

## 2008 HORTICULTURE AND ARABLE MONITORING EARLY RELEASE

# CANTERBURY ARABLE CROPPING



THIS REPORT CONTAINS THE KEY RESULTS FROM THE MINISTRY OF AGRICULTURE AND FORESTRY'S 2008 ARABLE MONITORING PROGRAMME. THE FULL HORTICULTURE AND ARABLE MONITORING REPORT 2008 WILL BE AVAILABLE IN SEPTEMBER 2008.

# **KEY POINTS**

- Gross farm revenue per hectare increased 28 percent in 2007/08 due to improved crop prices. However, farmers who set contracts at the start of the season were unable to capitalise on increasing cereal prices throughout the 2007/08 season. Crop prices are forecast to further improve in 2008/09, increasing revenue by 20 percent.
- > Farm working expenses per hectare increased 15 percent in 2007/08 due mainly to energy and fertiliser price rises, moderated by improvements in efficiency of use. The forecast 23 percent rise in farm working expenses in 2008/09 is likely to be conservative given recent general input price increases.
- > The arable model reflects a general trend towards increasing crop areas and reducing sheep numbers, with a greater focus on supplying the growing dairy industry with feed and grazing.
- Intensive arable farms are in a sound financial position and the outlook for the arable sector is positive. Farmers are responding to the current global lift in grain prices in a positive but prudent way by investing time and capital in improving the efficiency of their businesses.

## >>> TABLE 1: KEY PARAMETERS, FINANCIAL RESULTS AND FORECAST FOR THE CANTERBURY ARABLE MODEL

YEAR ENDED 30 JUNE	2004/05	2005/06	2006/07	2007/08	2008/09 Forecast
Total effective area (ha)	282	282	285	290	290
Effective cropping area (ha)	214	209	214	230	238
Total crop revenue (\$)	435 100	499 000	559 900	736 700	923 900
Sheep opening stock units	1 030	1 024	1 010	910	859
Lambing (%)	127	125	122	125	125
Gross farm revenue (\$)	673 100	653 800	695 600	903 000	1 083 000
Farm working expenses (\$)	365 100	393 800	420 600	490 700	603 000
Farm profit before tax (\$)	152 000	96 500	93 200	225 400	270 700
Farm surplus for reinvestment <sup>1</sup> (\$)	47 100	28 200	54 400	81 500	52 700

## Note

1 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 discretionary cash less off-farm income and drawings.

## >>> TABLE 2: CANTERBURY ARABLE MODEL CROP AREAS

YEAR ENDED 30 JUNE CROP	2006/07 HA	2007/08 HA	2008/09 Forecast Ha
Wheat	61	71	78
Barley	31	35	40
Other cereals	3	5	6
Grass seeds	37	45	46
Clover seeds	20	14	13
Vegetable/brassica seeds	15	15	14
Other seeds	8	7	3
Pulses	12	11	12
Silage crops	12	16	18
Process/fresh vegetable crops	15	11	8
Total crop area	214	230	238





## >>> TABLE 3: CANTERBURY ARABLE CROPPING BUDGET

		2007/08		2008/09 FORECAST	
	WHOLE FARM (\$)	PER HA (\$)	WHOLE Farm (\$)	PER HA (\$)	
REVENUE	· · · · · · · · · · · · · · · · · · ·	( <del>+</del> /	(4)	(47	
Cereals	293 300		381 000		
Small seeds	239 700		265 600		
Other crops	66 400		82 000		
Process/fresh vegetables	32 200		28 300		
Land leased for cropping	8 700		5 800		
Change in value of crop on hand	96 400		161 200		
Total crop revenue	736 700	2 540	923 900	3 186	
Sheep income (incl wool)	161 800	558	135 100	466	
Grazing income	35 000	121	45 000	155	
Other farm income	52 800	182	45 000	155	
LESS:					
Sheep purchases	81 700	282	65 800	227	
Stock value adjustment	-1 600	_5	-100	0	
Gross farm revenue		3 114	1 083 000		
Farm working expenses	903 000 490 700	1 692	603 000	3 735 2 079	
Cash operating surplus	412 300	1 422	480 000		
Interest	***************************************	419		1 <b>655</b> 478	
Rent and/or leases	121 500	0	138 700	4/8	
	65 400	226	70 600	243	
Minus depreciation  Farm profit before tax	225 400				
Taxation		777	270 700	933	
	60 500	209 <b>569</b>	71 500 <b>199 200</b>	246	
Farm profit after tax	164 900			687	
Add back depreciation	65 400	226	70 600	243	
Reverse stock value adjustment	-94 800	-327	-161 100	-556	
Off-farm income	3 000	10	3 000	10	
Discretionary cash	138 500	477	111 700	385	
APPLIED TO:					
Net capital purchases	100 000	345	100 000	345	
Development	25 000	86	44 000	152	
Principal repayments	32 000	110	50 000	172	
Drawings	54 000	186	56 000	193	
New borrowings	100 000	345	150 000	517	
Introduced funds	0	0	0	0	
Cash surplus/deficit	27 500	95	11 700	40	
Farm surplus for reinvestment <sup>1</sup>	81 500	281	52 700	182	
ASSETS AND LIABILITIES					
Farm, forest and building (opening)	5 655 000	19 500	7 504 900	25 879	
Plant and machinery (opening)	436 000	1 503	470 600	1 623	
Stock valuation (opening)	54 400	187	52 800	182	
Crop valuation (opening)	416 000	1 434	512 400	1 767	
Other farm related investments	0	0	0	0	
Total farm assets (opening)	6 561 300	22 625	8 540 700	29 451	
Total farm liabilities (opening)	1 383 600	4 771	1 421 600	4 902	
Total equity	5 177 700	17 854	7 119 100	24 549	
Symbol					

# Symbol

... Not applicable.

## Note

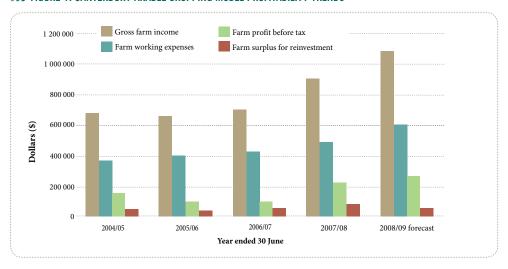
1 Farm surplus for reinvestment is calculated as follows: discretionary cash less off-farm income and drawings.

		2007/08	2008/09 FORECAST	
	WHOLE FARM (\$)	PER HA (\$)	WHOLE Farm (\$)	PER HA (\$)
FARM WORKING EXPENSES				
Permanent wages	36 500	126	38 000	131
Casual wages	4 350	15	4 640	16
ACC – employees	1 080	4	950	3
Total labour expenses	41 930	145	43 590	150
Contracting (including harvesting/drying)	22 620	78	24 940	86
Animal health	4 640	16	3 770	13
Breeding	0	0	0	0
Electricity	22 620	78	27 260	94
Feed (hay and silage)	4 350	15	4 350	15
Feed (crops)	0	0	0	0
Feed (grazing)	0	0	0	0
Feed (other)	1 450	5	0	0
Fertiliser	94 090	324	165 320	570
Lime	5 800	20	7 250	25
Freight	17 110	59	20 590	71
Seed dressing	29 580	102	28 710	99
Seeds	26 970	93	29 870	103
Shearing costs	2 730	9	2 580	9
Weed and pest control	79 750	275	91 060	314
Fuel	35 090	121	43 500	150
Vehicle costs (excluding fuel)	19 430	67	23 200	80
Repairs and maintenance	32 480	112	31 610	109
Total other working expenses	398 710	1 375	504 010	1 738
Communication costs (phone and mail)	3 770	13	3 770	13
Accountancy	4 350	15	4 350	15
Legal and consultancy	5 220	18	4 930	17
Other administration	3 480	12	3 480	12
Rates	9 860	34	10 440	36
Insurance	12 470	43	12 760	44
Water charges	1 160	4	1 160	4
Other expenditure	9 720	34	14 540	50
Total overhead expenses	50 030	173	55 430	191
Total farm working expenses	490 670	1 692	603 030	2 079
Wages of management	75 000	259	75 000	259
Depreciation	65 400	226	70 590	243
Total farm operating expenses	631 070	2 176	748 620	2 581
CALCULATED RATIOS				
Economic farm surplus (EFS¹)	271 900	938	334 400	1 153
Farm working expenses/GFR <sup>2</sup>	54%		56%	
EFS/total farm assets	4.1%		3.9%	
EFS less interest and lease/equity	2.9%		2.7%	
Interest + rent + lease/GFR	13.5%		12.8%	
EFS/GFR	30.1%		30.9%	

## Notes

1 EFS (or earnings before interest and tax) is calculated as follows: gross farm revenue, less farm 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.
2 Gross farm revenue.

## >>> FIGURE 1: CANTERBURY ARABLE CROPPING MODEL PROFITABILITY TRENDS



# INFORMATION ABOUT THE MODEL

Canterbury is the largest arable cropping area in New Zealand. The Canterbury arable cropping model represents about 500 properties larger than 100 hectares located throughout Canterbury, of which about half are in the mid Canterbury region.

The model is created from information drawn from 20 arable farms and a wide cross section of agribusiness representatives. The aim of the model is to typify an average arable farm for Canterbury. Budget figures are averaged from the contributing properties and adjusted to represent a real arable farm. Income figures include off-farm income, new borrowing, and other cash income. Expenditure figures include costs of management, production, debt, leasing, drawings, and development and capital purchases.

The monitored farms generate more than 50 percent of their income from growing crops. They are generally either more than 75 percent irrigated, or are located in normally reliable rainfall areas. Most properties grow a combination of crops, which are grouped in the budget into cereals, small seeds (including grass, clover and vegetable seeds), process vegetables, silage and other crops. Most have some type of stock enterprise as an integral part of the system, for example, grazing, trading and/or breeding stock.

For more information on the models contact Murray.Doak@maf.govt.nz

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