



This report summarises the results of a financial survey of sheep and beef farms across the central North Island, carried out by AgFirst through June 2019. A description of the model farm is at the back of this report.

KEY POINTS

- The 2018/19 season started off wet, but mild and settled weather through September/October saw very good lamb and calf survival. It then turned quite dry in most areas through the summer and autumn, with an increased proportion of stock sold store.
- Some rain with mild temperatures through May and June has seen pastures recover on easier country, but pasture covers are still short in many steeper less fertile hill country areas. Ewe condition over tugging was less than desirable on many farms, and consequently farmers are currently budgeting on a lower lambing percentage in the 2019 spring.
- Net cash income on the model farm was up 8% in 2018/19 compared with 2017/18, largely on the back of increased lambs for sale (following the good lamb survival) and a continuation of strong schedule prices.
- Farm working expenditure also increased (by 12%) via a combination of increased prices and increased expenditure on some items, particularly labour, animal health, weed & pest, and repairs and maintenance.
- Farm Profit before Tax is budgeted to drop (by 18%) in 2019/20 due to a reduced net cash income as a result of fewer lambs, coupled with a slight increase in farm working expenditure.
- While the model farm is generating enough income to operate at maintenance levels, there is limited surplus for ongoing future reinvestment.

Table 1: Key Parameters, Financial Results and Budget for the Central HI Hill Country Sheep and Beef Model

Year ended 30 June	2016/17	2017/18	2018/19	2019/20 budget
Effective area (ha)	571	571	571	571
Breeding ewes (head)	2 380	2 355	2 355	2 348
Replacement ewe hoggets (head)	690	670	670	670
Other sheep (head)	35	35	35	35
Breeding cows (head)	121	121	121	122
Rising 1-year cattle (head)	157	157	157	157
Other cattle (head)	113	113	113	113
Opening sheep stock units (ssu)	3 129	3 088	3 088	3 080
Opening cattle stock units	1 894	1 894	1 894	1 899
Opening total stock units (su)	5 023	4 981	4 981	4 979
Stocking rate (stock unit/ha)	8.8	8.7	8.7	8.7
Ewe lambing (%) ¹	128	129	131	126
Average store lamb price (\$/head)	\$65	\$84	\$100	\$100
Average prime lamb price (\$/head)	\$95	\$109	\$130	\$125
Average wool price (\$/kg)	\$2.53	\$2.25	\$2.24	\$2.16
Total wool produced (kg)	16 001	17 893	16 714	16 828
Wool production (kg/ssu)	5.11	5.80	5.41	5.46
Average 2-year+ steer (\$/head)	\$1,595	\$1,755	\$1,650	\$1,650
Average cull cow (\$/head)	\$1,157	\$1,053	\$983	\$980
Net cash income (\$)	\$459,559	\$508,441	\$548,329	\$531,773
Farm working expenses (\$)	\$248,704	\$280,384	\$313,839	\$319,901
Farm profit before tax (\$)	\$86,845	\$108,089	\$125,625	\$103,603
Farm surplus for reinvestment (\$) ²	\$33,845	\$44,724	\$56,751	\$40,928

Note:

¹ Lambing % is calculated as lambs docked over ewes mated

² Farm surplus for reinvestment is the cash available from the farm business, after meeting living costs, which is available for principal repayments, capital expenditure, and further farm development.

PHYSICAL FACTORS

A relatively mild winter saw good pasture covers carried into the 2018/19 season. While scanning percentages in ewes had not been exceptional, settled weather through September and October saw very good survival rates in both lambs and calves. The summer then turned dry, with high temperatures through February. While some rain fell, this was very patchy, often ineffective, and most areas experienced quite dry weather through the summer and autumn. Some good rain through May and June, coupled with mild weather has seen easier country recover, but much of the steeper less fertile hill country is still quite short of feed.

While lambing percentages lifted in 2018/19 due to good lamb survival, by contrast ewe live weights and condition were down at tugging in 2019, so farmers are budgeting for a drop in lambing percent for spring 2019; for the model, from 131% in spring 2018 to 124% in spring 2019. Cow condition at mating was good, so no change is expected in calving percentages.

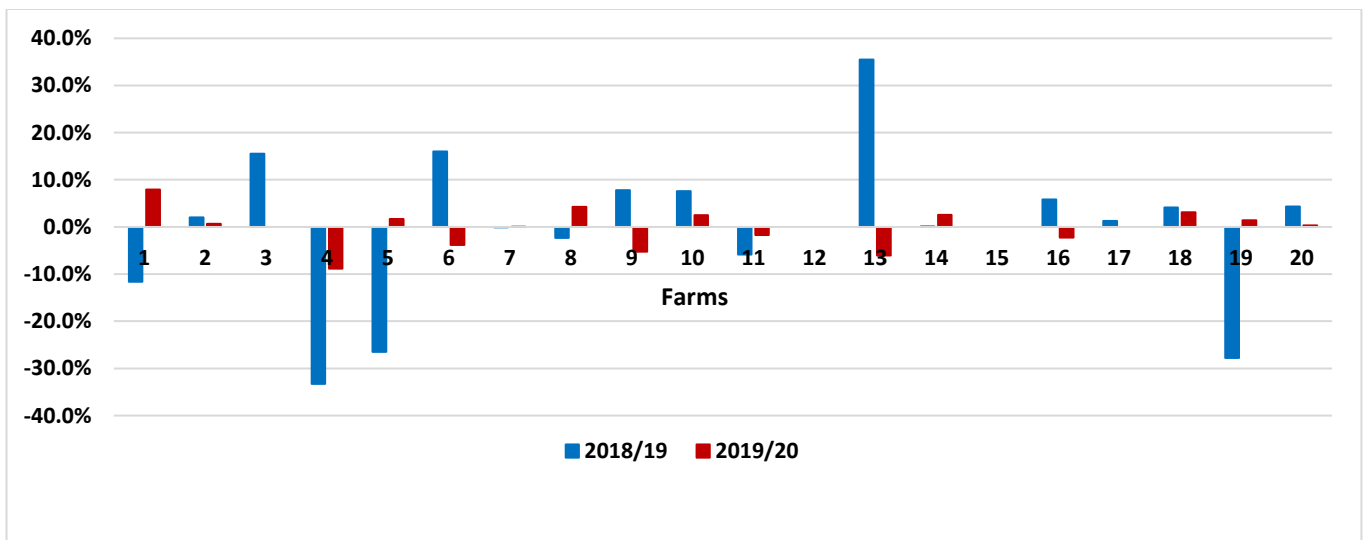
The dry weather saw farmers sell more store lambs, and in general the store market has been strong this season. For the model, the proportion of lambs sold store for 2018/19 was lifted to 40%. Lamb weights have varied, and many lambs sold to the Works in the first few drafts were at lower carcase weights. Growth rates in finishing cattle have been less than usual over the autumn, with some farmers keeping stock on longer, while others have killed stock at lower weights.

Animal health issues through the season were much on a par with previous years. In noting this there were some outbreaks of facial eczema, with some farms hit hard, especially in southern areas where eczema is less prevalent. Drench resistance is becoming more prevalent, with a high level of awareness of this amongst farmers, coupled with increased testing. Grass staggers was also a problem on some farms.

The dry weather resulted in some weed problems, especially willow weed and California thistle. With pastures opening-up due to the dry weather, farmers are expecting worse thistle problems in the 2019/20 season.

There were some major changes in breeding ewe and breeding cow numbers on individual monitored farms:

Figure 1: Changes in breeding ewe numbers on monitored farms over 2018/19 and 2019/20 (open versus close)



The average across all the farms for breeding ewes over 2018/19 was -0.4%. For 2019/20 there was a similar pattern, but with an average change of -0.2%. For breeding cows, the pattern was less pronounced, with an overall average change of +1.4% in 2018/19, and a budgeted -1.3% change in 2019/20. These average changes have been reflected in the model.

FINANCIAL PERFORMANCE 2018/19

Revenue Up

Net cash income for the model lifted by 8%, largely due to the increased number of lambs sold, and strong sale prices. Net income from cattle dropped slightly (5%) due mainly to lower returns for finished cattle, a combination of lower weights and schedule prices through summer. Wool continued its downward trajectory, with returns down 7% compared with 2017/18.

Expenditure Also Up

Farm working expenditure also increased in 2018/19, up by 12% to \$313,800 or \$550/ha, or \$63 per stock unit.

Within this increase, the main changes are:

- Labour expenses up 17% due to a combination of more casual labour, and the increase in the minimum wage.
- Animal health up 12%, driven by more lambs and higher product prices.
- Fertiliser expenditure up 3% due to the application of some nitrogen fertiliser (DAP).
- Shearing expenses increased by 9%, as a flow-over from increased costs in 2017/18.
- Weed and pest expenditure up 46%, due to the increased weed problem, plus the increased income meant more farms used helicopters to spray hilly areas.
- Fuel costs up 18% due to higher prices.
- Repairs and maintenance expenditure increased by 14% as farmers continued to catch up on previously deferred expenditure. The dry summer and autumn conditions also meant more work was able to be carried out.
- Overhead expenses up 16% mainly due to increased rates and insurance costs.

While many of the increases were not large in absolute terms, they all add up.

Debt servicing decreased by 12% due to lower interest costs; currently the model is paying 5% on term debt and 7% on overdraft.

Net Result

Farm profit before tax for 2018/19 is \$126,600, up 16% on 2017/18 as, increased farm working expenses notwithstanding, the improved income has flowed through. As a result, expenditure is also increased:

- Tax liability has increased in line with the improved profitability.
- Personal drawings up slightly (2%).
- Further expenditure on capital items, farm development, and some principal debt reduction. The debt reduction shown in the model budget is 50% of annual payments on a normal 20-year table mortgage.

The farm cash surplus for the year is \$7,000. The likelihood is that this will be spent on either increased personal drawings, or further capital expenditure in 2019/20.

FINANCIAL PERFORMANCE 2019/20

Revenue Down Slightly

The budgeted net cash income for the model is \$531,800, a 3% decrease compared with 2018/19. This is largely driven by the drop in lambing percentage, coupled with an expectation of a slight drop in lamb returns. This is offset to some degree by a 2.5% increase in net cattle income; slightly higher cattle numbers coupled with an expectation of similar prices to 2018/19.

Income from wool is budgeted to drop by 3%, largely driven by an expectation of a further drop in wool returns.

Expenditure Up Slightly

Budgeted farm working expenses increase by 2% overall, to \$319,900 or \$560/ha, or \$64.25/SU. Within this, main changes were:

- Labour costs up 9% due to further increases in the minimum wage.
- Fertiliser costs up 5%; same amount of fertiliser applied, but with higher costs, particularly for freight and application.
- Weed and pest costs up 5% due to greater thistle control.
- Fuel expenditure up 8% due mostly to an expectation of a rising fuel price.
- Repairs and maintenance expenditure down 7%, largely to offset increases in other areas, plus a significant amount of deferred maintenance has been caught up on.
- Overhead expenditure (administration, rates, insurance, etc.) up 3%.

Debt servicing drops slightly (down 2%); while interest rates have been held, the reduction is due to the repayment of debt in 2018/19.

Net Result

The budgeted farm profit before tax is \$103,600, down 18% on 2018/19. Budgeted spending of this includes:

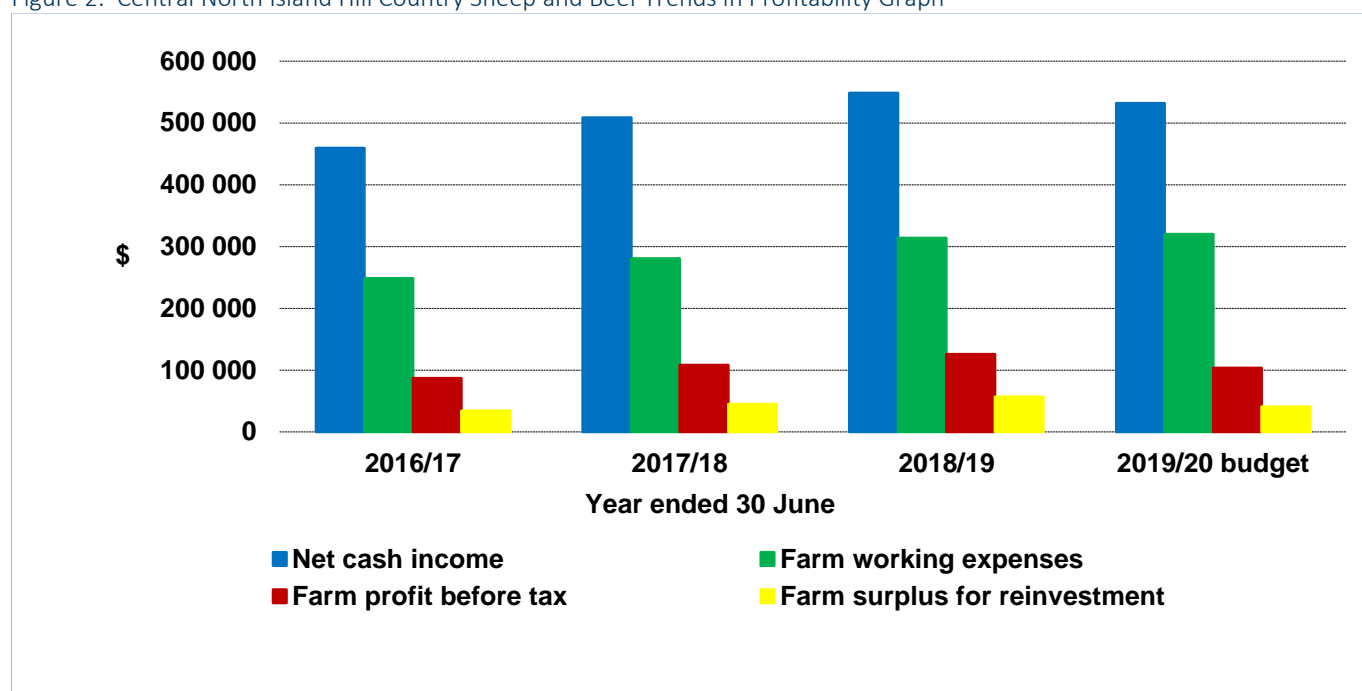
- Tax payment decreases in line with the reduction in profitability.
- Drawings up slightly (2%).
- Continued expenditure on capital, farm development, and some debt reduction.

Currently the result is a cash farm deficit of \$3,900. Assuming this eventuates, the likelihood is that farmers will look to reduce expenditure in the capital/development/debt reduction areas such that the farm breaks even.

As noted previously, the model farm is generating sufficient income to operate at a maintenance level, but with limited cash available for further development and/or capital expenditure and/or debt reduction. On the capital front, farms appear to be selling well, with land values continuing to firm. Many of the sales are farmer to farmer, with some increased interest from investors in planting farms into forestry for timber and carbon.

Return on capital, calculated as EFS divided by total farm capital, shows a 2.2% return in 2017/18, 2.3% in 2018/19, dropping to 1.9% in 2019/20.

Figure 2: Central North Island Hill Country Sheep and Beef Trends in Profitability Graph



Monitored Farm Ranges

The following shows the range of expenditure across different items, from the monitored farms:

Table 2: Expenditure range from monitored farms

	2018/19		2019/20 Budget	
	\$ per SU	\$ per ha	\$ per SU	\$ per ha
Animal Health	2.24 - 12.35	25 - 114	2.15 - 11.17	25 - 102
Fertiliser	6.61 - 36.06	60 - 261	10.60 - 26.43	114 - 261
Vehicle & Fuel	1.58 - 16.42	15 - 193	1.72 - 15.60	16 - 190
Repairs & Maintenance	149 - 12.89	16 - 156	16.2 - 16.53	17 - 159
Administration	0.63 - 4.77	5 - 55	0.69 - 5.92	7 - 58
Total farm working expenses	41.93 - 115.96	444 - 1,134	45.44 - 98.03	476 - 1,109
Debt servicing	1.11 - 34.13	16 - 372	1.07 - 29.29	16 - 372

ISSUES

There are a range of issues concerning farmers; the key aspects of which are outlined below:

- While farmers are still aware of M. Bovis and biosecurity issues, the situation has gone quiet. A number of farmers are still moving to have self-contained/closed herds, or to just dealing with one or two trusted suppliers/buyers. Others, while aware of the risks, are taking a business as usual approach with little change on-farm.
- Compliance issues are still significant, particularly the looming prospect of the Waikato Plan Change 1, and the need to address greenhouse gas emissions. There is a concern that many farms are not generating sufficient income to cover possible significant expenditure in these areas. While some farmers are taking action in the form of fencing off streams, or planting trees, most are still waiting to see what the final regulations and rules will require. Most farmers have little knowledge around greenhouse gas emissions and possible mitigations, and again most are waiting to see what eventuates. There is growing concern at the number of whole farms being purchased for forestry and carbon development, and the possible negative implications of this for rural communities.
- While farmers are happy with the returns being generated from sheep meat and beef, wool remains a particular concern. Most are budgeting for reduced prices in the 2019/20 year, and for the model, shearing costs now make up around 80% of wool returns. For the monitored farms the average is 94%.
- As noted previously, finding and retaining good farm staff remains a significant concern, with many farms struggling to find good staff, from shepherds through to managers. This is particularly so in more remote areas, where relatively poor local amenities, isolation, and limited opportunities for partners. In some respects, this is encouraging the use of new technologies, which in itself is creating a problem given the poor internet and mobile phone coverage in many areas.
- Farm succession is an ongoing issue, although the improved profitability in recent years has seen a lessening of this. Often it is the children driving the need to sort out a succession plan rather than the farming couple.
- The improvement in profitability in recent years, particularly on the more intensive farms, now sees a number of these having to manage large tax bills.
- While it is good to see the lift in hill country farm profitability on the back of good lamb and beef schedules, the model farm is still struggling somewhat. While operating at a maintenance operating expenditure level, there is limited funds available to pay a reasonable level of drawings, along with required ongoing investment in the farm, capital expenditure, development, and debt reduction. This is particularly so with the high probability of increased environmental compliance expenditure in coming years.

Table 3: Central North Island Hill Country Sheep and Beef Model Budget

	2018/19			2019/20 budget		
	Whole farm (\$)	Per ha (\$)	Per stock unit ¹ (\$)	Whole farm (\$)	Per ha (\$)	Per stock unit ¹ (\$)
Revenue						
Sheep	345 865	606	112.02	326 185	571	105.91
Wool	37 434	66	12.12	36 328	64	11.80
Cattle	230 011	403	121.47	233 520	409	122.97
Grazing income (including hay and silage sales)	0	0	0.00	0	0	0.00
Other farm income	5 100	9	1.02	5 000	9	1.00
Less:						
Sheep purchases	9 600	17	3.11	9 600	17	3.12
Cattle purchases	60 480	106	31.94	59 660	104	31.42
Net cash income	548 330	960	110.08	531 773	931	106.81
Farm working expenses	313 839	550	63.01	319 901	560	64.25
Cash operating surplus	234 490	411	47.08	211 872	371	42.55
Interest	84 350	148	16.93	82 449	144	16.56
Rent and/or leases	0	0	0.00	0	0	0.00
Stock value adjustment	377	1	0.08	- 1 497	- 3	-0.30
Minus depreciation	24 892	44	5.00	24 323	43	4.89
Farm profit before tax	125 625	220	25.22	103 603	181	20.81
Income equalisation	0	0	0.00	0	0	0.00
Taxation	23 727	42	4.76	17 121	30	3.44
Farm profit after tax	101 898	178	20.46	86 483	151	17.37
Allocation of funds						
Add back depreciation	24 892	44	5.00	24 323	43	4.89
Reverse stock value adjustment	- 377	- 1	-0.08	1 497	3	0.30
Drawings	69 662	122	13.99	71 375	125	14.34
Farm surplus for reinvestment²	56 751	99	11.39	40 928	72	8.22
Reinvestment						
Net capital purchases	18 843	33	3.78	14 275	25	2.87
Development	6 852	12	1.38	6 852	12	1.38
Principal repayments	24 028	42	4.82	23 664	41	4.75
Farm cash surplus/deficit	7 028	12	1.41	- 3 864	- 7	-0.78
Other cash sources						
Off-farm income	0	0	0.00	0	0	0.00
New borrowings	0	0	0.00	0	0	0.00
Introduced funds	0	0	0.00	0	0	0.00
Net cash position	7 028	12	1.41	- 3 864	- 7	-0.78
Assets and liabilities						
Farm, forest and building (opening)	4 800 000	8 406	963.66	4 893 664	8 570	982.90
Plant and machinery (opening)	150 375	263	30.19	146 662	257	29.46
Stock valuation (opening)	939 553	1 645	188.63	939 930	1 646	188.79
Other produce on hand (opening)	0	0	0.00	0	0	0.00
Total farm assets (opening)	5 889 928	10 315	1,182.48	5 980 256	10 473	1,201.14
Total assets (opening)	5 889 928	10 315	1,182.48	5 980 256	10 473	1,201.14
Total liabilities (opening)	1 659 000	2 905	333.07	1 624 972	2 846	326.38
Total equity (farm assets - liabilities)	4 230 928	7 410	849.41	4 355 284	7 627	874.77

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.

Table 4: Central North Island Hill Country Sheep and Beef Model Expenditure

	2018/19			2019/20 budget		
	Whole farm (\$)	Per ha (\$)	Per stock unit ¹ (\$)	Whole farm (\$)	Per ha (\$)	Per stock unit ¹ (\$)
Farm working expenses						
Permanent wages	0	0	0.00	0	0	0.00
Casual wages	19 985	35	4.01	21 698	38	4.36
ACC	701	1	0.14	673	1	0.14
Total labour expenses	20 686	36	4.15	22 371	39	4.49
Animal health	32 547	57	6.53	33 118	58	6.65
Breeding	0	0	0.00	0	0	0.00
Electricity	7 423	13	1.49	8 280	15	1.66
Feed (hay and silage)	7 994	14	1.60	7 994	14	1.61
Feed (feed crops)	0	0	0.00	0	0	0.00
Feed (grazing)	0	0	0.00	0	0	0.00
Feed (other)	1 713	3	0.34	1 713	3	0.34
Fertiliser	63 550	111	12.76	66 500	116	13.36
Lime	0	0	0.00	0	0	0.00
Cash crop and forestry expenses	0	0	0.00	0	0	0.00
Freight (not elsewhere deducted)	7 994	14	1.60	8 565	15	1.72
Regrassing costs	2 855	5	0.57	1 142	2	0.23
Shearing expense	29 121	51	9.43	29 692	52	9.64
Weed and pest control	10 849	19	2.18	11 420	20	2.29
Fuel	7 423	13	1.49	7 994	14	1.61
Vehicle costs (excluding fuel)	17 130	30	3.44	17 701	31	3.56
Repairs and maintenance	42 254	74	8.48	39 399	69	7.91
Total other working expenses	230 853	404	46.35	233 518	409	46.90
Administration	15 988	28	3.21	17 701	31	3.56
Rates	22 269	39	4.47	22 840	40	4.59
Insurance	13 133	23	2.64	13 704	24	2.75
ACC employer	4 629	8	0.93	4 629	8	0.93
Other expenditure	6 281	11	1.26	5 139	9	1.03
Total overhead expenses	62 300	109	12.51	64 013	112	12.86
Total farm working expenses	313 839	550	63.01	319 901	560	64.25
Calculated ratios						
Economic farm surplus (EFS ²)	134 975	236	27.10	111 052	194	22.30
Farm working expenses/NCI ³	57%			60%		
EFS/total farm assets	2.3%			1.9%		
EFS less interest and lease/equity	1.2%			0.7%		
Interest+rent+lease/NCI	15.4%			15.5%		
EFS/NCI	24.6%			20.9%		

Notes

¹ Shearing expenses per stock unit based on sheep stock units

² 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.

³ Net cash income.

INFORMATION ABOUT THE MODEL

The Central North Island Hill Country Sheep and Beef Model represents approximately 1,600 farms across the central North Island. The farms monitored cover the Waikato, Otorohanga, Waitomo, Stratford, Ruapehu, Whanganui, and Rangitikei districts.

The model was constructed based on the 2017 Agricultural Statistics data, plus information from the Beef + Lamb New Zealand Economic Service survey farms from within the above districts.

The model is a hill country farm based on an average property of 684 hectares total, 571 hectares effective, running 2,300 - 2,400 breeding ewes and replacements, selling 70% of lambs prime, 30% store. The farm also runs 121 breeding cows, with heifers calved as 2-year olds, and all stock finished; heifers to around 18 months, and steers taken through to around 300 kg carcass weight at 20 - 26 months. 50 - 60 weaner steers are also purchased in each year to finish at 20 - 26 months.

The model is created from information drawn from 20 surveyed sheep and beef farms and a cross section of agribusiness representatives. The aim of the model is to typify an average hill country sheep and beef farm for the central North Island region. The income and expenditure shown is on a cash-in/cash-out basis.

For more information on the model contact: phil.journeaux@agfirst.co.nz



AgFirst Waikato Ltd 26D Liverpool Street PO Box 9078 Hamilton 3240	AgFirst Central Ltd 24 Froude Street PO Box 976 Rotorua 3010	AgFirst Manawatu-Whanganui 59 Manchester Street PO Box 125 Feilding 4740
Website: www.agfirst.co.nz Phone: 0508 243 477		