



NORTHLAND 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

- › The drought in 2009/10 led to low pasture covers in 2010/11 and destocking occurred later than forecast in 2009/10.
- › Cattle were sold at lighter weights and young breeding cattle had high empty rates. Liveweight gains of both cattle and sheep were depressed for the first half of 2010/11 with low winter pasture covers following droughts in 2009/10 and from October to December 2010.
- › Net cash income increased by only 1 percent to \$216 100 in 2010/11 as a 20 percent increase in stock purchases offset higher average cattle and lamb sale prices.
- › Farm working expenses also increased by only 1 percent to \$121 800 as farmers restricted spending through the droughts.
- › Farm surplus for reinvestment trebled to \$22 500 due to improved stock prices over 2010/11 and is predicted to be similar in the coming year. Income in this model has been strongly influenced by destocking during recent droughts.
- › The stocking rate decreased 0.8 stock units per hectare over 2010/11 and farmers indicated that they plan to replace less than half of these stock over 2011/12 as they endure volatile weather patterns.
- › Farmer morale has improved and most farmers are optimistic that current prices will hold.

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

YEAR ENDED 30 JUNE	2007/08	2008/09	2009/10 ¹	2010/11	2011/12 BUDGET
Effective area (ha)	314	314	314	315	314
Breeding ewes (head)	614	572	545	559	544
Replacement ewe hoggets (head)	175	173	142	147	153
Other sheep (head)	60	58	29	10	27
Breeding cows (head)	108	114	121	85	70
Rising 1- year cattle (head)	242	244	233	248	277
Other cattle (head)	156	158	143	122	110
Opening sheep stock units (ssu)	780	735	734	726	725
Opening cattle stock units	2 436	2 485	2 406	2 157	2 159
Opening total stock units (su)	3 216	3 220	3 140	2 883	2 884
Stocking rate (stock unit/ha)	10.2	10.3	10.0	9.2	9.2
Ewe lambing (%)	123	117	125	124	128
Average lamb price (\$/head)	59.00	78.26	64.79	94.82	97.04
Average store lamb price (\$/head)	45.00	67.00	59.00	61.39	62.50
Average prime lamb price (\$/head)	62.00	88.00	68.00	96.95	99.00
Average wool price (\$/kg)	2.26	2.08	2.10	3.36	4.11
Total wool produced (kg)	3 587	4 008	3 473	3 310	3 410
Wool production (kg/ssu)	4.6	5.5	4.73	4.6	4.7
Average rising 2-year steer (\$/head)	750	780	825	751	829
Average cull cow (\$/head)	435	452	550	850	655
Net cash income (\$)	215 641	236 854	214 568	218 181	246 253
Farm working expenses (\$)	118 064	120 870	120 714	121 771	134 170
Farm profit before tax (\$)	48 577	40 355	19 270	54 567	86 804
Farm surplus for reinvestment (\$) ²	1 403	29 111	-12 563	22 498	19 076

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: NORTHLAND 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	57 309	182	78.96	60 450	193	83.33
Wool	11 120	35	15.32	14 015	45	19.32
Cattle	234 903	746	108.90	275 675	878	127.72
Grazing income (including hay and silage sales)	0	0	0.00	0	0	0.00
Other farm income	0	0	0.00	0	0	0.00
LESS:						
Sheep purchases	3 058	10	4.21	3 296	10	10.50
Cattle purchases	84 595	269	39.22	102 592	327	141.43
Net cash income	215 681	685	74.82	244 253	778	84.70
Farm working expenses	121 771	387	42.24	134 170	427	46.52
Cash operating surplus	93 910	298	32.58	110 083	351	38.17
Interest	22 394	71	7.77	23 978	76	8.31
Rent and/or leases	0	0	0.00	0	0	0.00
Stock value adjustment	-6 532	-21	-2.27	9 553	30	3.31
Minus depreciation	10 417	33	3.61	8 854	28	3.07
Farm profit before tax	54 567	173	18.93	86 804	276	30.10
Income equalisation	0	0	0.00	0	0	0.00
Taxation	-2 983	-9	-1.03	13 029	41	4.52
Farm profit after tax	57 550	183	19.96	73 775	235	25.58
ALLOCATION OF FUNDS						
Add back depreciation	10 417	33	3.61	8 854	28	3.07
Reverse stock value adjustment	6 532	21	2.27	-9 553	-30	-3.31
Drawings	52 000	165	18.04	54 000	172	18.72
Farm surplus for reinvestment²	22 498	71	7.80	19 076	61	6.61
REINVESTMENT						
Net capital purchases	12 000	38	4.16	12 000	38	4.16
Development	0	0	0.00	0	0	0.00
Principal repayments	0	0	0.00	0	0	0.00
Farm cash surplus/deficit	10 498	33	3.64	7 076	23	2.45
OTHER CASH SOURCES						
Off-farm income	2 100	7	0.73	2 000	6	0.69
New borrowings	0	0	0.00	0	0	0.00
Introduced funds	0	0	0.00	0	0	0.00
Net cash position	12 598	40	4.37	9 076	29	3.15
ASSETS AND LIABILITIES						
Farm, forest and building (opening)	1 560 000	4 952	541.14	1 560 000	4 968	540.93
Plant and machinery (opening)	69 443	220	24.09	59 027	188	20.47
Stock valuation (opening)	374 495	1 189	129.91	432 711	1 378	150.04
Other produce on hand (opening)	0	0	0.00	0	0	0.00
Total farm assets (opening)	2 003 938	6 362	695.14	2 051 738	6 534	711.45
Total assets (opening)	2 077 638	6 596	720.65	2 125 438	6 769	737.00
Total liabilities (opening)	316 778	1 006	109.89	316 778	1 009	109.84
Total equity (farm assets - liabilities)	2 527 160	8 023	876.63	1 734 960	5 525	601.60

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: NORTHLAND 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	7 200	23	2.50	7 500	24	2.35
ACC	272	1	0.09	253	1	0.08
Total labour expenses	7 472	24	2.59	7 753	25	2.42
Animal health	9 081	29	3.15	9 863	31	3.08
Breeding	1 384	4	0.48	1 413	5	0.44
Electricity	2 912	9	1.01	2 970	9	0.93
Feed (hay and silage)	840	3	0.29	1 980	6	0.62
Feed (feed crops)	0	0	0.00	0	0	0.00
Feed (grazing)	0	0	0.00	0	0	0.00
Feed (other)	3 000	10	1.04	3 000	10	0.94
Fertiliser	29 890	95	10.37	30 100	96	9.41
Lime	0	0	0.00	3 960	13	1.24
Cash crop expenses ¹	0	0	0.00	0	0	0.00
Freight (not elsewhere deducted)	4 382	14	1.52	4 557	15	1.42
Regrassing costs	0	0	0.00	0	0	0.00
Shearing expenses ²	4 231	13	5.83	4 490	14	6.19
Weed and pest control	4 612	15	1.60	6 287	20	1.97
Fuel	6 630	21	2.30	7 210	23	2.25
Vehicle costs (excluding fuel)	7 812	25	2.71	7 960	25	2.49
Repairs and maintenance	18 277	58	6.34	20 043	64	6.27
Total other working expenses	93 052	295	32.28	103 833	331	32.47
Communication costs (phone and mail)	1 759	6	0.61	1 817	6	0.57
Accountancy	2 364	8	0.82	2 451	8	0.77
Legal and consultancy	1 124	4	0.39	1 154	4	0.36
Other administration	1 441	5	0.50	1 471	5	0.46
Water charges (irrigation)	0	0	0.00	0	0	0.00
Rates	6 773	22	2.35	7 096	23	2.22
Insurance	3 517	11	1.22	4 182	13	1.31
ACC employer	2 771	9	0.96	2 886	9	0.90
Other expenditure	1 499	5	0.52	1 528	5	0.48
Total overhead expenses	21 247	67	7.37	22 585	72	7.06
Total farm working expenses	121 771	387	42.24	134 170	427	41.96
CALCULATED RATIOS						
Economic farm surplus (EFS ³)	25 922	82	8.99	59 265	189	20.55
Farm working expenses/NCI ⁴	56%			55%		
EFS/total farm assets	1%			3%		
EFS less interest and lease/equity	0%			2%		
Interest+rent+lease/NCI	10%			10%		
EFS/NCI	12%			24%		
Wages of management	51 039	162	17.70	51 517	164	16.11

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 NORTHLAND SHEEP AND BEEF MODEL FARM IN 2010/11

The cash operating surplus for the Northland sheep and beef farm model was \$93 900 for the 2010/11 season and very similar to the previous year.

REVENUE INCREASES DESPITE VARIABLE WEATHER CONDITIONS

Following the worst drought on record in Northland over the 2009/10 season, many farmers had low pasture covers, poor stock condition, low stock numbers and low morale going into the 2010/11 year. This was followed by another drought in late 2010. Although schedule prices were increasing right through the season, very few farmers were able to take advantage of these until the last half of the financial year.

DROUGHT STRIKES AGAIN

Northland's season began with some frosts in July reducing kikuyu grass quality and growth rates. August was wet with above average rain, but soil moisture levels had not been restored following the 2009/10 drought. October was a cool dry month followed by a drier than normal November and early December when Northland was declared to be in drought again. Although rainfall was above average for January to May, soil moisture levels were not restored until March 2011. For all but a small percentage of farmers that aggressively destocked during the drought, pasture covers remained low right through to March 2011. Autumn has been kind to the region with reasonable pasture covers, albeit with a predominance of kikuyu on many farms which could result in a significant reduction in pasture quality if frosts occur.

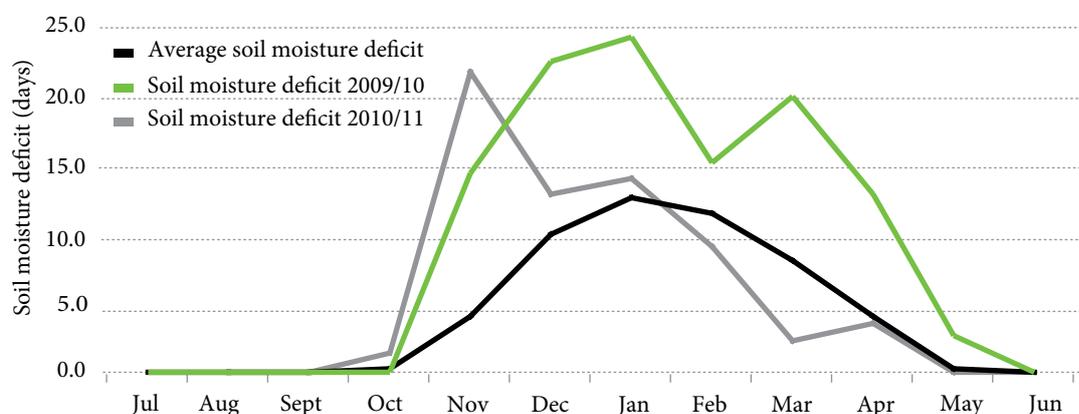
Those farmers that restocked following the 2010 drought struggled with finance, as a result of living off capital in previous years and the high prices of purchased stock.

CATTLE REVENUE INCREASES SLIGHTLY

Cattle revenue increased by 2 percent or \$4500. Average sale prices increased \$123 per head but fewer cattle were sold compared with 2009/10. Stock performance was adversely affected by the drought with liveweight gain and calving percentage taking the highest toll.

Stocking rates are not yet back to pre-drought levels and some farmers are planning to keep the stocking rate low as a buffer against volatile weather patterns. For the model, opening and closing cattle numbers were held constant.

»» FIGURE 1: NORTHLAND SOIL MOISTURE DEFICIT 2009/10 AND 2010/11



Source
NIWA.



SHEEP REVENUE INCREASES, AND WOOL MORE THAN DOUBLES

In contrast to cattle, revenue from sheep increased by 39 percent compared with 2009/10 to \$57 300. Opening sheep stocking rates were 8 percent lower than the 2009/10 season. Sheep numbers sold were down by 2 percent. Surprisingly, lambing held up at 124 percent due to favourable weather in spring. The average lamb price increased \$30 and the ewe price increased \$20 in 2010/11. Farmers also benefited from good lamb survival and recovery of ewe liveweight.

The price paid for wool increased by 60 percent to an average of \$3.36 per kilogram greasy in 2010/11. Most farmers did not benefit from the sale of second-shear wool as prices did not increase significantly until the second half of the year. Average wool weight dropped slightly to 4.6 kilograms per head, compared with 4.7 kilograms per head in 2009/10. Overall, this resulted in an increase in wool revenue of 52 percent to \$11 100.

EXPENDITURE KEPT TIGHT AND OVERHEADS UP

Although bank balances are in a much better position than in recent years, two consecutive droughts has meant farmers are exercising caution when it comes to expenditure. Farm working expenses were up by 1 percent to \$121 800 compared with the 2009/10 year which was also relatively restrained in expenditure. The main reductions in expenses were in labour, feed and lime, with most other expenses increasing slightly. On the monitored farms, total farm working expenses varied from \$28 per stock unit to \$81 per stock unit.

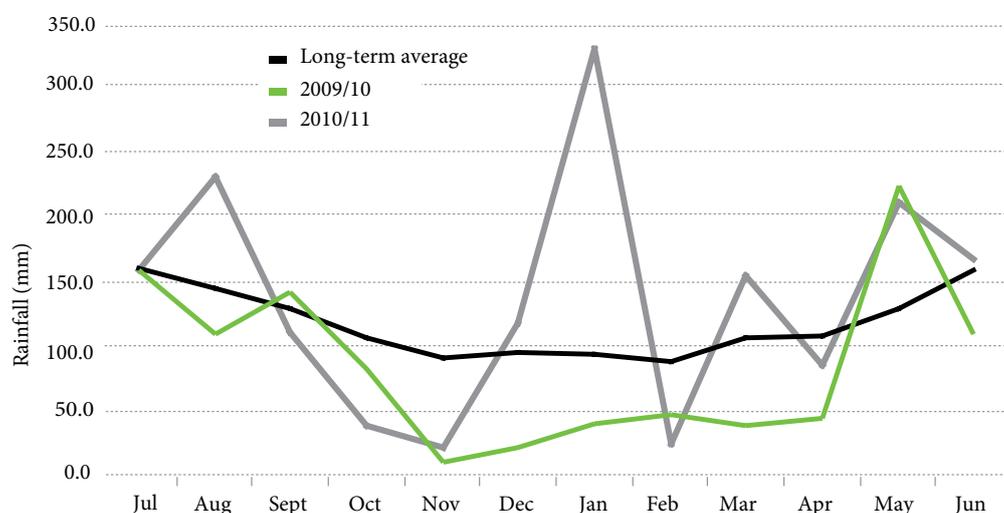
The drought had a significant impact on hay made on-farm in the 2010/11 year with 66 percent less hay produced.

FERTILISER AND LIME

Fertiliser spending increased 5 percent to \$29 900 as the cost of super phosphate increased. The model applied 20 kilograms of phosphorous per hectare, which is approximately maintenance level. On the monitored farms, fertiliser expenditure varied from \$4 per stock unit to \$29 per stock unit.

Many Northland farms have adequate soil fertility levels, however a significant number were not able to maintain this over the year. Farmers are concerned about the long-term affordability of phosphate with evidence suggesting more farmers are using lime/super mixes in an effort to raise the pH and get the best response from the application.

»» FIGURE 2: NORTHLAND RAINFALL 2009/10 AND 2010/11



Source
NIWA.

Interest expenses fell to \$22 400, or 21 percent, as a result of lower interest rates and most fixed term loans rolling over onto floating rates.

NET RESULT IMPROVES

The farm model finished the year with a cash operating surplus, very similar to last year, of \$93 900. After accounting for an increase in net capital purchases of \$12 000, the farm was showing a farm surplus of \$10 500 for the year.

Farm profit before tax increased by \$35 300 from 2009/10 to \$54 600. The key difference in 2009/10 was that the profit before tax was impacted by a capital stock adjustment of \$34 800 driven by a reduction in cattle numbers in that year.

Although the net result has improved, farmers are concerned that the droughts have altered trading margins for stock as a consequence of sale weights being down; this may have future implications on the value of capital stock and overall returns. This challenging situation is compounded with banks remaining tight on credit and borrowing conditions.

BUDGET FINANCIAL PERFORMANCE OF THE NORTHLAND SHEEP AND BEEF MODEL FARM IN 2011/12

The cash operating surplus expected for 2011/12 is \$110 100, a 17 percent lift on the 2010/11 season. Cattle, sheep and wool revenue are all predicted to increase, offset by only moderate increases in purchases and a 10 percent increase in farm working expenses.

REVENUE EXPECTED TO RISE

Net cash income is expected to rise by 13 percent in 2011/12 to \$244 300. There will be fewer sheep sold, but schedule prices for lamb and ewes are expected to rise. Similarly, the schedule price for cattle is budgeted to increase \$110 per head, and a higher price for wool is expected.

The 2011/12 budget will see the first increase in stocking rates (between opening and closing) since the 2010 drought with both sheep and cattle numbers expected to increase. In anticipation of better pasture production, the model stocking rate increases from 9.2 stock units per hectare to 9.5 stock units per hectare during 2011/12.

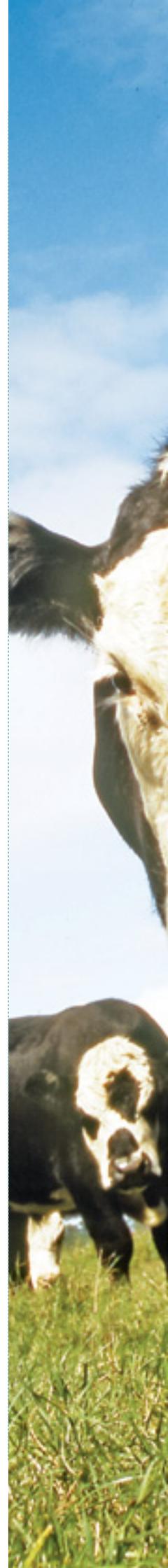
Production is expected to improve as livestock recover weight and condition, with scanning results expected to be well above average.

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

YEAR ENDED 30 JUNE	2007/08 (\$)	2008/09 (\$)	2009/10 ¹ (\$)	2010/11 (\$)	2011/12 BUDGET (\$)
Sheep sales less purchases	41 193	49 868	39 360	54 252	57 154
Cattle sales less purchases	157 071	170 350	159 616	150 308	173 084
Wool	8 107	8 337	7 292	11 120	14 015
Grazing income (including hay and silage sales)	0	0	0	0	0
Other farm income	8 300	8 300	8 300	0	0
Net cash income	215 641	236 854	214 568	218 181	246 253

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.



EXPENDITURE INCREASES, MAKING THE MOST OF INCREASED REVENUE

Farm working expenses are budgeted to increase by 10 percent to \$134 200 in 2011/12.

Animal health is predicted to increase by 9 percent to \$9900 as farmers invest in preventive animal health products such as anthelmintics for internal parasites in sheep and cattle and zinc dosing for facial eczema in cattle.

Hay production is expected to increase to around 550 bales as farmers recover from the drought and have surplus grass. The cost of making the hay is also likely to increase.

With an expected increase in income, farmers are planning to catch-up on weed control and are now planning to spend 36 percent or \$1700 more on weed control to manage gorse and remove thistles.

Repairs and maintenance is also expected to increase to \$20 000, compared to \$18 300 in 2010/11. There is a lot of upgrading required on many farms and this is likely to happen with a surplus in the budget.

Interest costs are budgeted to increase slightly. Farmers and industry commentators expect a lift in the official cash rate and also the requirement for banks' to increase capital holdings to lead to increases in interest rates.

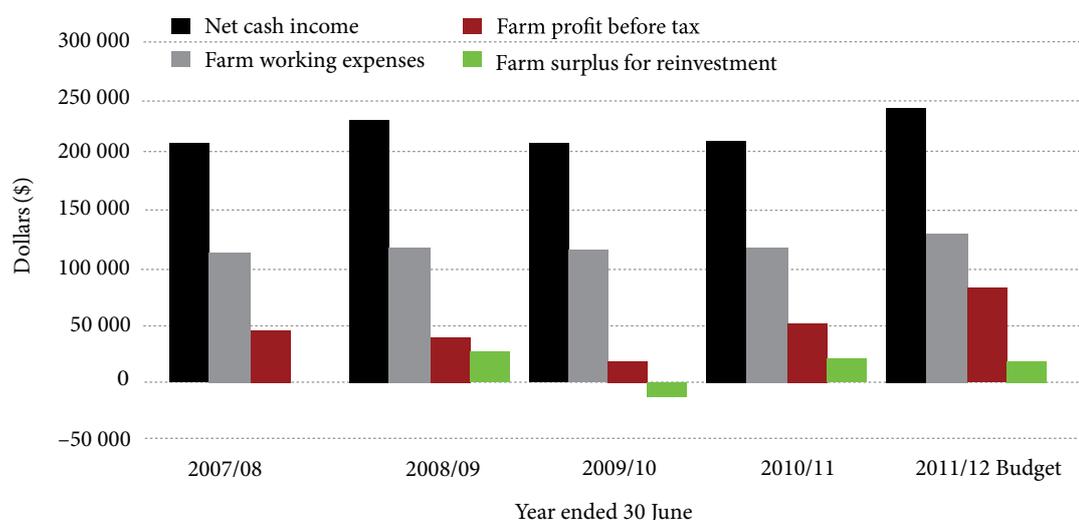
Insurance expenses are expected to increase 19 percent as a result of reinsurance price increases post-Canterbury earthquake.

PROFIT UP, BUT NET CASH POSITION DOWN

Farm profit before tax is predicted to increase 59 percent to \$86 800 in 2011/12. Farm surplus for reinvestment is expected to be down 15 percent on 2010/11 to \$19 100. After net capital purchases of \$12 000, a farm cash surplus of \$176 is anticipated.

Farmers are clinging to confidence in the sheep and beef industry, spurred on by strong schedule prices in 2010/11 which are predicted to continue into the 2011/12 year.

»» FIGURE 3: NORTHLAND 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.

INFORMATION ABOUT THE MODEL

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

The model runs a breeding flock with 25 to 30 percent ewe hogget replacements. 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.

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.

For more information on the model contact Erica.vanReenen@maf.govt.nz

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