

2009 PASTORAL MONITORING

OTAGO DRY HILL SHEEP AND BEEF



THIS REPORT CONTAINS THE KEY RESULTS FROM THE MINISTRY OF AGRICULTURE AND FORESTRY'S 2009 PASTORAL MONITORING PROGRAMME.

KEY POINTS

- Opening stock units in 2008/09 were down on average levels due to fewer hoggets being retained and reduced numbers of breeding ewes. This was a direct result of the actions taken by farmers to cope with the third year of dry conditions.
- Sheep income (not including wool) rose 45 percent in 2008/09 to \$355 400 compared with 2007/08. This was mainly driven by the average lamb price doubling from \$43.46 to \$88.71.
- The 2008/09 season saw a 6 percent increase in farm working expenses to \$269 900 compared with \$254 200 in 2007/08. However, farmers expect this to be held at about the same level in 2009/10.
- The farm surplus for reinvestment increased significantly from a \$15 600 deficit in 2007/08 to a surplus of \$73 500 in 2008/09. However, this is expected to decrease 88 percent to \$8600 in 2009/10.
- A record lambing percentage is expected in the Otago dry hill model for 2009/10 at 126 percent, up 9 percentage points on 2008/09. Despite this, net cash income is expected to fall 5 percent to \$448 800 in 2009/10 as a result of reduced product prices.
- Morale has improved with the lift in income and with capital stock being in better condition. However, farmers are cautious and would like to see the lift in lamb prices sustained over time.

►►► TABLE 1: KEY PARAMETERS, FINANCIAL RESULTS AND BUDGET FOR THE OTAGO DRY HILL SHEEP AND BEEF MODEL FARM

YEAR ENDED 30 JUNE	2005/06	2006/07	2007/08 ^R	2008/09	2009/10 BUDGET
Effective area (ha)	2 000	2 000	2 000	2 000	2 000
Breeding ewes (head)	4 653	4 675	4 675	4 155	4 156
Replacement ewe hoggets (head)	1 130	1 130	1 130	780	1 150
Other sheep (head)	201	261	261	271	271
Breeding cows (head)	84	84	84	89	90
Rising 1-year cattle (head)	56	54	54	54	52
Other cattle (head)	40	39	44	29	40
Opening sheep stock units (ssu)	5 590	5 654	5 655	4 897	5 157
Opening cattle stock units	928	870	892	844	893
Opening total stock units (su)	6 518	6 523	6 546	5 741	6 050
Stocking rate (stock unit/ha)	3.3	3.3	3.3	2.9	3.0
Ewe lambing (%)	123	119	120	117	126
Average lamb price (\$/head)	46.01	47.69	43.46	88.71	72.69
Average wool price (\$/kg)	3.46	3.36	3.15	3.08	2.70
Total wool produced (kg)	27 065	26 401	24 380	21 392	22 523
Wool production (kg/ssu)	4.84	4.67	4.31	4.37	4.37
Average rising 2-year steer (\$/head)	715	800	559	743	648
Average cull cow (\$/head)	559	595	495	520	497
Net cash income (\$)	394 661	390 008	376 077	470 024	448 779
Farm working expenses (\$)	283 172	223 220	254 221	269 866	271 330
Farm profit before tax (\$)	88 551	91 751	-17 040	153 389	126 775
Farm surplus for reinvestment (\$) ¹	50 359	37 818	-15 558	73 484	8 625

Note

¹ 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.

Symbol

^R The model parameters have been revised so the data for 2007/08 will not match that published in the *Pastoral Monitoring Report 2008*.



»» TABLE 2: OTAGO DRY HILL SHEEP AND BEEF MODEL BUDGET

	2008/09			2009/10 BUDGET			CHANGE BETWEEN 2008/09 AND 2009/10 (%)
	WHOLE FARM (\$)	PER HECTARE (\$)	PER STOCK UNIT¹ (\$)	WHOLE FARM (\$)	PER HECTARE (\$)	PER STOCK UNIT¹ (\$)	
REVENUE							
Sheep	355 410	178	72.58	335 978	168	65.15	-5
Wool	65 887	33	13.46	60 812	30	11.79	-8
Cattle	37 372	19	44.28	42 039	21	47.06	12
Grazing income (including hay and silage sales)	6 900	3	1.20	5 900	3	0.98	-14
Other farm income	7 700	4	1.34	7 700	4	1.27	0
LESS:							
Sheep purchases	555	0	0.11	650	0	0.13	17
Cattle purchases	2 690	1	3.19	3 000	2	3.36	12
Net cash income	470 024	235	81.87	448 779	224	74.18	-5
Farm working expenses	269 866	135	47.01	271 330	136	44.85	1
Cash operating surplus	200 158	100	34.87	177 449	89	29.33	-11
Interest	50 018	25	8.71	48 838	24	8.07	-2
Rent and/or leases	5 000	3	0.87	5 000	3	0.83	0
Stock value adjustment	39 244	20	6.84	34 159	17	5.65	-13
Minus depreciation	30 995	15	5.40	30 995	15	5.12	0
Farm profit before tax	153 389	77	26.72	126 775	63	20.95	-17
Taxation	5 156	3	0.90	47 486	24	7.85	821
Farm profit after tax	148 233	74	25.82	79 289	40	13.11	-47
ALLOCATION OF FUNDS							
Add back depreciation	30 995	15	5.40	30 995	15	5.12	0
Reverse stock value adjustment	-39 244	-20	-6.84	-34 159	-17	-5.65	-13
Income equalisation	0	0	0.00	0	0	0.00	...
Off-farm income	4 100	2	0.71	4 500	2	0.74	10
Discretionary cash	144 084	72	25.10	80 625	40	13.33	-44
APPLIED TO:							
Net capital purchases	24 000	12	4.18	18 000	9	2.98	-25
Development	3 000	2	0.52	3 000	2	0.50	0
Principal repayments	0	0	0.00	0	0	0.00	...
Drawings	66 500	33	11.58	67 500	34	11.16	2
New borrowings	0	0	0.00	0	0	0.00	...
Introduced funds	0	0	0.00	0	0	0.00	...
Cash surplus/deficit	50 584	25	8.81	-7 875	-4	-1.30	-116
Farm surplus for reinvestment²	73 484	37	12.80	8 625	4	1.43	-88
ASSETS AND LIABILITIES							
Farm, forest and building (opening)	3 540 000	1 770	616.64	3 340 000	1 670	552.06	-6
Plant and machinery (opening)	149 756	75	26.09	149 756	75	24.75	0
Stock valuation (opening)	648 898	324	113.03	688 142	344	113.74	6
Other produce on hand (opening)	0	0	0.00	0	0	0.00	...
Total farm assets (opening)	4 338 654	2 169	755.76	4 177 898	2 089	690.55	-4
Total assets (opening)	4 502 165	2 251	784.24	4 341 409	2 171	717.58	-4
Total liabilities (opening)	724 963	362	126.28	673 200	337	111.27	-7
Total equity (farm assets - liabilities)	3 613 691	1 807	629.48	3 504 698	1 752	579.28	-3
Notes							

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.

Symbol

... Not applicable.

»»» TABLE 3: OTAGO DRY HILL SHEEP AND BEEF MODEL EXPENDITURE

	2008/09			2009/10 BUDGET			CHANGE BETWEEN 2008/09 AND 2009/10 (%)
	WHOLE FARM (\$)	PER HECTARE (\$)	PER STOCK UNIT¹ (\$)	WHOLE FARM (\$)	PER HECTARE (\$)	PER STOCK UNIT¹ (\$)	
FARM WORKING EXPENSES							
Permanent wages	32 700	16	5.70	33 260	17	5.50	2
Casual wages	0	0	0.00	0	0	0.00	...
ACC	752	0	0.13	867	0	0.14	15
Total labour expenses	33 452	17	5.83	34 127	17	5.64	2
Animal health	19 555	10	3.41	20 700	10	3.42	6
Breeding	0	0	0.00	0	0	0.00	...
Electricity	5 005	3	0.87	5 400	3	0.89	8
Feed (hay and silage)	15 450	8	2.69	15 450	8	2.55	0
Feed (feed crops)	6 600	3	1.15	7 500	4	1.24	14
Feed (grazing)	0	0	0.00	0	0	0.00	...
Feed (other)	0	0	0.00	0	0	0.00	...
Fertiliser	40 194	20	7.00	38 805	19	6.41	-3
Lime	3 000	2	0.52	3 160	2	0.52	5
Cash crop expenses	0	0	0.00	0	0	0.00	...
Freight (not elsewhere deducted)	9 120	5	1.59	9 350	5	1.55	3
Regrassing costs	12 700	6	2.21	12 100	6	2.00	-5
Shearing expenses	24 484	12	5.00	26 480	13	5.13	8
Weed and pest control	12 295	6	2.14	11 600	6	1.92	-6
Fuel	21 635	11	3.77	18 600	9	3.07	-14
Vehicle costs (excluding fuel)	10 965	5	1.91	11 300	6	1.87	3
Repairs and maintenance	27 632	14	4.81	23 200	12	3.83	-16
Total other working expenses	208 635	104	36.34	203 645	102	33.66	-2
Communication costs (phone and mail)	2 583	1	0.45	2 634	1	0.44	2
Accountancy	3 413	2	0.59	3 482	2	0.58	2
Legal and consultancy	1 952	1	0.34	1 991	1	0.33	2
Other administration	2 062	1	0.36	2 103	1	0.35	2
Water charges (irrigation)	0	0	0.00	0	0	0.00	...
Rates	9 394	5	1.64	9 780	5	1.62	4
Insurance	6 260	3	1.09	6 635	3	1.10	6
Other expenditure²	2 115	1	0.37	6 933	3	1.15	228
Total overhead expenses	27 779	14	4.84	33 558	17	5.55	21
Total farm working expenses	269 866	135	47.01	271 330	136	44.85	1
Wages of management	74 387	37	12.96	72 779	36	12.03	-2
Depreciation	30 995	15	5.40	30 995	15	5.12	0
Total farm operating expenses	375 247	188	65.36	375 103	188	62.00	0
CALCULATED RATIOS							
Economic farm surplus (EFS³)	134 021	67	23.35	107 834	54	17.82	
Farm working expenses/NCI⁴	57%			60%			
EFS/total farm assets	3.1%			2.6%			
EFS less interest and lease/equity	2.2%			1.5%			
Interest+rent+lease/NCI	11.7%			12.0%			
EFS/NCI	28.5%			24.0%			

Notes

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

2 Includes Accident Compensation Corporation (ACC) employer levy.

3 EFS (or earnings before interest and tax) 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.

Symbol

... Not applicable.

FINANCIAL PERFORMANCE OF THE OTAGO DRY HILL SHEEP AND BEEF MODEL FARM IN 2008/09

The cash operating surplus for the Otago dry hill sheep and beef model farm increased from \$18.61 per stock unit in 2007/08 to \$34.87 per stock unit in 2008/09. The single biggest driver of this increase was the rise in the average lamb price from \$43.46 to \$88.71 over the period.

MAJOR LIFT IN REVENUE

Sheep revenue (sales less purchases) increased 47 percent to \$354 000 in 2008/09 compared with \$241 800 in 2007/08. This resulted in net cash income increasing from \$57.45 per stock unit to \$81.87 per stock unit in 2008/09. The main driver of this was a substantial lift in the lamb price (a finished lamb rose from an average price of \$53.55 to \$89.50).

Only 15 percent of the lamb crop was sold as store in 2008/09 compared with an average of 25 percent in previous years. Good autumn conditions allowed farmers to grow prime lambs to target weights.

Opening stock units in 2008/09 were down on average due to fewer hoggets being retained and reduced numbers of breeding ewes. These are both a direct result of the actions farmers took to cope with the third year of dry conditions. However, the 2008/09 season was much better for pasture growth, with the exception of a dry period in December 2008 and January 2009. Good rains in February led to much improved autumn feed supplies. This allowed more lambs to be finished rather than sold as stores; capital stock to regain some much-needed condition; and an increase in the number of ewe lambs retained. During 2008/09, sheep numbers increased by 309 stock units representing \$39 200 of foregone income.

Farmer frustration with wool continues as wool income declined 14 percent to \$65 900 in 2008/09 (\$3.08 per kilogram), compared with \$76 900 (\$3.15 per kilogram) in 2007/08. Many farms in this model shear their flocks in the pre-lamb period. They sold their wool in the early part of the 2008/09 season, prior to the large price falls that occurred later in the season when demand decreased due to the world economic recession.

Cattle revenue (sales less purchases) decreased 19 percent in 2008/09 to \$34 700 compared with \$42 800 in 2007/08. The variation in cattle income between years is largely due to changes in sales policy rather than price, as farmers use different sales strategies depending on available feed. Beef cow numbers are being held at current levels. The numbers of their progeny sold or finished in any particular age group is a key flexibility tool, allowing farm managers to respond to seasonal feed conditions.

»»» TABLE 4: OTAGO DRY HILL SHEEP AND BEEF MODEL CASH FARM INCOME

YEAR ENDED 30 JUNE	2005/06 (\$)	2006/07 (\$)	2007/08 ^R (\$)	2008/09 (\$)	2009/10 BUDGET (\$)
Sheep sales less purchases	253 709	258 392	241 848	353 965	335 328
Cattle sales less purchases	42 595	42 907	42 783	34 682	39 039
Wool	93 645	88 708	76 846	65 887	60 812
Grazing income (including hay and silage sales)	0	0	6 900	6 900	5 900
Other income	4 712	0	7 700	7 700	7 700
Net cash income	394 661	390 008	376 077	470 024	448 779

Symbol
^R The model parameters have been revised so the data for 2007/08 will not match that published in the *Pastoral Monitoring Report 2008*.



CONTINUED INCREASE IN COSTS

Fuel and fertiliser prices increased substantially through 2007/08 and were still high at the beginning of the 2008/09 season but both eased throughout the year.

With the exception of fuel and fertiliser, the cost of most farm inputs increased in 2008/09. Farmer spending was generally restricted to necessities with any extra income used to reduce the overdraft. Overall, farm working expenses increased from \$38.83 per stock unit to \$47.01 per stock unit in 2008/09. Increased costs were partly offset by fewer stock following a 12 percent drop in opening stock numbers.

While total expenditure increased, it declined as a percentage of net cash income from 68 percent in 2007/08 to 57 percent in 2008/09. This was due to the large increase in farm income in 2008/09.

Interest costs declined slightly to \$50 000 due to a slight drop in interest rates during the year and lower overdraft levels in the second half of the year. Interest costs are low overall at 12 percent of net cash income.

BEST FINANCIAL RESULT FOR MANY YEARS

Farm profit before tax of \$153 400 is the best result ever for this model and comes in spite of the after-effects of previous drought on lamb numbers. The farm surplus for reinvestment was \$73 500 and has been used mostly to reduce debt in the farm current account. Farmers paid minimal tax during 2008/09 following the very low farm profit before tax in 2007/08.

There have been limited land sales over the past 12 months but industry feedback from financiers and real estate agents is that land values for this class of farm have declined by around \$40 per stock unit. Equity is reasonable at 83 percent.

BUDGET FINANCIAL PERFORMANCE OF THE OTAGO DRY HILL SHEEP AND BEEF MODEL FARM IN 2009/10

A significant fall in revenue is expected in 2009/10 with the cash operating surplus declining by \$22 700 (11 percent). The main driver of this decline is a budgeted drop in the average lamb price to \$72.69.

SIGNIFICANT FALL IN SHEEP REVENUE PREDICTED

Sheep revenue (sales less purchases) is expected to decline by 5 percent to \$335 300 in 2009/10 compared with \$354 900 in 2008/09. This is due to an expected lift in lambing percentage from 117 percent in 2008/09 to 126 percent in 2009/10, combined with a fall in average lamb price from \$88.71 to \$72.69. The proportion of lambs sold as stores is expected to return to usual levels of 25 percent.

A 5 percent increase in sheep stock units is expected over 2009/10 representing \$34 200 foregone income. However, this is still below pre-drought levels and farmers report they are not intending to increase their ewe flock to former levels at this stage. They are more focussed on lifting performance from their flocks (with the improved pregnancy scanning results being an example) and keeping costs under control.

A further 12 percent decline in the average wool price to \$2.70 per kilogram is expected in 2009/10. Weaker demand during the recession and an increase in the value of the New Zealand dollar are being blamed.

Cattle income is less predictable due to the use of cattle as a flexible tool with which to respond to changing feed conditions. The model indicates a 12 percent (\$4700) increase in cattle income is expected for 2009/10 due to the sale of an increased number of rising two-year-old steers, sold as prime in the late spring-early summer. This increase is despite an expected fall in cattle prices.

EXPENDITURE EXPECTED TO STABILISE

Farm working expenses are expected to increase only slightly on 2008/09 levels, to \$271 300 in 2009/10; but expenditure is expected to rise to 60 percent of net cash income in 2009/10 due to reduced income. The increase in items such as rates, animal health, feed and shearing is expected to be largely offset by a decrease in the cost of fuel (down 14 percent) and farmers spending less on repairs and maintenance (down 16 percent) and fertiliser (down 3 percent).

Interest costs are expected to fall a further 2 percent as a result of much lower overdraft levels and an expected fall in interest rates.

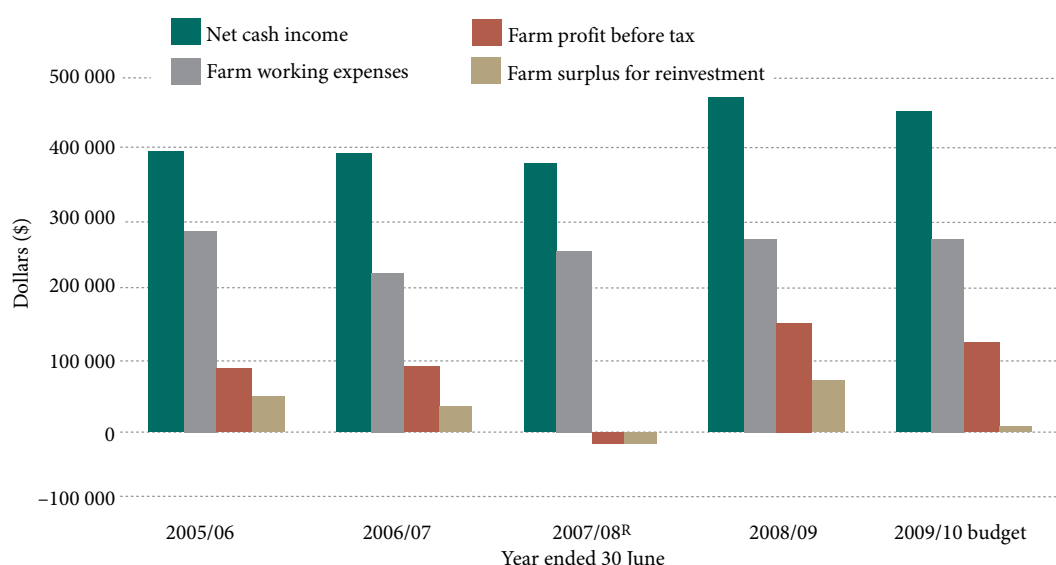
NET RESULT PREDICTED TO DETERIORATE

A total tax liability on the farm model of \$47 500 through 2009/10 is a major influence on the bottom line result. Accountants working with these farmers have advised that in many cases there will be accumulated tax losses from previous years, which may significantly reduce this liability in many individual cases.

The farm surplus for reinvestment is expected to fall significantly from \$73 500 in 2008/09 to \$8600 in 2009/10. About two-thirds of this is explained by the predicted change in tax payments. A small cash deficit of \$7900 is predicted for the year which is expected to disappoint farmers.

Farmers are expected to continue to restrain spending on capital purchases and development.

»» FIGURE 1: OTAGO DRY HILL SHEEP AND BEEF MODEL PROFITABILITY TRENDS



Symbol

R The model parameters have been revised so the data for 2007/08 will not match that published in the *Pastoral Monitoring Report 2008*.



INFORMATION ABOUT THE MODEL

The Otago dry hill sheep and beef model represents 400 farms in the Otago and south Canterbury areas. The farms range in size from 500 to 4000 hectares and are spread from Waimate to Millers Flat in Central Otago, with the main concentration being in the Middelmarsh and inland Palmerston areas.

These farms are characterised by systems that cope with dry summers and long, cold winters. The rainfall is 400 to 700 millimetres per year, but drought days number over 100 per year. These farms are predominantly hill country with a small area of valley floor. Some properties have a small area of irrigation on the valley floor.

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