

NORTHLAND SHEEP AND BEEF

This report contains the key results from MAF's 2010 sheep and beef monitoring programme. Please note that the sample of farms has changed between 2008/09 and 2009/10. Caution should be taken when comparing data between these two years.

KEY POINTS

- › The results for 2009/10 were over shadowed by a drought, which beset the region from mid-October 2009 to early May 2010. Farmers adapted to the climatic conditions and de-stocked by selling trading stock earlier with a higher percentage than usual sold store rather than prime.
- › The 2009/10 season returned a negative farm surplus for reinvestment of \$12 600, compared with \$29 100 in 2008/09, but this was after depositing \$20 000 in the income equalisation account from the forced sale of stock as a result of the drought.
- › Expenditure had already been curtailed in last year's budget for 2009/10, but actual expenses at \$120 700 in 2009/10 were \$2000 less than expected and down slightly compared with 2008/09.
- › Spending on repairs and maintenance and fertiliser for the past five years has been below maintenance levels, and is not sustainable. Some Northland sheep and beef farmers have serious doubts about the future viability of their industry.
- › The expected cash operating surplus for 2010/11 at \$40 400 is less than half that of 2009/10. The main drivers of this result are reduced numbers of stock available to sell as post-drought restocking occurs and an expected 5 percent increase in farm working expenses.
- › Morale amongst the monitored Northland sheep and beef farmers is at rock bottom with few expecting any improvement in the situation in the near future.

»» TABLE 1: KEY PARAMETERS, FINANCIAL RESULTS AND BUDGET FOR THE NORTHLAND SHEEP AND BEEF FARM MODEL

YEAR ENDED 30 JUNE	2006/07	2007/08	2008/09	2009/10 ¹	2010/11 BUDGET
Effective area (ha)	314	314	314	314	314
Breeding ewes (head)	616	614	572	545	559
Replacement ewe hoggets (head)	180	175	173	142	147
Other sheep (head)	60	60	58	29	10
Breeding cows (head)	99	108	114	121	107
Rising 1-year cattle (head)	235	242	244	233	248
Other cattle (head)	151	156	158	143	100
Opening sheep stock units (ssu)	785	780	735	734	684
Opening cattle stock units	2 367	2 436	2 485	2 406	2 179
Opening total stock units (su)	3 152	3 216	3 220	3 140	2 863
Stocking rate (stock unit/ha)	10.0	10.2	10.3	10.0	9.1
Ewe lambing (%)	128	123	117	125	118
Average lamb price (\$/head)	54	59	78	65	70
Average store lamb price (\$/head)	41	45	67	59	57
Average prime lamb price (\$/head)	57	62	88	68	70
Average wool price (\$/kg)	2.24	2.26	2.08	2.10	2.20
Total wool produced (kg)	3 690	3 587	4 008	3 473	3 401
Wool production (kg/ssu)	4.70	4.60	5.46	4.73	4.97
Average rising 2-year steer (\$/head)	775	750	780	825	1 100
Average cull cow (\$/head)	571	435	452	550	550
Net cash income (\$)	209 566	215 641	236 854	214 568	167 422
Farm working expenses (\$)	114 599	118 064	120 870	120 714	127 057
Farm profit before tax (\$)	47 888	48 577	40 355	19 270	42 290
Farm surplus for reinvestment (\$) ²	11 209	1 403	29 111	-12 563	-18 557

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 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.



»» TABLE 2: NORTHLAND SHEEP AND BEEF MODEL BUDGET

	2009/10			2010/11 BUDGET		
	WHOLE FARM (\$)	PER HECTARE (\$)	PER STOCK UNIT ¹ (\$)	WHOLE FARM (\$)	PER HECTARE (\$)	PER STOCK UNIT ¹ (\$)
REVENUE						
Sheep	41 160	131	56.06	39 670	126	57.96
Wool	7 292	23	9.93	7 482	24	10.93
Cattle	230 376	734	95.75	186 290	593	85.51
Grazing income (including hay and silage sales)	0	0	0.00	0	0	0.00
Other farm income	8 300	26	2.64	8 300	26	2.90
LESS:						
Sheep purchases	1 800	6	2.45	5 460	17	7.98
Cattle purchases	70 760	225	29.41	68 860	219	31.61
Net cash income	214 568	683	68.33	167 422	533	58.48
Farm working expenses	120 714	384	38.44	127 057	405	44.38
Cash operating surplus	93 855	299	29.89	40 365	129	14.10
Interest	28 478	91	9.07	28 883	92	10.09
Rent and/or leases	0	0	0.00	0	0	0.00
Stock value adjustment	-34 849	-111	-11.10	41 224	131	14.40
Minus depreciation	11 258	36	3.59	10 416	33	3.64
Farm profit before tax	19 270	61	6.14	42 290	135	14.77
Taxation	7 840	25	2.50	-1 461	-5	-0.51
Farm profit after tax	11 430	36	3.64	43 751	139	15.28
ALLOCATION OF FUNDS						
Add back depreciation	11 258	36	3.59	10 416	33	3.64
Reverse stock value adjustment	34 849	111	11.10	-41 224	-131	-14.40
Income equalisation	-20 000	-64	-6.37	20 000	64	6.99
Off-farm income	10 607	34	3.38	10 600	34	3.70
Discretionary cash	48 144	153	15.33	43 543	139	15.21
APPLIED TO:						
Net capital purchases	5 650	18	1.80	8 500	27	2.97
Development	0	0	0.00	0	0	0.00
Principal repayments	0	0	0.00	0	0	0.00
Drawings	50 100	160	15.95	51 500	164	17.99
New borrowings	0	0	0.00	0	0	0.00
Introduced funds	0	0	0.00	0	0	0.00
Cash surplus/deficit	-7 606	-24	-2.42	-16 457	-52	-5.75
Farm surplus for reinvestment²	-12 563	-40	-4.00	-18 557	-59	-6.48
ASSETS AND LIABILITIES						
Farm, forest and building (opening)	2 400 000	7 643	764	2 400 000	7 643	838
Plant and machinery (opening)	75 051	239	24	69 443	221	24
Stock valuation (opening)	409 344	1 304	130	374 495	1 193	131
Other produce on hand (opening)	0	0	0	0	0	0
Total farm assets (opening)	2 884 395	9 186	919	2 843 938	9 057	993
Total assets (opening)	2 938 095	9 357	936	2 843 938	9 057	993
Total liabilities (opening)	316 778	1 009	101	319 278	1 017	112
Total equity (farm assets - liabilities)	2 567 617	8 177	818	2 524 660	8 040	882

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.

»» TABLE 3: NORTHLAND SHEEP AND BEEF MODEL EXPENDITURE

	2009/10			2010/11 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	7 650	24	2.44	7 800	25	2.72
ACC	207	1	0.07	324	1	0.11
Total labour expenses	7 857	25	2.50	8 124	26	2.84
Animal health	9 105	29	2.90	9 500	30	3.32
Breeding	1 390	4	0.44	1 450	5	0.51
Electricity	2 800	9	0.89	3 150	10	1.10
Feed (hay and silage)	1 568	5	0.50	2 480	8	0.87
Feed (feed crops)	900	3	0.29	900	3	0.31
Feed (grazing)	0	0	0.00	0	0	0.00
Feed (other)	2 620	8	0.83	300	1	0.10
Fertiliser	28 420	91	9.05	32 800	104	11.46
Lime	3 150	10	1.00	2 950	9	1.03
Cash crop expenses ²	0	0	0.00	0	0	0.00
Freight (not elsewhere deducted)	4 600	15	1.46	4 100	13	1.43
Regrassing costs	0	0	0.00	0	0	0.00
Shearing expenses	4 038	13	5.50	3 833	12	5.60
Weed and pest control	4 360	14	1.39	4 000	13	1.40
Fuel	6 280	20	2.00	6 950	22	2.43
Vehicle costs (excluding fuel)	7 535	24	2.40	7 800	25	2.72
Repairs and maintenance	18 200	58	5.80	18 500	59	6.46
Total other working expenses	94 966	302	30.24	98 713	314	34.48
Communication costs (phone and mail)	1 690	5	0.54	1 750	6	0.61
Accountancy	2 250	7	0.72	2 360	8	0.82
Legal and consultancy	1 070	3	0.34	1 200	4	0.42
Other administration	1 380	4	0.44	1 500	5	0.52
Water charges (irrigation)	0	0	0.00	0	0	0.00
Rates	6 485	21	2.07	7 000	22	2.44
Insurance	2 900	9	0.92	3 050	10	1.07
ACC employer	2 115	7	0.67	3 360	11	1.17
Other expenditure	0	0	0.00	0	0	0.00
Total overhead expenses	17 890	57	5.70	20 220	64	7.06
Total farm working expenses	120 714	384	38.44	127 057	405	44.38
CALCULATED RATIOS						
Economic farm surplus (EFS ³)	-12 096	-39	-3.85	11 733	37	4.10
Farm working expenses/NCI ⁴	56%			76%		
EFS/total farm assets	-0.4%			0.4%		
EFS less interest and lease/equity	-1.6%			-0.7%		
Interest+rent+lease/NCI	13.3%			17.3%		
EFS/NCI	-5.6%			7.0%		
Wages of management	59 844	191	19.06	59 439	189	20.76

Notes

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

2 Includes forestry expenses.

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 NORTHLAND SHEEP AND BEEF FARM MODEL IN 2009/10

The cash operating surplus for the Northland sheep and beef farm model was \$93 900 for the 2009/10 season, which was \$22 100 less than the 2008/09 year, and \$9300 or 11 percent more than budgeted. The increase in revenue was inflated largely by the destocking of cattle as a consequence of the drought. It is unclear how much restocking will have occurred before 30 June 2010, as farmers struggle to regain pasture covers following the drought.



WORST DROUGHT EVER IN NORTHLAND

Northland suffered its worst drought on record, with lower rainfall than the droughts in 1983 and 1946. Preceding the drought, the 2009 autumn was difficult with very low May pasture growth rates resulting in lower than usual pasture covers over the winter. However, August was an exceptional pasture growth month and the weather was favourable for both calving and lambing. Consequently, there were higher than expected weaning rates especially for sheep. The rainfall deficits set in from mid-October and continued through to early May.

It was evident that farmers reacted to the drought in different ways. Approximately half of the farmers were quick to de-stock, as NIWA predicted the onset of El Nino weather conditions. Others held onto stock in the hope that they would get a downpour over summer or early autumn, as had been the case in each of the previous five years. Evidence that many farmers held onto stock has been seen in recent store stock sales, where stock and station agents have reported that the number of cattle sold has been much higher than usual.

CATTLE REVENUE DOWN BUT NUMBERS SOLD UP

Cattle revenue (sales less purchases) in 2009/10 declined 6 percent compared with 2008/09 to \$159 600, down \$10 700 from \$170 300. This was due to the early sale of stock during the drought, at an average price of \$740 per head compared with \$910 per head for the 2008/09 season.

Although some drought related restocking was completed late in 2009/10, most is expected to occur in the 2010/11 year when prices are budgeted to be higher.

SHEEP REVENUE DOWN BUT STEADY AS SHE GOES

Sheep revenue (sales less purchases) was down on 2008/09 by \$10 500 or 21 percent, despite an increase in lambs weaned and a strong store market. This reduced income came about because lamb weaning weights were down, and more lambs were sold store instead of prime. The drought prevented the purchase and sale of trading lambs and prices were less than expected, due to the negative impact of the exchange rate on schedule prices.

It is anticipated that purchasing lambs in the autumn for winter finishing will be restored in the 2010/11 season.

EXPENDITURE RESTRAINED

Although bank balances in 2009/10 are looking better than anticipated, as a result of destocking for the drought, most farmers continue to keep a tight rein on expenditure. Farm working expenses were down slightly to \$120 700, although it was evident that the drought caused the repairs and maintenance budget to be redirected toward stock water and stock feed challenges. The drought enabled many farmers to clean out dams, which had been rendered dry, and water reticulation systems required additional maintenance under the strain of extra delivery.

FERTILISER SPEND STAYED LOW AND REMAINS A CONCERN

Despite a 25 percent increase in fertiliser spend to \$28 400 the amount of phosphate applied in 2009/10 was only 19 kilograms of phosphorous per hectare and was applied when the price was at seasonally low levels. The average applied for the past three seasons has been 12 kilograms per hectare, or about 60 percent of maintenance levels.

Looking to the future, farm production will likely be eroded as pasture production drops in line with continued less than maintenance fertiliser applications, especially phosphate. There was evidence on a small number of monitored farms that applications of sulphur had been targeted, with some using small quantities of lime as a carrier for the sulphur.

Farmers are approaching their fertiliser spend based on a budgeted amount rather than a set quantity. This is a case of making the big expenditure items fit the budget.

Interest expenses have fallen to \$28 500 as a result of lower interest rates flowing through as fixed term loans were rolled over onto floating rates. Interest costs represent 13 percent of net cash income.

NET RESULT POOR

Farm profit before tax fell 52 percent to \$19 300 after allowing for a \$34 800 decline in stock on hand, following the drought. The farm showed a cash deficit of \$7600 for the year. Cash disposal has been severely constrained with minimal capital spending and no development or principal repayments.

BUDGET PERFORMANCE OF THE NORTHLAND SHEEP AND BEEF FARM MODEL IN 2010/11

The cash operating surplus expected for 2010/11 at \$40 400 is less than half that of 2009/10. The main drivers of this result are reduced numbers of stock available to sell as post-drought restocking occurs and an expected 5 percent increase in farm working expenses.

PREDICTED LIFT IN CATTLE NUMBERS

The 2010/11 budget sees the restoration of cattle numbers, which were depleted in the 2010 drought. Consequently net cash income is budgeted to fall \$47 100 to \$167 400, or 22 percent less than 2009/10.

The 2009/10 budget result was enhanced by the extra income received through the de-stocking for the drought, and farmers will need financial reserves to fully restock in the 2010/11 year. While the farm model has \$20 000

»»» TABLE 4: NORTHLAND SHEEP AND BEEF MODEL CASH FARM INCOME

YEAR ENDED 30 JUNE	2006/07 (\$)	2007/08 (\$)	2008/09 (\$)	2009/10 (\$) ¹	2010/11 BUDGET (\$)
Sheep sales less purchases	40 195	41 193	49 868	39 360	34 210
Cattle sales less purchases	152 086	157 071	170 349	159 616	117 430
Wool	8 266	8 107	8 337	7 292	7 482
Grazing income (including hay and silage sales)	0	0	0	0	0
Other income	8 300	8 300	8 300	8 300	8 300
Net cash income	209 566	215 641	236 854	214 568	167 422

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.

in the income equalisation account for restocking in the 2010/11 season, not all farmers have made this provision. There is also concern from banks that farmers have already spent the reserves from extra stock sales. Cattle prices have been steadily increasing in May and June, and the demand for stock could exceed supply resulting in higher than budgeted costs to restock.

REVENUE EXPECTED TO FALL AGAIN

The Northland farm model budget shows a significant decrease in net cash income. The net cash income drops to \$167 400; this compares poorly with the previous four years, which ranged from \$209 600 to \$236 900. The main contributors to this downturn in income are sheep revenue (sales less purchases) down \$5200 or 13 percent on 2009/10, and cattle (sales less purchases) down \$42 200 or 26 percent on the previous year.

Farmers in the monitored group expect schedule prices for sheep to hold to the same values as 2009/10, but expect cattle schedules to increase and be reflected in higher per head prices. Generally farmers expect beef prices to be around \$4 per kilogram carcass weight and this is what is assumed in the model.

Monitored farmers felt despondent about the meat industry, and have little confidence that the large meat companies would afford them anything other than more of the same, for example, commodity trading and resultant volatility in prices.

FARMERS DESPONDENT OVER WOOL

Monitored farmers appear to have little to no interest in the income from wool and little confidence that prices will recover. Many are lamenting the fact that if wool prices were higher, they would be enjoying excellent returns from sheep. For the 2010/11 season the model farm expects a price of \$2.20 per kilogram.

FARM WORKING EXPENSES PREDICTED TO RISE

Farm working expenses in 2010/11 are budgeted to increase \$6300 or 5 percent to \$127 000. Most of this increase is expected to come from a 15 percent increase in the volume of phosphate fertiliser applied. Fertiliser is not expected to increase in price but the cost of cartage and application is expected to increase by \$7 per tonne to \$96 per tonne. Farmers expect an average 12 percent increase in fuel and electricity expenditure to \$7000 and \$3200 respectively, mostly as a result of the Emissions Trading Scheme impacts on fuel and electricity prices.

REPAIRS AND MAINTENANCE LIKELY TO BE LOSING GROUND

The farm model's budget allows for \$18 500 to be spent on repairs and maintenance in 2010/11. The amount of expenditure on repairs and maintenance is second only to fertiliser, and there is strong evidence that farmers use these major expense items as a budget buffer when returns are lower. Industry commentators believe this approach is not sustainable in the long-term.

Some farmers were planning new or extended water reticulation systems and others are building new dams or enlarging existing dams.

Interest expenditure is budgeted to increase slightly in 2010/11 to \$28 900. Interest rates are expected to remain the same but borrowing will increase as farmers restock, following the drought in 2010.

PROFIT UP, BUT CASH DOWN

Farm profit before tax is predicted to increase in 2010/11 to \$42 300, compared with \$19 300 in 2009/10 but most of this is due to the increase in value of stock on hand, as farmers are expected to restock after the drought. Farm surplus for reinvestment is negative \$18 600; this is the lowest for the past six years. A cash deficit of \$16 500 is predicted in 2010/11.

CAPITAL EXPENDITURE BARELY ADEQUATE

The farm model has relatively low expenditure on capital items, which raises concerns about how farm vehicles such as quads, utilities, tractors and cars will be kept up to date. Net capital purchases are budgeted to increase to \$8500 in 2010/11 compared with just \$5700 in 2009/10.

INFORMATION ABOUT THE MODEL

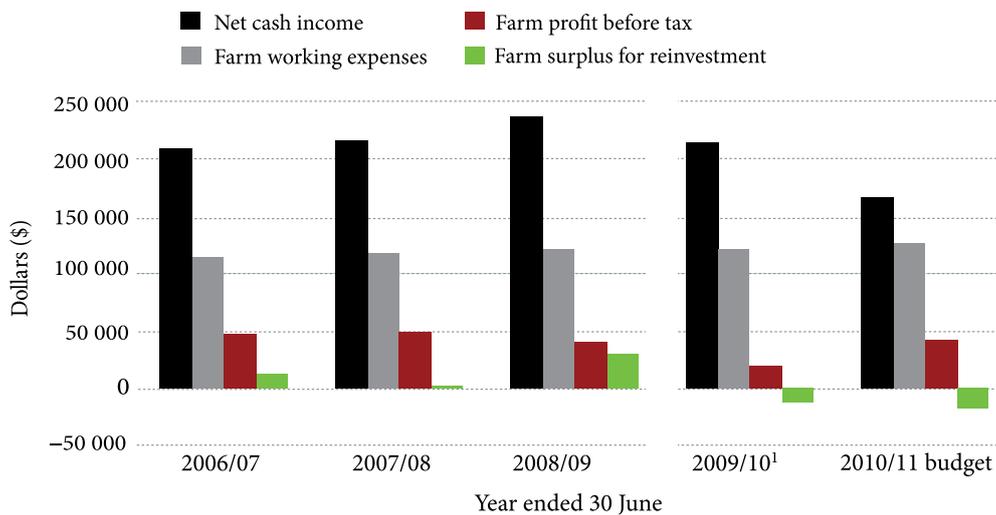
The Northland sheep and beef model represents 950 hill country and intensive finishing farms from Auckland north. Cattle make up 75 percent of total stock units.

The model runs a breeding flock with 25 to 30 percent ewe hogget replacements. Lambs are bought late in the autumn and finished during the winter period and early spring.

A cross-bred breeding herd is run, with nearly all home-bred cattle wintered. Replacement heifers are bought in. Home-bred heifers are mainly sold as prime rising 24 to 36 month heifers to the local trade market. The majority of steers are wintered over and sold on the spring grass market or carried through to slaughter from 22 to 30 months of age. A number of bull calves are purchased during the spring as weaners, and sold as 24 to 36-month bulls.

For more information on this model contact: Russell.Knutson@maf.govt.nz

»» FIGURE 1: NORTHLAND SHEEP AND BEEF MODEL PROFITABILITY TRENDS



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.

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