



CANTERBURY/MARLBOROUGH BREEDING AND FINISHING 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 winter, spring and summer seasons of 2009/10 were very favourable for pasture growth and stock survival, resulting in a 13 percentage point increase in lambing and allowing farmers to build up feed reserves of silage, balage and hay.
- Autumn growth of pasture and green feed was limited, because of dry conditions, and feed conditions were tight going into the winter. Parts of South Canterbury and North Canterbury were affected by drought.
- Net cash income in 2009/10 increased 12 percent from the previous year, from \$406 000 to \$452 800, principally due to a higher lambing percentage, and farmers' ability to carry more lambs on to heavier weights. Income was also helped by an increase in the crop area as well as grazing more dairy cattle.
- Income in 2010/11 is expected to drop 2 percent to \$444 600, due to a drop in the lambing percentage and slightly lower lamb prices. Increased grazing income is expected to offset the drop in sheep income.
- Total farm working expenditure for 2009/10 was up 18 percent, but is budgeted to be down 1 percent in 2010/11. Farmers maintained expenditure on productive items such as fertiliser, weed and pest control, and repairs and maintenance.
- The farm profit before tax was \$47 500 in 2009/10, and is expected to increase to \$51 500 in 2010/11 with slightly lower returns, and planned reductions in spending on some operating and overhead expenses.
- Farm sales have been minimal but are expected to build up due to pressure from succession, financiers' requirements, and demand for land from dairy farmers following the prospect of increased milksolids payouts.

>>> TABLE 1: KEY PARAMETERS, FINANCIAL RESULTS AND BUDGET FOR THE CANTERBURY/MARLBOROUGH BREEDING AND FINISHING SHEEP AND BEEF FARM MODEL

YEAR ENDED 30 JUNE	2006/07	2007/08	2008/09	2009/10 ¹	2010/11 BUDGET
Effective area (ha)	378	365	469	469	469
Breeding ewes (head)	2 400	1 919	2 250	2 250	2 165
Replacement ewe hoggets (head)	650	529	415	380	380
Other sheep (head)	28	89	93	284	311
Breeding cows (head)	0	0	0	0	0
Rising 1-year cattle (head)	0	105	75	60	60
Other cattle (head)	148	101	75	60	60
Opening sheep stock units (ssu)	2 877	2 352	3 084	3 212	3 147
Opening cattle stock units	808	947	1 012	913	1 051
Opening total stock units (su)	3 778	3 299	4 096	4 125	4 198
Stocking rate (stock unit/ha)	10.0	9.0	8.7	8.8	9.0
Ewe lambing (%)	124	124	125	138	134
Average lamb price (\$/head)	47.60	50.99	80.92	79.94	77.62
Average store lamb price (\$/head)	52.60	47.60	66.31	76.00	60.00
Average prime lamb price (\$/head)	52.41	40.37	84.09	80.00	78.00
Average wool price (\$/kg)	2.50	2.62	2.58	2.67	2.83
Total wool produced (kg)	15 326	10 973	13 736	14 524	14 260
Wool production (kg/ssu)	5.3	4.7	4.5	4.52	4.53
Average rising 2-year steer (\$/head)	897	903	980	840	850
Average cull cow (\$/head)	0	0	0	0	0
Net cash income (\$)	262 190	274 550	406 032	452 800	444 612
Farm working expenses (\$)	170 598	177 118	225 476	266 753	263 776
Farm profit before tax (\$)	37 432	14 747	58 693	47 547	51 484
Farm surplus for reinvestment (\$)2	10 772	-8 778	20 827	22 471	25 334
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: CANTERBURY/MARLBOROUGH BREEDING AND FINISHING 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	300 585	641	93.57	280 568	598	89.15		
Wool	38 780	83	12.07	40 357	86	12.82		
Cattle	90 360	193	99.00	92 300	197	87.81		
Grazing income (including hay and silage sales)	64 128	137	15.55	82 656	176	19.69		
Other farm income	43 982	94	10.66	38 619	82	9.20		
LESS:								
Sheep purchases	46 290	99	14.41	43 270	92	13.75		
Cattle purchases	38 745	83	42.45	46 618	99	44.35		
Net cash income	452 800	965	109.77	444 612	948	105.90		
Farm working expenses	266 753	569	64.67	263 776	562	62.83		
Cash operating surplus	186 047	397	45.10	180 836	386	43.07		
Interest	75 329	161	18.26	72 539	155	17.28		
Rent and/or leases	23 829	51	5.78	21 474	46	5.11		
Stock value adjustment	-6 994	-15	-1.70	-7 219	-15	-1.72		
Minus depreciation	32 348	69	7.84	28 121	60	6.70		
Farm profit before tax	47 547	101	11.53	51 484	110	12.26		
Taxation	8 709	19	2.11	11 605	25	2.76		
Farm profit after tax	38 838	83	9.42	39 879	85	9.50		
ALLOCATION OF FUNDS								
Add back depreciation	32 348	69	7.84	28 121	60	6.70		
Reverse stock value adjustment	6 994	15	1.70	7 219	15	1.72		
Income equalisation	0	0	0.00	0	0	0.00		
Off-farm income	3 583	8	0.87	3 500	7	0.83		
Discretionary cash	81 763	174	19.82	78 719	168	18.75		
APPLIED TO:								
Net capital purchases	10 000	21	2.42	21 000	45	5.00		
Development	18 051	38	4.38	2 000	4	0.48		
Principal repayments	14 752	31	3.58	9 900	21	2.36		
Drawings	55 709	119	13.51	49 885	106	11.88		
New borrowings	7 500	16	1.82	20 650	44	4.92		
Introduced funds	8 650	18	2.10	0	0	0.00		
Cash surplus/deficit	-599	-1	-0.15	16 584	35	3.95		
Farm surplus for reinvestment ²	22 471	48	5.45	25 334	54	6.03		
ASSETS AND LIABILITIES								
Farm, forest and building (opening)	5 512 000	11 753	1 336.23	5 517 000	11 763	1 314.12		
Plant and machinery (opening)	182 318	389	44.20	154 970	330	36.91		
Stock valuation (opening)	376 998	804	91.39	370 004	789	88.13		
Other produce on hand (opening)	0	0	0.00	0	0	0.00		
Total farm assets (opening)	6 071 316	12 945	1 471.82	6 041 974	12 883	1 439.16		
Total assets (opening)	6 071 316	12 945	1 471.82	6 041 474	12 882	1 439.04		
Total liabilities (opening)	1 024 367	2 184	248.33	917 115	1 955	218.45		
Total equity (farm assets - liabilities)	5 046 949	10 761	1 223.49	5 124 859	10 927	1 220.71		
1 / 1								

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: CANTERBURY/MARLBOROUGH BREEDING AND FINISHING 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	23 286	50	5.64	23 480	50	5.59	
Casual wages	4 287	9	1.04	5 457	12	1.30	
ACC	750	2	0.18	1 169	2	0.28	
Total labour expenses	28 322	60	6.87	30 106	64	7.17	
Animal health	13 538	29	3.28	14 033	30	3.34	
Breeding	2 516	5	0.61	2 981	6	0.71	
Electricity	8 845	19	2.14	10 227	22	2.44	
Feed (hay and silage)	16 110	34	3.91	16 051	34	3.82	
Feed (feed crops)	1 650	4	0.40	1 926	4	0.46	
Feed (grazing)	496	1	0.12	780	2	0.19	
Feed (other)	3 114	7	0.75	2 706	6	0.64	
Fertiliser	40 313	86	9.77	39 893	85	9.50	
Lime	5 440	12	1.32	5 880	13	1.40	
Cash crop expenses ²	8 818	19	2.14	7 686	16	1.83	
Freight (not elsewhere deducted)	8 213	18	1.99	8 964	19	2.14	
Regrassing costs	13 674	29	3.31	10 502	22	2.50	
Shearing expenses	16 383	35	5.10	16 648	35	5.29	
Weed and pest control	12 455	27	3.02	12 107	26	2.88	
Fuel	13 674	29	3.31	14 354	31	3.42	
Vehicle costs (excluding fuel)	12 049	26	2.92	12 153	26	2.89	
Repairs and maintenance	27 167	58	6.59	20 958	45	4.99	
Total other working expenses	204 455	436	49.56	197 847	422	47.13	
Communication costs (phone and mail)	3 339	7	0.81	4 769	10	1.14	
Accountancy	4 107	9	1.00	4 127	9	0.98	
Legal and consultancy	2 482	5	0.60	2 018	4	0.48	
Other administration	2 301	5	0.56	2 706	6	0.64	
Water charges (irrigation)	1 309	3	0.32	1 101	2	0.26	
Rates	8 574	18	2.08	9 126	19	2.17	
Insurance	8 078	17	1.96	8 622	18	2.05	
ACC employer	2 115	5	0.51	1 616	3	0.38	
Other expenditure	1 670	4	0.40	1 738	4	0.41	
Total overhead expenses	33 975	72	8.24	35 822	76	8.53	
Total farm working expenses	266 753	569	64.67	263 776	562	62.83	
CALCULATED RATIOS							
Economic farm surplus (EFS3)	71 705	153	17.38	70 497	150	16.79	
Farm working expenses/NCI ⁴	59%			59%			
EFS/total farm assets	1.2%			1.2%			
EFS less interest and lease/equity	-0.5%			-0.5%			
Interest+rent+lease/NCI	21.9%			21.1%			
EFS/NCI	15.8%			15.9%			
Wages of management	75 000	160	18.18	75 000	160	17.86	

Notes

4 Net cash income.

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.

FINANCIAL PERFORMANCE OF THE CANTERBURY/ MARLBOROUGH BREEDING AND FINISHING SHEEP AND BEEF FARM MODEL IN 2009/10



The cash operating surplus for the Canterbury/Marlborough breeding and finishing sheep and beef farm model increased 3 percent from the previous year, from \$180 600 to \$186 000 in 2009/10. Sheep revenue was up due to higher lamb survival, and better finishing conditions, but farm working expenses were up 18 percent due to higher feed conservation costs, cash crop expenses, weed and pest control, repairs and maintenance and general movement in input prices.

LACK OF STORMS HELPED LAMB SURVIVAL GIVING LIFT IN INCOME

Net cash income of \$452 800 in 2009/10 was up \$46 800 (12 percent) on the previous year. Mild spring weather without any storms allowed lambing to be 13 percentage points above the previous year. In addition, favourable growth through until December allowed more lambs to be finished to prime weights. This increased sheep income by 2 percent or \$5800 from the previous season. Grazing for dairy support also contributed to higher returns as farmers seek to diversify.

LAMB PRICES CLOSE TO BUDGET, BUT MORE LAMBS TO SELL

Lamb prices averaged nearly \$80.00 for the 2009/10 season, up from the \$76.56 that was budgeted, while the number of lambs bred on the farm sold rose from the budgeted 2518 to 2844. More farmers are mating hoggets, which is also increasing the number of lambs to sell, but many are not retaining sufficient lambs to maintain the breeding flock. Sheep revenue less purchases contributed to 56 percent of net cash income.

WOOL RETURNS UP BUT CONTRIBUTING LITTLE TO RETURNS

The wool price increased from \$2.58 to \$2.67 in 2009/10 increasing wool returns to \$38 800. However, \$16 400 (just over 42 percent) was expended on shearing costs. Wool contributed only 9 percent of net cash income, or 5 percent after shearing, and farmers are pessimistic about better wool returns in the future.

CATTLE FINISHING CONTRIBUTES TO 16 PERCENT OF NET RETURNS

There are few breeding cattle on this class of farm, and the model assumes a finishing policy with weaner calves being bought in the autumn, and supplemented with forward stores being bought as 18-month-olds. Farmers in this class of farm are flexible in their cattle policy and buy and sell the class of cattle they consider to be most profitable during the season.

GRAZING REVENUE INCREASING

Grazing revenue is increasing in importance either for dairy support in terms of rearing heifer calves or wintering cows, or for beef contracts for companies such as Five Star Beef. In 2009/10, it contributed \$64 100 or 14 percent

>>> TABLE 4: CANTERBURY/MARLBOROUGH BREEDING AND FINISHING 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	136 934	159 329	230 519	254 295	237 298
Cattle sales less purchases	35 666	45 258	66 875	51 615	45 682
Wool	38 090	26 610	35 438	38 780	40 357
Grazing income (including hay and silage sales)	22 000	15 850	49 800	64 128	82 656
Other income	29 500	7 419	23 400	43 982	38 619
Net cash income	262 190	254 465	406 032	452 800	444 612

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.

of net cash income. Dairy support is maturing as an industry as dairy farmers and graziers understand more of the requirements for success. Dairy grazing prices depend on breed, commission and performance standards, but weekly rates have been in the range of \$5.60 to \$6.50 for calves, \$7.00 to \$9.50 for heifers, \$17.00 to \$19.50 for two-year heifers, and \$20.00 to \$22.00 for dairy cows.

INCREASE IN FARM WORKING EXPENDITURE

Total farm working expenses rose 18 percent in 2009/10 to \$266 800, or \$569 per hectare (\$64.67 per stock unit), with farmers keeping a close control on discretionary items of expenditure.

FERTILISER SPENDING BEING MAINTAINED

Fertiliser application at \$86.00 per hectare or \$9.77 per stock unit, is close to maintenance requirements. The drop in fertiliser prices from 2008/09 allowed farmers to increase the tonnage applied, for the same expenditure. Application rates have been increasing to boost the yields of winter feed crops such as kale for winter dairy cow grazing. Overall application of 13 kilograms of phosphorous per hectare and 19 kilograms per hectare of sulphur is close to maintenance requirements for this class of land. Fertiliser accounts for 15 percent of farm working expenses.

FEED CONSERVATION COSTS UP

Following the poor previous season, with very high demand for conserved crops such as hay, balage, silage and grain crops, good spring growth enabled farmers to replenish reserves and feed costs rose to \$21 400, or \$46 per hectare (\$5.18 per stock unit).

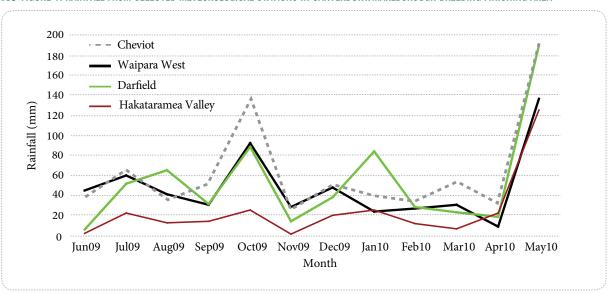
SHEARING COSTS SIGNIFICANT

Shearing costs have risen steadily to an average \$5.10 per sheep stock unit. This is despite farmers trying to reduce costs by moving to annual shearing from the traditional eight months, doing some of the work themselves and using local labour such as football clubs for lamb shearing and crutching.

CASH CROPPING COSTS RISING, DUE TO GREATER AREAS BEING SOWN

Cash cropping areas have increased slightly as farmers use crops in pasture renewal, and the straw produced in cereal cropping is valuable for supplementing pasture and kale for dairy cows in winter. The value of feed grains has plateaued due to oversupply and importation of palm kernel expeller (PKE), which dairy farmers have been using as a cheaper feed.





REPAIRS AND MAINTENANCE UP ON BUDGET

Repairs and maintenance were higher than budgeted as farmers maintained the value of their asset. The expenditure tended to be later in the season as farmers identified their financial surpluses. Most of the repairs and maintenance budget of \$27 200 was spent on plant and machinery \$8311 (30 percent), followed by fences and tracks at \$6900 (25 percent).

INTEREST COSTS REMAINED SIMILAR TO LAST YEAR

A drop in interest rates allowed a 5 percent drop in interest payments. As most of the farm debt is on fixed mortgage, and depending on the term, breaking the mortgage early was not feasible. Analysts expect the low floating rates at present to rise, reducing the difference between term and floating mortgages. Most farms have a mix of term debts with different maturity dates, reducing the ability to refinance all of the debt when rates were low.

NET RESULT IMPROVES FROM THE PREVIOUS YEAR

Farm profit before tax fell from \$58 700 in 2008/09 to \$47 600 in 2009/10. Overall increased spending has outweighed the increase in income. Capital purchases were reduced by \$26 300, new borrowings were down from \$19 500 to \$7500, but development was up by \$8000. After net capital purchases, development, principal repayments, drawings and new borrowings a small cash deficit of \$600 was realised.

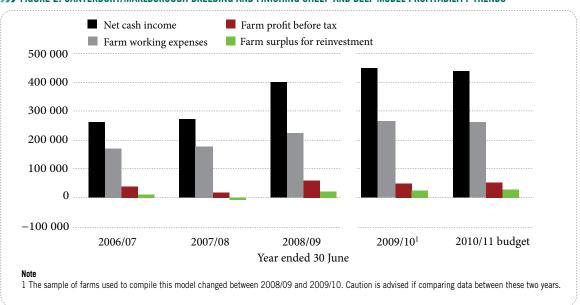
BUDGET FINANCIAL PERFORMANCE OF THE CANTERBURY/ MARLBOROUGH BREEDING AND FINISHING SHEEP AND BEEF FARM MODEL IN 2010/11

The cash operating surplus is expected to drop from \$186 000 in 2009/10 to \$180 800 in 2010/11, down 3 percent, following an expected drop in lambing percentage, lamb price, cattle returns, and a small decrease in farm working expenditure.

LOWER PRICES ARE EXPECTED TO DROP NET CASH INCOME

Net cash income is expected to drop 2 percent from \$452 800 to \$444 600 in 2010/11. This result will depend on export prices as well as lamb survival, and cattle finishing margins.





LOWER LAMB RETURNS

Dry conditions during autumn 2010, as well as a return to a more typical spring are expected to drop lambing by 4 percentage points to 134 percent. The average lamb price is expected to fall from \$79.94 to \$77.62. Breeding ewe numbers are expected to drop slightly as farmers increase land for dairy support, such as heifer rearing and dairy cow wintering.

WOOL PRICES EXPECTED TO SHOW SLIGHT INCREASE

Wool prices are expected to increase from \$2.67 per kilogram greasy to \$2.83, contributing only \$13.00 per sheep stock unit, compared with \$76.00 per sheep stock unit for lamb. Any significant increase in sheep returns is seen by farmers as needing to come from an increase in the wool price, rather than lamb price.

CATTLE RETURNS EXPECTED TO DECLINE

The flexible cattle trading policy has resulted in slightly fewer cattle for sale in 2010/11 and they are in a younger age bracket and lower price although there is a wide range of cattle policies amongst the farmers surveyed. This margin is highly dependent on purchase prices both in the autumn and spring, as well as export demand and prices. Overall cattle sales less purchases, is predicted to fall \$5900 (11 percent).

GRAZING INCOME BUDGETED TO INCREASE

Grazing income including dairy support grazing, and sales of hay and silage is expected to increase from \$64 100 to \$82 700 in 2010/11, or \$176 per hectare, up from \$137 per hectare. Farmers expect that the higher forecast for milksolids will flow through to dairy farmers looking at more off farm grazing, and purchase of feed stocks.

FORECAST EXPENDITURE SEEN TO DROP

Farm working expenses in 2010/11 are expected to drop by 1 percent to \$263 800, but this could be overtaken by increases in farm input costs. Fertiliser prices are not expected to move in the short term, but items such as electricity, fuel and freight are expected to move following the Emissions Trading Scheme cost impacts on transport and energy. Farm working expenditure to net cash income is estimated to be 59 percent but industry commentators observe than many farmers have higher working expenses than this.

FEED COSTS EXPECTED TO REMAIN THE SAME

Farmers spent more in the 2009/10 season due to good spring conditions, and the need to replenish reserves that had been run down the previous season. Feed costs are expected to remain at the same high level in 2010/11 due to poor growing conditions in the autumn, which meant that pasture cover was below average and greenfeed crops such as kale were lower yielding.

INTEREST COSTS LIKELY TO REMAIN ABOUT THE SAME

Interest costs are expected to fall slightly as some higher interest rate fixed loans are able to be refinanced at lower rates even though interest costs are now rising. Financiers are closely monitoring their exposure to debt on farms by ensuring that cash flows are positive, rather than concentrating solely on equity. In addition, they are not allowing increases in overdraft limits. This has resulted in some farmers looking at alternative options to conventional farming such as dairy support. Interest plus lease costs are expected to be 21 percent of net cash income.

NET RESULT DETERIORATES

The farm profit before tax is expected to increase from \$47 500 in 2009/10 to \$51 500 in 2010/11. Development and capital purchases are budgeted to be minimised, while drawings are expected to be tightly controlled. Some farmers may invest in irrigation to guarantee feed supplies for dairy support, cropping, and critical feed supplies. While there is provision for capital purchases of \$21 000 it is expected that most of this will be funded through an increase in new borrowing. A cash surplus of \$25 300 is predicted and Farm surplus for reinvestment is expected to improve slightly to \$25 300.

INFORMATION ABOUT THE MODEL

This model represents 1555 finishing breeding farms in coastal Marlborough and Canterbury. Farms are located on the dry downs and plains, in irrigated areas, and in the higher rainfall upper plains. There is a wide range of farm sizes, stocking rates, stock classes, and performance in this region. The farms in the model have an average effective area of 469 hectares and normally run nine to ten stock units per effective hectare.

Breeding ewe flocks with lamb finishing predominate, with cattle finishing and or grazing income on many properties. Some farmers also derive income from some cash cropping, deer, beef breeding cows, lamb finishing, farm forestry, and off-farm sources. Cattle returns are calculated on a beef finishing policy.

For more information on this model contact: john.greer@maf.govt.nz

PUBLISHER

Ministry of Agriculture and Forestry PO Box 2526, Wellington 6140, New Zealand

 $Tel + 64 \ 4 \ 894 \ 0100 \ or \ Freephone \ 0800 \ 008 \ 333$

Email: policy.publications@maf.govt.nz

Web: www.maf.govt.nz

ISBN 978-0-478-36381-4 (Online)

© Crown copyright – Ministry of Agriculture and Forestry July 2010

DISCLAIMER

The information in this report by the Ministry of Agriculture and Forestry is based on the best information available to the the Ministry at the time it was drawn up and all due care was exercised in its preparation. As it is not possible to foresee all uses of this information or to predict all future developments and trends, any subsequent action that relies on the accuracy of the information in this report is the sole commercial decision of the user and is taken at his/her own risk. Accordingly, the Ministry of Agriculture and Forestry disclaims any liability whatsoever for any losses or damages arising out of the use of this information, or in respect of any actions taken.

New Zealand Government

