PASTORAL MONITORING 2010

WAIKATO/BAY OF PLENTY INTENSIVE 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

- Lambing percentages bounced back to 124 percent in 2009/10, from a low 111 percent in 2008/09, following the 2008 drought and the very wet 2008 winter.
- Farm working expenses decreased 7 percent in 2009/10 to $143 500 driven by the tighter trading conditions.
- Farm profitability declined in 2009/10 to the low levels experienced in 2006/07, mainly as a result of the drought that affected the region again in 2010. Cash operating surplus on the model fell 33 percent to $88 700.
- Farm profitability is expected to improve in 2010/11 with a 25 percent increase in the cash operating surplus to $110 900, based on the expectation of more usual climatic conditions and better stock returns. Absolute profitability though remains low.
- Farmers have applied sub-maintenance levels of fertiliser for three consecutive years – 2007/08, 2008/09 and 2009/10 – and budgeted for the same in 2010/11. This threatens the medium-term sustainability of the farm system in this region.

TABLE 1: KEY PARAMETERS, FINANCIAL RESULTS AND BUDGET FOR THE WAIKATO/BAY OF PLENTY INTENSIVE SHEEP AND BEEF FARM MODEL

YEAR ENDED 30 JUNE	2006/07	2007/08	2008/09	2009/10[1]	2010/11 BUDGET
Effective area (ha)	300	300	300	300	300
Breeding ewes (head)	1 014	1 014	933	917	906
Replacement ewe hoggets (head)	336	336	309	287	279
Other sheep (head)	123	123	114	74	74
Grazing Heifers (head)	40	56	56	56	71
Rising 1-year cattle (head)	186	186	177	181	188
Rising 2-year cattle (head)	108	108	103	105	128
Opening sheep stock units (ssu)	1 584	1 584	1 458	1 263	1 245
Opening cattle stock units	1 696	1 672	1 606	1 634	1 868
Opening total stock units (su)	3 280	3 256	3 064	2 897	3 113
Stocking rate (stock unit/ha)	10.9	10.9	10.2	9.7	10.4
Ewe lambing (%)	132	126	111	124	127
Average lamb price ($/head)	56	57	82	71	70
Average store lamb price ($/head)	42	32	58	62	63
Average prime lamb price ($/head)	57	59	84	74	71
Average wool price ($/kg)	2.32	2.24	2.23	2.24	2.34
Total wool produced (kg)	7 424	6 869	4 032	6 007	5 288
Wool production (kg/ssu)	4.70	4.34	2.77	4.76	4.25
Average rising 2-year steer ($/head)	900	966	1 044	945	981
Average rising 2-year bull ($/head)	840	908	1 030	928	936
Net cash income ($)	247 035	275 616	285 447	232 161	259 340
Farm working expenses ($)	141 907	151 310	153 659	143 466	148 476
Farm profit before tax ($)	49 501	50 823	66 526	53 444	52 008
Farm surplus for reinvestment ($)[2]	–14 456	4 174	4 157	–21 043	–2 740

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.

Ministry of Agriculture and Forestry
Te Manatū Ahuwhenua, Ngāherehere

TABLE 2: WAIKATO/BAY OF PLENTY INTENSIVE 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	58 375	195	46.22	59 439	198	47.73
Wool	32 640	109	25.84	12 373	41	9.94
Cattle	201 857	673	123.54	243 975	813	130.61
Grazing income (including hay and silage sales)	27 690	92	16.95	33 150	111	17.75
Other farm income	6 900	23	2.38	7 000	23	2.25
LESS:						
Sheep purchases	3 835	13	3.04	4 392	15	3.53
Cattle purchases	91 466	305	55.98	92 205	307	49.36
Net cash income	**232 161**	**774**	**80.14**	**259 340**	**864**	**83.30**
Farm working expenses	**143 466**	**478**	**49.52**	**148 476**	**495**	**47.69**
Cash operating surplus	**88 695**	**296**	**30.62**	**110 864**	**370**	**35.61**
Interest	31 752	106	10.96	33 778	113	10.85
Rent and/or leases	7 696	26	2.66	8 000	27	2.57
Stock value adjustment	20 349	68	7.02	–1 907	–6	–0.61
Minus depreciation	16 152	54	5.58	15 171	51	4.87
Farm profit before tax	**53 444**	**178**	**18.45**	**52 008**	**173**	**16.71**
Taxation	8 890	30	3.07	10 426	35	3.35
Farm profit after tax	**44 554**	**149**	**15.38**	**41 582**	**139**	**13.36**
ALLOCATION OF FUNDS						
Add back depreciation	16 152	54	5.58	15 171	51	4.87
Reverse stock value adjustment	–20 349	–68	–7.02	1 907	6	0.61
Income equalisation	0	0	0.00	0	0	0.00
Off-farm income	16 000	53	5.52	17 000	57	5.46
Discretionary cash	**56 357**	**188**	**19.45**	**75 660**	**252**	**24.30**
APPLIED TO:						
Net capital purchases	7 156	24	2.47	6 000	20	1.93
Development	0	0	0.00	0	0	0.00
Principal repayments	0	0	0.00	0	0	0.00
Drawings	61 400	205	21.19	61 400	205	19.72
New borrowings	0	0	0.00	0	0	0.00
Introduced funds	0	0	0.00	0	0	0.00
Cash surplus/deficit	**–12 199**	**–41**	**–4.21**	**8 260**	**28**	**2.65**
Farm surplus for reinvestment[2]	**–21 043**	**–70**	**–7.26**	**–2 740**	**–9**	**–0.88**
ASSETS AND LIABILITIES						
Farm, forest and building (opening)	4 229 234	14 097	1 459.87	3 108 266	10 361	998.38
Plant and machinery (opening)	88 029	293	30.39	81 980	273	26.33
Stock valuation (opening)	320 756	1 069	110.72	341 105	1 137	109.56
Other produce on hand (opening)	19 186	64	6.62	0	0	0.00
Total farm assets (opening)	**4 657 204**	**15 524**	**1 607.60**	**3 531 351**	**11 771**	**1 134.28**
Total assets (opening)	**5 061 706**	**16 872**	**1 747.22**	**3 449 371**	**11 498**	**1 107.95**
Total liabilities (opening)	440 246	1 467	151.97	440 246	1 467	141.41
Total equity (farm assets - liabilities)	**4 216 958**	**14 057**	**1 455.63**	**3 091 105**	**10 304**	**992.87**

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: WAIKATO/BAY OF PLENTY INTENSIVE 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	15 091	50	5.21	16 301	54	5.24
ACC	612	2	0.21	640	2	0.21
Total labour expenses	**15 703**	**52**	**5.42**	**16 941**	**56**	**5.44**
Animal health	11 533	38	3.98	12 417	41	3.99
Breeding	782	3	0.27	94	0	0.03
Electricity	4 257	14	1.47	4 717	16	1.52
Feed (hay and silage)	11 405	38	3.94	11 341	38	3.64
Feed (feed crops)	0	0	0.00	0	0	0.00
Feed (grazing)	0	0	0.00	0	0	0.00
Feed (other)	0	0	0.00	0	0	0.00
Fertiliser	31 640	105	10.92	31 760	106	10.20
Lime	6 000	20	2.07	6 000	20	1.93
Cash crop expenses[2]	0	0	0.00	0	0	0.00
Freight (not elsewhere deducted)	2 351	8	0.81	2 740	9	0.88
Regrassing costs	2 669	9	0.92	3 260	11	1.05
Shearing expenses	8 222	27	6.51	8 368	28	6.72
Weed and pest control	3 300	11	1.14	3 900	13	1.25
Fuel	4 766	16	1.64	5 306	18	1.70
Vehicle costs (excluding fuel)	6 163	21	2.13	5 965	20	1.92
Repairs and maintenance	10 008	33	3.45	9 815	33	3.15
Total other working expenses	**103 096**	**344**	**35.59**	**105 684**	**352**	**33.95**
Communication costs (phone and mail)	1 652	6	0.57	1 873	6	0.60
Accountancy	2 669	9	0.92	2 948	10	0.95
Legal and consultancy	1 493	5	0.52	879	3	0.28
Other administration	2 033	7	0.70	2 220	7	0.71
Water charges (irrigation)	0	0	0.00	0	0	0.00
Rates	9 000	30	3.11	9 300	31	2.99
Insurance	3 225	11	1.11	3 300	11	1.06
ACC employer	3 007	10	1.04	3 597	12	1.16
Other expenditure	1 589	5	0.55	1 734	6	0.56
Total overhead expenses	**24 668**	**82**	**8.51**	**25 851**	**86**	**8.30**
Total farm working expenses	**143 466**	**478**	**49.52**	**148 476**	**495**	**47.69**
CALCULATED RATIOS						
Economic farm surplus (EFS[3])	17 892	60	6.18	27 473	92	8.82
Farm working expenses/NCI[4]	62%			57%		
EFS/total farm assets	0.4%			0.8%		
EFS less interest and lease/equity	–0.5%			–0.5%		
Interest+rent+lease/NCI	17.0%			16.1%		
EFS/NCI	7.7%			10.6%		
Wages of management	75 000	250	25.89	66 314	221	21.30

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 WAIKATO/BAY OF PLENTY INTENSIVE SHEEP AND BEEF FARM MODEL IN 2009/10

The cash operating surplus for the Waikato/Bay of Plenty intensive sheep and beef farm model decreased 33 percent in 2009/10 to $88 700, driven by lower sheep and cattle returns, mainly as a result of drought.

REVENUE FALLS SHARPLY WITH REDUCED CATTLE AND SHEEP RETURNS

SHEEP RETURNS FALL

Net sheep returns (sales less purchases) on the model decreased 26 percent in 2009/10 to $54 500 driven by lower lamb prices. The number of lambs docked increased to 124 percent, bouncing back to usual levels from a poor 111 percent in 2008/09. This was due to greater lamb survival over a warm August. Industry commentators suggest some farmers are returning to more traditional sheep breeds due to unacceptably higher lamb and ewe death rates experienced with composite breeds.

The average lamb value decreased 14 percent in 2009/10 to $71 per head but was still well above historic levels. Finished lambs averaged 16.6 kilograms carcass weight for an average return of $74 across monitored farms. The lack of autumn feed forced many farmers to sell up to 25 percent of lambs on the store market instead of the traditional 10 percent, with an average liveweight of 31 kilograms returning $62 per head in 2009/10.

WOOL REVENUE BOOSTED BY STOCKS CARRIED FORWARD

Average wool prices remained relatively static in 2009/10, returning $2.24 per kilogram. Wool revenue on the model more than tripled to $32 600 as wool stock carried forward from 2008/09 was sold. Industry commentators suggest that some farmers are shearing less often, and not shearing lambs before sale, in an attempt to lift the net return from wool.

CATTLE INCOME FALLS AS WELL

Net cattle revenue (sales less purchases) decreased by 36 percent in 2009/10 to $110 400 due to cattle revenues falling 26 percent to $201 900. The lack of feed available during the drought meant carcass weights at sale were on average 10 to 15 kilograms lighter, reducing returns, while the cost of replacement cattle remained steady. The model sold fewer rising two-year old bulls in 2009/10, carrying more over to 2010/11 to achieve a higher return and increase the stocking rate.

There was some difficulty in obtaining replacement weaners in the 2010 autumn, even though the drought throughout much of the North Island brought extra animals onto the market. Many farms are yet to fill their quota of rising two-year cattle, especially steers, which fetched a premium as farms in other regions looked to re-stock after successive droughts.

The model opened with 56 grazing dairy heifers in 2009/10, increasing to 71 during the year. This impacted on grazing revenue which increased 16 percent to $27 700 in 2009/10. Grazing rates remained stable at $7.50 per head per week, but the number of calves and heifers taken on for grazing is on the increase throughout the region as farmers take advantage of the more sustainable income stream.

TOTAL EXPENDITURE FALLS

Total farm working expenses on the model decreased 7 percent in 2009/10 to $143 500, or to $49.52 per stock unit. The tight stock trading conditions, difficult spring and the drought forced farmers to keep a tight hold on the purse strings from an early stage in 2009/10. Farmers exercised discretion when committing to spending in 2009/10 and generally spent less in order to balance the budget.

Fertiliser expenditure remained at a similar level in 2009/10 compared with 2008/09, at $31 640 or $11 per

stock unit. Reduced fertiliser prices allowed monitored farms to increase their application rate, to approximately 55 percent of maintenance level. However, this is the third year in a row of sub-maintenance fertiliser application and it is a threat to the sustainability of the current farm system, particularly the stocking rate.

Lime expenditure on the model more than doubled in 2009/10 to $6000. The cost of lime applied rose to $60 per tonne in 2009/10, a 25 percent increase on 2008/09; and the quantity applied increased 67 percent to 100 tonnes. Lime is increasingly being viewed as a strategic input to help modify nutrient imbalances and mitigate the impact of sub-maintenance fertiliser application.

Insurance costs have increased 5 percent in 2009/10 to $3200, attributed to revaluations by companies of the level of cover held.

Debt servicing costs decreased 12 percent in 2009/10 to $31 800 due to reduced interest rates. Many farmers have come off fixed rates to take advantage of lower floating rates; but the timing of re-fixing is crucial. Industry commentators noted that new entrants into the industry would likely face significantly higher debt servicing costs than is represented on the model due to the low debt level on the model. This poses a significant barrier to entry for the next generation of dry-stock farmers given the low levels of profitability.

NET RESULT DETERIORATES

Farm profit before tax decreased 20 percent in 2009/10 to $53 400, however, this figure itself is inflated by a $20 300 stock value adjustment, and the sale of last season's wool.

After three years of difficult climatic conditions and low returns, some farmers have not yet recovered from the 2007/08 drought and are struggling to rebuild their stocking rates. Farmers in the Bay of Plenty had generally maintained their stocking rates until the 2009/10 drought which forced them to lower stock numbers. The farm model closed with an improved stocking rate of 10.4 stock units per hectare due to additional grazers taken on and more bulls carried over.

The reduced farm profitability forced farmers to reduce their level of drawings 12 percent to $61 400 in 2009/10 to attempt to balance the books, but the model still produced a $12 200 cash deficit.

Development expenditure on the model remains suspended in 2009/10. Capital expenditure fell 72 percent to $7200 as a direct result of the reduced profitability. Industry commentators suggest that a lot of farm infrastructure is past its "use by" date.

TABLE 4: WAIKATO/BAY OF PLENTY INTENSIVE 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	80 630	62 746	73 364	54 540	55 047
Cattle sales less purchases	126 070	166 370	172 065	110 391	151 770
Wool	17 249	16 887	8 978	32 640	12 373
Grazing income (including hay and silage sales)	16 786	22 472	23 940	27 690	33 150
Other income	6 300	7 141	7 100	6 900	7 000
Net cash income	247 035	275 616	285 447	232 161	259 340

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 WAIKATO/BAY OF PLENTY INTENSIVE SHEEP AND BEEF FARM MODEL IN 2010/11

The cash operating surplus in 2010/11 is expected to increase 25 percent to $110 900, driven by improved cattle returns.

REVENUE EXPECTED TO INCREASE

SHEEP INCOME STABLE

Net sheep returns (sales less purchases) are expected to stabilise in 2010/11 at $55 000. Ewes are in better condition and more favourable climatic conditions are expected to increase lambing percentages 3 percentage points to 127 percent in 2010/11. A higher proportion of lambs are expected to be sold on the prime market (85 percent) returning higher prices. Store stock prices for both lambs and good quality mixed age ewes are expected to remain very strong as demand by farmers rebuilding ewe flocks after the drought strengthens further.

Wool prices are budgeted to increase 10 cents per kilogram, or 4 percent in 2010/11, to $2.34 per kilogram. The market for greasy wool has strengthened considerably over the last six to seven months, but farmers are not preparing for any major change in wool fortunes.

CATTLE NUMBERS AND WEIGHTS UP

Net cattle returns (sales less purchases) are budgeted to increase 37 percent in 2010/11 to $151 800. This is driven by improved prices and the sale of additional rising two-year old bulls carried over from 2009/10. With a return to more usual climatic conditions, farmers expect to be able to take rising two- and three-year old cattle through to heavier carcass weights at slaughter, up 10 to 15 kilograms on 2009/10, and in line with usual levels.

Grazing income is expected to increase 20 percent in 2010/11 to $33 200, with the inclusion of 14 additional heifers taking the grazing herd up to 85.

EXPENDITURE EXPECTED TO INCREASE SLIGHTLY

Farm working expenses on the farm model are budgeted to increase 3 percent in 2010/11 to $148 500, driven by the recovery from the drought. On a per stock unit basis, farm working expenses are budgeted to fall 4 percent, to $47.69 per stock unit, due to the higher stocking rate.

Many 2010 winter crops failed or had low yields on monitored farms due to the cold spring and drought in 2009/10. The feed situation is tight and nitrogen application has become a strategic discretionary expense.

Spending on fertiliser is budgeted at similar levels to 2009/10, and still remains at below maintenance levels. Regrassing expenditure on the model is budgeted to increase 22 percent in 2010/11 to $3300, driven by the desire to replenish pasture damaged from successive droughts.

The cost of freight, fuel and electricity are expected to rise in 2010/11, driven in part by the introduction of the Emissions Trading Scheme.

Industry commentators observe that most farmers have already come off fixed mortgage rates and therefore interest costs are expected to increase slightly due to a slight increase in the average interest rate. The model is budgeting to spend $33 800 on interest payments in 2010/11.

NET RESULT IMPROVED BUT REMAINS POOR

The improved income on the model translates into a 25 percent increase in the cash operating surplus in 2010/11 to $110 900; however, farm profit before tax is expected to remain flat at $52 000. This level of profit is very similar to the levels experienced since 2006/07.

Capital purchases are budgeted to decrease 16 percent in 2010/11 to $6000 and development expenditure is expected to be suspended for the third consecutive year, as farm reinvestment becomes more of a discretionary item.

Overall, the farm model is expecting a return to a positive cash surplus of $8300 in 2010/11; however, without the off-farm income of $17 000 the model would have a cash deficit of $8700.

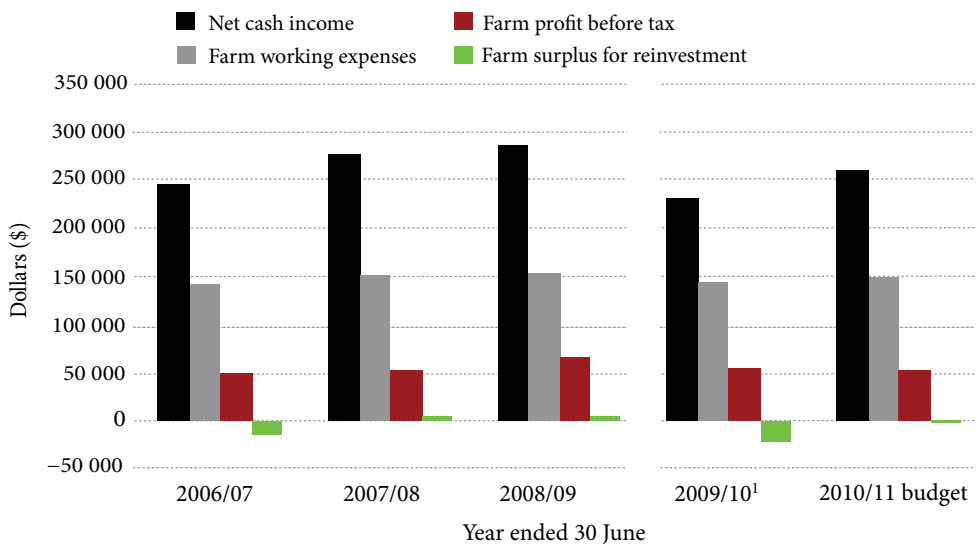
INFORMATION ABOUT THE MODEL

The Waikato/Bay of Plenty sheep and beef farm model represents 722 farms bounding the predominately dairying districts of the region. The farm model is a 300 effective hectare operation representing a typical finishing beef cattle and sheep farm with rolling-to-easy hill contour and volcanic ash soil.

The dominant enterprise on the farm is bull beef finishing, combined with steer finishing and dairy grazers. A high performance sheep flock is crossed with a high-fertility breed.

For more information on this model contact Tony.Schischka@maf.govt.nz

FIGURE 1: WAIKATO/BAY OF PLENTY INTENSIVE SHEEP AND BEEF FARM MODEL PROFITABILITY TRENDS



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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