

FARM MONITORING 2012

Ministry for Primary Industries
Manatū Ahu Matua



WESTERN LOWER NORTH ISLAND INTENSIVE SHEEP AND BEEF

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

KEY POINTS

- 2011/12 was one of the best grass growing seasons on record and high stock production, coupled with generally high product prices, resulted in a very profitable year.
- Net cash income in 2011/12 increased 19 percent, from \$491 000 in 2010/11 to \$584 700, primarily due to good production levels across all stock classes and high prices received for lambs and hoggets in the first half of 2011/12.
- Total farm working expenditure for 2011/12 was up 15 percent and is budgeted to be down 3 percent in 2012/13. Farmers maintained expenditure on productive items such as fertiliser and caught up on deferred repairs and maintenance.
- Net farm profit before tax jumped 24 percent to \$174 700 in 2011/12, although the farm cash surplus fell to \$23 700 due to increased taxation, increased spending on capital purchases and debt repayment.
- Most farmers accept the price volatility of current markets but are confident that prices will remain above historical averages over the medium-term. Farmers are using the improved income to catch up on previously deferred expenditure, although they will wait to see the money in the bank before reinvesting large amounts on-farm.

Table 1: Key parameters, financial results and budget for the Western lower North Island intensive sheep and beef farm model

Year ended 30 June	2008/09	2009/10 ¹	2010/11	2011/12 actual	2012/13 budget
Effective area (ha)	220	368	368	368	368
Breeding ewes (head)	1 004	1 187	1 184	1 094	1 116
Replacement ewe hoggets (head)	255	435	433	415	308
Other sheep (head)	292	737	544	622	538
Breeding cows (head)	0	0	0	0	0
Rising 1-year cattle (head)	96	98	101	80	80
Other cattle (head)	68	133	104	138	145
Opening sheep stock units (ssu)	1 388	2 345	2 383	2 342	2 239
Opening cattle stock units	873	1 545	1 604	1 693	1 728
Opening total stock units (su)	2 261	3 890	3 987	4 035	3 966
Stocking rate (stock unit/ha)	10.3	10.6	10.8	11.0	10.8
Ewe lambing (%)	118	134	112	132	131
Average lamb price (\$/head) ^R	94.69	83.58	120.00	125.76	109.13
Average store lamb price (\$/head)	78.75	65.00	95.00
Average prime lamb price (\$/head)	94.69	86.14	120.00	125.76	109.13
Average wool price (\$/kg)	2.20	2.32	3.59	3.73	3.40
Total wool produced (kg)	6 558	11 945	11 407	12 039	11 253
Wool production (kg/ssu)	4.72	5.09	4.79	5.14	5.03
Average rising 2-year steer (\$/head)	891	872	1 495	1 350	1 290
Average rising 2-year bull (\$/head)	...	1 068	1 490	1 200	1 140
Net cash income (\$)	210 332	406 963	491 000	584 652	538 884
Farm working expenses (\$)	119 815	215 285	244 207	280 680	273 060
Farm profit before tax (\$)	47 809	30 728	141 289	174 667	148 888
Farm surplus for reinvestment (\$) ²	21 032	15 932	94 666	97 537	85 924

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.

Symbol

^R The model parameter has been revised so the data for *Average lamb price (\$/head)* may not match that published in the 2011 report.

... Not available.

Table 2: Western lower North Island intensive sheep and beef model budget

	2011/12			2012/13 budget		
	Whole farm (\$)	Per hectare (\$)	Per stock unit ¹ (\$)	Whole farm (\$)	Per hectare (\$)	Per stock unit ¹ (\$)
Revenue						
Sheep	492 213	1 338	210.15	462 454	1 257	206.55
Wool	44 907	122	19.17	38 260	104	17.09
Cattle	252 519	686	149.20	256 880	698	148.70
Grazing income (including hay and silage sales)	99 365	270	24.63	105 581	287	26.62
Other farm income	68 285	186	16.92	60 000	163	15.13
Less:						
Sheep purchases	217 492	591	92.86	230 592	627	102.99
Cattle purchases	155 144	422	91.67	153 700	418	88.97
Net cash income	584 652	1 589	144.91	538 884	1 464	135.86
Farm working expenses	280 680	763	69.57	273 060	742	68.84
Cash operating surplus	303 973	826	75.34	265 823	722	67.02
Interest	68 132	185	16.89	62 621	170	15.79
Rent and/or leases	25 200	68	6.25	25 200	68	6.35
Stock value adjustment	-11 027	-30	-2.73	-2 038	-6	-0.51
Minus depreciation	24 946	68	6.18	27 077	74	6.83
Farm profit before tax	174 667	475	43.29	148 888	405	37.54
Income equalisation	0	0	0.00	0	0	0.00
Taxation	56 494	154	14.00	34 479	94	8.69
Farm profit after tax	118 174	321	29.29	114 409	311	28.84
Allocation of funds						
Add back depreciation	24 946	68	6.18	27 077	74	6.83
Reverse stock value adjustment	11 027	30	2.73	2 038	6	0.51
Drawings	56 610	154	14.03	57 600	157	14.52
Farm surplus for reinvestment²	97 537	265	24.17	85 924	233	21.66
Reinvestment						
Net capital purchases	38 000	103	9.42	12 500	34	3.15
Development	1 000	3	0.25	0	0	0.00
Principal repayments	34 820	95	8.63	25 339	69	6.39
Farm cash surplus/deficit	23 717	64	5.88	48 085	131	12.12
Other cash sources						
Off-farm income	4 300	12	1.07	0	0	0.00
New borrowings	0	0	0.00	0	0	0.00
Introduced funds	0	0	0.00	0	0	0.00
Net cash position	28 017	76	6.94	48 085	131	12.12
Assets and liabilities						
Farm, forest and building (opening)	4 927 413	13 390	1 221.27	4 926 225	13 386	1 241.96
Plant and machinery (opening)	158 386	430	39.26	172 628	469	43.52
Stock valuation (opening)	485 809	1 320	120.41	474 782	1 290	119.70
Other produce on hand (opening)	0	0	0.00	0	0	0.00
Total farm assets (opening)	5 571 608	15 140	1 380.94	5 573 635	15 146	1 405.18
Total assets (opening)	5 660 182	15 381	1 402.89	5 662 202	15 386	1 427.51
Total liabilities (opening)	1 024 995	2 785	254.05	1 019 675	2 771	257.07
Total equity (farm assets – liabilities)	4 546 613	12 355	1 126.89	4 553 960	12 375	1 148.11

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: Western lower North Island intensive sheep and beef model expenditure

	2011/12			2012/13 budget		
	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	11 788	32	2.92	12 023	33	3.03
ACC	404	1	0.10	357	1	0.09
Total labour expenses	12 191	33	3.02	12 380	34	3.12
Animal health	16 083	44	3.99	16 325	44	4.12
Breeding	1 412	4	0.35	1 547	4	0.39
Electricity	5 336	15	1.32	5 704	16	1.44
Feed (hay and silage)	5 888	16	1.46	4 600	13	1.16
Feed (feed crops)	5 520	15	1.37	4 784	13	1.21
Feed (grazing)	0	0	0.00	0	0	0.00
Feed (other)	1 840	5	0.46	1 840	5	0.46
Fertiliser	79 394	216	19.68	82 044	223	20.68
Lime	2 944	8	0.73	2 760	8	0.70
Cash crop and forestry expenses	22 500	61	5.58	18 000	49	4.54
Freight (not elsewhere deducted)	6 624	18	1.64	6 624	18	1.67
Regrassing costs	6 624	18	1.64	6 698	18	1.69
Shearing expense	14 287	39	6.10	13 882	38	6.20
Weed and pest control	4 416	12	1.09	4 784	13	1.21
Fuel	14 352	39	3.56	14 720	40	3.71
Vehicle costs (excluding fuel)	10 856	30	2.69	10 304	28	2.60
Repairs and maintenance	26 239	71	6.50	21 017	57	5.30
Total other working expenses	224 315	610	55.60	215 632	586	54.36
Communication costs (phone and mail)	2 594	7	0.64	2 650	7	0.67
Accountancy	4 517	12	1.12	4 710	13	1.19
Legal and consultancy	1 925	5	0.48	2 135	6	0.54
Other administration	2 713	7	0.67	2 382	6	0.60
Water charges (irrigation)	0	0	0.00	0	0	0.00
Rates	16 560	45	4.10	17 296	47	4.36
Insurance	8 464	23	2.10	8 832	24	2.23
ACC employer	4 641	13	1.15	4 467	12	1.13
Other expenditure	2 760	8	0.68	2 576	7	0.65
Total overhead expenses	44 174	120	10.95	45 048	122	11.36
Total farm working expenses	280 680	763	69.57	273 060	742	68.84
Calculated ratios						
Economic farm surplus (EFS ²)	192 999	524	47.84	161 709	439	40.77
Farm working expenses/NCI ³	48%			51%		
EFS/total farm assets	3.5%			2.9%		
EFS less interest and lease/equity	2.2%			1.6%		
Interest+rent+lease/NCI	16.0%			16.3%		
EFS/NCI	33.0%			30.0%		
Wages of management	75 000	204	18.59	75 000	204	18.91

Notes

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

2 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.

3 Net cash income.

FINANCIAL PERFORMANCE OF THE WESTERN LOWER NORTH ISLAND INTENSIVE SHEEP AND BEEF FARM MODEL IN 2011/12

The cash operating surplus for the western lower North Island intensive sheep and beef farm model increased 20 percent from \$253 600 the previous year, to \$304 000 in 2011/12. This was primarily due to a 50 percent increase in sheep revenue.

Sheep revenue lifts 50 percent

Sheep revenue (sales less purchases) increased to \$274 700, due to a return to good lambing results and high prices received for lambs and hoggets in the first half of 2011/12.

It was an excellent winter and spring 2011 for many sheep and beef farms. In winter, ewes were in good condition and pasture covers were superb, which set ewes up for an excellent lambing. Lambing percentages rose to average or above-average levels; 132 percent from ewes and 47 percent from hoggets.

Hogget prices peaked at around \$185 per head in early 2011/12 and the lamb schedule peaked at \$8.00 per kilogram carcass weight.

With the abundance of pasture, lambs were held longer and taken to heavier weights. As supply reduced, works' prices remained high during November and December 2011 (a time of year when schedules traditionally fall).

Prices fell sharply from January 2012 and margins for trading lambs were very poor due to the high buy-in price (often down to a margin of \$5 per head). Fewer lambs were traded as a result. Many farmers represented by this model sold most of their lambs prior to prices falling and the average lamb sale price for the model increased to \$126 per head for 2011/12.

Capital stock and older ewes also achieved good prices in January and February 2012, due to the abundance of feed and some confidence in the sheep market. However, the higher buy-in prices reportedly led to several farmers not purchasing as many as usual.

Wool income increases 10 percent

The wool weight increased in 2011/12 to 5.1 kilograms per sheep stock unit, as high wool prices encouraged farmers to shear a higher proportion of trade lambs and hoggets. The average wool price per kilogram continued to strengthen during the first half of the year, but dropped away dramatically from late January onwards. Despite

this, the average wool price for the western lower North Island farm model was still up slightly on 2010/11 at \$3.73 per kilogram. Farmers were reportedly able to sell much of their wool prior to the fall in price.

Cattle revenue falls slightly

Farms in this model primarily run finishing cattle and graze cattle on contract. Finishing cattle were in good condition, held longer and taken to heavier weights in 2011/12 due to excellent pasture growth.

As for lamb trading, the export schedule for beef did not follow its usual seasonal pattern and lifted from August 2011 to a peak of almost \$4.80 per kilogram in January 2012. Replacement store cattle also lifted in price over this period as supply reduced when hill country properties held on to cattle to make use of the exceptional grass growth.

Despite the high store cattle price, margins remained strong at around \$500 per head. However, cattle revenue (sales less purchases) fell 7 percent to \$97 400.

Grazing income continues to bolster revenues

Grazing revenue continued to be an attractive option for intensive sheep and beef farmers in this region. Grazing is mainly dairy support, although some lamb grazing also occurs. Those farmers with dairy grazing did well this year as they didn't have to enter the strong store cattle market. Grazing made up 15 percent of net cash income.

Exceptional grass growth, combined with lower numbers of traded lambs, fewer ewes bought in, and expensive store cattle, meant there was a lot of hay and silage made. A lot of this wasn't sold and has been held over. As a result, hay and silage sales fell to 2 percent of net cash income.

Other farm income increases despite variable crop performance

A slow, wet spring made crop establishment difficult. This led to variable yields and some crops being resown. While the summer months saw excellent pasture growth, crops didn't ripen as quickly as usual and wet ground delayed harvesting, further disrupting production schedules. Produced primarily for the dairy sector, maize silage prices were strong and showed good returns despite the variability in yields. Other income rose \$5700 to \$68 300.

EXPENDITURE RISES 15 PERCENT

Farm working expenses rose 15 percent in 2011/12 to \$280 700, or \$763 per hectare (\$69.57 per stock unit). However, as a proportion of income, expenditure remained stable at 48 percent of net cash income. Expenditure increased for most operating items, as farmers sought to catch up on previous years, when expenditure on discretionary items was kept to a low level.

Fertiliser expenditure rises

Fertiliser expenditure increased 23 percent to \$79 400. Capital applications of fertiliser and lime increased compared with 2010/11, when maintenance levels were barely reached. Cost increases included freight and spreading charges and the price per tonne of some fertilisers.

Feed costs jump due to pasture surpluses

Total feed expenditure increased 52 percent to \$36 per hectare, primarily due to increased hay and silage costs, which almost doubled as more was made in 2011/12 with so much surplus pasture. Extra supplies of conserved feed were generally stored for the long term.

Cash crop expenses rose \$3300 to \$22 500, due to difficult establishment and resowing of some crops.

Maintenance and other expenses rise

Repairs and maintenance increased 29 percent, as farmers sought to maintain the value of their assets and caught up on spending deferred in previous years. Slightly more was spent on plant and machinery than fences and tracks.

Insurance costs continued to rise, up 23 percent to \$8500 in 2011/12. Farmers in this group expressed concern at the prospect of further increases.

Interest payments fell 8 percent in 2011/12, as interest rates fell and farmers availed themselves of floating rates at 6.5 percent or less.

NET RESULT IMPROVES

Farm profit before tax rose from \$141 300 in 2010/11 to \$174 700 in 2011/12. Increased spending was outweighed by the increase in net cash income. Taxation on the farm model increased from \$8000 to \$56 500 in 2011/12, due to improved profits in the previous and current year. Farmers continued to consolidate their financial position and reduce debt. The farm cash surplus fell 62 percent to \$23 700, largely due to an increase in capital purchases early in the year.

Table 4: Western lower North Island intensive sheep and beef model cash farm income

Year ended 30 June	2008/09 (\$)	2009/10 ¹ (\$)	2010/11 (\$)	2011/12 (\$)	2012/13 budget (\$)
Sheep sales less purchases	110 470	191 910	183 081	274 721	231 863
Cattle sales less purchases	60 404	101 201	105 110	97 375	103 180
Wool	14 428	27 712	40 950	44 907	38 260
Grazing income (including hay and silage sales)	8 130	31 668	99 240	99 365	105 581
Other income	16 900	54 471	62 620	68 285	60 000
Net cash income	351 828	406 963	491 000	584 652	538 884

Note

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.

BUDGET FINANCIAL PERFORMANCE OF THE WESTERN LOWER NORTH ISLAND INTENSIVE SHEEP AND BEEF MODEL FARM IN 2012/13

The cash operating surplus is expected to drop 13 percent from \$304 000 in 2011/12 to \$265 800 in 2012/13, which is still higher than that reported in 2010/11. This follows an expected fall in sheep, wool and crop revenues while farm working expenditure is expected to remain at a similar level.

Sheep revenue expected to fall 16 percent

Farmers are expecting sheep and lamb prices to fall from the 2011/12 peak, to 'more realistic' lamb schedules of around \$6.00 per kilogram in spring and \$5.00 in autumn 2013. The average prime lamb price in this model falls 13 percent in 2012/13 to \$109 per head, still ahead of historical averages. Total sheep revenue (sales less purchases) is expected to fall 16 percent to \$231 900 in 2012/13.

Ewes went into winter 2012 in good condition and scanning rates were positive. Farmers were expecting similar lambing percentages to the previous year, at 131 percent.

Wool returns budgeted to drop

Wool income is expected to fall 15 percent to \$38 300, a combination of slightly less wool clipped and farmers anticipating the average wool price falling 33 cents to \$3.40 per kilogram. Wool weights are budgeted to be similar to 2011/12 levels at an average 5 kilograms per sheep stock unit following from good feed levels in 2012.

Cattle prices expected to remain firm

Farmers reported greater optimism for beef than for lamb. Farmers are expecting beef schedules to remain strong in 2012/13 at around \$4.00 per kilogram, but following a more traditional seasonal cycle. Trade cattle retained past June 2012 were generally heavier due to the excellent season and were expected to be marketed earlier, offsetting any weakening of the beef price earlier in the season.

The margin for trading cattle is expected to increase from around \$500 per head in 2011/12 to \$540 per head in 2012/13. Cattle revenue (sales less purchases) is expected to increase 6 percent to \$103 200.

Grazing income steady

Farmers anticipate grazing income to remain steady in terms of the number of animals grazed and the grazing price. However, there is real concern that the lower forecast dairy payout will affect both dairy grazing and other dairy support (maize silage, grass silage).

Hay and silage sales are expected to be up slightly, even though less is expected to be made, as farmers look to sell the surplus hay/baleage made in 2011/12.

Crop income is expected to fall, primarily due to weaker prices for barley.

EXPENDITURE REMAINS STEADY IN 2012/13

Farm working expenses in 2012/13 are expected to drop by 3 percent to \$273 100. However, as a proportion of net cash income, total expenditure increases from 48 percent in 2011/12 to 51 percent in 2012/13.

Fertiliser spending to be maintained

Fertiliser prices are expected to increase slightly in the short-term and the combined spending on fertiliser and lime in 2012/13 is expected to increase another 3 percent on the previous year's 24 percent increase. Farmers are keen to continue to restore areas of expenditure neglected in prior years, despite a lower income anticipated in 2012/13.

Crop and feed conservation expenses expected to reduce

Feed crops, hay and silage costs and cash crop expenditure are predicted to fall from 2011/12 levels. Several crops and new grasses were sown twice in 2011/12 and it is expected that this won't be necessary in 2012/13. In addition, the large pasture surpluses of 2011/12 are not anticipated to be repeated.

Other spending mixed

Expenditure increases are anticipated for animal health and breeding, weed and pest control, electricity and fuel, and possibly consultancy fees around tax planning. These may be somewhat offset by an expected fall in repairs and maintenance expenditure to near 2010/11 levels at \$57 per hectare.

NET RESULT EXPECTED TO FALL BUT STILL HEALTHY

Farm profit before tax is expected to be down 15 percent to \$148 900 or \$405 per hectare in 2012/13. Taxation is expected to fall 39 percent as a result. Farmers recognise that, while down on 2011/12, this is a financially viable result.

Spending on reinvestment items such as capital purchases, development and principal repayments are expected to reduce as farmers hold back such spending until incomes in the budget year are more certain. This leaves an expected farm cash surplus of \$48 100 or \$131 per hectare.

Figure 1: Western lower North Island intensive sheep and beef model profitability trends



INFORMATION ABOUT THE MODEL

The western lower North Island intensive model represents 385 intensive finishing farms located south of New Plymouth and on the west coast of the North Island. Most farms in this region are suited to intensive finishing, cropping and dairy support. The farm management practices and stock policies are very flexible between seasons and can be as variable as the weather in this region.

The model farm has a sheep breeding livestock policy and also buys in lambs for finishing, has

a cattle trading policy (half bull beef), and sells baleage and silage.

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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