

## GISBORNE HILL COUNTRY 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**

- Large increases in sheep, cattle and wool prices increased net cash income by \$184 400 (42 percent) in 2010/11 and a further \$60 300 (10 percent) increase is expected in 2011/12.
- Low pasture cover early in the season was beneficial in the long run as low weaning weights caused farmers to hold lambs longer allowing them to take advantage of higher prices later in the season.
- Farm working expenses continued to increase and for the first time in a long while farmers are choosing to spend more, particularly on fertiliser and repairs and maintenance.

- Farm working expenses accounted for 58 percent of net cash income in 2010/11, compared with 78 percent in 2009/10.
- Memories of recent droughts have farmers using their increased farm surplus for reinvestment (\$140 800 in 2010/11) to reduce debt to place them in a better position to cope with any future adverse events.
- Farmers are focusing on increasing the weight and productivity of their current stock rather than increasing numbers.

#### >>> TABLE 1: KEY PARAMETERS, FINANCIAL RESULTS AND BUDGET FOR THE GISBORNE HILL COUNTRY SHEEP AND BEEF MODEL

YEAR ENDED 30 JUNE	2007/08	2008/09	2009/10 <sup>1</sup>	2010/11 ACTUAL	2011/12 BUDGET
Effective area (ha)	821	821	829	829	829
Breeding ewes (head)	2 990	3 000	2 792	2 706	2 697
Replacement ewe hoggets (head)	1 060	1 120	760	851	911
Other sheep (head)	167	229	204	284	295
Breeding cows (head)	262	252	257	267	252
Rising 1-year cattle (head)	216	235	232	268	269
Other cattle (head)	177	193	192	161	180
Opening sheep stock units (ssu)	3 855	3 950	3 879	4 187	4 232
Opening cattle stock units	3 168	3 283	3 335	3 382	3 417
Opening total stock units (su)	7 022	7 233	7 214	7 569	7 649
Stocking rate (stock unit/ha)	8.6	8.8	8.7	9.1	9.2
Ewe lambing (%)	113	115	124	134	133
Average lamb price (\$/head)	51.42	81.80	74.00	103.32	106.84
Average store lamb price (\$/head)	28.58	73.74	66.00	85.00	90.00
Average prime lamb price (\$/head)	58.26	85.98	77.00	108.00	110.00
Average wool price (\$/kg)	2.30	2.18	2.17	3.56	4.20
Total wool produced (kg)	19 356	17 651	17 223	18 825	19 008
Wool production (kg/ssu)	5.0	4.5	4.4	4.5	4.5
Average rising 3-year steer (\$/head)	947	997	924	1 098	1 171
Average cull cow (\$/head)	602	619	587	800	806
Net cash income (\$)	310 305	490 793	442 337	626 693	687 003
Farm working expenses (\$)	230 471	216 039	344 298	360 623	419 158
Farm profit before tax (\$)	18 029	122 568	32 554	190 575	203 522
Farm surplus for reinvestment (\$) <sup>2</sup>	-70 728	122 188	-5 095	140 764	97 293

#### 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: GISBORNE HILL COUNTRY SHEEP AND BEEF MODEL BUDGET

			2010/11		20	011/12 BUDGET
	WHOLE	PER	PER STOCK	WHOLE	PER	PER STOCK
	FARM (\$)	HA (\$)	UNIT <sup>1</sup> (\$)	FARM (\$)	HA (\$)	UNIT <sup>1</sup> (\$)
REVENUE	(Ψ)	(Ψ)	(ψ)	(Ψ)	(Ψ)	(ψ)
Sheep	372 557	449	88.99	424 340	512	100.26
Wool	66 929	81	15.99	79 832	96	18.86
Cattle	246 889	298	73.00	262 394	317	76.80
Grazing income (including hay and silage sales)	5 000	6	0.00	5 000	6	0.00
Other farm income	5 000	6	0.66	10 000	12	1.31
LESS:						
Sheep purchases	32 622	39	7.79	46 813	56	11.06
Cattle purchases	37 060	45	10.96	47 750	58	13.98
Net cash income	626 693	756	82.80	687 003	829	89.82
Farm working expenses	360 623	435	47.65	419 158	506	54.80
Cash operating surplus	266 069	321	35.15	267 845	323	35.02
Interest	52 913	64	6.99	42 515	51	5.56
Rent and/or leases	14 336	17	1.89	14 342	17	1.88
Stock value adjustment	10 294	12	1.36	10 839	13	1.42
Minus depreciation	18 539	22	2.45	18 305	22	2.39
Farm profit before tax	190 575	230	25.18	203 522	246	26.61
Income equalisation	0	0	0.00	0	0	0.00
Taxation	20 056	24	2.65	71 694	86	9.37
Farm profit after tax	170 519	206	22.53	131 827	159	17.23
•						
ALLOCATION OF FUNDS						
Add back depreciation	18 539	22	2.45	18 305	22	2.39
Reverse stock value adjustment	-10 294	-12	-1.36	-10 839	-13	-1.42
Drawings	38 000	46	5.02	42 000	51	5.49
Farm surplus for reinvestment <sup>2</sup>	140 764	170	18.60	97 293	117	12.72
REINVESTMENT						
Net capital purchases	13 000	16	1.72	22 000	27	2.88
Development	2 000	2	0.26	3 000	4	0.39
Principal repayments	48 196	58	6.37	85 938	104	11.24
Farm cash surplus/deficit	77 568	94	10.25	-13 645	-16	-1.78
OTHER CASH SOURCES						
Off-farm income	1 700	2	0.22	1 700	2	0.22
New borrowings	0	0	0.00	0	0	0.00
Introduced funds	0	0	0.00	0	0	0.00
Net cash position	79 268	96	10.47	-11 945	-14	-1.56
ASSETS AND LIABILITIES						
Farm, forest and building (opening)	3 790 125	4 572	500.77	4 137 550	4 991	540.94
Plant and machinery (opening)	91 758	111	12.12	90 994	110	11.90
Stock valuation (opening)	1 094 350	1 320	144.59	1 104 644	1 333	144.42
Other produce on hand (opening)	0	0	0.00	0	0	0.00
Total farm assets (opening)	4 976 233	6 003	657.48	5 333 188	6 433	697.25
Total assets (opening)	4 976 233	6 003	657.48	5 333 188	6 433	697.25
Total liabilities (opening)	720 901	870	95.25	627 705	757	82.06
Total equity (farm assets - liabilities)	4 255 332	5 133	562.23	4 705 484	5 676	615.19

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.

**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.

<sup>2</sup> 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 3: GISBORNE HILL COUNTRY SHEEP AND BEEF MODEL EXPENDITURE

			2010/11		2011	/12 BUDGET
	WHOLE FARM	PER	PER STOCK Unit	WHOLE FARM	PER	PER STOCK
	(\$)	HA (\$)	(\$)	(\$)	HA (\$)	UNIT (\$)
FARM WORKING EXPENSES						
Permanent wages	93 000	112	12.29	94 800	114	12.39
Casual wages	8 000	10	1.06	8 000	10	1.05
ACC	3 284	4	0.43	3 545	4	0.46
Total labour expenses	104 284	126	13.78	106 345	128	13.90
Animal health	24 220	29	3.20	26 000	31	3.40
Breeding	3 179	4	0.42	3 500	4	0.46
Electricity	7 493	9	0.99	7 725	9	1.01
Feed (hay and silage)	1 362	2	0.18	1 600	2	0.21
Feed (feed crops)	5 525	7	0.73	5 927	7	0.77
Feed (grazing)	1 514	2	0.20	1 500	2	0.20
Feed (other)	0	0	0.00	0	0	0.00
Fertiliser	49 350	60	6.52	80 618	97	10.54
Lime	4 087	5	0.54	4 103	5	0.54
Cash crop expenses <sup>1</sup>	258	0	0.03	4 200	5	0.55
Freight (not elsewhere deducted)	4 352	5	0.58	4 400	5	0.58
Regrassing costs	2 550	3	0.34	2 700	3	0.35
Shearing expenses <sup>2</sup>	28 500	34	6.81	31 000	37	7.32
Weed and pest control	6 128	7	0.81	8 500	10	1.11
Fuel	10 000	12	1.32	11 000	13	1.44
Vehicle costs (excluding fuel)	14 500	17	1.92	14 500	17	1.90
Repairs and maintenance	35 557	43	4.70	41 800	50	5.46
Total other working expenses	198 574	240	26.24	249 073	300	32.56
Communication costs (phone and mail)	3 898	5	0.52	4 000	5	0.52
Accountancy	9 734	12	1.29	10 152	12	1.33
Legal and consultancy	8 100	10	1.07	8 370	10	1.09
Other administration	4 465	5	0.59	4 713	6	0.62
Water charges (irrigation)	0	0	0.00	0	0	0.00
Rates	15 498	19	2.05	16 207	20	2.12
Insurance	5 600	7	0.74	5 920	7	0.77
ACC employer	2 771	3	0.37	10 078	12	1.32
Other expenditure	7 700	9	1.02	4 300	5	0.56
Total overhead expenses	57 766	70	7.63	63 740	77	8.33
Total farm working expenses	360 623	435	47.65	419 158	506	54.80
CALCULATED RATIOS						
Economic farm surplus (EFS <sup>3</sup> )	182 825	221	24.16	185 379	224	24.24
Farm working expenses/NCI <sup>4</sup>	58%		21.13	61%		2 1.2 1
EFS/total farm assets	3.7%			3.5%		
EFS less interest and lease/equity	2.7%			2.7%		
Interest+rent+lease/NCI	10.7%			8.3%		
EFS/NCI	29.2%			27.0%		
	27.270			27.070		
Wages of management	75 000	90	9.91	75 000	90	9.81

#### 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.

Substantial improvements in stock and wool prices lifted the cash operating surplus of the Gisborne hill country model to \$266 100 (\$321 per hectare) in 2010/11; up from \$98 000 (\$118 per hectare) in 2009/10. Farm working expenditure increased by 5 percent but as a proportion of net cash income, fell from 78 percent in 2009/10 to 58 percent in 2010/11.

#### **REVENUE INCREASES 42 PERCENT**

Net cash income increased by \$184 400 (42 percent) to \$626 700 in 2010/11. Income improved across all product categories with sheep income being the main contributor to the increase. Along with higher prices, more stock was available for sale with farms restocking during 2009/10 as they recovered from the droughts in preceding years, as well as an increase in the lambing percentage.

#### PRICES PUSH SHEEP INCOME UP

Sheep income (sales less purchases) increased \$116 300 to \$339 900 in 2010/11 compared with \$223 700 in 2009/10. Ewes entered winter 2010 in good condition but the cold wet mid-winter conditions caused this to deteriorate prior to lambing. Despite that, the district achieved an average lambing percentage of 134 percent, up from the previous year's drought-affected 124 percent.

Store lamb prices increased \$19 to \$85 per head and prime lambs increased \$31 to \$108 per head. The lacklustre pasture conditions reduced lamb growth and lowered drafting weights for the new season lambs. Most farmers were behind in either weight or the date of their first drafts. Prices improved progressively through the year with prime lambs selling for around \$90 in December/January and increasing to \$135 in May. Strong demand for sheep meat pushed the cull ewe prices up from \$57 to \$88 in 2010/11.

While a dry spell in December/January led to some farmers selling store lambs, generally the low lamb weights early in the season caused farmers to hold on to their lambs. Regular rainfall events occurred from late January through until May. This resulted in the best autumn pasture growth in many years. Farmers had the luxury for the first time in a long while of being able to sell stock when it suited them rather than reacting to feed shortages, so were able to take advantage of the upward trend in prices.

#### **CATTLE INCOME INCREASES**

Cattle income (sales less purchases) increased by \$44 600 to \$209 800 in 2010/11 because of improved prices for all classes of cattle and with 46 extra cattle sold as numbers stabilised.

Prices for rising three year old heifers and mixed age cows were up about \$220 per head on 2009/10, rising three year steers were up \$174 per head and bulls were up \$137 per head.

Cow condition was poor at calving following the low feed levels in winter. This resulted in more cows not cycling when put to the bull in late spring and increased sales of dry cows. Higher feed covers across the district during autumn allowed farmers to grow out or finish stock that they would have sold store in past years, and thus capitalised on the high beef prices as well as lifting cow condition going into winter 2011.

#### **RESURRECTION OF WOOL PRICES**

Wool income increased by \$29 500 (79 percent) to \$66 900 in 2010/11, following several years of declining income. A shortage of supply and rising prices for competing fibres pushed up strong wool prices in 2010/11. The average wool price in the model increased 64 percent to \$3.56 per kilogram, compared with \$2.17 in 2009/10.



The improved wool price led to more farmers second shearing as it is now more profitable.

#### **FARM COSTS UP**

Farmers kept a tight rein on expenditure in the first half of 2010/11 before the increase in income became apparent. Expenditure on farm working expenses increased 5 percent to \$360 600 in 2010/11, an increase of \$20 per hectare. The main areas of increased expenditure were labour, shearing and animal health, while expenditure fell for feed, weed and pest control and employer ACC.

#### ANIMAL HEALTH AND SHEARING EXPENSES UP

The higher value for stock meant farmers were prepared to spend more on animal health products to keep stock in good condition. While there were no major animal health issues during the year, there were low to moderate levels of facial eczema as humid conditions lasted longer than usual. Facial eczema also affected some inland properties for the first time. The level of internal parasites was reported to be low.

Shearing expenditure increased \$5300 (23 percent) in 2010/11. Higher prices for wool lead to more shearing occurring, particularly second shear. Shearing costs accounted for 43 percent of wool income, compared with 62 percent in 2009/10.

#### **FERTILISER SPEND HELD**

Fertiliser and lime prices stayed at similar levels to 2009/10 but farmers applied a lot more lime during 2010/11, increasing expenditure by \$1600 or 63 percent compared with 2009/10. A shortage of top-dressing planes is making it difficult to get fertiliser applied and limits recently placed on the load planes can carry is increasing the cost of application.

#### LESS EXPENDITURE ON FEED AND WEED AND PEST CONTROL

Good pasture covers for much of the season reduced feed expenses by \$4100 with less need for bought feed. Weed and pest control was reduced \$4300 as pastures were in better condition and good pasture cover reduced the presence of weeds.

#### SOME CREEP IN OTHER COSTS

Expenditure on items such as electricity, fuel, insurance, administration and rates (up 5 percent) continued to increase. Expenditure on repairs and maintenance was held at a similar level to 2009/10 despite two periods of storm damage. A significant rainfall event hit the district in mid-October 2010 with 199mm falling in the month. This caused flooding and damage to many parts of the region. This was followed by heavy rain in the Wairoa area in late April causing significant damage to some properties with slips and forestry debris destroying pasture and infrastructure.

#### >>> TABLE 4: GISBORNE HILL COUNTRY SHEEP AND BEEF MODEL CASH FARM INCOME

YEAR ENDED 30 JUNE 2007/08 (\$) 2008/09 (\$) 2009/10¹ (\$) 2011/12 BUDGET (\$)   Sheep sales less purchases 145 726 264 265 223 661 339 935 377 527   Cattle sales less purchases 113 427 178 085 165 225 209 829 214 644
Sheep sales less purchases 145 726 264 265 223 661 339 935 377 527
Cattle calca loss murchases 112 427 179 005 165 225 200 020 214 644
Cattle sales 1635 purchases 175 427 176 005 105 225 207 027 214 044
Wool 43 551 38 444 37 451 66 929 79 832
Grazing income (including hay and silage sales) 200 2 500 7 000 5 000 5 000
Grazing income (including may and shage sales)
Other income 7 400 7 500 9 000 5 000 10 000
Net cash income 310 305 490 793 442 337 626 693 687 003
Nata

Note

<sup>1</sup> 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.

Interest payments were down slightly on 2009/10, a result of lower interest rates and some principal repayment in 2009/10. Interest and rent now represent only 11 percent of net cash income compared with 14 percent in 2009/10.

#### **NET RESULT INCREASED SIGNIFICANTLY**

Farm profit before tax increased significantly to \$190 600, an increase of \$158 000 from 2009/10. The tax paid consisted mostly of provisional tax relating to the 2010/11 year as little tax was due on the 2009/10 farm profit.

Drawings in the model are not high as many of the farms surveyed are corporate farms with total labour expenses including the cost of a manager.

The resulting farm surplus for reinvestment was \$140 800, which farmers used for capital purchases and to pay off a larger portion of their debt.

The end result was a farm cash surplus of \$77 600, a large improvement on the previous year's deficit of \$34 200.

# BUDGET FINANCIAL PERFORMANCE OF THE GISBORNE HILL COUNTRY SHEEP AND BEEF FARM MODEL IN 2011/12

The model's cash operating surplus is expected to increase 1 percent to \$267 800 in 2011/12. A 16 percent budgeted increase in farm working expenses is expected to almost offset the predicted 10 percent increase in net cash income.

#### REVENUE EXPECTED TO INCREASE BY 10 PERCENT

Further price improvements for stock and wool and a higher volume of sheep sold are anticipated to generate a 10 percent increase in net cash income in 2011/12.

#### SHEEP INCOME DRIVING REVENUE UP

Sheep income (sales less purchases) is expected to increase 11 percent to \$377 500. Lambing is predicted to achieve 133 percent a similar level to 2010/11. Improved pasture levels during autumn 2011 provided good feed levels for ewes in their build up for mating. However, ewe and lamb liveweight gain was not as high as farmers had hoped and the ewe mating weights were similar to 2010.

Further improvements in prices for all classes of sheep are expected in 2011/12. Prices for hoggets are expected to show the largest increase between years (up \$42 to \$140 per head), as the spring 2010 hogget sales occurred before prices began trending up. Ewe prices are expected to improve by \$12 per head and lamb prices by only a few dollars.

#### **WOOL REVENUE TO CONTINUE IMPROVING**

The strong demand for wool and constrained supply is expected to continue and push the average price for wool up 64 cents per kilogram in 2011/12. About 50 percent of the monitored farmers sold early last season and did not get the full benefit of the higher prices in 2010/11. Wool income is anticipated to increase \$12 900, up 19 percent compared with 2010/11.

#### SLIGHT RISE IN CATTLE INCOME

Cattle income (sales less purchases) is expected to increase 2 percent to \$214 600. Cattle prices are expected to move in both directions with price increases expected for steers and rising two-year-old bulls and price decreases expected for rising 3-year heifers and mixed age bulls.



#### CARBON INCOME CONTRIBUTING

A handful of monitored farmers began trading in carbon and this is reflected in a \$5000 increase in other income in 2011/12. While many of the farmers are still struggling to understand how they can apply for carbon units, those issued with them are holding them, selling a portion of them or selling the lot.

#### PLANNING ON MORE EXPENDITURE

Farmers are planning to spend more in 2011/12 following a good cash surplus in 2010/11 and in anticipation that commodity prices will hold or improve. The farm model has budgeted a 16 percent increase (up \$58 500) in farm working expenses with the bulk of the increased expenditure going on fertiliser.

#### INCREASED FERTILISER SPEND

Fertiliser expenditure is predicted to increase 63 percent (\$31 300) with higher application rates and price increases for fertiliser expected. At the end of 2010/11, fertiliser prices had increased around 10 percent. Farmers plan to lift their application rates back to 250 kilograms per hectare from the 115 kilograms applied in recent years.

#### **GENERAL EXPENDITURE CREEP IN OTHER AREAS**

Farmers plan for a 7 percent increase in animal health expenditure allowing for some price increases as well as being prepared to spend more in this area to keep stock in good condition.

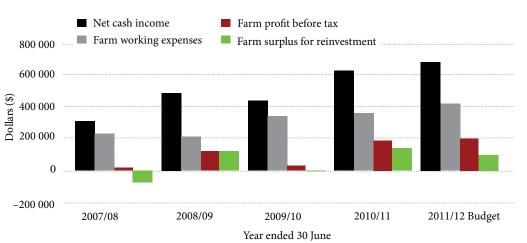
Increases in cash crop expenditure includes planned farm forestry expenses. Repairs and maintenance expenditure is expected to increase 18 percent as farmers invest some of the 2010/11 surplus.

Inflationary pressures are expected to increase expenditure in many other areas such as fuel, shearing expenses and feed. A 10 percent increase in total overhead expenses is budgeted for, with rates and ACC expenditure expected to be the main drivers.

#### INTEREST EXPENDITURE DOWN

A lower opening debt level from principal payments made in 2010/11 and lower interest rates locked in during 2010/11 will lower interest payments in 2011/12. Interest payments are expected to be down

#### >>> FIGURE 1: GISBORNE HILL COUNTRY 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.

\$10 400 (20 percent) compared with 2010/11. Consequently, interest and rent will fall to only 8 percent of net cash income.

#### **NET RESULT TO IMPROVE 7 PERCENT**

Farm profit before tax is expected to be \$203 500, a 7 percent improvement on 2010/11. It is anticipated that a significant tax bill and a slight increase in drawings will reduce the farm surplus for reinvestment by \$43 500 compared with 2010/11. However, this will still leave a healthy \$97 300 farm surplus for reinvestment.

It is expected that most of the farm surplus for investment will be used to substantially reduce debt with some also going on capital purchases with little change expected in expenditure on development. This will result in a cash deficit of \$13 600, which will be offset against the 2010/11 cash surplus.

#### **FARMER MORALE HIGH**

Farmer morale is high in the Gisborne and Wairoa districts and much improved from last year when many farmers felt like leaving the industry. There is confidence that commodity prices will remain high with the supply and demand indicators favourable and aided by the shift to dairying in the South Island. However, a conservative approach is being taken due to the increased frequency of adverse events. To be prepared farmers are reducing debt and concentrating on increasing the quality, not quantity, of their stock.

### INFORMATION ABOUT THE MODEL

The Gisborne hill country sheep and beef model represents about 600 farms on steep hill country and easier hill country on mudstone soils with some pumice overlay in the Gisborne and Wairoa districts. The model's stock policy is based on breeding ewes and cows with replacement stock retained, surplus stock sold prime or store and some trading stock for finishing or margin trading.

For more information on this model contact loretta.dobbs@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 978-0-478-38496-3 (Print) ISBN 978-0-478-38497-0 (Online)

The report can be downloaded from www.maf.govt.nz

#### **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