



WESTERN LOWER NORTH ISLAND INTENSIVE 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

- › Difficult climatic conditions in winter, spring and early summer of 2010 restricted pasture growth and stock performance. The favourable autumn 2011 period enabled significant gains in stock condition and is expected to provide a good production base for the 2011/12 year.
- › Net cash income in 2010/11 increased 21 percent from \$407 000 to \$491 000 as sheep and cattle prices increased over the year, supported by increased returns for wool and steady demand for dairy support.
- › Farm expenditure continued to increase in 2010/11 as farmers took the opportunity to advance development, repairs and maintenance after having deferred them in the previous few years.
- › Farm profit before tax in 2010/11 increased \$115 300 to \$141 300 and is expected to continue to grow in 2011/12 on the back of stable lamb and cattle returns as well as the improved grazing demand and cropping options.
- › Farmer viability, morale and confidence improved markedly in the second half of 2010/11 after several years of dry conditions and storms in September 2010. Industry commentators anticipate a profitable year in 2011/12 with improved pasture levels going into winter and continuing favourable stock prices, grazing demand and crop options.

»» TABLE 1: KEY PARAMETERS, FINANCIAL RESULTS AND BUDGET FOR THE WESTERN LOWER NORTH ISLAND INTENSIVE SHEEP AND BEEF MODEL

YEAR ENDED 30 JUNE	2007/08	2008/09	2009/10 ¹	2010/11	2011/12 BUDGET
Effective area (ha)	220	220	368	368	368
Breeding ewes (head)	1 066	1 004	1 187	1 184	1 172
Replacement ewe hoggets (head)	284	255	435	433	415
Other sheep (head)	326	292	737	544	622
Breeding cows (head)	0	0	0	0	0
Rising 1-year cattle (head)	105	96	98	101	80
Other cattle (head)	76	68	133	104	138
Opening sheep stock units (ssu)	1 495	1 388	2 345	2 383	2 618
Opening cattle stock units	961	873	1 545	1 604	1 693
Opening total stock units (su)	2 456	2 261	3 890	3 987	4 311
Stocking rate (stock unit/ha)	11.2	10.3	10.6	10.8	11.7
Ewe lambing (%)	121	118	134	112	133
Average lamb price (\$/head) ^R	58.04	94.69	83.58	118.54	113.20
Average store lamb price (\$/head)	51.18	78.75	65.00	95.00	89.00
Average prime lamb price (\$/head)	60.12	94.69	86.14	120.00	115.00
Average wool price (\$/kg)	2.20	2.20	2.32	3.59	3.86
Total wool produced (kg)	7 750	6 558	11 945	11 407	11 660
Wool production (kg/ssu)	5.19	4.72	5.09	4.79	4.45
Average rising 2-year steer (\$/head)	724	891	872	1 495	1 450
Average rising 2-year bull (\$/head)	1 068	1 490	1 430
Net cash income (\$)	189 309	210 332	406 963	491 000	621 586
Farm working expenses (\$)	122 347	119 815	215 285	244 207	279 022
Farm profit before tax (\$)	6 334	47 809	30 728	141 289	201 075
Farm surplus for reinvestment (\$) ²	-8 994	21 032	15 932	87 827	142 979

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.

Symbols

R Revised 2009/10.
... Data not collected.



»» TABLE 2: WESTERN LOWER NORTH ISLAND SHEEP AND BEEF MODEL BUDGET

	2010/11			2011/12 BUDGET		
	WHOLE FARM (\$)	PER HA (\$)	PER STOCK UNIT ¹ (\$)	WHOLE FARM (\$)	PER HA (\$)	PER STOCK UNIT ¹ (\$)
REVENUE						
Sheep	355 020	965	148.97	483 842	1 315	184.81
Wool	40 950	111	17.18	45 007	122	17.19
Cattle	249 390	678	155.53	279 480	759	165.13
Grazing income (including hay and silage sales)	99 240	270	24.89	105 777	287	24.54
Other farm income	62 620	170	15.71	82 938	225	19.24
LESS:						
Sheep purchases	171 939	467	72.15	230 468	626	88.03
Cattle purchases	144 280	392	89.98	144 990	394	85.67
Net cash income	491 000	1 334	123.16	621 586	1 689	144.20
Farm working expenses	244 207	664	61.26	279 022	758	64.73
Cash operating surplus	246 793	671	61.91	342 564	931	79.47
Interest	74 282	202	18.63	75 894	206	17.61
Rent and/or leases	24 600	67	6.17	26 700	73	6.19
Stock value adjustment	23 747	65	5.96	-10 671	-29	-2.48
Minus depreciation	30 369	83	7.62	28 224	77	6.55
Farm profit before tax	141 289	384	35.44	201 075	546	46.65
Income equalisation	0	0	0.00	0	0	0.00
Taxation	8 000	22	2.01	46 381	126	10.76
Farm profit after tax	133 289	362	33.43	154 694	420	35.89
ALLOCATION OF FUNDS						
Add back depreciation	30 369	83	7.62	28 224	77	6.55
Reverse stock value adjustment	-23 747	-65	-5.96	10 671	29	2.48
Drawings	52 084	142	13.06	50 610	138	11.74
Farm surplus for reinvestment²	87 827	239	22.03	142 979	389	33.17
REINVESTMENT						
Net capital purchases	10 994	30	2.76	11 485	31	2.66
Development	2 000	5	0.50	11 000	30	2.55
Principal repayments	19 856	54	4.98	20 580	56	4.77
Farm cash surplus/deficit	54 978	149	13.79	99 914	272	23.18
OTHER CASH SOURCES						
Off-farm income	9 351	25	2.35	9 665	26	2.24
New borrowings	0	0	0.00	0	0	0.00
Introduced funds	0	0	0.00	0	0	0.00
Net cash position	64 329	175	16.14	109 579	298	25.42
ASSETS AND LIABILITIES						
Farm, forest and building (opening)	4 933 507	13 406	1 237.51	4 927 413	13 390	1 143.11
Plant and machinery (opening)	161 835	440	40.59	148 554	404	34.46
Stock valuation (opening)	439 335	1 194	110.20	463 082	1 258	107.43
Other produce on hand (opening)	0	0	0.00	0	0	0.00
Total farm assets (opening)	5 534 677	15 040	1 388.31	5 539 049	15 052	1 285.00
Total assets (opening)	5 624 989	15 285	1 410.96	5 628 915	15 296	1 305.85
Total liabilities (opening)	1 044 851	2 839	262.09	1 024 995	2 785	237.79
Total equity (farm assets - liabilities)	4 489 826	12 201	1 126.22	4 514 054	12 266	1 047.21

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: WESTERN LOWER NORTH ISLAND SHEEP AND BEEF MODEL EXPENDITURE

	2010/11			2011/12 BUDGET		
	WHOLE FARM (\$)	PER HA (\$)	PER STOCK UNIT (\$)	WHOLE FARM (\$)	PER HA (\$)	PER STOCK UNIT (\$)
FARM WORKING EXPENSES						
Permanent wages	0	0	0.00	0	0	0.00
Casual wages	11 500	31	2.88	12 512	34	2.90
ACC	144	0	0.04	439	1	0.10
Total labour expenses	11 644	32	2.92	12 951	35	3.00
Animal health	15 349	42	3.85	15 800	43	3.67
Breeding	478	1	0.12	881	2	0.20
Electricity	5 020	14	1.26	5 371	15	1.25
Feed (hay and silage)	2 990	8	0.75	3 707	10	0.86
Feed (feed crops)	3 429	9	0.86	4 569	12	1.06
Feed (grazing)	0	0	0.00	0	0	0.00
Feed (other)	2 312	6	0.58	2 586	7	0.60
Fertiliser	64 420	175	16.16	75 660	206	17.55
Lime	2 208	6	0.55	3 680	10	0.85
Cash crop ¹	19 236	52	4.83	22 793	62	5.29
Freight (not elsewhere deducted)	7 462	20	1.87	8 588	23	1.99
Regrassing costs	6 615	18	1.66	7 523	20	1.75
Shearing expense ²	14 537	40	6.10	15 298	42	5.84
Weed and pest control	5 836	16	1.46	5 887	16	1.37
Fuel	13 476	37	3.38	14 311	39	3.32
Vehicle costs (excluding fuel)	10 570	29	2.65	10 906	30	2.53
Repairs and maintenance	20 383	55	5.11	24 220	66	5.62
Total other working expenses	194 321	528	48.74	221 781	603	51.45
Communication costs (phone and mail)	2 978	8	0.75	2 642	7	0.61
Accountancy	4 319	12	1.08	3 700	10	0.86
Legal and consultancy	1 816	5	0.46	1 988	5	0.46
Other administration	2 576	7	0.65	2 760	8	0.64
Water charges (irrigation)	0	0	0.00	0	0	0.00
Rates	14 352	39	3.60	15 088	41	3.50
Insurance	6 855	19	1.72	8 433	23	1.96
ACC employer	2 771	8	0.69	7 471	20	1.73
Other expenditure	2 576	7	0.65	2 208	6	0.51
Total overhead expenses	38 243	104	9.59	44 290	120	10.27
Total farm working expenses	244 207	664	61.26	279 022	758	64.73
CALCULATED RATIOS						
Economic farm surplus (EFS ³)	165 171	449	41.43	228 669	621	53.05
Farm working expenses/NCI ⁴	50%			45%		
EFS/total farm assets	3.0%			4.1%		
EFS less interest and lease/equity	1.5%			2.8%		
Interest+rent+lease/NCI	20.1%			16.5%		
EFS/NCI	33.6%			36.8%		
Wages of management	75 000	204	18.81	75 000	204	17.40

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 WESTERN LOWER NORTH ISLAND SHEEP AND BEEF MODEL FARM IN 2010/11

The cash operating surplus for the western lower North Island model increased 29 percent to \$246 800 as sale prices for sheep and cattle improved as well as crop and grazing returns, despite increases in almost all areas of expenditure.

REVENUE INCREASED WITH RISING STOCK PRICES

Net cash income increased 21 percent (\$84 000) to \$491 000 in 2010/11 as sheep and cattle prices increased over the year. Improved grazing and cropping income also brought in more revenue as farmers sought to diversify income streams.

SHEEP PRICES BOLSTERED REVENUE

Lamb and hogget returns increased markedly with average prime lamb prices rising 39 percent from \$86.14 in 2009/10 to \$120.00 in 2010/11. However, as farmers restocked to replenish lambs lost in the September 2010 storm, sheep purchases nearly doubled compared with the previous year, squeezing trading margins. This resulted in net sheep revenues (sales less purchases) falling 5 percent to \$183 100. Farms in this region have taken on more grazing over the past year, leading to fewer finishing stock and some displacement of sheep revenue into grazing.

Lambing fell to 112 percent, well down on the expected 134 percent mainly due to the storm in September 2010. This took a huge toll on both lambs and ewes and was one of the biggest single losses of sheep stock in this region in recent memory. A cold, wet spring and poor pasture growth hit young and lactating stock particularly hard, reducing their performance until mid-summer. Growth rates to weaning were generally poor, resulting in lower lamb weaning weights despite fewer lambs per ewe. Good rains beginning in late January 2011 and a mild climate led to a much improved second half of the season. Pasture and stock growth rates recovered significantly, and the region experienced the best autumn weather since 2004. Facial eczema from the wet and warm February 2011 was reported, especially on sheltered country, and may impact lambing numbers in 2011/12.

Hogget mating at 68 percent was slightly down on the previous year's 75 percent as they were generally not up to ideal weights. A number of farmers decided high hogget and ewe prices were too good to pass up and sold them prime, carrying only the bare minimum of replacements through in order to better feed the remaining stock. Farmers also took the opportunity to cull more poor performing ewes and bought in better quality replacements.

CATTLE MARGINS INCREASED ON RISING MARKET

Good cattle margins were achieved through summer-autumn 2011 due to a rising schedule, increasing weights, and a low store price early in the season caused by a lack of confidence in prices and feed supply. Cattle growth rates in spring and early summer 2010 were reduced by short feed covers and low stock condition following a cold and wet winter. Margins for steers and bulls have reportedly risen from around \$200 to over \$600 per head although this margin is not expected to continue. Store market bulls also achieved better prices after being less popular in recent years. Breeding cows suffered in the winter and spring with poor breeding success resulting in 20 to 30 percent dry in 2011.

The dry autumn conditions in 2010 also caused some pasture damage. Closing cattle stock units showed an increase in 2010/11 as many cattle were carried over to the next financial year because they had not reached target weights. With fewer cattle on hand at the beginning of 2010/11 and more yet to be sold by year end, the value of cattle on hand increased \$19 200 whereas net cattle income (sales less purchases) increased \$3900 to \$105 100.

INCREASED WOOL INCOME ADDS TO BOTTOM LINE

Wool income in 2010/11 increased 48 percent to \$41 000 while the total clip decreased 5 percent to



11 400 kilograms. Wool prices averaged \$3.59 per kilogram, up \$1.27 per kilogram on a year ago, due to strong demand and despite a high exchange rate. The average price is well below prices achieved in the later part of the season because most farms sold their main shear before prices peaked. Prices on the monitored farms ranged from \$1.94 per kilogram to \$5.67 per kilogram.

EXPANDED GRAZING OPTIONS LIFT INCOME

Contract grazing of lambs, cattle and dairy support activities increased in the region. These are attractive options for intensive sheep and beef farmers as they have the benefit of lower capital investment, less market risk and increased liquidity. There has been a trend in the region for farmers to have grazing sheep on their properties, particularly for meat companies, rather than owning them. Grazing stock units for the model farm increased from 390 to 1020 and grazing income more than tripled to \$99 200 as higher milksolid payouts drove strong demand from the dairy sector for supplementary feed and grazing. Finally, carrying capacity was enhanced as pastures thickened and appeared more robust than in previous years without significantly increased fertiliser application and this should underpin future grazing income.

CROPPING YIELDS ORDINARY ALTHOUGH PRICES IMPROVED

Income from crops increased 41 percent to \$62 600 as prices improved and crop area increased. Farms in this intensive finishing class took advantage of the great flexibility of land use available to them to increase the cropping area in 2010/11. However, yields were at or below average as crop establishment through November and December slowed due to the dry and cool conditions. Wet weather in late summer also retarded grain filling and depressed crop yields.

Prices for wheat and barley increased over 2010/11 from around \$300 per tonne to around \$400 per tonne, cushioning the effects of the reduced yields. There were several reports of secondary-tillering which made grain harvesting difficult.

Maize and silage sales to dairy farmers were profitable this year and are increasingly seen as another good land use option as store lambs become more expensive.

TOTAL FARM EXPENDITURE INCREASED

Farm working expenses increased 13 percent to \$244 200, though expenditure was restrained in early 2010/11 until the year's financial position became clearer. Improved pasture condition and prices received during the year meant that farmers could catch up on expenditure deferred in recent years while maintaining a ratio of farm working expenses to net cash income of 50 percent, 3 percent lower than the previous year.

Fertiliser expenditure increased to \$64 400. Use of fertiliser and lime increased this year but barely reached maintenance levels. Fertiliser prices were up between \$25 and \$60 per tonne as at June 2011, although most farmers purchased early to beat price increases. Increased cropping and leased land areas contributed to increased fertiliser use and also increased labour costs by \$7500 to \$11 500.

»» TABLE 4: WESTERN LOWER NORTH ISLAND SHEEP AND BEEF CASH FARM INCOME

YEAR ENDED 30 JUNE	2007/08 (\$)	2008/09 (\$)	2009/10 ¹ (\$)	2010/11 (\$)	2011/12 BUDGET (\$)
Sheep sales less purchases	81 744	110 470	191 910	183 081	253 374
Cattle sales less purchases	72 337	60 404	101 201	105 110	134 490
Wool	17 048	14 428	27 712	40 950	45 007
Grazing income (including hay and silage sales)	9 180	8 130	31 668	99 240	105 777
Other income	9 000	16 900	54 471	62 620	82 938
Net cash income	189 309	351 828	406 963	491 000	621 586

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.

Animal health expenditure increased to more typical levels of \$3.85 per stock unit in 2010/11 following a low spend the previous year and as farmers sought to combat facial eczema.

To accommodate increased grazing and cropping opportunities this year, rent and lease activity increased in the region and expenditure on the model increased significantly from \$13 300 to \$24 600. Some leases for cropping are quite short-term.

Interest payments reduced to \$74 300 per annum as many farms moved off fixed term loans at around 9 percent per annum and switched to floating rates of just over 6 percent. Average overdraft levels were also lower.

NET RESULT IMPROVED

Farm profit before tax increased \$115 300 to \$141 300 in 2010/11. Farm surplus for reinvestment increased from \$15 900 in the previous year to a healthy \$87 800 in 2010/11. This enabled a significant increase in principal repayments to \$19 900. Development and capital expenditure also increased \$2000 and \$5600 respectively as farmers sought to catch up on areas of wear and disrepair deferred over recent years.

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

The cash operating surplus in 2011/12 is budgeted to increase 39 percent on 2010/11 to \$343 000. Sheep revenues are expected to improve in 2010/11 after rebuilding stock levels. Cattle revenues are also likely to increase with the sale of those animals held over from the previous year.

REVENUE BUDGETED TO INCREASE

Net cash income is expected to increase 27 percent (\$130 600) to \$622 000, although this is dependent upon favourable seasonal conditions. Monitored farmers are cautiously optimistic that prices will hold through 2011/12 and that pastures will be in good condition from autumn 2011 with fewer grub and porina issues. The increase in income will additionally depend on lambing percentages returning to typical levels of around 133 percent, continued favourable cattle trading margins and good crop yields.

SHEEP PRICES EXPECTED TO HOLD

Net sheep revenues (sales less purchases) are expected to increase to \$254 000 on the back of the lambing returning to 133 percent and ewes attaining good condition. With favourable pasture conditions and a lift in ewe weights at tupping in 2011, lambing is expected to be in good shape in spring 2011, although there could be some impact from facial eczema. With good live weights, hogget mating is also expected to lift.

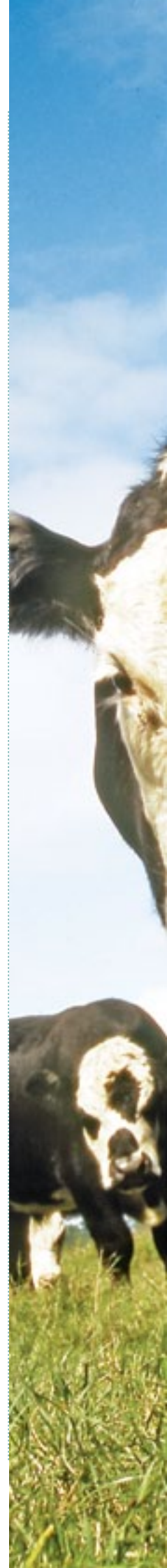
Lamb prices for 2011/12 are expected to average \$115 per head or just under \$6 per kilogram. Improved lamb kill weights are also expected to increase the average lamb price.

NET CATTLE REVENUES TO INCREASE

Cattle sales less purchases are budgeted to increase 28 percent to \$135 000 as stock carried over due to a slower finishing cycle in 2011 are expected to be sold in 2011/12. Margins are expected to reduce with farmers budgeting for increased purchase prices. The large number of dry cows in 2010/11 may reduce cattle supply and contribute to higher sale prices in 2011/12 as the finishing cycle returns to more typical lengths and better weights are achieved following the promising autumn in 2011.

GAINS IN WOOL PRICES EXPECTED

Wool income is expected to increase 10 percent with a small lift in total wool weight and an expected 8 percent increase in wool prices to \$3.86. Many farmers in the region are considering shifting their



shearing policies from a twelve to an eight month cycle to take advantage of the strong price growth and increase in potential revenue.

GRAZING DEMAND POSITIVE

Grazing revenue is budgeted to lift 7 percent to \$106 000 in 2011/12 with 46 percent from sheep grazing and 54 percent from dairy grazing. A high milksolid payout is expected to continue to drive demand from the dairy sector. This continues the trend towards contract grazing as seen in the previous year as meat companies also seek secure stock supply and so graze out their own stock.

OTHER INCOME BUDGETED TO LIFT DUE TO INCREASED CROPPING REVENUE

Other farm income is expected to increase 32 percent to \$83 000 in 2011/12. Increasing demand for crushed barley from the dairy sector and anticipated price rises for grains including barley are budgeted to drive an increase in the cropping area. With some flexibility on this class of land, farmers are expected to weigh up future potential grain demand with potentially lucrative grazing contracts before committing to a particular option.

EXPENDITURE INCREASES EXPECTED IN MOST AREAS

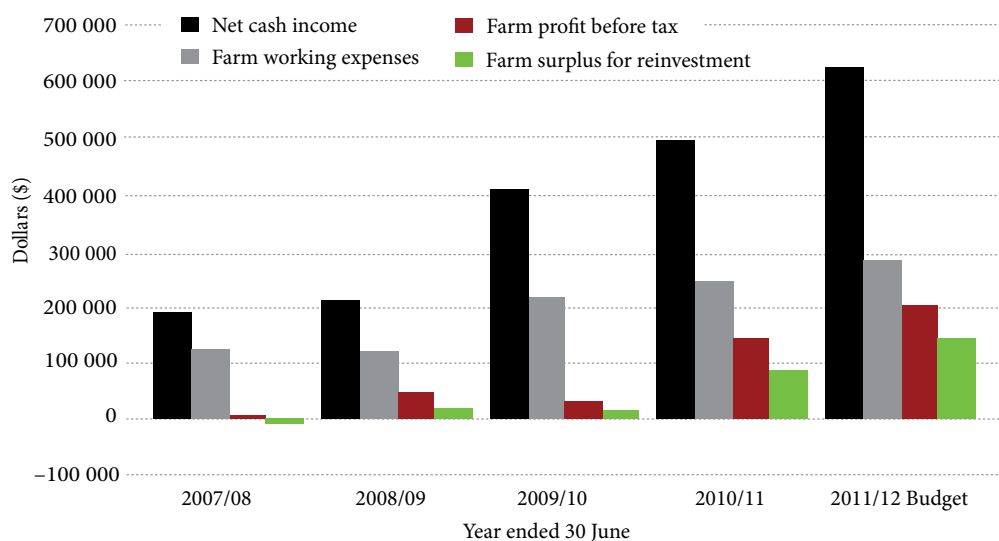
Farm working expenses are budgeted to increase through 2011/12 as expected higher returns are realised. Farm working expenditure is budgeted to increase to \$279 000 in 2011/12, up 14 percent on 2010/11.

Repairs and maintenance, development and capital expenditure are also budgeted to increase as farmers take the opportunity to upgrade and replace older machinery and vehicles.

Rates, fuel, freight, regrassing and cash crop expenses are all expected to rise in line with inflation and concerns remain over Emissions Trading Scheme related costs. Fertiliser costs are budgeted to increase 17 percent to \$206 per hectare after falling slightly in 2010/11. Lime costs are budgeted to return to \$10 hectare.

Standing costs are anticipated to increase in 2011/12 led by insurance premiums, budgeted to increase \$1600 in response to natural disasters in New Zealand and globally. ACC employer levies are budgeted to increase \$4700 due to higher earnings in the previous year.

»» FIGURE 1: WESTERN LOWER NORTH ISLAND 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.

Interest costs are expected to increase despite lower average overdraft levels as farmers expect the official cash rate to rise in 2012 and suggest that changed banking regulations will also increase rates. Rent is expected to increase a further 9 percent due to demand for grazing and cropping land.

NET RESULT EXPECTED TO INCREASE

Farm profit before tax is expected to increase 42 percent in 2011/12 to \$201 000 on the back of stable returns for sheep and beef as well as continuing demand for grazing and improving cropping options.

Debt repayment is expected to remain the primary focus of reinvestment as more debt moves off high fixed rates. Farmers are expected to reduce average overdraft levels, although the farm model's trading policy will continue to trigger fluctuations in the overdraft account.

Tax is expected to be approximately \$46 000 with increased provisional and terminal tax because of the 2010/11 profit. Some farmers have carried through accumulated losses from previous years which will reduce their liability. After accounting for drawings, the farm surplus for reinvestment is expected to increase 63 percent to \$143 000. Monitored farmers plan to maintain capital purchases and principal payments at similar levels to 2010/11 but to increase development to \$11 000. A positive net cash position of \$110 000 is expected and this may be used to further reduce overdraft levels.

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, 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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