HORTICULTURE AND ARABLE MONITORING 2010

CANTERBURY ARABLE CROPPING

THIS REPORT CONTAINS KEY RESULTS FROM THE MINISTRY OF AGRICULTURE AND FORESTRY'S 2010 ARABLE MONITORING PROGRAMME.

KEY POINTS

- Crop yields and quality were generally better than 2008/09, due to good growing conditions. Cereal and small seed yields are budgeted to drop back 5-10 percent from the very good yields achieved in 2009/10.
- Cereal prices fell during the season due to an overhang of grain from 2008/09 harvest, and reduced demand.
- Farm profit before tax increased 29 percent in 2009/10 to $254 700, but includes a significant amount of un-contracted grain and other crop on hand at prices that are not guaranteed. The net cash surplus was therefore barely positive at $10 300, and there is further uncertainty about the 2010/11 budget.
- Farm profit before tax is budgeted to decrease 14 percent in 2010/11 to $218 400. Farmer morale is low, due to the poor cereal market and limited grass and clover seed growing opportunities, which are likely to prevail through 2010/11.
- More arable farmers than usual are actively considering changing land use to dairy farming, while others see opportunities for irrigation investment and efficiency gains.

TABLE 1: KEY PARAMETERS, FINANCIAL RESULTS AND BUDGET FOR THE CANTERBURY ARABLE CROPPING MODEL

YEAR ENDED 30 JUNE	2006/07	2007/08	2008/09	2009/10	2010/11 BUDGET
Total effective area (ha)	285	290	300	300	300
Effective cropping area (ha)	214	230	259	263	258
Total crop revenue ($)	559 900	736 700	844 400	841 000	825 400
Sheep opening stock units	1 010	910	859	759	759
Lambing (%)	122	125	120	130	140
Gross farm revenue ($)	695 600	903 000	1 012 000	1 041 300	1 012 500
Farm working expenses ($)	420 600	490 700	597 400	566 000	564 700
Farm profit before tax ($)	93 200	225 400	198 000	254 700	218 400
Farm surplus for reinvestment[1] ($)	54 400	81 500	48 200	116 300	159 200

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	2008/09 (HA)	2009/10 (HA)	2010/11 BUDGET (HA)
Wheat	83	84	82
Barley	43	25	27
Other cereals	5	5	5
Grass seeds	48	51	45
Clover seeds	16	21	17
Vegetable/brassica seeds	15	15	18
Other seeds	4	11	14
Pulses	14	21	20
Silage crops	20	14	14
Process/fresh vegetable crops	11	16	16
Total crop area	**259**	**263**	**258**
Effective area	300	300	300
Percent of effective area in crop	86%	88%	86%

Ministry of Agriculture and Forestry
Te Manatū Ahuwhenua, Ngāherehere

TABLE 3: CANTERBURY ARABLE CROPPING MODEL BUDGET

	2008/09	2009/10		2010/11 BUDGET	
	WHOLE FARM ($)	WHOLE FARM ($)	PER HA ($)	WHOLE FARM ($)	PER HA ($)
REVENUE					
Cereals	310 400	320 500	…	354 400	…
Small seeds	304 100	278 000	…	320 600	…
Other crops	103 400	78 200	…	97 600	…
Process/fresh vegetables	29 500	53 300	…	58 500	…
Land leased for cropping	7 800	7 200	…	7 300	…
Change in value of crop on hand	89 200	103 800	…	–12 900	…
Total crop revenue	**844 400**	**841 000**	**2 803**	**825 400**	**2 751**
Sheep income (including wool)	232 700	217 000	723	213 600	712
Grazing income	38 200	37 600	125	37 500	125
Other farm income	50 400	61 500	205	40 600	135
LESS:					
Sheep purchases	143 800	115 800	386	104 600	349
Stock value adjustment	–9 900	0	0	0	0
Gross farm revenue	**1 012 000**	**1 041 300**	**3 471**	**1 012 500**	**3 375**
Farm working expenses	**597 400**	**566 000**	**1 887**	**564 700**	**1 882**
Cash operating surplus	**414 600**	**475 400**	**1 585**	**447 700**	**1 492**
Interest	146 100	147 100	490	154 800	516
Rent and/or leases	0	0	0	0	0
Depreciation	70 500	73 600	245	74 500	248
Farm profit before tax	**198 000**	**254 700**	**849**	**218 400**	**728**
Tax	74 000	48 200	161	88 200	294
Farm profit after tax	**124 000**	**206 500**	**688**	**130 200**	**434**
Add back depreciation	70 500	73 600	245	74 500	248
Reverse stock value adjustment	–79 300	–103 800	–346	12 900	43
Off-farm income	3 000	3 000	10	3 000	10
Discretionary cash	**118 200**	**179 300**	**598**	**220 700**	**736**
APPLIED TO:					
Net capital purchases	91 000	80 000	267	70 000	233
Development	42 100	30 000	100	35 000	117
Principal repayments	84 000	65 000	217	87 700	292
Drawings	67 000	60 000	200	58 500	195
New borrowings	88 000	66 000	220	20 000	67
Introduced funds	0	0	0	0	0
Cash surplus/deficit	**–77 900**	**10 300**	**34**	**–10 500**	**–35**
Farm surplus for reinvestment[1]	**48 200**	**116 300**	**388**	**159 200**	**531**
ASSETS AND LIABILITIES					
Farm, forest and building (opening)	8 100 000	7 950 000	26 500	7 600 000	25 333
Plant and machinery (opening)	470 000	490 500	1 635	496 900	1 656
Stock valuation (opening)	97 900	85 900	286	88 000	293
Crop valuation (opening)	536 100	590 900	1 970	694 600	2 315
Other farm related investments (opening)	0	0	0	0	0
Total farm assets (opening)	**9 204 000**	**9 117 300**	**30 391**	**8 879 600**	**29 599**
Total liabilities (opening)	**1 583 600**	**1 630 600**	**5 435**	**1 631 600**	**5 439**
Total equity	**7 620 400**	**7 486 700**	**24 956**	**7 248 000**	**24 160**

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

Symbol
…Not applicable.

TABLE 4: CANTERBURY ARABLE CROPPING MODEL EXPENDITURE

	2008/09	2009/10		2010/11 BUDGET	
	WHOLE FARM ($)	WHOLE FARM ($)	PER HA ($)	WHOLE FARM ($)	PER HA ($)
FARM WORKING EXPENSES					
Permanent wages	42 000	42 300	141	42 600	142
Casual wages	4 200	5 100	17	5 700	19
ACC - employees	1 100	1 300	4	2 100	7
Total labour expenses	**47 300**	**48 700**	**162**	**50 400**	**168**
Contracting (including harvesting/drying)	22 500	27 900	93	26 400	88
Animal health	3 600	4 200	14	4 200	14
Breeding	0	0	0	0	0
Electricity	25 800	24 600	82	28 800	96
Feed (hay and silage)	5 700	6 300	21	4 200	14
Feed (crops)	0	0	0	0	0
Feed (grazing)	1 500	1 500	5	1 500	5
Feed (other)	1 500	1 800	6	300	1
Fertiliser	152 100	109 500	365	110 700	369
Lime	2 300	2 300	8	2 200	7
Freight	16 500	17 400	58	19 800	66
Seed dressing	35 400	34 200	114	33 400	111
Seeds	32 700	27 400	91	30 400	101
Shearing costs	3 300	4 600	15	4 600	15
Weed and pest control	93 300	94 000	313	94 500	315
Fuel	32 700	29 100	97	29 400	98
Vehicle costs (excluding fuel)	21 900	26 400	88	22 500	75
Repairs and maintenance	34 200	47 100	157	34 800	116
Total other working expenses	**485 000**	**458 200**	**1 527**	**447 700**	**1 492**
Communications (phone and mail)	3 900	3 900	13	3 900	13
Accountancy	4 800	5 700	19	5 100	17
Legal and consultancy	4 800	3 600	12	3 300	11
Other administration	5 100	4 800	16	4 500	15
Rates	11 100	12 000	40	12 000	40
Insurance	12 900	15 600	52	13 800	46
Water charges	2 400	3 900	13	6 000	20
Other expenditure (incl. ACC - owners)	20 100	9 600	32	18 000	60
Total overhead expenses	**65 100**	**59 100**	**197**	**66 600**	**222**
Total farm working expenses	**597 400**	**566 000**	**1 887**	**564 700**	**1 882**
CALCULATED RATIOS					
Economic farm surplus (EFS)[1]	269 100	326 800	1 089	298 200	994
Farm working expenses/GFR[2]	59%	54%		56%	
EFS/total farm assets	2.9%	3.6%		3.4%	
EFS less interest and lease/equity	3.5%	2.4%		2.0%	
Interest+rent+lease/GFR	14%	14%		15%	
EFS/GFR	27%	31%		29%	
Wages of management	75 000	75 000	250	75 000	250

Notes
1 EFS is calculated as follows: gross farm revenue 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 orchard assets to a maximum of $75 000.
2 Gross farm revenue.

FINANCIAL PERFORMANCE OF THE CANTERBURY ARABLE CROPPING MODEL IN 2009/10

Farm profit before tax increased 29 percent for the year to the end of June 2010 to $254 700. However, the net cash surplus for the year is barely positive at $10 300. The difference is due to a further 16 percent increase in the value of crop on hand.

The model remains at 300 hectares. Growth in farm size has virtually ceased due to tighter credit criteria. The total crop area in the model increased from 259 hectares to 263 hectares, reflecting a good range of grass, clover and pea options in 2009. The proportion of cereals grown has reduced in 2009/10, following a period of increased plantings in response to the global cereal price increases in early 2008.

REVENUE STEADY DUE TO MORE CROP

Crop revenue per hectare for the 263 hectares of crop grown fell 2 percent to $3200 per hectare despite yields being generally better than 2008/09, especially for cereals and dryland crops. The drop reflects a decline in price from the high levels of the global commodity boom in 2008/09.

The harvest period was delayed several weeks by cool, damp and overcast weather in January. This condensed the harvest period, putting the pressure on people and on machinery, but ultimately did not affect yields or quality.

GOOD SEASON FOR CROP PRODUCTION

Cereals thrived during a mild 2009 winter and warm, dry spring conditions. Crops were able to be planted on time and disease pressure was low. There were very few drying north-westerly winds through the growing season. Lower evapotranspiration allowed irrigation systems to keep up with crop water demand. The cool January was very good for grain fill. Figures 1 and 2 show the rainfall and growing degree days (GDD) for the season in mid Canterbury compared to 2008/09 and the long-term average.

Due to these favourable conditions, wheat yields in the model increased from 8.5 tonnes per hectare in 2008/09 to 9.1 tonnes per hectare in 2009/10. Barley showed an even greater increase of 37 percent, albeit off a poor 2008/09 result.

PROJECTED PRICES NOT ACHIEVED

The projected sell-down of carried over cereal stocks from the 2008/09 harvest did not occur in an orderly fashion. Farmers were not initially prepared to meet market prices that had returned to the pre-global commodity boom levels. The price drop resulted from low global cereal prices, reduced demand from dairy farmers due to a low initial milksolids price and good grass growing conditions, and high cereal production during 2008/09 from arable and sheep and beef farms.

On-farm storage was largely utilised to capacity, meaning that farmers were forced to take cereals to market at low prices to make way for the new harvest. In the mean time, cereal purchasers who require reasonably constant supplies of grain, were not able to purchase at the prices they considered reflected the global supply situation. They then sourced some cereals and substitute grains such as sorghum from Australia. Many arable farmers have felt

badly let down by this situation, and some rue not selling at prices offered earlier in the season.

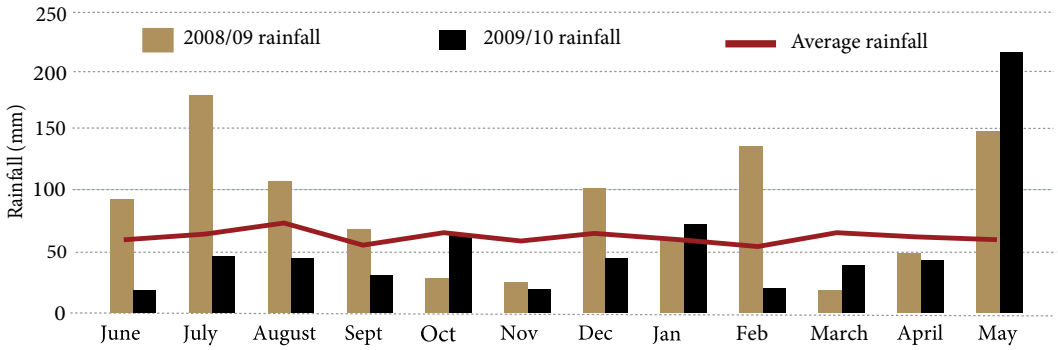
The model shows an 18 percent increase in crop on hand to $695 000, 48 percent of which is cereal grains.

OTHER CROPS ALSO PRODUCED WELL

Grass and clover seed areas were up for 2009/10, due to favourable market conditions at the time of planting in autumn 2009. Grass seed yields were up approximately 10–15 percent depending on variety, due to a good growing season. The condensed harvest was frustrating for growers, and also caused congestion with seed processors, but did not affect yields or quality.

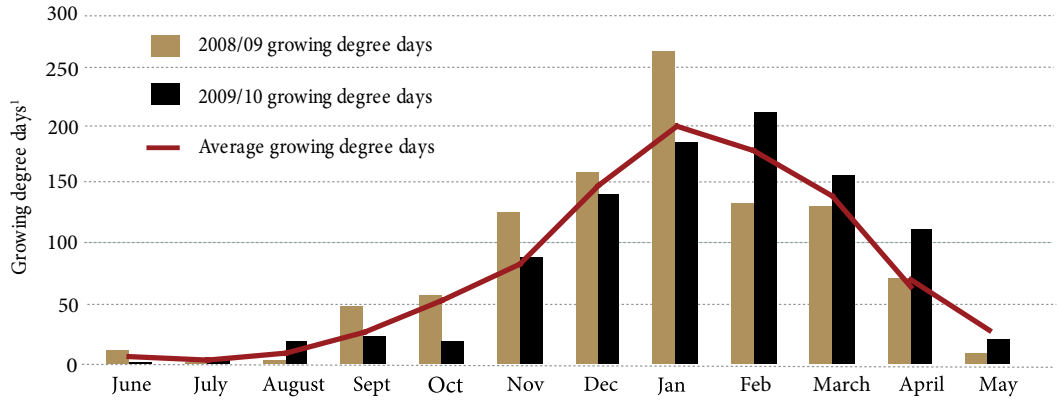
Vegetable and brassica seed areas and yields have been generally consistent compared with 2008/09. Some other

FIGURE 1: MID-CANTERBURY RAINFALL



Source: NIWA (Winchmore).

FIGURE 2: MID-CANTERBURY GROWING DEGREE DAYS



Note
1 GDD – growing degree days. GDDs are calculated by taking the average of the daily high and low temperatures each day compared with a baseline (usually 10 degrees centigrade). They help to predict the date that a flower will bloom or a crop reach maturity.
Source: NIWA (Winchmore).

crop options, such as linseed, increased in area. Carrot and radish seeds are the main higher value seed crops grown throughout Canterbury and they had an average year, despite some pollination concerns in the cool December.

Peas are the main pulse crop, and they too had a good growing season, with the exception of a significant number of crops being damaged or lost due to hail in December 2009. Process pea crops also had a generally good year, with some exceptionally good yields in central Canterbury, due to the cooler but dry weather over spring and early summer.

Maize silage areas were reduced, as the demand from dairy farmers was held back by the low initial payout. Warm and sunny conditions in April allowed yields to recover following the cooler weather experienced over summer.

Sales of fodder and straw recovered to levels of two years ago, and contributed a helpful $200 per hectare to revenue. Likewise, livestock grazing, lamb trading and those ewe flocks that remain on some properties contributed significantly to the revenue during 2009/10. Lamb trading in particular is increasingly favoured in the arable system, and margins were steady at around $27 per head before direct costs.

EXPENDITURE DOWN DUE TO FERTILISER PRICE DROPS

Farm working expenses fell 5 percent compared with 2008/09 to $566 000. This reduction is entirely due to a decrease in fertiliser prices, following the global energy price spike during 2008/09. However, this fall in expenditure was originally forecast by farmers to be 7 percent. Farm working expenses as a percentage of gross farm income have decreased, from 59 percent in 2008/09 to 54 percent for 2009/10.

Arable farmers are analysing cost effectiveness in farm spending, due to a tight cash situation. Labour expenses are steady with a tendency towards more flexible casual labour. Contracting expenditure was 24 percent higher than 2008/09 at $27 900, due to increased seed drying costs and more contract drilling following the difficult 2009 harvest. The condensed 2010 harvest also meant some farmers had to buy in contract harvesting. Electricity expenses fell 5 percent to $24 600 due to lower irrigation use.

ALL COSTS UNDER SCRUTINY

Fertiliser expenses fell 28 percent to $109 500, due to price drops for urea and phosphate based fertilisers. Growers are continuing to improve their focus on nutrient budgeting to optimise nutrient inputs, in order to manage costs. Farmers held weed and pest control expenses due to the favourable growing conditions and competitive pricing of chemicals.

Fuel expenditure fell 11 percent to $29 100, reflecting lower fuel prices and the increased use of contractors in 2009/10. Repairs and maintenance expenses were 38 percent higher than the previous year at $47 100, reflecting a catch-up in deferred maintenance on machinery and buildings. In addition, the condensed harvest put added pressure on machinery, resulting in some expensive repairs. Also, low unemployment in rural areas has generated a shortage of skilled machinery technicians and higher repair rates.

Standing charges overall showed increases in line with inflation. There was a 21 percent increase in insurance expenses to $15 600, reflecting a rise in rates and more crop insurance cover. Water charges from community irrigation schemes rose 63 percent in the 2009/10 model budget to $3900, due to reinvestments and development opportunities.

NET RESULT BETTER BUT CROP STILL TO SELL

Farm profit before tax increased 29 percent for the 2009/10 year to $255 000. While this is a good result, it includes the significant rise of $104 000 in the value of crop on hand.

Interest expenditure was the same as in the 2008/09 model at $147 100. The impacts of changing rates are highly variable between farms, depending on their choice of floating and fixed rates and the time of renewal. In general, overdrafts have been on the rise as crop on hand increases.

SIGNS OF CONFIDENCE

The farm surplus for reinvestment more than doubled to $116 300. Capital and development investments have fallen 17 percent compared with 2008/09 to a still significant $110 000. This shows there is confidence in the industry and a willingness to invest in development that provides an increase in returns, such as in irrigation. Analysis of the individual farm data shows that a few farmers are willing to invest large amounts, while many are waiting for a better outlook. Drawings have reduced 10 percent to $60 000.

Based on very few sales, land value has fallen slightly, helping the return on total farm assets to improve from 2.9 percent in 2008/09 to 3.6 percent.

BUDGET FINANCIAL PERFORMANCE OF THE CANTERBURY ARABLE CROPPING MODEL IN 2010/11

REVENUE FALLS EXPECTED

Farmers are budgeting for a 3 percent reduction in gross farm revenue, back to the levels of 2008/09. The crop area is expected to reduce slightly, with grass and clover seeds expected to be the area most reduced. Cereal and small seed yields are budgeted to decrease 5-10 percent, based on very good yields achieved in 2009/10.

CAN IT BE ACHIEVED?

Included in farmer's revenue expectations is a sell-down of crop on hand, at prices that are not guaranteed. The uncertainty and weekly volatility in feed grain markets is likely to continue for some time. Milling wheat contract prices had not been announced at the time of writing (June 2010), but are expected to be lower than those offered last year. On the upside, increases in the dairy payout and a cold start to the winter may increase demand for feed grains into spring.

SIGNS OF BEING AT THE BOTTOM OF THE CYCLE

Farmers are expecting a good range of spring crop options, and intend to increase barley, vegetable, brassica, and other small seed crop areas. This will almost make up for the reduced area in grass and clover seeds. At time of

writing there were hopeful signs in the garden pea area and some seed markets, although the impact of the European economic situation is still uncertain. Prices of most pea types have increased over the past few years and are holding, which is encouraging for farmers in an otherwise poor outlook. Industry commentators noted more certainty should come in late July when contracts will be finalised.

As fewer contracts for proprietary grass and clover varieties are available, and the outlook for prices of the public varieties (or "commons") is poor, it is surprising that budgeted areas in the model have held up reasonably well. It is thought that farmers may be hedging their bets on intended areas of grass and clover seed becoming livestock feed, depending on climatic conditions and relative prices in the spring.

Grazing revenue is expected to continue at 2009/10 levels at $37 500, with an improvement in margins on trading lambs from $27 per head to $31 per head before direct costs. Livestock numbers are budgeted to remain at 2009/10 levels.

FARMERS INTEND TO HOLD EXPENDITURE

Budget expenditure is almost the same as 2009/10 at $564 700. Most of the key expenditure items remain steady. Some items return to average levels from the 2009/10 year, such as contracting (down 5 percent to $26 400), electricity (up 17 percent to $28 800) and seeds (up 11 percent to $30 400). Growers have factored cost increases for fuel, freight and electricity due to the New Zealand Emissions Trading Scheme.

Fertiliser expenses are budgeted to remain steady, although some industry commentators noted that there are indications of fertiliser price rises. Other major expense items such as vehicle expenses (excluding fuel) at $22 500 and repairs and maintenance spending at $34 800 are expected to fall 15 and 26 percent respectively. Repairs and maintenance is an area that falls when new machinery is purchased, but is difficult to predict accurately.

Overhead expenses are expected to increase 13 percent to $66 600. There are significant increases in ACC rates on self-employed, as well as water charges increasing by more than 50 percent to $6000, driven by irrigation scheme upgrades.

Farm working expenses as a percentage of gross farm income is budgeted to be 2 percentage points higher than in 2009/10 at 56 percent.

LARGE INVESTMENTS BY SOME

Interest expenses are expected to increase 5 percent to $154 800. Tax is also budgeted to rise due to a better 2009/10 financial result. Arable farmers are indicating that capital and development expenditure is expected to fall by $5000, indicating confidence in the long-term. However, more analysis of the sample farms shows that the majority have decreased this item significantly, and a few intend investing large amounts on specific items of machinery or irrigation. The latter are considered "opportunity driven" investments, as the high New Zealand dollar makes it a good time to purchase large equipment. Irrigation scheme investment is considered by some to be a "once in a lifetime" opportunity. Even though current budgets may not support this expenditure in the short-term, it indicates that lenders have confidence in sound businesses in the arable sector.

NET RESULT ALSO FALLING

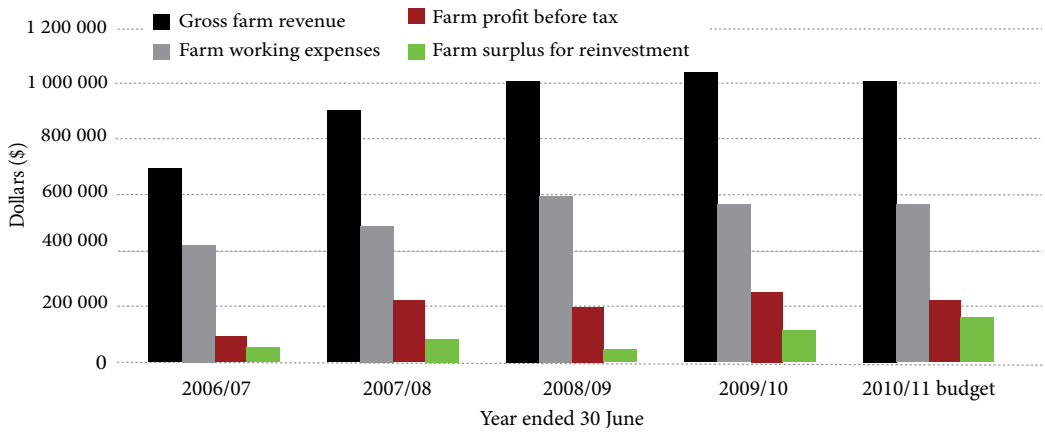
Farm profit before tax is budgeted to fall 14 percent compared with 2009/10 to $218 400. Reduced capital expenditure, drawings, borrowings, and a reduced overdraft from a sell down of crop on hand, means there is a cash deficit expected of $10 500 and a 37 percent increase in farm surplus for reinvestment to $159 200.

NERVOUSNESS JUSTIFIED IF PRICES DO NOT IMPROVE

This appears to be a good result on paper. However, there is a significant risk that this may not eventuate. Given the comments on the expected cereal and seeds markets, and some upside on expenditure, there is some concern that the budget result may not be achievable.

A sensitivity analysis on the model was carried out using current cereal prices for the sales of crop on hand and inflation sized rises in contract prices for the 2010/11 season. The result showed the gross revenue would fall by $65 000, and the budgeted cash deficit would increase to $52 000. This indicates the vulnerability of the model to continuing poor prices.

FIGURE 3: CANTERBURY ARABLE CROPPING MODEL PROFITABILITY TRENDS



INDUSTRY ISSUES AND DEVELOPMENTS

GROWER MORALE AND BUSINESS VIABILITY PLANS

The sensitivity analysis on the 2010/11 budget explains why at the time of writing, arable farmers' morale is the lowest it's been for many years. Poor cash flows over two years and in some cases, high debt, means those without solid commitment and a positive outlook are considering their options. Some are reluctantly considering future partial or full dairy conversion, or investing in a dairying syndicate, particularly where farm succession is the priority in the short to medium term. There are thought to be 20-25 conversions for the coming season in Canterbury, of which approximately a quarter to a half were arable farms.

It is likely the pressure on cash flow will continue to worsen through spring 2010 as a result of lower price contracts, particularly in cereals, grass and clovers. However, under the pessimistic surface, there is a feeling of cautious optimism amongst those growers who sense opportunity, since market variations are a part of arable farming and market prices currently appear to be at the bottom of the cycle.

The cautiously optimistic growers tend to have lower debt levels, and a risk management approach to marketing, favouring moderate priced contracts over risking the spot market. They see some medium term potential in global and local markets for arable produce, given the much publicised forecast increases in world food demand. The previous two seasons have coincided with some uncertainty around milk prices, which have recently been revised, and now have a much better outlook. Hopes are high that dairy farmers will resume investment in grain feeding equipment and higher input systems, which will assist in increasing demand for grain, seed, silage and straw residues locally.

A cereal industry group was formed in 2009 in response to the need for some forward thinking and analysis of the problems facing the sector. Three areas have been identified as needing urgent industry wide consideration: information on markets and supply; contract form and practice; and logistics. The challenge is to make a real difference to cereal growers, given the number of factors that are outside anyone's direct control. Many growers and industry personnel believe something significant must be done otherwise the industry critical mass will be under threat. The project is supported by the MAF Sustainable Farming Fund.

GROWER RESPONSE TO INPUT PRICE CHANGES AND SHORTAGES

On-farm responses aimed at strengthening business viability include: tight control of farm working expenses; increasing dairy support at the expense of trading stock; investing in irrigation shares and infrastructure; and maintaining similar overall crop areas with a shift towards small seeds in the medium term as markets allow.

Many growers have taken on board the lessons learned from chasing cereal markets. An undoubted strength of arable farmers is their capacity and willingness to take up opportunities to supply products very quickly and deftly. However, this can also be a limitation when certainty and consistency of supply is required to meet customer needs.

Banks are working closely with farmers on cashflow budgeting and monitoring. They are generally supportive of arable farms despite the current difficulties, as long as profitability is good, debt levels are manageable and speculative behaviour can be kept in check.

ENVIRONMENTAL AND NATURAL RESOURCE MANAGEMENT

While there is currently a focus on financial sustainability, the emphasis on efficient resource use has remained

important for growers. Peaking fertiliser prices resulted in a focus on fertiliser use efficiency and nutrient budgets per crop, with a positive impact on financial and environmental resources. The trend towards minimum tillage and minimising fuel and machinery hours to prepare seedbeds and establish a crop continues. When cultivation equipment is upgraded, it usually involves moving to reduced pass or minimum tillage gear.

Some farmers have made considerable investments in technology to monitor irrigation water use, application efficiency and crop demand. Given the investment made, the information is definitely being used to enhance overall water use efficiency on arable farms.

Farmers are waiting expectantly for tangible signs that the government is supportive of water infrastructure development, especially something that involves access to Lake Coleridge for some irrigation supply. Current scheme developments at Barrhill-Chertsey, Acton and Ashburton-Lyndhurst, have been well supported in principle. Some individuals are prepared to invest significant money, albeit with returns on paper that will take a long time to recoup without a change in land use.

The recent changes at Environment Canterbury are generally viewed positively by farmers. However, the uncertainty around water consents, the increased monitoring and consenting costs that farmers are likely to face, and the future for water scheme development remain to be addressed.

Information on and understanding of the impacts of the New Zealand Emissions Trading Scheme (ETS) is not high, although there was recognition of fuel, energy and flow-on costs starting from 1 July 2010.

The oil seed rape production industry has consolidated at a level similar to last year. It is therefore seen as neither a threat to the seed industry, nor a saviour for those farmers who wish to have another crop option.

INFORMATION ABOUT THE MODEL

Canterbury is the largest arable cropping area in New Zealand. The Canterbury arable cropping model represents approximately 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 18 arable farms and a wide cross-section of agribusiness representatives. The aim of the model is to construct a typical intensive arable farm for Canterbury. Budget figures are averaged from the contributing properties and adjusted to represent a real arable farm. Income figures include income from crops and stock, off-farm income, new borrowing, and other cash income. Expenditure figures include costs of 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 usually 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 model contact Murray.Doak@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 978-0-478-36393-7 (Print)
ISBN 978-0-478-36394-4 (Online)

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