37 500 in 2007/08. Despite average prices being similar to 2007/08, wool production was down due to a combination of both a drop in per head production, and fewer sheep; both a carry over effect of the drought.

CATTLE INCOME DOWN

Net cattle income (sales less purchases) was down 10 percent to \$102 800 in 2008/09 compared with \$113 800 in 2007/08, due to capital de-stocking in 2007/08, which artificially boosted income in that year. At an individual price level, although many animals were sold at lighter weights due to the carryover effects of the drought, prices received were up around 20 percent due to higher schedule prices.

DROUGHT IMPACTS ON LAMBING AND CALVING PERCENTAGES

Both lambing and calving percentages dropped in 2008/09 (down to 107 percent and 76 percent respectively), again a reflection of the carryover effects of the drought and a relatively poor climatic season through 2008/09 – feed conditions were tight and stock condition poor over the mating period for both cows and ewes. While the drought broke in most areas in May 2008, this was followed by a very wet winter. However, the 2008 spring was relatively good, resulting in good survival rates at lambing and calving. A dry early summer was followed by very good rain in February, which saved the region from a repeat of the previous year's drought.

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

YEAR ENDED 30 JUNE	2005/06 (\$)	2006/07 (\$)	2007/08 ^R (\$)	2008/09 (\$)	2009/10 BUDGET (\$)
Sheep sales less purchases	170 352	148 158	135 166	170 058	173 254
Cattle sales less purchases	101 767	102 668	113 771	102 824	87 309
Wool	49 660	42 750	37 470	35 561	33 707
Grazing income (including hay and silage sales)	0.0	2 411	1 300	2 900	2 900
Other income	0.0	3 913	4 300	4 400	4 400
Net cash income	321 779	299 900	292 007	315 743	301 570

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*.

EXPENDITURE DROPS AS FARMERS BALANCE THEIR BOOKS

Total farm working expenditure dropped 6 percent in 2008/09 to \$183 600 compared with \$194 800 in 2007/08, as farmers cut expenditure in order to break even. On a stock unit basis farm working expenditure actually increased 3 percent, due to the decrease in stock numbers.

The biggest drop was in fertiliser expenditure, with a 38 percent decrease in 2008/09 to \$26 500, compared with \$42 700 in 2007/08. Combined with a rise in fertiliser prices, this means less than half maintenance fertiliser was applied on the model farm. At the farm level there is some variation around this, with a number of farmers applying no fertiliser at all, while others applied more lime.

Most other farm working expenditure items increased, reflecting rises in unit costs (that is, on-farm inflation). The one main exception to this was the fall in fuel expenses, reflecting the drop in fuel prices over the year.

Total debt servicing costs dropped 7 percent to \$56 900 despite an increase in total debt levels due to drought-induced borrowing. Lower interest rates are starting to have an effect in the region. This can vary though, depending on the proportion of the mortgage which is on fixed rates, and when this next rolls over.

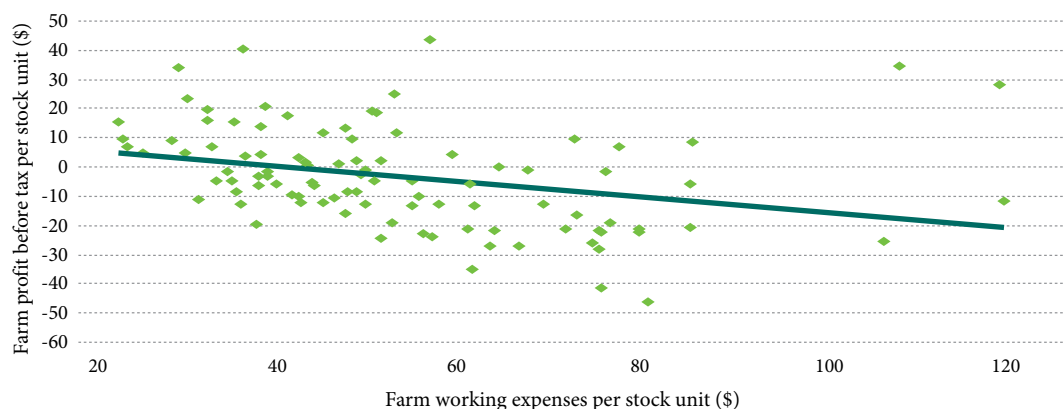
NET RESULT IS BREAKEVEN

Farm profit before tax improved to \$49 000 in 2008/09, compared with a loss of \$28 200 in 2007/08. Tax payments were well down in 2008/09; most farms have a refund due from 2007/08, which offsets 2008/09 tax payable.

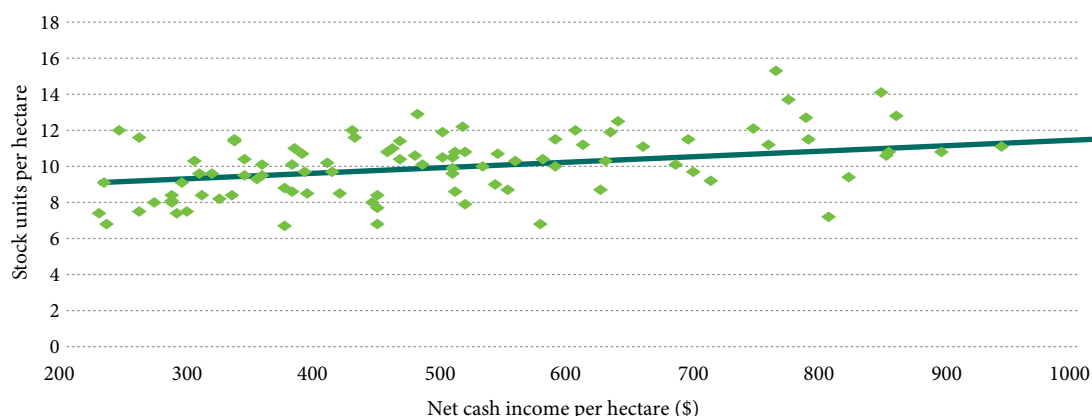
Some expenditure was also made on capital purchases (but less than the level of depreciation) and development. Drawings dropped slightly as farmers tighten personal expenditure. The end result is essentially a breakeven budget – but relies on some off-farm income and less than maintenance fertiliser expenditure.

Figures 1 and 2 below show farm profit before tax versus working expenses, and net cash income per hectare versus stocking rate, for the 2007/08 year. They show that the relationships are quite weak.

»» FIGURE 1: FARM PROFIT BEFORE TAX VERSUS FARM WORKING EXPENSES, 2007/08



»» FIGURE 2: NET CASH INCOME PER HECTARE VERSUS STOCKING RATE (STOCK UNITS PER HECTARE), 2007/08



BUDGET FINANCIAL PERFORMANCE OF THE CENTRAL NORTH ISLAND HILL COUNTRY SHEEP AND BEEF MODEL FARM IN 2009/10

The cash operating surplus for the central North Island hill country model farm is budgeted to decrease 21 percent to \$104 700 in 2009/10, as a result of decreased income and increased farm working expenditure.

FARMERS HOPE FOR A BETTER YEAR CLIMATICALLY

The summer of 2008/09 was only saved by good rain in February, which saw pasture carried forward over the next few months. The autumn was generally very dry, with the northern Rangitikei declared a drought area, as part of a wider East Coast drought. By May, pasture covers on most farms were quite tight. The winter of 2009 was one of the hardest winters for several decades with severe frosts, and mostly cold southerly rain. Heading into spring, farms are not in great shape, and farmers are hoping for improved weather conditions.

SHEEP INCOME UP, CATTLE AND WOOL INCOME DOWN

Overall, the net cash income for the model is expected to decrease 4 percent to \$301 600 in 2009/10 compared with \$315 700 in 2008/09. Net sheep revenue (sales less purchases) is expected to increase 2 percent, largely on the back of an expected improvement in the lambing percentage to 121 percent. Farmers were also budgeting conservatively on lamb prices, expecting them to be down 10 to 15 percent compared with 2008/09.

Wool returns are expected to drop 5 percent to \$33 700 in 2009/10 compared with \$35 600 in 2008/09, largely due to farmers budgeting for low prices, often less than \$2 per kilogram on average. A number of farmers report receiving much less than \$2 per kilogram (down to \$1.45 per kilogram) on winter shorn fleece wool, and farmers were generally not optimistic about wool returns.

Net cattle revenue (sales less purchases) is budgeted to be down 15 percent, due to a combination of budgeting conservatively on expected prices (prompted by the current high New Zealand dollar) and increased prices for replacement stock. This latter factor is driven by the expectation of less arable cropping area in the North Island as a result of the “bust” in 2008/09 and the possible demand coming out of the East Coast as they re-stock following the recent drought.

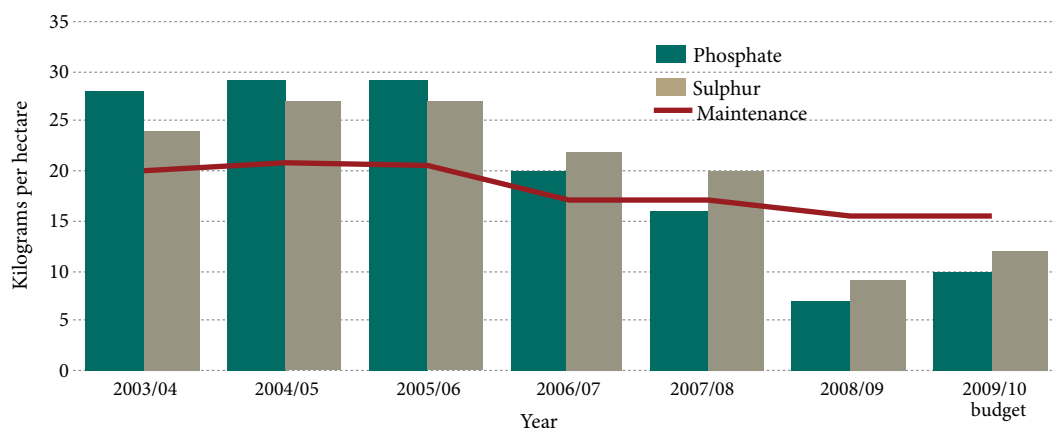
Farmers are again giving no indication of increasing stock numbers, and especially sheep through 2009/10. There was some indication that they would retain some extra young cattle as a move to rebuild their herds. This is reflected in the model with stock units budgeted to increasing by 0.5 percent. Increasing stock numbers is constrained by several factors, especially lack of cash and low fertiliser inputs, but also farmers are not looking to increase their workloads.

EXPENDITURE TO INCREASE

Total farm working expenditure is budgeted to increase 7 percent over 2008/09 to \$196 900. Increases are expected across virtually all expenditure items, driven largely by expected unit cost increases. The biggest increase is in fertiliser expenditure, where farmers are budgeting to apply more fertiliser but still at less than maintenance levels. Many farmers are realising that sulphur inputs are as important if not more so than phosphate, and are therefore looking to increase sulphur applications.

Interest costs are budgeted to decrease; down 14 percent as lower interest rates assist in this area.

»» FIGURE 3: CENTRAL NORTH ISLAND HILL COUNTRY SHEEP AND BEEF MODEL FERTILISER APPLICATION, 2003/04 TO 2009/10



DEFICIT COVERED BY MORE BORROWING

While farm profit before tax is down 22 percent to \$38 400 in 2009/10 compared with \$49 000 in 2008/09, tax payable is up as the refund from 2007/08 temporarily decreased tax payable in 2008/09.

Farmers are budgeting for some capital expenditure (but again less than depreciation) and some development. Even with off-farm income as an important input into the farm, the budget finishes in a deficit position. To cover this, the model is increasing its borrowings to finish in a breakeven position.

This is now the fourth year that the model has finished the year in a deficit situation, covering this deficit either by increased borrowing and/or applying less than maintenance fertiliser. Industry commentators believe this situation is not sustainable in the longer-term.

»» FIGURE 4: CENTRAL NORTH ISLAND HILL COUNTRY SHEEP AND BEEF MODEL PROFITABILITY TRENDS



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*.

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 experiences a moist summer and a long, cool winter.

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