



# CANTERBURY/MARLBOROUGH HILL COUNTRY 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

- › Lambing percentages and wool weights fell in 2010/11 because autumn, winter and spring 2010 were difficult seasons with significant feed shortages.
- › Better prices for lamb, other sheep, wool and beef have lifted revenue \$58 300 in 2010/11. Prices are expected to hold for the 2011/12 year and, combined with better production, give a further \$60 300 increase in net cash income.
- › Farm working expenses increased \$27 200 (12 percent) in 2010/11 with increases in fertiliser, lime and repairs and maintenance. Farmers plan to keep expenses tightly controlled for the 2011/12 year with increases of only \$7400 (3 percent) predicted.
- › Net farm profit before tax jumped to \$108 300 in 2010/11 and is predicted to rise to \$148 800 in 2011/12.

»» TABLE 1: KEY PARAMETERS, FINANCIAL RESULTS AND BUDGET FOR THE CANTERBURY MARLBOROUGH HILL COUNTRY SHEEP AND BEEF MODEL

YEAR ENDED 30 JUNE	2007/08	2008/09	2009/10 <sup>1</sup>	2010/11	2011/12 BUDGET
Effective area (ha)	1 397	1 397	1 397	1 397	1 397
Breeding ewes (head)	2 706	2 614	2 600	2 600	2 600
Replacement ewe hoggets (head)	787	664	650	650	680
Other sheep (head)	414	0	389	240	240
Breeding cows (head)	207	0	192	190	193
Rising 1-year cattle (head)	135	143	140	130	135
Other cattle (head)	42	30	73	66	74
Opening sheep stock units (ssu)	3 551	3 318	3 380	3 266	3 600
Opening cattle stock units	1 976	2 048	2 022	1 942	1 961
Opening total stock units (su)	5 614	5 482	5 487	5 268	5 620
Stocking rate (stock unit/ha)	4.0	3.9	3.9	3.8	4.0
Ewe lambing (%)	112	111	118	116	123
Average lamb price (\$/head)	46.02	70.51	70.02	91.52	88.70
Average store lamb price (\$/head)	33.00	58.00	61.50	82.50	85.00
Average prime lamb price (\$/head)	54.64	79.00	74.00	97.00	90.50
Average wool price (\$/kg)	3.25	3.10	3.28	4.10	4.60
Total wool produced (kg)	16 624	15 560	15 730	14 105	15 210
Wool production (kg/ssu)	4.7	4.7	4.7	4.3	4.2
Average rising 2-year steer (\$/head)	683	1 025	700	890	890
Average cull cow (\$/head)	454	562	643	750	770
Net cash income (\$)	295 744	362 009	375 894	434 238	494 532
Farm working expenses (\$)	214 467	222 964	230 784	258 032	265 457
Farm profit before tax (\$)	4 316	46 854	49 441	108 346	148 804
Farm surplus for reinvestment (\$) <sup>2</sup>	-21 247	35 519	20 500	39 263	85 074

### 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.



»» TABLE 2: CANTERBURY/MARLBOROUGH HILL COUNTRY SHEEP AND BEEF MODEL BUDGET

	2010/11			2011/12 BUDGET		
	WHOLE FARM (\$)	PER HA (\$)	PER STOCK UNIT <sup>1</sup> (\$)	WHOLE FARM (\$)	PER HA (\$)	PER STOCK UNIT <sup>1</sup> (\$)
<b>REVENUE</b>						
Sheep	260 678	187	79.82	289 526	207	80.43
Wool	57 831	41	17.71	69 966	50	19.44
Cattle	107 430	77	55.32	123 440	88	62.96
Grazing income (including hay and silage sales)	5 600	4	93.33	5 600	4	93.33
Other farm income	19 000	14	3.61	16 000	11	2.85
<b>LESS:</b>						
Sheep purchases	7 300	5	2.24	6 000	4	1.67
Cattle purchases	9 000	6	4.63	4 000	3	2.04
<b>Net cash income</b>	<b>434 238</b>	<b>311</b>	<b>82.43</b>	<b>494 532</b>	<b>354</b>	<b>87.99</b>
<b>Farm working expenses</b>	<b>258 032</b>	<b>185</b>	<b>48.98</b>	<b>265 457</b>	<b>190</b>	<b>47.23</b>
<b>Cash operating surplus</b>	<b>176 206</b>	<b>126</b>	<b>33.45</b>	<b>229 075</b>	<b>164</b>	<b>40.76</b>
Interest	58 300	42	11.07	55 508	40	9.88
Rent and/or leases	5 000	4	0.95	5 000	4	0.89
Stock value adjustment	14 940	11	2.84	0	0	0.00
Minus depreciation	19 500	14	3.70	19 763	14	3.52
<b>Farm profit before tax</b>	<b>108 346</b>	<b>78</b>	<b>20.57</b>	<b>148 804</b>	<b>107</b>	<b>26.48</b>
Income equalisation	0	0	0.00	0	0	0.00
Taxation	17 763	13	3.37	24 818	18	4.42
<b>Farm profit after tax</b>	<b>90 583</b>	<b>65</b>	<b>17.20</b>	<b>123 986</b>	<b>89</b>	<b>22.06</b>
<b>ALLOCATION OF FUNDS</b>						
Add back depreciation	19 500	14	3.70	19 763	14	3.52
Reverse stock value adjustment	-14 940	-11	-2.84	0	0	0.00
Drawings	55 880	40	10.61	58 674	42	10.44
<b>Farm surplus for reinvestment<sup>2</sup></b>	<b>39 263</b>	<b>28</b>	<b>7.45</b>	<b>85 074</b>	<b>61</b>	<b>15.14</b>
<b>REINVESTMENT</b>						
Net capital purchases	15 000	11	2.85	14 000	10	2.49
Development	17 113	12	3.25	6 182	4	1.10
Principal repayments	16 000	11	3.04	11 000	8	1.96
<b>Farm cash surplus/deficit</b>	<b>-8 850</b>	<b>-6</b>	<b>-1.68</b>	<b>53 893</b>	<b>39</b>	<b>9.59</b>
<b>OTHER CASH SOURCES</b>						
Off-farm income	15 000	11	2.85	15 000	11	2.67
New borrowings	7 000	5	1.33	0	0	0.00
Introduced funds	0	0	0.00	0	0	0.00
<b>Net cash position</b>	<b>13 150</b>	<b>9</b>	<b>2.50</b>	<b>68 893</b>	<b>49</b>	<b>12.26</b>
<b>ASSETS AND LIABILITIES</b>						
Farm, forest and building (opening)	4 500 000	3 221	854.24	4 492 500	3 216	799.33
Plant and machinery (opening)	80 000	57	15.19	83 000	59	14.77
Stock valuation (opening)	822 576	589	156.15	837 516	600	149.02
Other produce on hand (opening)	0	0	0.00	0	0	0.00
<b>Total farm assets (opening)</b>	<b>5 402 576</b>	<b>3 867</b>	<b>1 025.58</b>	<b>5 413 016</b>	<b>3 875</b>	<b>963.12</b>
<b>Total assets (opening)</b>	<b>5 642 576</b>	<b>4 039</b>	<b>1 071.14</b>	<b>5 653 016</b>	<b>4 047</b>	<b>1 005.82</b>
Total liabilities (opening)	860 000	616	163.25	851 000	609	151.42
<b>Total equity (farm assets - liabilities)</b>	<b>4 542 576</b>	<b>3 252</b>	<b>862.32</b>	<b>4 562 016</b>	<b>3 266</b>	<b>811.70</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.

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: CANTERBURY/MARLBOROUGH HILL COUNTRY SHEEP AND BEEF MODEL EXPENDITURE

	2010/11			2011/12 BUDGET		
	WHOLE FARM (\$)	PER HA (\$)	PER STOCK UNIT (\$)	WHOLE FARM (\$)	PER HA (\$)	PER STOCK UNIT (\$)
<b>FARM WORKING EXPENSES</b>						
Permanent wages	27 395	20	5.20	28 108	20	5.00
Casual wages	5 798	4	1.10	5 616	4	1.00
ACC	1 790	1	0.34	1 165	1	0.21
<b>Total labour expenses</b>	<b>34 983</b>	<b>25</b>	<b>6.64</b>	<b>34 889</b>	<b>25</b>	<b>6.21</b>
Animal health	18 626	13	3.54	18 552	13	3.30
Breeding	1 580	1	0.30	1 579	1	0.28
Electricity	7 907	6	1.50	8 717	6	1.55
Feed (hay and silage)	10 643	8	2.02	15 175	11	2.70
Feed (feed crops)	5 268	4	1.00	5 620	4	1.00
Feed (grazing)	4 257	3	0.81	1 686	1	0.30
Feed (other)	4 257	3	0.81	2 810	2	0.50
Fertiliser	39 034	28	7.41	40 409	29	7.19
Lime	4 000	3	0.76	5 040	4	0.90
Cash crop expenses <sup>1</sup>	1 000	1	0.19	1 000	1	0.18
Freight (not elsewhere deducted)	2 640	2	0.50	2 696	2	0.48
Regrassing costs	5 267	4	1.00	5 337	4	0.95
Shearing expenses <sup>2</sup>	18 453	13	5.65	18 539	13	5.15
Weed and pest control	10 533	8	2.00	11 246	8	2.00
Fuel	14 221	10	2.70	15 744	11	2.80
Vehicle costs (excluding fuel)	10 268	7	1.95	8 997	6	1.60
Repairs and maintenance	26 333	19	5.00	22 478	16	4.00
<b>Total other working expenses</b>	<b>184 290</b>	<b>132</b>	<b>34.98</b>	<b>185 625</b>	<b>133</b>	<b>33.03</b>
Communication costs (phone and mail)	2 137	2	0.41	2 249	2	0.40
Accountancy	4 219	3	0.80	4 498	3	0.80
Legal and consultancy	2 626	2	0.50	2 473	2	0.44
Other administration	3 954	3	0.75	3 940	3	0.70
Water charges (irrigation)	279	0	0.05	1 132	1	0.20
Rates	11 623	8	2.21	12 810	9	2.28
Insurance	5 867	4	1.11	7 893	6	1.40
ACC employer	3 792	3	0.72	5 729	4	1.02
Other expenditure	4 261	3	0.81	4 219	3	0.75
<b>Total overhead expenses</b>	<b>38 759</b>	<b>28</b>	<b>7.36</b>	<b>44 943</b>	<b>32</b>	<b>8.00</b>
<b>Total farm working expenses</b>	<b>258 032</b>	<b>185</b>	<b>48.98</b>	<b>265 457</b>	<b>190</b>	<b>47.23</b>
<b>CALCULATED RATIOS</b>						
Economic farm surplus (EFS <sup>3</sup> )	96 646	69	18.35	134 312	96	23.90
Farm working expenses/NCI <sup>4</sup>	59%			54%		
EFS/total farm assets	1.8%			2.5%		
EFS less interest and lease/equity	0.7%			1.6%		
Interest+rent+lease/NCI	14.6%			12.2%		
EFS/NCI	22.3%			27.2%		
Wages of management	75 000	54	14.24	75 000	54	13.34

**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 CANTERBURY/ MARLBOROUGH HILL COUNTRY SHEEP AND BEEF MODEL FARM IN 2010/11

Cash operating surplus increased 21 percent to \$176 200 in 2010/11 as a result of higher prices for lamb, sheep, wool and beef. Although farm working expenses increased 12 percent, this was more than offset by the rise in revenue. Much of the improvement in prices and increased spending occurred in the second half of the year

### IMPROVED PRICES LIFT REVENUE

Better prices for lamb, other sheep, wool and beef have lifted revenue \$58 300 (16 percent). Much of the upswing in prices, particularly for wool, came after many of this class of farm had sold stock in the spring. Autumn, winter and spring 2010 were poor seasons with dry and cold weather creating feed shortages. The poor seasons combined with storms at lambing to reduce lambing percentages and wool weights on most farms. It was only in autumn 2011 that good weather and good prices really boosted income. Much of the benefit of the good autumn is expected to flow into further improved financial performance in the budget year.

### LAMB AND SHEEP PRICES UP

Sheep sales less purchases increased 25 percent from the previous year with a lift in prices for all classes of sheep. The average lamb price increased \$21.50. The lift would have been even larger but 6 percent more lambs were sold as stores because of the difficult spring and dry early summer. Additionally, farmers felt store prices were very good at the time and decided to sell before the usual summer slump in prices. Because lamb prices kept rising all season, farmers who sold later achieved much better prices for both store and prime lambs.

Later in the season the margin between store and prime lamb price reduced to as low as \$10, due to the very good autumn feed conditions and because the buyers of store lambs were expecting to sell on a high winter schedule. Winter prime lambs are now expected to fetch up to \$150 for heavier carcass weights.

The increase in cull ewe price was even more dramatic, increasing \$27 with a higher schedule and higher carcass weight on cull ewes. Again those farmers who sold later in the year did better with a higher ewe meat schedule and heavier carcass weights.

### WOOL WEIGHTS DOWN BUT PRICES LIFT

The average wool weight fell 0.33 kilograms per sheep stock unit because feeding levels were restricted by the dry summer and autumn in 2010 and the cold wet winter and early spring. Slightly higher ewe deaths also reduced wool sold. However, a 25 percent lift in wool price during the season more than offset the drop in wool volume, and wool income rose by 12 percent to \$57 800. Industry commentators observe that the change from mid micron to cross bred sheep has continued on this class of farm as farmers pursue increased meat income.

### CATTLE PRICES UP

Cattle prices have increased \$87 on average, ranging from a \$60 rise in the weaner calf price to an extra \$190 for two year old steers. However, cattle sales less purchases were down slightly because of an increase in stock on hand of \$11 300 at the end of June 2011 (19 fewer cattle sold) and increased breeding bull purchases. The average weaner price may have increased more but this year farmers retained the best calves and sold the seconds whereas last year many sold the best calves.





### INCREASE IN FORESTRY INCOME

A number of the monitored farmers have taken advantage of the improved log price and sold some trees. In addition, some farmers in this model have forests which are eligible for carbon credits and are venturing into carbon trading although the revenue is minor as yet.

### DISCRETIONARY SPENDING RISES

Total farm working expenses increased \$27 200 (12 percent) with two thirds of this from increases in fertiliser, lime and repairs and maintenance; farmers took advantage of their improved income to reinvest in their business. Fertiliser spending increased 35 percent or \$10 000 compared with last year. There was a lot more topdressing of hill country which has been quite restricted until this year. One industry commentator observed that in the autumn “aerial topdressing planes could be heard up every valley”. Applications of lime also increased and some farmers in this class are still applying lime in preference to superphosphate. Repairs and maintenance increased 36 percent or \$6900.

There was very little increase in development or capital spending as it was only late in the season that improved profits showed in bank balances. However, development at \$17 100 is still significant. Most of this is matagouri spraying and follow-up pasture establishment or development of irrigation where water is available.

There were increases in most operating costs including animal health, electricity, freight, weed and pest control fuel and administration. Rates and insurance have also increased. Wages, shearing and other vehicle costs have not increased although there has been some movement from casual wages to permanent wages. Farmer ACC payments have increased with increased taxable income.

### DEBT SERVICING FALLS SLIGHTLY

Interest costs fell \$1100 (2 percent) as fixed term mortgages at around 9 percent finish and move onto floating or short term fixed rates of less than 7 percent. Industry commentators report that the proportion of fixed loans that are fixed for one year or less has increased from 37 percent to 55 percent. Debt servicing for the farm model was 15 percent of net cash income although a quarter of the monitored farms have debt servicing levels above 25 percent of net cash income.

### LITTLE INCREASE IN CASH DISPOSAL

Cash disposal increased only slightly despite the jump in income. Drawings increased \$3000 but industry commentators noted that this is relatively modest given the increased cost of living and the remoteness of many farms in this class. For instance, boarding school fees have continued to increase. Tax has increased

»» TABLE 4: CANTERBURY/MARLBOROUGH HILL COUNTRY SHEEP AND BEEF MODEL CASH FARM INCOME

YEAR ENDED 30 JUNE	2007/08 (\$)	2008/09 (\$)	2009/10 <sup>1</sup> (\$)	2010/11 (\$)	2011/12 BUDGET (\$)
Sheep sales less purchases	132 606	183 066	202 729	253 378	283 526
Cattle sales less purchases	83 410	106 507	105 831	98 430	119 440
Wool	54 028	48 236	51 594	57 831	69 966
Grazing income (including hay and silage sales)	9 500	10 500	5 040	5 600	5 600
Other income	16 200	13 700	10 700	19 000	16 000
Net cash income	295 744	362 009	375 894	434 238	494 532

**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.

to \$17 800. These farmers have carried forward some losses and/or development costs which they may be able to use to mitigate this increase.

### NET FARM PROFIT BEFORE TAX MORE THAN DOUBLES

Net farm profit before tax jumped to \$108 300, the highest level for a number of years. However, \$14 900 of this profit is from the value of increased stock numbers so the increase in farm surplus for reinvestment to \$39 300 is more modest. The financial result for farmers in this class depended on the time of sale with those selling lamb and wool early in the season missing some of the upswing in prices and doing less well than those selling later.

## BUDGET FINANCIAL PERFORMANCE OF THE CANTERBURY MARLBOROUGH HILL COUNTRY SHEEP AND BEEF MODEL FARM IN 2011/12

Farmers are predicting another big increase in cash operating surplus for 2011/12 with increases in sheep, wool and cattle income anticipated as prices are expected to remain at or about levels prevailing in June 2011.

### BIG REVENUE INCREASE EXPECTED

Farmers are predicting an increase in net cash income of \$60 300 (14 percent) as current prices continue and performance lifts following the good autumn weather in 2011.

### BETTER LAMBING LIFTS SHEEP INCOME

Sheep income is expected to increase 11 percent in 2011/12. Lambing is predicted to increase 7 percentage points to 123 percent as a result of good autumn feed conditions over most of the region. Early scanning results are about 10 percent up on last year but farmers are well aware that the weather at lambing time will be the deciding factor. The average lamb price is predicted to fall \$2.80 with the store price expected to rise slightly but prime lamb returns expected to fall. Much of this is related to the timing of sales.

Store lamb prices before Christmas are expected to be up substantially on the previous year but farmers are also being somewhat conservative in their expectations of the meat industry. The works ewe price is also expected to be a little lower in the forecast year.

### WOOL PRICES EXPECTED TO HOLD

Wool prices are expected to average \$0.50 per kilogram more in the budget year leading to a 21 percent increase in wool income. Prices are expected to hold around levels current at the end of June 2011 and this will give a substantial lift in wool income for those farmers who pre lamb shear. About 20 percent of this class have mid micron wool and industry commentators expect these farmers to do particularly well.

### INCREASE IN CATTLE SALES EXPECTED AS NUMBERS STABILISE

Cattle sales less purchases are expected to increase \$21 000 mostly as a result of increased sales of older cattle. Farmers expect similar or slightly lower prices to the 2010/11 year. Weaner calf prices are budgeted to decrease \$20 per head but rising two year steers are expected to get the same price. Cattle breeding performance is expected to fall a little with cows in lower condition than normal



when the bulls went out in 2010. Cattle have gone into winter in excellent condition because of the good autumn in 2011.

Other income is expected to remain above normal levels at \$19 000 with forestry revenue down on 2010/11 but well above that achieved in the 2009/10 year.

#### FARM EXPENDITURE WILL BE RESTRAINED

Farmers' budgets indicate they plan to keep expenses tightly controlled in the 2011/12 year. Farm working expenses are expected to increase only \$7400 (3 percent).

Farmers have budgeted to reduce repairs and maintenance spending to \$22 500, although spending in this area may increase once income levels are known for the season as happened in 2010/11. Insurance costs are forecast to increase by \$2000 (35 percent) because of the Canterbury earthquakes. This is an estimate by industry commentators as only a few farmers have received insurance renewals recently.

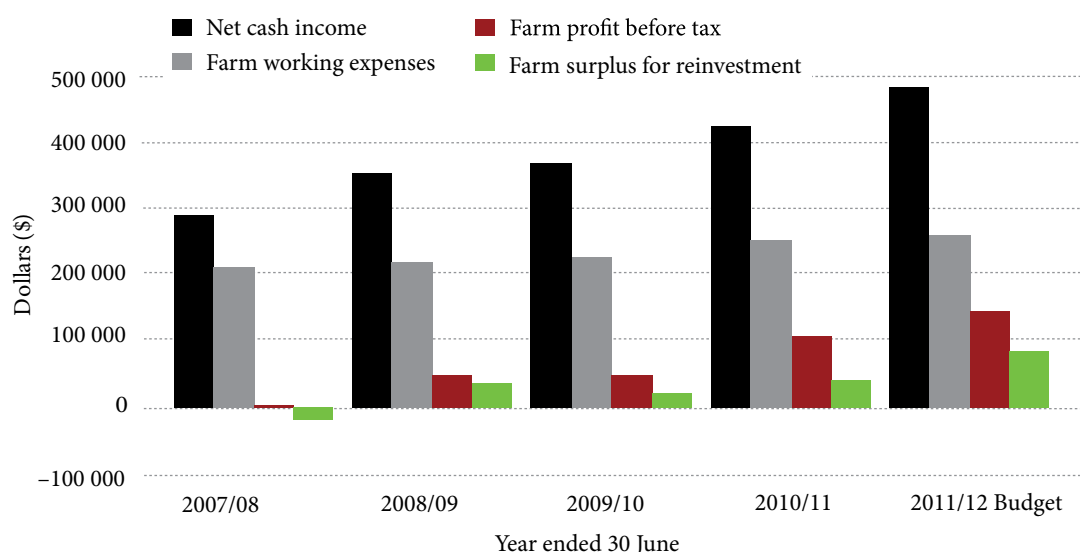
#### MOST EXPENSES HELD

Farmers plan to keep most expenses at or about the amount spent in 2010/11. Feed costs will change somewhat with a more normal season giving an increase in hay and baleage costs but a decline in bought grazing. Fertiliser expenses will increase slightly with a small increase in sulphur super prices budgeted but no change in volume. Lime applications are expected to increase 20 percent. Fuel costs are budgeted to increase 11 percent but farmers expect this to be offset by a 12 percent decline in other vehicle expenses.

#### DEBT SERVICING CONTINUES TO FALL

Interest costs are expected to fall a further 5 percent as a result of lower average overdraft levels and slightly lower average interest rates. Debt servicing should fall to 13 percent of net cash income with the drop in interest costs and the increase in income.

»» FIGURE 1: CANTERBURY/MARLBOROUGH HILL COUNTRY SHEEP AND BEEF 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.

### CASH DISPOSAL STILL RESTRAINED

Farmers budgets indicate that cash disposal will be held or reduced in the 2011/12 year with capital payments, development and principal repayments all reducing. Industry commentators feel that farmers underestimated the extent of improved profits when preparing their 2011/12 budgets and suggested that spending plans may be revised upward in the new financial year. Drawings are expected to increase a further 5 percent to \$58 700 while tax payments are expected to increase 40 percent to \$24 800 because of increased terminal and provisional tax.

### NET FARM PROFIT BEFORE TAX EXPECTED TO INCREASE AGAIN

Farmers expect that a full year of income at higher prices and restraint on farm working expenses should give a 37 percent increase in net farm profit before tax to \$148 800. Farm surplus for reinvestment is expected to more than double to \$85 100. At this stage farmers are planning to restrain cash disposal resulting in a predicted \$55 700 improvement in the net cash position.

## INFORMATION ABOUT THE MODEL

This model represents 425 hill country farms in Canterbury and Marlborough. Farms have a proportion of land that is in tussock, or too steep to be cultivated by two wheeled tractors. They run fine wool, mid-micron or crossbred sheep according to the class of country and farmer preference. They run breeding flocks and herds and produce a proportion of store stock.

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.

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