

SOUTHLAND/SOUTH OTAGO INTENSIVE SHEEP AND BEEF

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

KEY POINTS

- Lambing improved by 12 percentage points, despite a spring storm, to 134 percent in 2011/12.
- Net cash income for 2011/12 increased 14 percent to \$407 100 as lamb numbers sold increased and wool prices rose. The average lamb price did not change as improvements in the schedule price were offset by the need to sell more lambs store during a dry December and January. Income is expected to fall 1 percent in 2012/13 to \$401 300.
- Farm working expenses rose only 2 percent to \$160 000 in 2011/12 as farmers offset increases in weed and pest control and repairs and maintenance with reductions in lime and feed. Expenditure is expected to remain stable with a 1 percent increase budgeted in 2012/13.
- Farm surplus for reinvestment increased by \$28 000 in 2011/12 to \$104 000, with a fall expected in 2012/13 to \$91 900. Tax is increasing on these properties, up \$22 300 to \$46 400 in 2011/12, with a further rise expected in 2012/13 to \$50 500.
- Farmers responded to poor pasture production due to a wet spring and dry summer in 2011/12, by selling some lambs store. The buoyant store lamb price and above-average meat and wool prices delivered good returns, and farmer attitudes were upbeat during the year. Farmers consider the significant risk to their financial returns results from industry structures that appear to have little control over commodity prices.

Table 1: Key parameters, financial results and budget for the Southland/South Otago 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)	234	234	234	234	234
Breeding ewes (head)	2 325	2 214	2 216	2 275	2 276
Replacement ewe hoggets (head)	386	542	600	697	707
Other sheep (head)	30	30	30	29	27
Breeding cows (head)	0	0	0	0	0
Rising one-year cattle (head)	0	0	0	0	0
Other cattle (head)	0	0	0	0	0
Opening sheep stock units (ssu)	3 098	3 119	2 952	3 329	3 345
Opening cattle stock units	108	108	108	108	108
Opening total stock units (su)	3 206	3 227	3 060	3 437	3 453
Stocking rate (stock unit/ha)	13.7	13.8	13.1	14.7	14.8
Ewe lambing (%)	131	142	122	134	141
Average lamb price (\$/head)	90	77	110	110	103
Average store lamb price (\$/head)	0.00	0.00	0.00	103.22	0.00
Average prime lamb price (\$/head)	90.11	77.31	110.22	112.44	103.11
Average wool price (\$/kg)	2	2	4	4	4
Total wool produced (kg)	13 461	13 250	14 300	13 500	13 600
Wool production (kg/ssu)	5	4	5	4	4
Average rising two-year steer (\$/head)	0	0	0	0	0
Average cull cow (\$/head)	0	0	0	0	0
Net cash income (\$)	294 703	274 777	355 528	407 050	401 307
Farm working expenses (\$)	156 143	150 791	156 817	159 988	161 318
Farm profit before tax (\$)	69 960	72 433	159 223	196 208	189 790
Farm surplus for reinvestment (\$) ²	18 716	16 138	75 993	104 014	91 885

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: Southland/South Otago 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	334 780	1 431	100.57	332 280	1 420	99.33
Wool	56 154	240	16.87	47 600	203	14.23
Cattle	0	0	0.00	0	0	0.00
Grazing income (including hay and silage sales)	13 632	58	3.97	18 632	80	5.40
Other farm income	6 534	28	1.90	6 920	30	2.00
Less:						
Sheep purchases	4 050	17	1.22	4 125	18	1.23
Cattle purchases	0	0	0.00	0	0	0.00
Net cash income	407 050	1 740	118.43	401 307	1 715	116.21
Farm working expenses	159 988	684	46.55	161 318	689	46.71
Cash operating surplus	247 062	1 056	71.88	239 990	1 026	69.50
Interest	28 221	121	8.21	27 387	117	7.93
Rent and/or leases	0	0	0.00	0	0	0.00
Stock value adjustment	1 246	5	0.36	3 476	15	1.01
Minus depreciation	23 879	102	6.95	26 288	112	7.61
Farm profit before tax	196 208	838	57.09	189 790	811	54.96
Income equalisation	0	0	0.00	0	0	0.00
Taxation	46 387	198	13.50	50 486	216	14.62
Farm profit after tax	149 821	640	43.59	139 304	595	40.34
Allocation of funds						
Add back depreciation	23 879	102	6.95	26 288	112	7.61
Reverse stock value adjustment	-1 246	-5	-0.36	-3 476	-15	-1.01
Drawings	68 440	292	19.91	70 232	300	20.34
Farm surplus for reinvestment²	104 014	445	30.26	91 885	393	26.61
Reinvestment						
Net capital purchases	39 000	167	11.35	35 000	150	10.14
Development	0	0	0.00	0	0	0.00
Principal repayments	7 545	32	2.20	11 034	47	3.20
Farm cash surplus/deficit	57 469	246	16.72	45 850	196	13.28
Other cash sources						
Off-farm income	11 362	49	3.31	12 033	51	3.48
New borrowings	0	0	0.00	0	0	0.00
Introduced funds	0	0	0.00	0	0	0.00
Net cash position	68 830	294	20.03	57 883	247	16.76
Assets and liabilities						
Farm, forest and building (opening)	3 530 000	15 085	1027.08	3 549 493	15 169	1 027.87
Plant and machinery (opening)	152 693	653	44.43	168 789	721	48.88
Stock valuation (opening)	483 988	2 068	140.82	485 234	2 074	140.51
Other produce on hand (opening)	0	0	0.00	0	0	0.00
Total farm assets (opening)	4 166 681	17 806	1 212.33	4 203 516	17 964	1 217.26
Total assets (opening)	4 212 654	18 003	1 225.71	4 269 489	18 246	1 236.36
Total liabilities (opening)	460 080	1 966	133.86	383 705	1 640	111.11
Total equity (farm assets - liabilities)	3 706 601	15 840	1 078.47	3 819 811	16 324	1 106.14

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: Southland/South Otago intensive sheep and beef model expenditure

	2011/12			2012/13 budget		
	Whole farm (\$)	Per hectare (\$)	Per stock unit (\$)	Whole farm (\$)	Per hectare (\$)	Per stock unit (\$)
Farm working expenses						
Permanent wages	0	0	0.00	0	0	0.00
Casual wages	1 286	5	0.37	2 170	9	0.63
ACC	69	0	0.02	61	0	0.02
Total labour expenses	1 355	6	0.39	2 231	10	0.65
Animal health	12 806	55	3.73	12 906	55	3.74
Breeding	1 383	6	0.40	1 449	6	0.42
Electricity	2 949	13	0.86	3 205	14	0.93
Feed (hay and silage)	5 953	25	1.73	6 086	26	1.76
Feed (feed crops)	0	0	0.00	0	0	0.00
Feed (grazing)	825	4	0.24	870	4	0.25
Feed (other)	4 613	20	1.34	4 635	20	1.34
Fertiliser	30 710	131	8.94	30 951	132	8.96
Lime	1 629	7	0.47	1 999	9	0.58
Cash crop expenses ¹	0	0	0.00	0	0	0.00
Freight (not elsewhere deducted)	2 754	12	0.80	2 776	12	0.80
Regrassing costs	5 339	23	1.55	5 382	23	1.56
Shearing expenses ²	13 307	57	4.00	14 059	60	4.20
Weed and pest control	4 440	19	1.29	3 597	15	1.04
Fuel	12 374	53	3.60	13 412	57	3.88
Vehicle costs (excluding fuel)	8 864	38	2.58	8 595	37	2.49
Repairs and maintenance	21 391	91	6.22	17 473	75	5.06
Total other working expenses	129 336	553	37.63	127 395	544	36.89
Communication costs (phone and mail)	2 243	10	0.65	2 486	11	0.72
Accountancy	2 986	13	0.87	3 096	13	0.90
Legal and consultancy	945	4	0.27	840	4	0.24
Other administration	1 224	5	0.36	972	4	0.28
Water charges (irrigation)	0	0	0.00	0	0	0.00
Rates	8 293	35	2.41	8 976	38	2.60
Insurance	6 200	26	1.80	7 194	31	2.08
ACC employer	4 641	20	1.35	4 467	19	1.29
Other expenditure	2 764	12	0.80	3 659	16	1.06
Total overhead expenses	29 297	125	8.52	31 692	135	9.18
Total farm working expenses	159 988	684	46.55	161 318	689	46.71
Calculated ratios						
Economic farm surplus (EFS ³)	151 762	649	44.16	144 142	616	41.74
Farm working expenses/NCI ⁴	39%			40%		
EFS/total farm assets	3.6%			3.4%		
EFS less interest and lease/equity	3.3%			3.1%		
Interest+rent+lease/NCI	6.9%			6.8%		
EFS/NCI	37.3%			35.9%		
Wages of management	72 667	311	21.14	73 035	312	21.15

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 SOUTHLAND/SOUTH OTAGO INTENSIVE SHEEP AND BEEF FARM MODEL IN 2011/12

The cash operating surplus for the Southland/South Otago intensive sheep and beef farm model increased \$48 400, or 24 percent, to \$247 100 in 2011/12. The main drivers were an increase in lamb numbers sold and an increase in wool prices. A poor pasture growth season was well managed with farmers selling store lambs for good prices, an unusual practice on the monitored farms.

MAJOR LIFT IN REVENUE DUE TO INCREASED LAMB SALES AND WOOL PRICES

Net cash income increased 14 percent to \$407 100. An increase in lamb numbers sold was the key driver, as the lambing percentage in 2011/12 lifted compared with the impact of the September 2010 snow storm. Despite a fall in wool commodity prices during 2011/12, the overall result was good with the wool cheque reaching a three-year high.

Lambing percent up 12 points despite a lambing storm

The lambing percentage was the main contributor to improving revenue, with a 12 percentage point increase in lambing to 134 percent in 2011/12. The improvement was not as great as expected due to a brief storm hitting many farms in the region over lambing in 2011.

Unusually, 24 percent of the lambs available to market were sold store as a significant dry spell affected pasture production during December and January. Typically, these farmers finish all lambs and it was a radical step to sell them store. Many farmers reported the sales were due to concerns over feed availability rather than a buoyant store market.

Wool prices lifted to \$4.16 per kilogram greasy

Wool prices trended down for most of 2011/12. Despite the decline, the season average price increased 8 percent from \$3.85 per kilogram greasy in 2010/11 to \$4.16 per kilogram greasy in 2011/12. Downward trends during 2011/12 were attributed to falls in commodity prices as the decline occurred even though exchange rates trended down favourably.

FARM WORKING EXPENSES INCREASED marginally

The farm operating expenses increased 2 percent to \$160 000 in 2011/12. Farmers represented by this model have robust spending habits and tend not to make big changes to their systems. The most significant changes happened because of a dry spell in December and January as farmers attempted to repair brassica crops and faced poor silage and baleage harvests. However, farmers also caught up on repairs and maintenance, with expenditure increasing from a more typical \$75 per hectare in 2010/11 to \$91 per hectare, or \$21 400, in 2011/12.

Hay and silage expenditure goes down

Hay and silage expenditure declined \$2500 to \$6000 in 2011/12 as the December–January dry spell limited the production and eventual harvest of grass. The reduction in grass harvested was offset by a good autumn growing season that pushed more grass cover into the winter.

Weed and pest expenditure rises

Weed and pest control expenditure increased 69 percent to \$4400 in 2011/12. Weather conditions for brassica establishment were far from ideal; consequently, weeds and pests became a significant problem for farmers leading to increased costs in this area.

FARM PROFIT LEADS TO INCREASED TAX AND DRAWINGS

Farm profit before tax increased \$37 000 to \$196 200 in 2011/12. The most notable change in the distribution of funds is tax, which increased \$22 300 to \$46 400. Similarly, drawings increased \$7000 to \$68 400 on the back of three years of improved returns. Interest payments decreased \$9000 as the trend to float mortgages on reduced interest rates rather than fix continued. Net capital purchases declined from \$55 300 in 2010/11 to \$39 000 in 2011/12 as costly machinery items had been purchased and cheaper but necessary items were obtained.

BUDGET FINANCIAL PERFORMANCE OF THE SOUTHLAND/SOUTH OTAGO INTENSIVE SHEEP AND BEEF FARM MODEL IN 2012/13

The cash operating surplus for the Southland/South Otago intensive sheep and beef farm model is expected to fall 3 percent to \$240 000 in 2012/13. Anticipated improvements in the lambing result are expected to be offset by falling commodity prices.

FARM REVENUE STABLE

Net cash income is expected to decline 1 percent to \$401 300 in 2012/13 due to anticipated declines in commodity prices for lambs and wool.

Improvements in lambing percentage offset by declines in lamb value

Sheep revenue (sales less purchases) is anticipated to decline 1 percent to \$328 200 in 2012/13. The average price per lamb is expected to fall from \$110 per head in 2011/12 to \$103 per head in 2012/13. The fall in lamb price is expected to be offset by an increase in lamb sales following an anticipated improvement in lambing from 134 percent in 2011/12 to 141 percent in 2012/13. The record lambing percentage for this model is 142 percent in 2009/10. However, predicted lower prices for cull ewes and for a smaller number of winter trade lambs will result in a small decline in sheep income for the 2012/13 year.

Wool income expected to fall 15 percent

Wool income is anticipated to fall 15 percent to \$47 600, with the main driver being the reduction in the expected wool price. The wool price is

expected to fall from \$4.16 per kilogram greasy in 2011/12 to \$3.50 per kilogram greasy in 2012/13.

Stock numbers remain static

Ewe and hogget numbers are not expected to change in 2012/13 because farmers view the stock numbers as sustainable in the current market. Farmers continued to carry a high number of hoggets into the 2012 winter with a view to culling dry and surplus hoggets in spring.

FARM WORKING EXPENSES EXPECTED TO INCREASE SLIGHTLY

Farm working expenses are expected to increase 1 percent to \$161 300 in 2012/13. Generally, farmers represented by this model are conservative in their spending patterns and fluctuations are typically subtle. Increases in labour and overhead expenses, particularly rates and insurance, are expected to offset anticipated reductions in other working expenses.

Repairs and maintenance decline

Repairs and maintenance expenditure is expected to decline 18 percent (\$3900) to \$17 500 in 2012/13. This decline is simply regarded by farmers as a return to a sustainable level of repairs, with the 2011/12 year being a catch up year. Similarly, weed and pest expenditure is budgeted to decline \$800 to \$3600 as a typical season for brassica growth is expected compared with the previous year.

Table 4: Southland/South Otago intensive 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	249 388	222 710	270 035	330 730	328 155
Cattle sales less purchases	0	0	0	0	0
Wool	30 960	31 303	55 055	56 154	47 600
Grazing income (including hay and silage sales)	11 942	12 384	18 094	13 632	18 632
Other income	2 412	8 380	12 344	6 534	6 920
Net cash income	294 703	274 777	355 528	407 050	401 307

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.

Lime and labour requirements higher

Lime expenditure on these farms cycles high every second year as farmers apply lime biennially. The 2012/13 year is considered by many as a year for lime application. Labour is expected to increase as farmers demand more lambing shepherd hours while lamb prices stay higher than the long-term average.

Fuel and electricity expected to increase

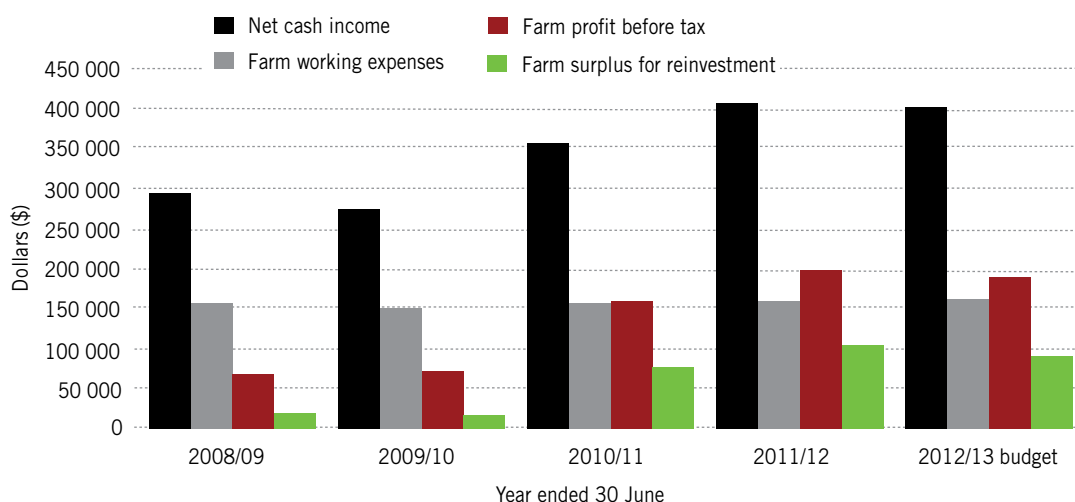
Farmers expect to spend \$1000 more on fuel and \$300 more on electricity, as they anticipate energy costs rising in 2012/13.

NET RESULT DETERIORATES

Farm profit before tax is expected to decline 3 percent to \$189 800 in 2012/13. With a budgeted tax increase of \$4100 and an increase in drawings of \$1800 the resulting farm surplus for reinvestment is expected to fall 12 percent to \$91 900.

Farmers continue to show confidence in the sheep industry, with net capital purchases of \$35 000 expected and a budgeted increase planned in principal repayments of \$3500 to \$11 000 in 2012/13.

Figure 1: Southland/South Otago intensive sheep and beef model profitability trends



INFORMATION ABOUT THE MODEL

This model represents nearly 1600 intensive sheep and beef farms in the Southland and South Otago regions. These farms typically finish lambs rather than sell store lambs and sell dairy grazing rather than finish beef. This type of farm is on the plains and downlands and usually has good seasonal rainfall. Historically, this class of land has been challenged by the expanding dairy industry and the opportunities it presents for heifer grazing and sale of surplus feed options.

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 percent and less than 120 percent. Based on the lambing percentage for this model breeding ewe numbers were multiplied by 1.2 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.

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