

# CENTRAL NORTH ISLAND HILL COUNTRY SHEEP AND BEEF

## Key results from the Ministry for Primary Industries 2012 sheep and beef monitoring programme

### KEY POINTS

- The 2011/12 year was a great season overall, with good pasture growth, animal production and returns.
- Net cash income rose 22 percent in 2011/12 compared with 2010/11 on the back of improved production and generally good prices.
- Farm working expenses lifted 21 percent, with increased expenditure on fertiliser and repairs and maintenance.
- The good season and returns have maintained farmer morale, with many farms now recovering well from the 2008 drought.
- Although expecting schedule prices to fall, farmers are budgeting for a cash surplus in 2012/13, while maintaining inputs.

**Table 1: Key parameters, financial results and budget for the Central North Island hill country sheep and beef farm model**

Year ended 30 June	2008/09	2009/10 <sup>1</sup>	2010/11	2011/12 actual	2012/13 budget
Effective area (ha)	635	635	635	635	635
Breeding ewes (head)	2 509	2 509	2 463	2 610	2 587
Replacement ewe hoggets (head)	723	723	774	697	732
Other sheep (head)	71	57	57	57	58
Breeding cows (head)	149	161	175	164	173
Rising one-year cattle (head)	137	146	161	152	153
Other cattle (head)	99	82	77	85	84
Opening sheep stock units (ssu)	3 068	3 439	3 410	3 513	3 543
Opening cattle stock units	1 863	1 887	1 998	1 933	1 984
Opening total stock units (su)	4 931	5 326	5 408	5 446	5 527
Stocking rate (stock unit/ha)	7.8	8.4	8.5	8.6	8.7
Ewe lambing (%)	107	126	108	126	131
Average lamb price (\$/head)	78.87	72.63	96.68	108.59	91.47
Average store lamb price (\$/head)	68.83	63.93	83.23	95.00	83.00
Average prime lamb price (\$/head)	83.35	75.53	104.57	113.00	94.00
Average wool price (\$/kg)	2.19	2.27	3.82	4.03	3.10
Total wool produced (kg)	16 245	15 339	14 663	15 633	15 623
Wool production (kg/ssu)	5.3	4.5	4.3	4.5	4.4
Average rising two-year steer (\$/head)	728	773	1 163	1 221	1 250
Average cull cow (\$/head)	500	590	693	769	722
Net cash income (\$)	315 743	357 610	452 184	551 390	507 047
Farm working expenses (\$)	183 624	199 689	227 237	276 073	269 299
Farm profit before tax (\$)	49 045	104 532	148 172	229 622	203 288
Farm surplus for reinvestment (\$) <sup>2</sup>	1 085	43 351	92 703	136 065	67 492

#### 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.

<sup>2</sup> 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: Central North Island hill country sheep and beef model budget

	2011/12			2012/13 budget		
	Whole farm (\$)	Per hectare (\$)	Per stock unit <sup>1</sup> (\$)	Whole farm (\$)	Per hectare (\$)	Per stock unit <sup>1</sup> (\$)
<b>Revenue</b>						
Sheep	351 477	554	100.05	311 220	490	87.85
Wool	62 999	99	17.93	48 430	76	13.67
Cattle	151 828	239	78.53	159 883	252	80.57
Grazing income (including hay and silage sales)	0	0	0.00	0	0	0.00
Other farm income	2 844	4	0.52	3 216	5	0.58
<b>Less:</b>						
Sheep purchases	5 856	9	1.67	2 824	4	0.80
Cattle purchases	11 902	19	6.16	12 878	20	6.49
<b>Net cash income</b>	<b>551 390</b>	<b>868</b>	<b>101.24</b>	<b>507 047</b>	<b>798</b>	<b>91.74</b>
<b>Farm working expenses</b>	<b>276 073</b>	<b>435</b>	<b>50.69</b>	<b>269 299</b>	<b>424</b>	<b>48.72</b>
<b>Cash operating surplus</b>	<b>275 317</b>	<b>434</b>	<b>50.55</b>	<b>237 749</b>	<b>374</b>	<b>43.02</b>
Interest	39 869	63	7.32	36 815	58	6.66
Rent and/or leases	0	0	0.00	0	0	0.00
Stock value adjustment	7 302	11	1.34	16 289	26	2.95
Minus depreciation	13 128	21	2.41	13 935	22	2.52
<b>Farm profit before tax</b>	<b>229 622</b>	<b>362</b>	<b>42.16</b>	<b>203 288</b>	<b>320</b>	<b>36.78</b>
Income equalisation	0	0	0.00	0	0	0.00
Taxation	41 383	65	7.60	73 942	116	13.38
<b>Farm profit after tax</b>	<b>188 239</b>	<b>296</b>	<b>34.56</b>	<b>129 346</b>	<b>204</b>	<b>23.40</b>
<b>Allocation of funds</b>						
Add back depreciation	13 128	21	2.41	13 935	22	2.52
Reverse stock value adjustment	- 7 302	- 11	-1.34	- 16 289	- 26	-2.95
Drawings	58 000	91	10.65	59 500	94	10.77
<b>Farm surplus for reinvestment<sup>2</sup></b>	<b>136 065</b>	<b>214</b>	<b>24.98</b>	<b>67 492</b>	<b>106</b>	<b>12.21</b>
<b>Reinvestment</b>						
Net capital purchases	23 229	37	4.27	10 877	17	1.97
Development	13 616	21	2.50	16 415	26	2.97
Principal repayments	21 934	35	4.03	21 538	34	3.90
<b>Farm cash surplus/deficit</b>	<b>77 286</b>	<b>122</b>	<b>14.19</b>	<b>18 662</b>	<b>29</b>	<b>3.38</b>
<b>Other cash sources</b>						
Off-farm income	0	0	0.00	0	0	0.00
New borrowings	0	0	0.00	0	0	0.00
Introduced funds	0	0	0.00	0	0	0.00
<b>Net cash position</b>	<b>77 286</b>	<b>122</b>	<b>14.19</b>	<b>18 662</b>	<b>29</b>	<b>3.38</b>
<b>Assets and liabilities</b>						
Farm, forest and building (opening)	2 921 000	4 600	536.34	2 925 680	4 607	529.34
Plant and machinery (opening)	79 719	126	14.64	85 140	134	15.40
Stock valuation (opening)	884 376	1 393	162.38	891 678	1 404	161.33
Other produce on hand (opening)	0	0	0.00	0	0	0.00
<b>Total farm assets (opening)</b>	<b>3 885 095</b>	<b>6 118</b>	<b>713.36</b>	<b>3 902 498</b>	<b>6 146</b>	<b>706.08</b>
<b>Total assets (opening)</b>	<b>3 885 095</b>	<b>6 118</b>	<b>713.36</b>	<b>3 902 498</b>	<b>6 146</b>	<b>706.08</b>
Total liabilities (opening)	579 773	913	106.45	557 839	878	100.93
<b>Total equity (farm assets - liabilities)</b>	<b>3 305 322</b>	<b>5 205</b>	<b>606.90</b>	<b>3 344 659</b>	<b>5 267</b>	<b>605.15</b>

**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.

Table 3: Central North Island hill country sheep and beef model expenditure

	2011/12			2012/13 budget		
	Whole farm (\$)	Per hectare (\$)	Per stock unit (\$)	Whole farm (\$)	Per hectare (\$)	Per stock unit (\$)
<b>Farm working expenses</b>						
Permanent wages	0	0	0.00	0	0	0.00
Casual wages	10 675	17	1.96	9 230	15	1.67
ACC	375	1	0.07	286	0	0.05
<b>Total labour expenses</b>	<b>11 049</b>	<b>17</b>	<b>2.03</b>	<b>9 516</b>	<b>15</b>	<b>1.72</b>
Animal health	25 379	40	4.66	24 540	39	4.44
Breeding	1 634	3	0.30	1 603	3	0.29
Electricity	5 119	8	0.94	5 361	8	0.97
Feed (hay and silage)	11 274	18	2.07	8 733	14	1.58
Feed (feed crops)	10 729	17	1.97	10 888	17	1.97
Feed (grazing)	0	0	0.00	0	0	0.00
Feed (other)	2 995	5	0.55	3 040	5	0.55
Fertiliser	68 440	108	12.57	69 580	110	12.59
Lime	0	0	0.00	0	0	0.00
Cash crop expenses <sup>1</sup>	0	0	0.00	0	0	0.00
Freight (not elsewhere deducted)	4 738	7	0.87	4 643	7	0.84
Regrassing costs	7 570	12	1.39	8 346	13	1.51
Shearing expenses <sup>2</sup>	27 576	43	7.85	27 774	44	7.84
Weed and pest control	7 570	12	1.39	7 130	11	1.29
Fuel	9 912	16	1.82	10 446	16	1.89
Vehicle costs (excluding fuel)	9 313	15	1.71	8 733	14	1.58
Repairs and maintenance	31 915	50	5.86	27 635	44	5.00
<b>Total other working expenses</b>	<b>224 166</b>	<b>353</b>	<b>41.16</b>	<b>218 450</b>	<b>344</b>	<b>39.52</b>
Communication costs (phone and mail)	2 396	4	0.44	2 487	4	0.45
Accountancy	3 649	6	0.67	3 703	6	0.67
Legal and consultancy	3 050	5	0.56	2 598	4	0.47
Other administration	1 743	3	0.32	1 769	3	0.32
Water charges (irrigation)	0	0	0.00	0	0	0.00
Rates	17 047	27	3.13	17 686	28	3.20
Insurance	6 045	10	1.11	6 301	10	1.14
ACC employer	4 641	7	0.85	4 467	7	0.81
Other expenditure	2 287	4	0.42	2 321	4	0.42
<b>Total overhead expenses</b>	<b>40 858</b>	<b>64</b>	<b>7.50</b>	<b>41 332</b>	<b>65</b>	<b>7.48</b>
<b>Total farm working expenses</b>	<b>276 073</b>	<b>435</b>	<b>50.69</b>	<b>269 299</b>	<b>424</b>	<b>48.72</b>
<b>Calculated ratios</b>						
Economic farm surplus (EFS <sup>3</sup> )	199 640	314	36.66	170 077	268	30.77
Farm working expenses/NCI <sup>4</sup>	50%			53%		
EFS/total farm assets	5.1%			4.4%		
EFS less interest and lease/equity	4.8%			4.0%		
Interest+rent+lease/NCI	7.2%			7.3%		
EFS/NCI	36.2%			33.5%		
Wages of management	69 851	110	12.83	70 025	110	12.67

**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 CENTRAL NORTH ISLAND HILL COUNTRY SHEEP AND BEEF MODEL FARM IN 2011/12

The cash operating surplus in 2011/12 for the Central North Island hill country sheep and beef farm model was \$275 300, up 22 percent on 2010/11, as a result of improved production and higher prices for lamb, beef and wool.

### REVENUE UP DUE TO IMPROVED PRICES

#### Seasonal factors

While the 2011 winter was wet, a settled spring saw very good survival rates in lambs and calves, especially given the disastrous storm in spring 2010. The summer saw regular rainfall, which significantly boosted pasture growth. While the autumn turned cool and dry, May and June were relatively mild, which saw most farms go into the 2012 winter with good pasture covers and stock in good condition.

#### Sheep revenue up

The 2011/12 year was positive for the sheep sector. The good weather and a favourable mating period in 2011 saw a marked lift in lambing rates to an average of 126 percent, compared with 108 percent in 2010/11. Heavy snow storms in the 2010 spring were a major contributing factor to the low lambing percentage in 2010/11. This year, ideal conditions for both lamb survivability and pasture growth, meant lambs got off to a strong start. The monitored farms recorded lambing percentages varying from 95 percent through to 152 percent.

In recent years, there has been much talk of the need to achieve \$150 per lamb. The 2012 opening season schedule of \$8.20 per kilogram, some 30 percent higher than 2011, saw many farmers achieve this goal. Fears that this would not last came true when the schedule started to drop away markedly from late January 2012. By mid-February, the schedule had dropped to \$6.50 per kilogram, the same value as in 2011. While, in 2011, the schedule continued to rise through the autumn, in 2012, it continued to decline, with values as low as \$5.60 per kilogram, compared with \$7.25 per kilogram at the same time the previous year.

The higher average schedule for the season helped lift the average prime lamb price to \$113 per head compared with \$105 in 2010/11. With schedules

dropping on average 15 cents per week from mid-January to mid-May, farmers needed to be growing lambs at 120 grams per head per day to counter this fall in value. Summer pasture growth conditions meant this was achievable, but for many lambs on hill country, this target was only just met. As a result, a large number of lambs were kept on until late in the season for little financial gain. Several farmers sold store lambs in December–January for around \$100 per head (\$3.80 per kilogram live weight) with many wishing in hindsight they had sold more. In general, the model sells around two-thirds of lambs prime and one-third store. The good 2011/12 season saw 76 percent sold prime and 24 percent sold store, at an average price of \$95 per head.

The average cull ewe price for the season of \$102 per head was also a significant highlight for the 2011/12 year. Despite the higher value on offer, there was no great clean out of ewe flocks as many farmers chose to keep ewe numbers up. On the monitored farms, closing numbers for breeding ewes for 2011/12 were much the same as opening numbers, whereas replacement ewe hogget numbers increased 4 percent.

#### Wool revenue up

Wool production for 2011/12 remained relatively static. A mix of shearing policies continues to see this fluctuate from year to year. Overall wool production lifted slightly to 4.5 kilograms per sheep stock unit compared with 4.3 kilograms in 2010/11. This can be attributed largely to the additional lambs born and the abundant feed supplies that saw fewer lambs offloaded in the early part of the season.

The average wool price for 2011/12 lifted to \$4.03 per kilogram compared with \$3.83 per kilogram in 2010/11. This was fuelled mainly by the significant increase in prices, which rose to over \$5.00 per kilogram, in the late winter and early spring of 2011. Those with winter or early shearing policies were able to capitalise on these prices, which markedly boosted average returns for the year.

Returns dropped rapidly over the season, and farmers were somewhat pessimistic (again) about wool returns heading into the 2012/13 year.

Overall, wool revenue was \$63 000, up 12 percent compared with 2010/11.

### Cattle revenue drops slightly

Net cattle revenue (sales less purchases) dropped 4 percent in 2011/12, due largely to more stock being retained on-farm. Average prices for the season rose, mainly on the back of the excellent feeding of cattle and an increase in average weight. The average price for rising three-year steers lifted to \$1220 per head compared with \$1162 per head in 2010/11.

Compared with the previous season, the empty rate for breeding cows in 2011/12 was down by about 5 percent due to the good conditions prevailing at mating. Farmers took advantage of this to lift breeding cow numbers back to levels prevailing before a cull in 2011. The 2011 cull occurred because of high empty rates in 2010/11.

Calving for the year lifted to 90 percent from 88 percent in 2010/11. This was primarily due to the excellent rate of calf survival in the spring period and minimal losses in cows.

Weaner sales for the autumn were buoyant, which reflected the demand from finishing farms.

On average, most cattle heading into the 2012 winter were 20 to 50 kilograms liveweight ahead of last year. This value is “unrealised” at this stage, but bodes well for the next season.

## EXPENDITURE INCREASES IN LINE WITH INCOME

Farm working expenses in 2011/12 rose 21 percent to \$50.69 per stock unit compared with \$42.02 in 2010/11. This was due to increases across a number of items. Animal health costs rose 27 percent to \$4.66 per stock unit, due to a combination of more lambs, heavier

animals (and, hence, more volume of drench used) and unit price increases. On the monitored farms, animal health costs varied from \$2.52 to \$9.38 NBS per stock unit.

Total feed costs rose 55 percent in 2011/12 as farms either made more hay or silage, due to the flush of feed, and/or increased the area of summer or winter crops.

Fertiliser expenditure increased 8 percent to \$108 per hectare, as farmers endeavoured to apply at least maintenance levels of fertiliser. For the monitored farms, fertiliser expenditure varied from \$36 to \$105 per hectare. Several farmers also applied lime, with seven of the 20 monitored (35 percent) doing so.

Repairs and maintenance expenditure saw a 59 percent lift to \$50 per hectare, as farmers continued to catch up on deferred maintenance.

Administration costs were up 12 percent, and standing charges such as rates and insurance also rose, up 17 percent and 18 percent respectively.

For the monitored farms, total farm working expenditure varied from \$43.96 to \$75.58 per stock unit.

Debt servicing costs continued to decline, down 4 percent to \$7.32 per stock unit in 2011/12, due to a combination of falling interest rates and some debt reduction in 2010/11.

## NET RESULT POSITIVE

Compared with 2010/11, farm profit before tax jumped 55 percent to \$229 600. Drawings are up only slightly, whereas expenditure on both capital purchases and development has increased. The model is also making a principal debt repayment given a similar move by 17 of the 20 monitored farms.

**Table 4: Central North Island hill country sheep and beef model cash farm income**

Year ended 30 June	2008/09 (\$)	2009/10 (\$)	2010/11 (\$)	2011/12 (\$)	2012/13 budget (\$)
Sheep sales less purchases	170 058	209 952	247 987	345 621	308 396
Cattle sales less purchases	102 824	108 134	145 102	139 926	147 005
Wool	35 561	34 821	56 013	62 999	48 430
Grazing income (including hay and silage sales)	2 900	0	0	0	0
Other income	4 400	4 704	3 082	2 844	3 216
Net cash income	315 743	357 610	452 184	551 390	507 047

**Note**

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.

The model finishes the 2011/12 year with a \$77 300 cash surplus. Farmers remain cautious, like last year, on any increased spend. This cash surplus will be targeted at a range of items such as debt reduction, vehicle replacement and further

development. Many farmers, though, are using the cash surplus to reduce overdrafts or are keeping it in an on-call account until they see how next season develops.

## **BUDGET FINANCIAL PERFORMANCE OF THE CENTRAL NORTH ISLAND HILL COUNTRY SHEEP AND BEEF MODEL FARM IN 2012/13**

The cash operating surplus for the Central North Island hill country sheep and beef farm model is budgeted to drop 14 percent in 2012/13 compared with 2011/12, to \$507 000, due mostly to expected reductions in returns for lamb and wool.

### **Sheep revenue down**

Farmers are budgeting for a lift in lambing to 131 percent on the back of excellent ewe condition in the 2012 autumn. This will be a record for the model. A higher proportion of ewe hoggets, 64 percent compared with 53 percent in 2011/12, have also gone to the ram, given higher body weights as a result of the good season.

Farmers are budgeting for an average prime lamb price of \$94, down \$19 on 2011/12 returns, and \$83 for store lambs, down around \$12 per head on 2011/12 returns. Farmers are budgeting on selling at least 75 percent of lambs prime and on receiving \$84 for cull ewes, down \$18 on 2011/12.

The overall picture is one of softening prices in the coming year but underlying confidence remains in the sector.

### **Wool revenue down**

Wool production is expected to be similar to 2011/12. However, farmers are only budgeting on an average price of \$3.10 per kilogram, resulting in an overall 23 percent drop in wool revenue in 2012/13. Farmers are uncertain about wool prices, with various “blips” in payout, so are budgeting conservatively. There is still confidence that the markets will not dip to 2009/10 levels.

### **Cattle revenue up**

Net capital revenue (sales less purchases) is expected to be up 5 percent in 2012/13 to \$147 000. This is mostly due to an increase in the numbers of stock sold, given the lift in cow numbers in 2011/12. With the good conditions at mating and reduced number of empty cows, farmers are also budgeting for a small lift in calving from 90 percent in 2011/12 to 91 percent in 2012/13.

The value of the increased weight of cattle coming

into this year remains to be seen. Farmers are budgeting on a slightly lower schedule for 2012/13, but with heavier weights, the per head return is expected to be similar to 2011/12. If the schedule remains similar to 2011/12, the average sale value could improve further.

### **FARM WORKING EXPENSES DOWN SLIGHTLY**

Total farm working expenses for 2012/13 are budgeted to decrease by 2 percent, to \$48.72 per stock unit. Decreases in expenditure are expected for: hay and silage made on-farm (down 23 percent as farmers expect less pasture surplus), weed and pest control (down 6 percent), and repairs and maintenance (down 13 percent). Increases are expected for: electricity (up 5 percent), fertiliser (up 2 percent – less fertiliser being applied but allowing for price increases), and rates and insurance (up 4 percent).

Debt servicing is expected to drop in 2012/13 due to a combination of lower interest rates and further debt reduction in 2011/12.

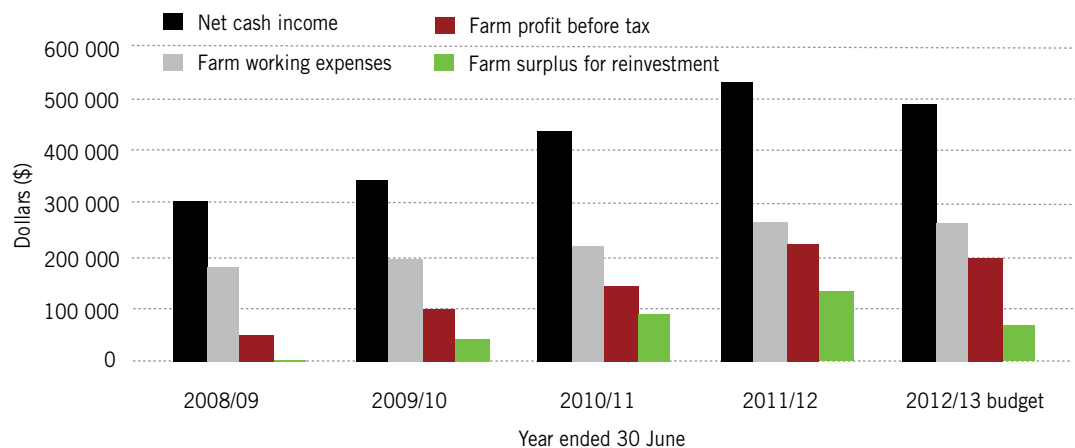
### **NET RESULT STILL POSITIVE, BUT WELL DOWN ON 2011/12**

Farm profit before tax for 2012/13 is expected to be down 11 percent on 2011/12, at \$203 300. However, tax payments are budgeted to increase sharply, up 79 percent, due to terminal tax flowing through from the improved income in 2011/12. The result is that farm profit after tax is expected to be down 31 percent compared with 2011/12. Farmers are also budgeting for some expenditure on capital purchases, development and further debt reduction.

The net result for 2012/13 is an expected cash surplus of \$18 700, down 76 percent on 2011/12. While a relatively small surplus, it is still on the right side of the ledger and farmers will wait to see how the season and schedules progress before committing to any major spending.



Figure 1: Central North Island hill country sheep and beef model profitability trends



## INFORMATION ABOUT THE MODEL

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

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

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

Farm monitoring models calculate sheep stock units based on lambing performance. One standard sheep stock unit is based on a ewe lambing greater than 111 and less than 120 percent. Based on the lambing percentage for this model breeding ewe numbers were multiplied by 1.1 stock units in both years. Any per stock unit calculations or indices should take this into account when comparing to other sources of financial information.

For further information on the model contact:

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