



Dairy Monitoring Report

A short-term financial and physical forecast reflecting farmer, farm consultant and industry perceptions of farming trends and issues, production and financial figures

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All information for the model and commentary-only reports has been contracted in by MAF.

Foreword

Monitoring is a process whereby MAF Policy monitors the production and financial status of farms and orchards in terms of their cash income and expenditure. Trends, issues, and sector concerns are also monitored.

The report discussed within reflects farmers' and growers' expectations and intentions, and the thoughts of those servicing the sector. They are not MAF price or production predictions.

The model farms depicted in this report are representative of their farm type within the region. They are based on the average farm, in a statistical sense, for the regions. However, they have been adjusted to represent real farms.

From time to time the models are revisited. This results in some changes, and caution should be taken in comparing between years.

Information for each model is drawn from 20 real farmers and discussions with a wide cross-section of agribusiness.

The aim of each model is to best typify an average farm for the region. Budget figures are therefore indicative of the average levels of income and expenditure, management, stock performance or farm production, debt and expenditure on development and capital purchases. Similarly, drawings, new borrowing and off-farm income are averaged.

Quartile analysis on the basis of Net Farm Profit per hectare for the actual farms/orchards is provided in a summary page.

Monitoring is being constantly improved to better accommodate the needs of the users of the reports.

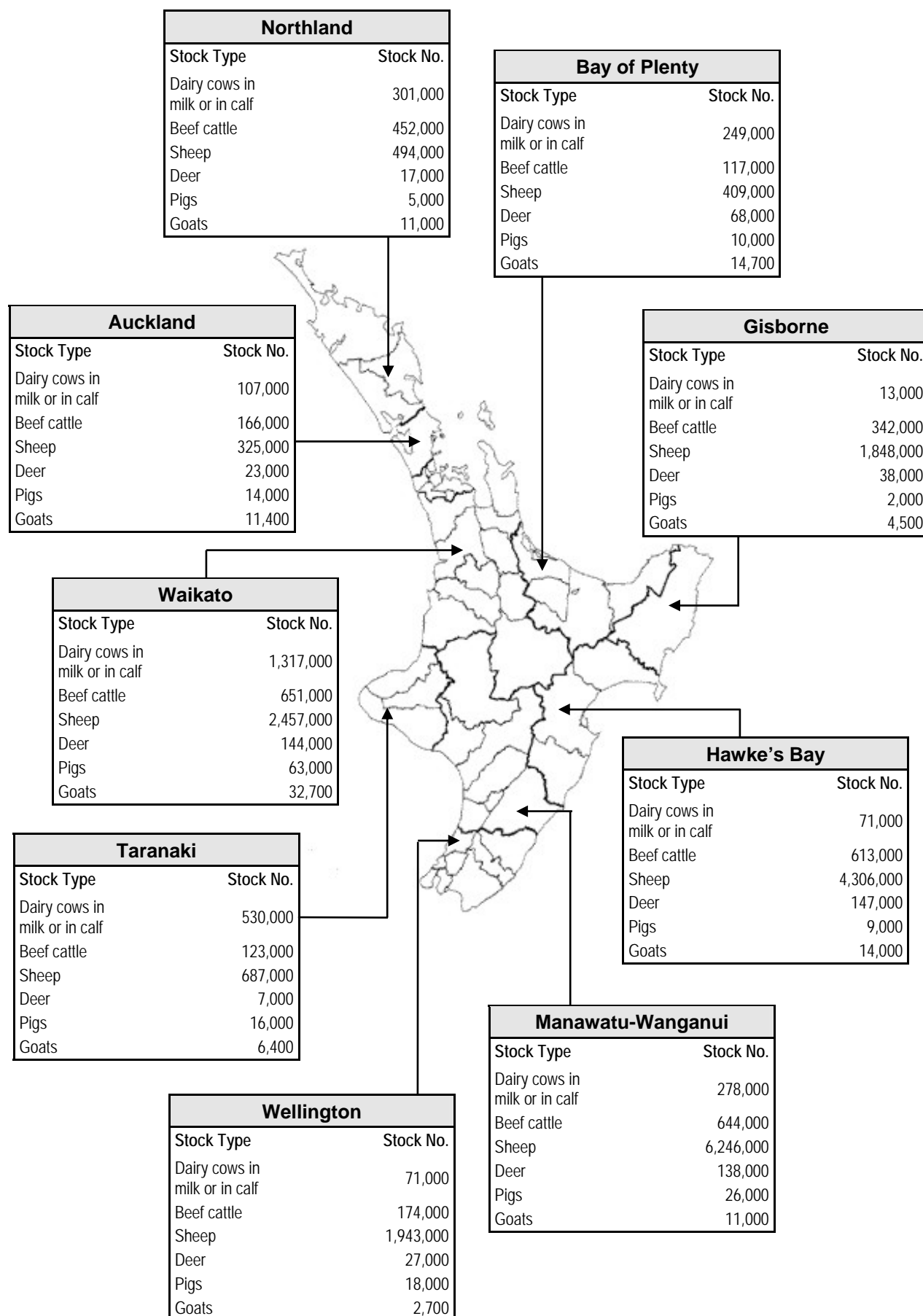
The Economic Farm Surplus (EFS) depicted in the model budgets is calculated as follows:

Gross Revenue + Change in Livestock Value - Working Expenses (excluding interest, rent and lease costs) - Depreciation - Wages of Management.

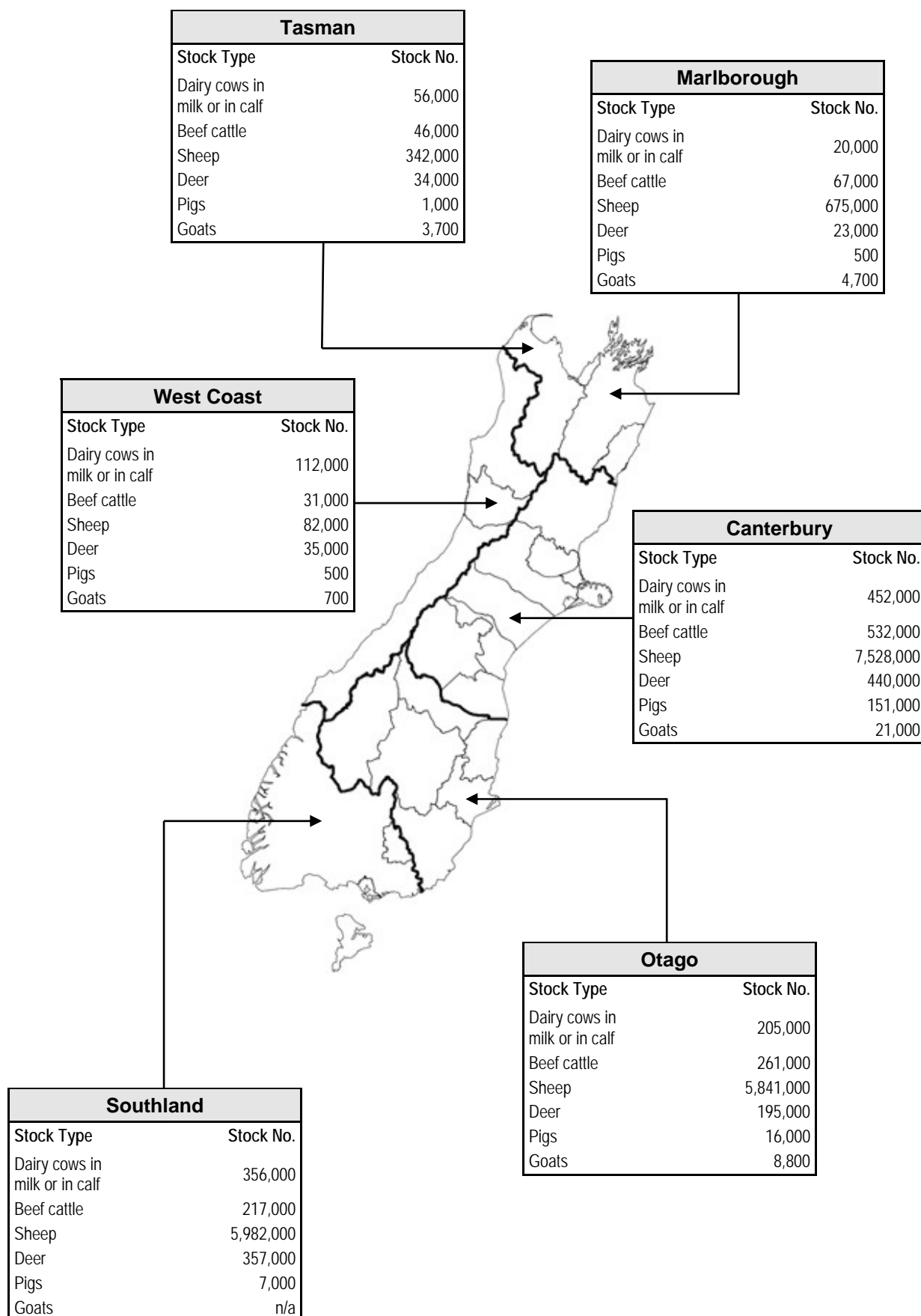
Wages of Management are calculated as follows:

\$38,000 allowance for labour input + 1% of total capital as managerial reward. An upper limit for WoM of \$75,000 has been set.

30 June 2004 Statistical Survey



30 June 2004 Statistical Survey



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International Dairy Product Prices

The last three dairy seasons (2002/03 to 2004/05) have seen one of the largest swings of international dairy product prices in history. Prices fell to 10-year lows in the first few months of the 2002/03 season. Since then, prices have risen to near-record levels in recent months. International butter prices have more than doubled since hitting a low point in July 2002, while prices for skim milk powder (SMP), whole milk powder (WMP), and cheese have all risen by just over 80% since August 2002.

The main reasons for the current high price levels include:

- Constrained exports of dairy products from Australia as its industry continues to recover from drought.
- High oil prices driving increased spending on dairy products, particularly butter and WMP, in oil-producing countries.
- Lower New Zealand dairy product exports, largely due to adverse weather conditions. Together, New Zealand and Australia supply around 50% of the international trade in dairy products (excluding intra-European Union (EU) trade). Therefore, fluctuations in Oceania's production and export volumes have the potential to significantly affect world prices.
- EU decisions to focus on lowering domestic EU prices, increasing domestic consumption in the EU and lowering the volume of dairy products available for export.

Average annual international prices for all products are projected to start falling early in the 2005/06 dairy season, as demand for products declines and supply increases at the current high prices (SMP prices, however, have been falling since December 2004).

International prices, based on the Organisation for Economic Co-operation and Development's (OECD) March 2005 projections, are forecast to generally fall throughout the outlook period and remain below 2004/05 prices. However, they remain above the average prices of the past 12 years. Higher than average prices are expected to be underpinned by several factors, including those outlined below.

Low Australian dairy export volumes

In March 2005, the Australian Bureau of Agricultural and Resource Economics projected that Australian dairy export volumes will not return to pre-drought levels until 2009 (ABARE, 2005).

Significantly higher oil prices over the outlook period

This is a result of strong demand from China, ongoing concerns about the security of supply in the Middle East, and concerns about the adequacy of spare world production capacity in the event of a significant disruption to supply (ABARE, 2004). Higher oil prices have a double-edged effect on dairy product demand. While they drive increased spending on dairy products in oil-producing countries, they also fuel global inflation, constraining economic growth and purchasing power.

Progressively lower European intervention prices stemming from the EU's 2003 Common Agricultural Policy (CAP) Reform

Under the EU's CAP Reform of June 2003, intervention prices for butter and SMP are to be reduced progressively over time. Butter prices are to be reduced by a total of 25% by 2007, and SMP prices by 15% by 2006. The OECD estimates that these changes will result in lower EU production of all the major dairy products except cheese, as milk will be diverted away from butter and SMP production into the relatively more profitable cheese production. For all the main dairy products, EU dairy export volumes are expected to fall over the outlook period, leading to rising world prices (OECD, 2004a).

Modest demand growth in OECD countries

The OECD predicts increasing consumption of WMP and cheese, a marginal increase in the consumption of butter, and static consumption of SMP in these countries. The demand for prepared,

ready-to-eat, and fast-food meal options, as well as indulgence dairy products, is expected to increase in these markets (OECD, 2004b).

Strong demand growth in non-OECD countries

In these markets the highest growth is expected in the demand for milk powder, particularly WMP, which is used both for reconstituting into liquid milk and as an ingredient in processed foods. The main drivers for this growth in demand are predicted to be:

- growing per capita income;
- the trend toward urbanisation and associated changes in diets and tastes away from traditional foods toward Western foods;
- the increasing presence of Western retail chains;
- population growth expanding the consumption base (OECD, 2004b).

Dairy Industry Average Prices

Year End May	Unit	2003	2004	2005e	2006f	2007z	2008z
USD/NZD spot rate	USD	0.514	0.624	0.689	0.684	0.612	0.576
USD/NZD Fonterra hedged rate	USD	0.475	0.520	0.615	0.649	0.627	0.583
Fonterra payout	\$/kgMS	3.63	4.25	4.50	3.85	3.80	4.20
Average dairy company payout	\$/kgMS	3.66	4.25	4.49	3.87	3.83	4.23

Source: MAF

e = estimate; f = forecast; z = projection

References:

Australian Bureau of Agricultural and Resource Economics (2004) Australian commodities, September quarter.

Australian Bureau of Agricultural and Resource Economics (2005) Australian commodities, March quarter.

Organisation for Economic Co-operation and Development (2004a) Medium term market impacts of the 2003 EU Common Agricultural Policy Reform.

Organisation for Economic Co-operation and Development (2004b) OECD Agricultural Outlook.

Further information on the outlook for the dairy industry is available at:

<http://www.maf.govt.nz/mafnet/rural-nz/statistics-and-forecasts/sonzaf>

Sector Overview

The 2004/05 season was a very difficult year climatically throughout the whole country. The spring was long and cold in most regions, followed by a short but good summer, which in turn was followed by a dry autumn in the North Island, and wet in the South. This resulted in below average, if not erratic, pasture growth throughout the year, making grazing management difficult and reducing milksolids production in most regions compared with the 2003/04 season.

As with last year, most regions saw good climatic conditions through May into June, and most farms are now going into the 2005 winter with reasonable pasture covers, but with cows in less than optimal condition.

A significant spin-off from the poor spring was a rise in the number of empty cows; up 2-3% on average in most regions to around 10-12% in total, although some farms recorded 30-50% empties. With a shortage of replacement stock and the high empty rate, some farms are struggling to go into the 2005/06 season with the same number of cows as at the start of the 2004/05 season.

Despite the drop in production, gross farm revenue at the national level is up 9% on the back of an increase in milksolids payout, currently up 25 cents per kilogram of milksolids (/kgMS) over last year's payout. At the same time, farm working expenses lifted 10%, with significant increases in wages and feed costs. Spending on development and capital purchases also remains at a healthy level.

Despite the lift in revenue, farmers have again recorded a disposable deficit before new borrowing and off-farm income. This has been a regular occurrence now for several years. Of the 100 monitored farms, 59 ran a disposable deficit for the 2004/05 season. For most farms this loss is offset by new borrowing and/or off-farm income.

While many farms are technically operating at a loss, this has been more than offset by increases in capital values. The model achieves a 2.9% cash return on capital (calculated as EFS/total farm capital) in 2004/05, while at the same time recording an 11.7% capital gain on land, buildings and shares. Since 1990, the average (nominal) return on capital has been 12.2%, of which 75% is capital gain on land, buildings and shares.

Farmers are currently hoping for, and budgeting on, a return to more normal climatic conditions in 2005/06. Consequently, they are budgeting on an increase in milksolids production to at least 2003/04 levels. While they are also budgeting on Fonterra's announced payout of \$3.85/kgMS, there is a strong expectation that the final payout will exceed \$4.00. Gross farm revenue is projected to drop only 1%, while farm working expenses increases by 2.2%, with farmers budgeting for a general increase in costs across the board. Most farms are still budgeting to operate at a bottom line loss before new borrowings and off-farm income.

On the industry front most farmers appear to be happy with the direction Fonterra is taking. Many admit they underestimated the issues involved with amalgamation and are pleased that a number of these appear to have been settled, although they acknowledge that there are many more issues to be sorted through. The recent vote on altering the peak notes system and introducing contract milk was passed with little dissension, although farmers again realise more work is probably required on Fonterra's capital structure. Farmers are also watching the start up of new companies Open Country Cheese Company and Synlait with interest.

Overall, farmer morale and confidence is high heading into the 2005/06 season.

Northland

Model Description

The model represents spring calving dairy farms north of Auckland City.

Production varies around 270-320 kgMS/cow and stocking rates around 2.0-2.2 cows/ha. Surplus calves are sold at 4 days of age for slaughter (bobby calves) or for beef rearing. Grazing some of the heifer replacements and most of the cows off the farm during winter is common.

The model represents an established family partnership employing some casual labour. Equity is around 87% and interest payments absorb about 8% of gross farm revenue.

Table 1: The Model in Summary 2004/05

Effective area:	108 ha	Opening stock wintered:	311 hd
		Milking cows	242 hd
		Replacement heifers	66 hd
		Other cattle	3 hd

Table 2: Key Parameters

	2001/02	2002/03	2003/04	2004/05	2005/06f
Effective area (ha)	102	104	108	108	108
Cows wintered	212	227	235	242	250
Cows milked at 15 December	207	219	222	233	237
Stocking rate (cows/ha)	2.0	2.1	2.1	2.2	2.2
Total milksolids (kg)	59,075	65,755	60,495	63,520	64,790
Milksolids/ha	579	632	560	588	600
KgMS/cow milked	285	300	273	273	273
MS advance to end June (\$/kg)	4.70	3.30	3.72	3.95	3.50
MS deferred payment (\$/kg)	0.70	0.60	0.27	0.50	0.55
Gross farm revenue (\$)	333,316	271,072	270,949	312,328	298,022
Net trading profit (\$)	172,830	43,467	86,903	105,657	91,159
Disposable surplus/deficit (\$)	-21,415	-12,508	-6,457	-12,544	-15,282

Key Points

- Northland dairy farmers have experienced two dry autumns in a row. Although production has continued to increase, it has not returned to the levels seen in the record 2002/03 year.
- Revenue earned from milksolid production in 2004/05 rose by just over 15%.
- The 2004/05 year saw the model generate its first disposable surplus for five years.
- Increases in land values have given farmers a lot of confidence in their industry.
- The negative side of increasing values is that it is easier for marginal dairy farmers to exit the industry by cashing in their dairy company shares and remaining in beef production, but the high values may make it more difficult for new farmers to enter the industry.

Physical Factors

Northland dairy farmers were hoping for a return to a more normal season following the difficult 2003/04 year. July to September 2004, which are usually Northland's wettest three months, were quite dry, with many areas receiving only 40-50% of their normal rainfall. This simplified winter and spring

management, and the usual signs of treading damage and pugged pastures were not evident. Herds came through the winter in good condition and calving problems were minimal.

Cool temperatures and poor pasture growth rates from October to December 2004 caused problems at a time when herds needed to be fully fed around mating time. Many herds were very short of feed and a number of herds lost condition and experienced poor conception rates at mating. Empty rates in mid Northland were 4-5% above average with 15-16% empty rate being common. In the far north rates as high as 20-25% of herds not being in calf are not uncommon. There was little surplus feed to make into supplements and although maize crops established well, temperatures were cool enough to limit growth rates,

January to March 2005 saw a return to warm temperatures. Average or above average rainfall in January and February resulted in very good pasture growth. A lot of late season hay and silage was harvested during this period. Milk production accelerated and dairy farmers counted on a good autumn to get them up to forecast production levels. Rainfall during March was well below average and soils dried rapidly and stayed dry right through until May, when average rainfall again occurred. Northland experienced another summer with very low facial eczema spore counts and little clinical signs of the disease in dairy herds.

Kikuyu pastures which had bolted during the warm, moist January/February period were grazed closely from March to May. However, milk production in April and May was 27% below the same period in 2004 which itself was one of the driest autumns for some time. Pastures are well grazed and there have been good growth rates during May and early June to build up feed prior to winter.

In June 2004 during the past farm monitoring round Northland farmers had just experienced an 8% milk production drop compared with the record 2002/03 year. They were optimistic that production would return to somewhere near normal and were forecasting an 8% increase in milksolids production. In spite of the difficult season, production rose by around 5%, which reflects slightly more cows and an increase in per cow production. On most farms the 2002/03 year remains the record production year.

Northland dairy farmers are looking forward to another 2% increase in production in the 2005/06 year. This optimism is based on a known small increase in cow numbers but, more importantly, an expectation that the season will return to somewhere near a normal rainfall year.

Financial Factors

2004/05 Review

Revenue

In June 2004 farmers were forecasting milksolids revenue to increase by less than 3% to close to \$250,000 in the 2004/05 year, even though they were forecasting an 8% increase in milksolids production. However, the 2003/04 milksolid price rose from an expected \$3.72-\$4.25/kgMS and the 2004/05 milksolid advance lifted to \$3.95/kgMS. Milksolid revenue earned during the 2004/05 season increased by just over 15% when compared with the previous year.

Cattle prices have remained at relatively high levels and the revenues earned from cattle sales are very similar to those forecast in 2004.

Expenditure

Cash farm expenditure increased by more than 10% to around \$175,000. Half of this increase is accounted for by additional expenditure on fertiliser and repairs and maintenance. More nitrogen is being applied, with rates now averaging around 70-80 kgN/ha. This has been applied in the spring to boost pasture quantities and in autumn to stimulate the growth of ryegrasses to provide winter feed

from Kikuyu based pastures. More phosphate and potash is also being applied on farms, reflecting increased intensity. More was also spent on upgrading races and improving drainage.

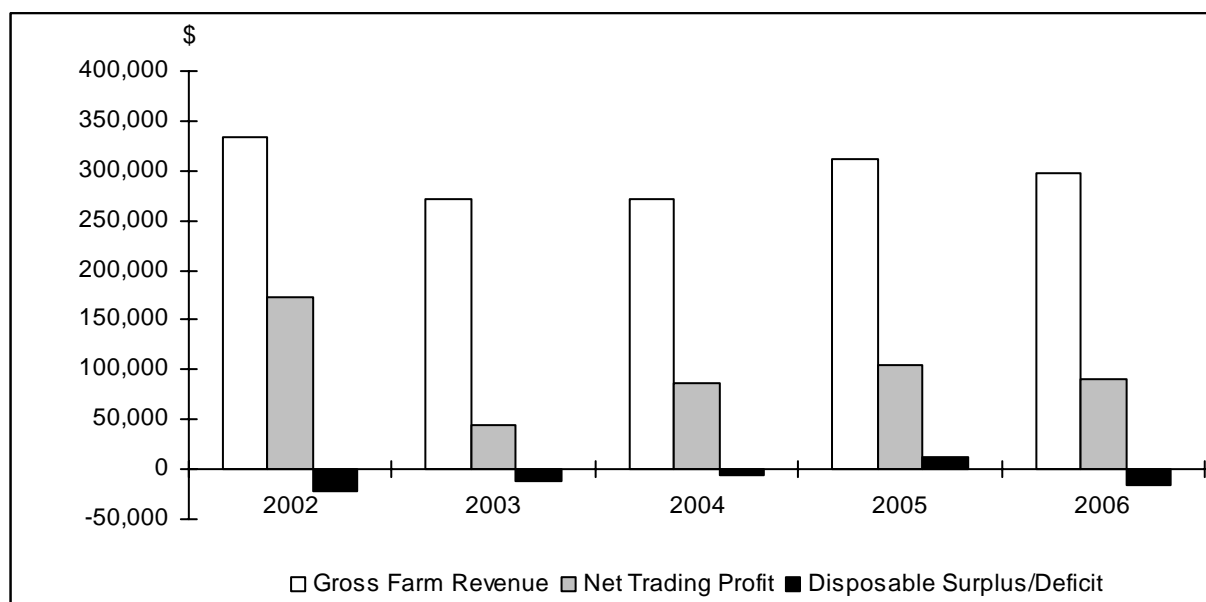
Most other items have shown a gradual lift in prices, rather than additional quantities or change in practices.

Net Result

Cash farm surplus and net trading profit have both shown large increases over 2003/04, at 24% and 44%, respectively. In this relatively good financial year, personal drawings and development expenditure have increased. Capital purchases have also been maintained at a high level. This is largely on plant and equipment as the fall in milksolid production from the record 2003/03 year has meant most farmers have not had to purchase additional dairy company shares.

A disposable cash surplus of around \$12,500 was generated in the 2004/05 year and, after adding off-farm earnings, which have remained relatively constant at about \$13,500, a positive net cash change of around \$26,000 was achieved.

Northland Profitability Trends



2005/06 Forecast

Revenue

Farmers are forecasting a 5% decrease in gross farm revenue in the 2005/06 year. A small forecast increase in milksolid production does not make up for an expected reduction in the milksolid price from \$4.50/kgMS in 2004/05 to an expected \$3.90/kgMS for the 2005/06 season.

Cattle sales are expected to generate a slightly higher return in 2005/06. More surplus animals become available from the larger herd and per head schedule prices are expected to firm slightly.

Expenditure

Farmers are forecasting cash farm expenditure to be very similar to the 2004/05 year. Most items are expected to rise in price, but any increase would be compensated for by a forecast decrease in repairs and maintenance expenditure.

Net Result

Cash farm surplus and net trading profit are both expected to decline because of lower revenues. The tax payment will be almost three times higher in the 2005/06 year as steady increases in taxable income have led to increasing amounts of terminal tax coming due in each year.

Net trading profit after tax reduces by more than 40% to about \$53,000 due to the lower revenue and higher income tax payment. The model ends up with a disposable deficit of around \$15,000 but, after including off-farm earnings of around \$12,000, there will be a negative net cash change of around \$3,000.

The 2004/05 year is the only one of the last five years to show a positive net cash change. Farmers are not worried about this as over the same period equity in the property has increased by over \$1 million.

Issues and Trends

In spite of seasonal difficulties, Northland dairy farmers are confident about the future of their industry. There was wide support in Northland for Fonterra's attempt to take over an Australian milk processing company and plans to modify and simplify the share structure.

The dry summer has left many autumn calving herds very short of feed. More supplements have been fed out during autumn than usual. Many winter milking herds are struggling to meet their quota production levels.

Cow sale prices have fluctuated during the season. In summer, several farmers were having difficulties selling their herds. However, recently, good quality recorded cows have been fetching \$1,100-\$1,200/hd.

A small number of Northland farmers have attempted once-a-day (OAD) milking; 1-2% tried milking all season and between 10 and 20% tried OAD milking in the latter half of the season. Production responses have been variable, but in-calf rates have been excellent in OAD herds. Once-a-day milking is here to stay, but it is not suitable for all farmers.

There are questions about the future of the Northland dairy industry. Numbers of farms supplying Fonterra in Northland have been falling. There are now about 1,220 suppliers compared with 1,600 not too many years ago. Despite the reduction in the number of farms, milk supplies from Northland have not yet shown a decline. Competing land uses for dairying are largely associated with subdivision into lifestyle blocks close to Auckland City and on the east coast of Northland.

Land prices show a coastal influence – dairy properties near the coast have sold for as much as \$41/kgMS while similar properties away from the coast have sold for around \$25/kgMS. There is a shortage of good dairy farms on the market. However, farms that have spent capital on things such as effluent disposal, drainage and fencing waterways, remain highly marketable.

Northland Budget

	2004/05			2005/06f		
	\$			\$		
	Whole farm	per cow	per kgMS	Whole farm	per cow	per kgMS
Revenue						
Milksolids	281,152	1,207	4.43	261,701	1,104	4.04
Cattle	32,476	139	0.51	37,621	159	0.58
Other farm income	0	0	0.00	0	0	0.00
Less:						
Cattle purchases	1,300	6	0.02	1,300	5	0.02
Gross farm revenue	312,328	1,340	4.92	298,022	1,257	4.60
Cash farm expenditure	175,489	753	2.76	175,540	741	2.71
Interest	25,920	111	0.41	21,574	91	0.33
Rent and/or leases	0	0	0.00	0	0	0.00
Cash farm surplus	110,919	476	1.75	100,909	426	1.56
Stock value adjustment	8,238	35	0.13	5,025	21	0.08
Minus depreciation	13,500	58	0.21	14,775	62	0.23
Net trading profit	105,657	453	1.66	91,159	385	1.41
Taxation	12,448	53	0.20	37,996	160	0.59
Net trading profit after tax	93,209	400	1.47	53,163	224	0.82
Allocation of Funds						
Add back depreciation	13,500	58	0.21	14,775	62	0.23
Reverse stock value adjustment	-8,238	-35	-0.13	-5,025	-21	-0.08
Drawings	39,500	170	0.62	40,500	171	0.63
Principal repayments	11,927	51	0.19	13,195	56	0.20
Development	12,500	54	0.20	12,500	53	0.19
Capital purchases	22,000	94	0.35	12,000	51	0.19
Disposable surplus/deficit	12,544	54	0.20	-15,282	-64	-0.24
Other Cash Sources						
New borrowing	0	0	0.00	0	0	0.00
Off-farm income	13,500	58	0.21	12,000	51	0.19
Other cash income	0	0	0.00	0	0	0.00
Net cash change	26,044	112	0.41	-3,282	-14	-0.05
Assets and Liabilities						
Farm, forest & building (opening)	1,390,683	5,969	21.89	1,504,086	6,346	23.21
Plant and machinery (opening)	90,000	386	1.42	98,500	416	1.52
Stock valuation (opening)	286,989	1,232	4.52	295,227	1,246	4.56
Dairy company shares	350,474	1,504	5.52	370,858	1,565	5.72
Total farm capital	2,118,146	9,091	33.35	2,268,671	9,572	35.02
Total debt opening	267,250	1,147	4.21	267,250	1,128	4.12
Equity (assets-liabilities)	1,850,896	7,944	29.14	2,001,421	8,445	30.89

Northland Budget

	2004/05			2005/06f		
	\$			\$		
	Whole farm	per cow	per kgMS	Whole farm	per cow	per kgMS
Farm Working Expenses						
Permanent wages	0	0	0.00	0	0	0.00
Casual wages	8,400	36	0.13	8,400	35	0.13
ACC	2,143	9	0.03	4,142	17	0.06
Animal health	13,200	57	0.21	13,200	56	0.20
Breeding	6,600	28	0.10	6,640	28	0.10
Dairy shed expenses	5,739	25	0.09	5,780	24	0.09
Electricity	7,300	31	0.11	7,650	32	0.12
Feed (hay and silage)	7,150	31	0.11	6,750	28	0.10
Feed (feed crops)	5,850	25	0.09	5,850	25	0.09
Feed (grazing)	9,867	42	0.16	10,226	43	0.16
Feed (other)	6,970	30	0.11	8,220	35	0.13
Fertiliser	33,242	143	0.52	32,674	138	0.50
Lime	2,378	10	0.04	2,378	10	0.04
Freight (not elsewhere deducted)	1,200	5	0.02	1,200	5	0.02
Re-grassing costs	1,750	8	0.03	1,800	8	0.03
Weed and pest control	3,165	14	0.05	3,180	13	0.05
Fuel	7,125	31	0.11	7,510	32	0.12
Vehicle costs (excluding fuel)	10,505	45	0.17	9,000	38	0.14
Repairs and maintenance	15,080	65	0.24	12,800	54	0.20
Communication costs (phone and mail)	2,120	9	0.03	2,150	9	0.03
Accountancy	3,105	13	0.05	3,220	14	0.05
Legal and consultancy	1,624	7	0.03	1,800	8	0.03
Other administration	1,800	8	0.03	1,800	8	0.03
Water charges (irrigation)	0	0	0.00	0	0	0.00
Rates	4,606	20	0.07	4,840	20	0.07
Insurance	4,830	21	0.08	4,890	21	0.08
Other expenditure	9,740	42	0.15	9,440	40	0.15
Cash farm expenditure	175,489	753	2.76	175,540	741	2.71
Calculated Ratios						
Economic farm surplus (or EBIT)	72,395	311	1.14	52,046	220	0.80
Cash farm expenditure/GFR	56%			59%		
EFS/total farm capital	3.4%			2.3%		
EFS less interest and lease/equity	2.5%			1.5%		
Interest+rent+lease/GFR	8.3%			7.2%		
EFS/GFR	23.2%			17.5%		
Economic Farm Surplus (EFS) is calculated as follows:						
Gross Revenue+Change in Livestock Value-Farm Working Expenses-Depreciation-Wages of Management						
Wages of Management = 1% of Opening Total Farm Capital + \$38,000 (to a maximum of \$75,000)						

Waikato/Bay of Plenty

Model Description

This model is representative of seasonal supply dairy farms in the Waikato and Bay of Plenty regions. It is based on an average property of 102 effective hectares (ha), wintering 277 cows and producing 87,000 kgMS.

Some surplus bull calves are sold as 4-day-old calves for beef rearing, with the remaining surplus calves sold as bobbies. The replacement yearling heifers are grazed off the farm for 12 months.

An owner-operator who milks the cows and employs a permanent (single) worker manages the farm. The all-up capital value of the business is \$3.525 million, with an equity level of 80%.

Table 1: The Model in Summary 2004/05

Effective area:	102 ha	Opening stock wintered:	333 hd
		Milking cows	277 hd
		Replacement heifers	56 hd

Table 2: Key Parameters

	2001/02	2002/03	2003/04	2004/05	2005/06f
Effective area (ha)	94	100	101	102	102
Cows wintered	255	267	272	277	285
Cows milked at 15 December	248	257	262	266	268
Stocking rate (cows/ha)	2.70	2.6	2.6	2.6	2.6
Total milksolids (kg)	76,200	85,400	86,700	83,300	87,000
Milksolids/ha	810	854	858	817	853
KgMS/cow milked	307	332	331	313	325
MS advance to end June (\$/kg)	4.70	3.30	3.75	395	3.50
MS deferred payment (\$/kg)	0.60	0.60	0.30	0.45	0.55
Gross farm revenue (\$)	450,404	357,020	369,900	397,930	384,135
Net trading profit (\$)	180,188	61,019	92,532	91,431	68,497
Disposable surplus/deficit (\$)	33,321	-25,270	-5,713	-28,488	-15,914

Key Points

- A difficult year climatically resulting in a drop in production.
- Gross revenue has increased compared with 2003/04, mainly due to the higher milksolids payout.
- On-farm spending has increased.
- Farmer morale is high.

Physical Factors

Most farms went into winter 2004 with only average pasture covers of 2,000-2,200 kilograms dry matter per hectare (kgDM/ha) and with cows in less than optimal condition. Winter 2004 was long and cold in most areas of the Waikato and Bay of Plenty, and these conditions prevailed well into spring. Accordingly, pasture growth was slow, and in spite of a lot of supplementary feed being fed out during this time, milk production fell behind last year's levels.

Spring finally arrived in November and December, with warm temperatures and good pasture growth, and many farmers caught up with making their supplementary feed.

Table 3: Rainfall Recorded (mm)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Ruakura:													
Mean	83	79	81	97	110	124	123	112	97	101	94	89	1,189
2003	103	45	129	41	88	150	72	45	160	72	121	142	1,168
2004	77	220	17	24	118	125	89	96	100	127	80	124	1,195
2005	45	48	50	31	193								
Te Puke:													
Mean	118	88	136	134	99	148	166	183	137	166	138	126	1,732
2003	190	89	209	97	135	181	76	109	167	203	73	98	1,629
2004	84	320	9	191	255	168	286	86	134	187	83	184	1,987
2005	35	84	157	22	405								

Source: NIWA

The summer then turned hot and dry, especially over February, March and April. The Bay of Plenty fared slightly better with some rain at strategic times. By early May most farms were short of feed, running low on supplements, behind in milk production, and cows in only average condition of around 4.0.

Good rain through May, coupled with warm temperatures, saw excellent pasture growth. Most farms are now going into winter with reasonable pasture covers of 2,200-2,400 kgDM/ha, although cow condition is still less than ideal.

Heavy rain in the eastern Bay of Plenty in July 2004 resulted in widespread flooding which affected many farms. More flooding, albeit on a slightly reduced scale, occurred in December and, again, in the coastal Bay of Plenty in May 2005. These conditions disrupted affected farms over the whole season.

A consequence of the poor spring has been a significant rise in the number of empty cows. The average empty rate is estimated at 12%, 2-3% up on usual. As in most years there is a wide range, with some herds recording up to 30% empties. Some farmers are now running a higher number of replacement heifers (25% compared with the more usual 20%) as a result of a trend towards increased numbers of empty cows.

While the monitored farms have increased cow numbers heading into the 2005/06 season (by 1.8%) many farms are heading into the new season with the same, or less, cows compared with a year earlier. This is a direct reflection on the high empty rate and the lack of suitable replacements. Currently farmers are budgeting to lift cow numbers heading into the 2006/07 season by 2.8%.

It would appear that the usual area was planted in maize for silage this year. However, with the poor climatic conditions, yields were down, as was quality. A number of maize crops intended for grain were harvested for silage when it became apparent that the grain yield would be well down. Most pasture supplements were fed out over the dry summer/early autumn, so many farms are going into winter with less supplement on hand than usual, with most of this being maize silage. The price of maize silage was around 21-22 cents/kgDM (c/kgDM) landed on farm. Palm kernel is becoming increasingly popular, given its high energy content and price of around 19 c/kgDM.

As noted, milk production was down on average this season by 4%. There was a lot of variability around this, with central and north Waikato districts down 10-15% unless significant supplements were fed, while southern Waikato and Bay of Plenty districts finished the season on par or slightly better than last year. Most farms are budgeting for an increase for the 2005/06 season, on average back up to the 2003/04 levels.

Animal health problems throughout the year were not significant. While facial eczema spore counts were generally low, there were some clinical outbreaks in areas throughout the Waikato.

Financial Factors

2004/05 Review

Revenue

Gross farm revenue for the model increased by 6% over 2003/04, due mostly to a 4.9% lift in returns on milksolids plus a 20% increase in cattle sales. The lift in milksolids return was due solely to the increase in payout, offset by the drop in production. The revenue from dairy cattle increased mainly on the basis of a lift in schedule prices.

Cow prices have been relatively strong for most of the season, with herd prices typically around \$1,000-\$1,200 per cow, and with first calving heifers selling for around \$900-\$1,000 per animal. This is due to a lower number of replacement animals reared in the previous season, the influence of heifers being exported to China, and the high empty rate in cows. Prices generally strengthened strongly towards the end of the season.

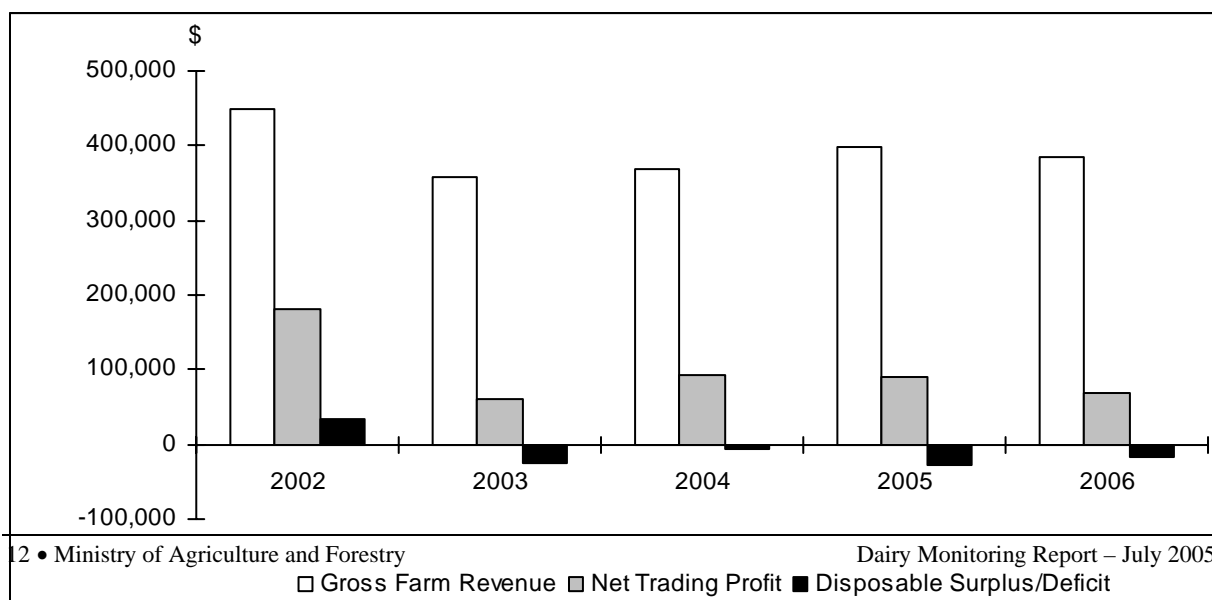
Expenditure

Total farm working expenditure for the model has lifted 9% compared with the 2003/04 year. Significant changes were; wages up 25%, feed up 15%, fertiliser up 5.9%, repairs and maintenance down 13.6%. Most administration/standing charges also increased. Spending on-farm has been strong in recent years and generally this has continued, with the exception of repairs and maintenance - given high spending in recent years, this now appears to be tailing off. Expenditure on fertiliser remains strong, with model applying 117 kg/haN, 46kg/haP, 82kg/haK. Animal health costs were much the same as the previous year, averaging \$0.19 kgMS. For the surveyed farms, this ranged from \$0.07/kgMS-\$0.26kgMS. Total feed costs averaged \$0.59/kgMS, with the range from the surveyed farms varying from \$0.30-\$1.00/kgMS.

Total farm working expenses for the model is \$2.71/kgMS. For the surveyed farms, this ranged from \$1.37-\$3.98/kgMS.

Interest costs for the model lifted by 6%, reflecting a 1% increase in interest rates. It is now difficult to reflect changes in interest rates, given the range of fixed and floating options, as well as revolving credit facilities. Drawings also increased over the previous year, as did expenditure on development and capital purchases.

Waikato/Bay of Plenty Profitability Trends



Net Result

The net trading profit after tax for the model is down 21% compared with 2003/04. After accounting for drawings, principal repayments, development and capital purchases, the model shows a \$28,488 loss for the year, which is well up on 2003/04. While farm revenue has increased, spending on-farm has more than kept pace with this. The disposable loss is mostly offset by off-farm income. This is a significant item on many dairy farms, with 70% of the surveyed farms having some form of off-farm income.

At the end of the year, farmers are generally happy with the financial situation. Although they are cautious due to predictions of a lower payout for the 2005/06 year, most are quietly confident that this payout will be increased throughout the year.

2005/06 Forecast

Revenue

Gross farm revenue in 2005/06 is projected to drop 3.5% compared with the 2004/05 year. This is largely due to a 4.8% drop in expected returns for milksolids. The budgeted increase in production does not offset the projected drop in milksolids payout.

Returns from cattle sales increase, solely due to an increase in the number of stock being carried.

Expenditure

Cash farm expenditure for 2005/06 increases by just under 1% compared with the 2004/05 season. Farmers were generally budgeting for small increases in most items, with significant increases in wages (up 4.4%), feed (up 3.8%), and fertiliser (up 3.9%). The cost of ACC also lifts significantly, mainly due to it being calculated on the net trading profit for the previous year which had increased on the year before that. On a per kilogram of milksolids basis, cash farm expenditure actually reduces to \$2.62, due to the budgeted increase in milksolids production.

Total interest payable remains the same as 2004/05, as most farmers are anticipating no real change in interest rates, either up or down.

Drawings remain essentially the same as for the 2004/05 season while the main concessions to a reduced payout appear to be a significant reduction in the funds budgeted for development and capital purchases.

Net Result

Net trading profit drops 25% compared with the 2004/05 season. The overall disposable deficit is negative \$15,914 which is a significant improvement over the previous year. Again, this is offset by off-farm income.

As in many previous years, most farms are in good physical and financial shape and at this stage would be able to weather a short term downturn in payout.

Issues and Trends

Overall, farmer morale is high and generally farmers appear to be happy with the direction in which Fonterra is heading. Many admit they underestimated the issues involved with amalgamation and are pleased that a number of these appear to have been settled, although they acknowledge that there are many more issues to be sorted through. Farmers are expressing confidence in the senior management of Fonterra, are positive about Fonterra moves in Australia, and accept the need for Fonterra to use overseas milk.

The recent vote on altering the peak notes system and introducing contract milk was passed with little dissension. With the removal of the peak note system and the introduction of a capacity adjustment, many farmers in the Waikato and Bay of Plenty will receive a cash re-distribution in the 2006/07 season, due to their high peak production curves. At this stage there does not appear to be much interest in contract milk, particularly while the Fonterra share value continues to increase.

The recent move by Fonterra to take over management control of Dexcel surprised many farmers, who are unsure of the consequences of this move.

There is increasing pressure on dairy land use in the Waikato and Bay of Plenty, with a number of competing land uses. In particular, subdivision of dairy farms into lifestyle properties is starting to influence the number of dairy farms in this region, particularly in the north Waikato area. A number of farmers are looking to sell off their company shares and then subdivide their properties. As a counter to this, there is significant interest in the conversion of forestry land into dairying, and there will be a steady stream of land converting to dairying, particularly in the southern Bay of Plenty and Waikato regions.

Once-a-day (OAD) milking is gaining popularity in the Waikato and Bay of Plenty. Although the number of farmers who practice OAD milking for the entire season is relatively low at this stage, the concept of moving to OAD milking for part of or the entire herd after Christmas, is becoming relatively common. A number of farmers this season moved to OAD in the spring due to the cold weather and shortage of feed, and effectively stayed on this for the remainder of the season. Some will return to twice a day milking in 2005/06 if there is a good spring. A number of farmers who have shifted to OAD are doing very well, while others have seen a significant drop in production.

Land prices continue to reach new heights. Good dairy land is now selling for up to \$50,000/ha including dairy company shares. Although this often results in significant capital gain for the seller, the resulting return on investment in cash terms for the purchaser of a new property is very low in most cases. In milksolids terms, the best land in the Waikato is selling at \$40-\$50/kgMS, and \$30-\$40/kgMS in the Bay of Plenty. The predominant purchasers of dairy farms are existing dairy farmers who are expanding their operations. Over the last 15 years dairy farms have achieved, on average, a 12% return on capital. Of this, approximately 75% is represented as capital gain, with an average of 3.2% return on capital in the form of cash (calculated as EFS/total farm capital). In 2004/05 the model farm achieved a 2.2% return on capital in the form of cash, while the capital gain was 17%. The projection for 2005/06 is a 1.3% cash return, but a 16% increase in capital gain. This capital gain includes the increase in the value of dairy company shares.

Environmental issues continue to gain in importance. Nitrogen fertiliser use remains high, but there is a noticeable trend to the strategic use of it. This includes trying to minimise applications throughout the winter period and investigating alternative options. In many cases, fertiliser nitrogen is largely replacing natural nitrogen fixation which has ceased due to the impacts of the clover root weevil.

Many farmers are watching the upcoming Environment Court case where Environment Waikato's regional plan is being challenged, such that farmers in sensitive catchments would require a resource consent if they applied greater than 60 kgN/ha. In many respects, New Zealand society still needs to talk through the trade-offs involved between economic growth and environmental protection.

A major issue still remains with the treatment of dairy shed effluent. Recent investigations reveal a large number of systems are not being managed properly and farmers do not appear to understand exactly what a "permitted activity" is and do not realise they have a problem. Environment Waikato, Federated Farmers, and Fonterra are working through the development of some rules which will go to all dairy farmers in the Waikato in July.

Farmers are concerned about a number of "governmental" initiatives that have the potential to impact on their businesses. Examples would include; air quality restrictions within the Waikato and the possibility of restrictions on open fires, restrictions on development due to the need to protect biodiversity and the costs involved in fencing off areas and maintaining these, land access and concerns with health and safety issues, and the power transmission lines across the Waikato.

There is still some pressure on the labour market, with the availability of labour generally quite tight. This has resulted in increases in wages and salaries but, more importantly, farm owners are finding they need to improve the level of housing and infrastructure if they want to attract top quality staff. As the number of freely available 50:50 sharemilking positions is gradually declining, sharemilkers are looking at a variety of solutions in order to grow their businesses. These include equity partnerships, or purchasing residential or commercial property.

A code of practice for inducing cows is to be introduced this coming season. While the code of practice allows cows to still be induced, it must be under the aegis of the protocol and signed off by a vet. The aim is to reduce inductions to less than 2% by 2010, compared with the current level of approximately 4.5%.

Farmers are also noticing problems in accessing various services in rural areas, such as mechanics and electricians.

Despite these issues and the forecast of a lower payout, most farmers remain optimistic about the future of their industry.

Waikato/Bay of Plenty Budget

	2004/05			2005/06f		
	\$			\$		
	Whole farm	per cow	per kgMS	Whole farm	per cow	per kgMS
Revenue						
Milksolids	368,050	1,384	4.42	350,315	1,307	4.03
Cattle	33,880	127	0.41	38,420	143	0.44
Other farm income	0	0	0.00	0	0	0.00
Less:						
Cattle purchases	4,000	15	0.05	4,600	17	0.05
Gross farm revenue	397,930	1,496	4.78	384,135	1,433	4.42
Cash farm expenditure	225,950	849	2.71	227,840	850	2.62
Interest	57,950	218	0.70	57,950	216	0.67
Rent and/or leases	0	0	0.00	0	0	0.00
Cash farm surplus	114,030	429	1.37	98,345	367	1.13
Stock value adjustment	9,578	36	0.11	1,812	7	0.02
Minus depreciation	32,177	121	0.39	31,660	118	0.36
Net trading profit	91,431	344	1.10	68,497	256	0.79
Taxation	29,071	109	0.35	19,531	73	0.22
Net trading profit after tax	62,359	234	0.75	48,967	183	0.56
Allocation of Funds						
Add back depreciation	32,177	121	0.39	31,660	118	0.36
Reverse stock value adjustment	-9,578	-36	-0.11	-1,812	-7	-0.02
Drawings	60,648	228	0.73	60,000	224	0.69
Principal repayments	25,228	95	0.30	25,228	94	0.29
Development	11,345	43	0.14	1,500	6	0.02
Capital purchases	16,226	61	0.19	8,000	30	0.09
Disposable surplus/deficit	-28,488	-107	-0.34	-15,914	-59	-0.18
Other Cash Sources						
New borrowing	0	0	0.00	0	0	0.00
Off-farm income	25,000	94	0.30	21,000	78	0.24
Other cash income	0	0	0.00	0	0	0.00
Net cash change	-3,488	-13	-0.04	5,086	19	0.06
Assets and Liabilities						
Farm, forest & building (opening)	2,601,000	9,778	31.22	3,034,500	11,323	34.88
Plant and machinery (opening)	114,516	431	1.37	113,565	424	1.31
Stock valuation (opening)	316,037	1,188	3.79	325,615	1,215	3.74
Dairy company shares	493,323	1,855	5.92	558,348	2,083	6.42
Total farm capital	3,524,876	13,251	42.32	4,032,028	15,045	46.35
Total debt opening	715,000	2,688	8.58	715,000	2,668	8.22
Equity (assets-liabilities)	2,809,876	10,563	33.73	3,317,028	12,377	38.13

Waikato/Bay of Plenty Budget

	2004/05			2005/06f		
	\$			\$		
	Whole farm	per cow	per kgMS	Whole farm	per cow	per kgMS
Farm Working Expenses						
Permanent wages	37,485	141	0.45	39,150	146	0.45
Casual wages	0	0	0.00	0	0	0.00
ACC	3,641	14	0.04	4,510	17	0.05
Animal health	15,944	60	0.19	16,235	61	0.19
Breeding	8,496	32	0.10	8,265	31	0.10
Dairy shed expenses	4,980	19	0.06	4,827	18	0.06
Electricity	7,497	28	0.09	7,625	28	0.09
Feed (hay and silage)	19,475	73	0.23	18,200	68	0.21
Feed (feed crops)	0	0	0.00	0	0	0.00
Feed (grazing)	22,672	85	0.27	22,880	85	0.26
Feed (other)	7,238	27	0.09	8,134	30	0.09
Fertiliser	35,071	132	0.42	36,442	136	0.42
Lime	0	0	0.00	0	0	0.00
Freight (not elsewhere deducted)	1,750	7	0.02	1,822	7	0.02
Re-grassing costs	1,859	7	0.02	1,798	7	0.02
Weed and pest control	1,692	6	0.02	1,865	7	0.02
Fuel	6,812	26	0.08	7,062	26	0.08
Vehicle costs (excluding fuel)	6,815	26	0.08	6,721	25	0.08
Repairs and maintenance	13,476	51	0.16	12,049	45	0.14
Communication costs (phone and mail)	2,631	10	0.03	2,653	10	0.03
Accountancy	3,078	12	0.04	3,101	12	0.04
Legal and consultancy	3,540	13	0.04	2,340	9	0.03
Other administration	4,189	16	0.05	4,221	16	0.05
Water charges (irrigation)	0	0	0.00	0	0	0.00
Rates	7,493	28	0.09	7,625	28	0.09
Insurance	4,578	17	0.05	4,620	17	0.05
Other expenditure	5,538	21	0.07	5,695	21	0.07
Cash farm expenditure	225,950	849	2.71	227,840	850	2.62
Calculated Ratios						
Economic farm surplus (or EBIT)	76,132	286	0.91	51,447	192	0.59
Cash farm expenditure/GFR	57%			59%		
EFS/total farm capital	2.2%			1.3%		
EFS less interest and lease/equity	0.6%			-0.2%		
Interest+rent+lease/GFR	14.6%			15.1%		
EFS/GFR	19.1%			13.4%		
Economic Farm Surplus (EFS) is calculated as follows:						
Gross Revenue+Change in Livestock Value-Farm Working Expenses-Depreciation-Wages of Management						
Wages of Management = 1% of Opening Total Farm Capital + \$38,000 (to a maximum of \$75,000)						

Lower North Island

Model Description

This model represents approximately 3,200 seasonal supply dairy farms in the bottom half of the North Island, including the regions of Taranaki, Manawatu, Horowhenua, Wairarapa and Southern Hawke's Bay. These dairy farms supply the Fonterra Co-operative Dairy Company. Generally, they are well-developed dairy farms, have good soil fertility levels, and a moderate level of well-maintained buildings, plant and equipment. On average, the farms are 100 effective hectares (ha) in size, milking 265 cows. For the 2005/06 season milk production is anticipated to be around 84,000 kgMS, or 840 kgMS/ha.

The model has now reached the stage where one full time farm assistant is employed. Up until this year, only part time labour was employed. The level of debt has gone up, reflecting the increased size of the model and trends within the surveyed farms. Most of the lower North Island has reliable summer rainfall, especially the Taranaki province. However, many farms in the Manawatu and on the East Coast are, by New Zealand dairy standards, somewhat drought-prone. Approximately 250 farms, mainly in the South Wairarapa, Hawke's Bay and Manawatu, have irrigation.

The model budgets are owner-operator farms with labour employed, and the model represents an estimated 70-80% of dairy farms, the other 20-30% fitting into the sharemilking or partnership categories.

Table 1: The Model in Summary 2004/05

Effective area:	90 ha	Opening stock wintered:	318 hd
		Milking cows	250 hd
		Replacement heifers	65 hd
		Other cattle	3 hd

Table 2: Key Parameters

	2001/02	2002/03	2003/04	2004/05	2005/06f
Effective area (ha)	85	85	90	90	100
Cows wintered	220	225	243	250	275
Cows milked at 15 December	207	210	230	236	264
Stocking rate (cows/ha)	2.5	2.6	2.6	2.6	2.6
Total milksolids (kg)	65,000	59,500	73,500	68,500	84,000
Milksolids/ha	765	700	817	761	840
KgMS/cow milked	314	283	320	290	318
MS advance to end June (\$/kg)	4.70	3.30	3.72	3.95	3.50
MS deferred payment (\$/kg)	0.70	0.60	0.27	0.50	0.70
Gross farm revenue (\$)	388,360	264,650	313,826	328,423	371,590
Net trading profit (\$)	172,830	43,467	86,903	82,960	84,738
Disposible surplus/deficit (\$)	17,623	-33,415	3,958	-16,832	6,644

Key Points

- Seasonal Production for 2004-05 was well down due to adverse climatic conditions impacting on pasture growth.
- Land prices continue to climb despite the need for any new farmer to purchase Fonterra shares which have also risen in value.

- Farmers continue to find it hard to obtain farm labour.
- Approximately 80 farms went out of dairying, although some of this was due to amalgamation.
- Farmers are increasing their use of palm kernel as a supplementary feed.
- Winter milk production is becoming more popular, and some of this due to the difficulty in getting cows back in calf.

Physical Factors

The Taranaki province had an average winter with normal pasture growth, followed by a wet and cold spring resulting in lower growth rates, feeding levels and suppressed milk production. From mid summer onwards it was dry, which lowered pasture growth and resulted in more supplements being fed. Adequate rainfall in late autumn resulted in good growth rates and pasture covers going into winter.

In the Manawatu most farms (except the sand country) experienced a wet and cool winter with cool weather conditions persisting until the end of the year. Pasture growth rates through January and early February were above average, helping to lift pasture covers and ensuring herds were adequately fed over this period. However, with minimal rainfall through the autumn, pasture growth rates and covers were below normal, with effectively a green dry/drought period. There has been insufficient soil moisture until mid May to lift pasture growth rates back to average or above average. In general, pasture covers are only adequate entering the winter.

On the East Coast there were regional differences. However, in general, there was a normal winter with average pasture growth, followed by a cold and wet spring with flooding in South Wairarapa. With the difficult spring, most herds were under significant feed pressure, lowering milk production. Pasture growth was good through November and December, which helped to ensure cows were well fed over this period. There was a short dry spell from January to March, suppressing pasture growth. However, with adequate rainfall through late March/April, favourable growth rates were experienced, resulting in a good autumn. Most dairy farms have adequate to good pasture covers heading into the winter.

Flooding hit the Wairarapa over the spring, which severely affected about 20 farms. Farms that were severely affected during the February floods in the Manawatu/Horowhenua district suffered, with the wet winter/spring resulting in significant pasture damage/pugging to new pastures.

Over the lower North Island, in general, it was a difficult season with production significantly behind last year. This season is best described as 12 months of highly variable weather patterns and conditions. As a result, milk production for this model farm is 68,500 kgMS compared with the 2003/04 season's 73,500 kgMS.

The level of supplement going into winter is variable across the lower North Island. Taranaki has adequate supplementary reserves; in the Wairarapa levels exceed projected demand; while the Manawatu has only adequate supplement levels due to the late and dry autumn. Pasture covers in the Taranaki area are better than average, as a result of adequate rainfall during autumn. However, on the East Coast and in Manawatu, pasture covers are only adequate, and will be very dependent on growth rates over the winter and early spring period.

Maize yields were down 10-20% as a result of the cool summer.

With the cool and wet spring less silage was made, resulting in a need to purchase more supplementary feed, including meal and palm kernel. There was a significant increase in the use of palm kernel, which also coincided with a decline in its price. This decrease in price continued through until late autumn, with the price in the Manawatu around \$200/tonne landed on farm. This makes palm kernel a very competitively priced supplement, resulting in greater farmer interest in using this product.

A number of farms were on once-a-day (OAD) milking due to the difficult spring. Farmers are growing more maize on the milking platform compared with purchasing maize silage on contract.

Cow condition over the spring was lower and greater liveweight loss occurred. Cow condition in Taranaki and East Coast is generally adequate to good, at around 4.5 condition score, and lower in the Manawatu/Rangitikei at around 4.25 condition score, due to the drier autumn and lower feeding levels.

Empty rates throughout the lower North Island are higher than usual, with Taranaki averaging around 14%, Manawatu/Rangitikei 15%, and East Coast around 18%. Overall, the empty rate is 2-3% higher than normal. As a result, some empty cows have been carried over for replacements and, in some areas, more empty cows are being milked through the winter to help maintain cow numbers for the following season.

Death rates in the Wairarapa were higher than usual (up to 5%) due to the wet and cold spring and flooding in the region. Death rates in Taranaki and Manawatu were normal.

With the wet and cold spring, more cows became lame. There were also fewer inductions and less use of CIDRS. Farmers thought there were higher incidences of grading due to somatic cell count problems, but overall milk grading was 39% better than last year.

The use of nitrogen during the spring was higher than normal to help counter the lower growth rates as a result of the wet/cool weather conditions through this period.

The normal amount of summer cropping on dairy farms was undertaken: minimal in Taranaki and around 4-6% of the effective area in Manawatu and East Coast. Yields were average, but some low-lying paddocks were subject to lower yields.

There are no major animal health problems this season, with facial eczema not being a big issue.

The cull cow price and surplus calf prices were similar to the previous season. The capital price of cows has increased significantly, with the shortage of cows pushing the average price up to around \$1,050-\$1,150/cow. This is attributed to the export of heifers to China, and to higher empty rates. Heifer exports to China have declined. In-calf heifers have been averaging around \$900-\$1,000/hd.

The cost of heifer and dry cow grazing has generally remained unchanged, even though there appears to be a greater supply of heifer grazing, especially in the Taranaki region.

Milk production throughout the lower North Island has decreased compared with the previous season, as shown in the table below:

Table 2: Lower North Island Milk Production Decrease Compared with Last Season

	% Decrease
Taranaki	9
Manawatu/Rangitikei	8
Wairarapa	12
Hawke's Bay	6

In summary, the model farm has had a difficult season, with production down to 68,500 kgMS, or 760 kgMS/ha, which represents a decrease of 9% on a per hectare basis. This farm has continued to grow in size, reflecting a trend towards increasing farm size in the lower North Island. The farm size for the 2005/06 season will increase to 100 ha, peak milking 265 cows.

There are approximately 70-80 farms dropping out of milk production in the lower North Island this year, continuing the trend of last year. There are five new dairy conversions coming into Fonterra. The

farms ceasing milk production are doing so for a variety of reasons, including subdivisions, lifestyle, and many other personal factors.

Financial Factors

2004/05 Review

Revenue

The expected interim payout to the end of June 2005 is \$3.95/kgMS, which is an increase of 20 c/kgMS on the previous year. The total payment for the 2003/04 season was \$4.25/kgMS. As a result of the increase in the advance payment and higher final payments from the previous year, milk revenue is up by approximately \$12,850, or 4.4%, to \$307,300 for the 2004/05 year. Stock revenue is similar to the previous season, at around \$21,000. There has been little difference in cull cow and surplus calf prices compared with last season.

Expenditure

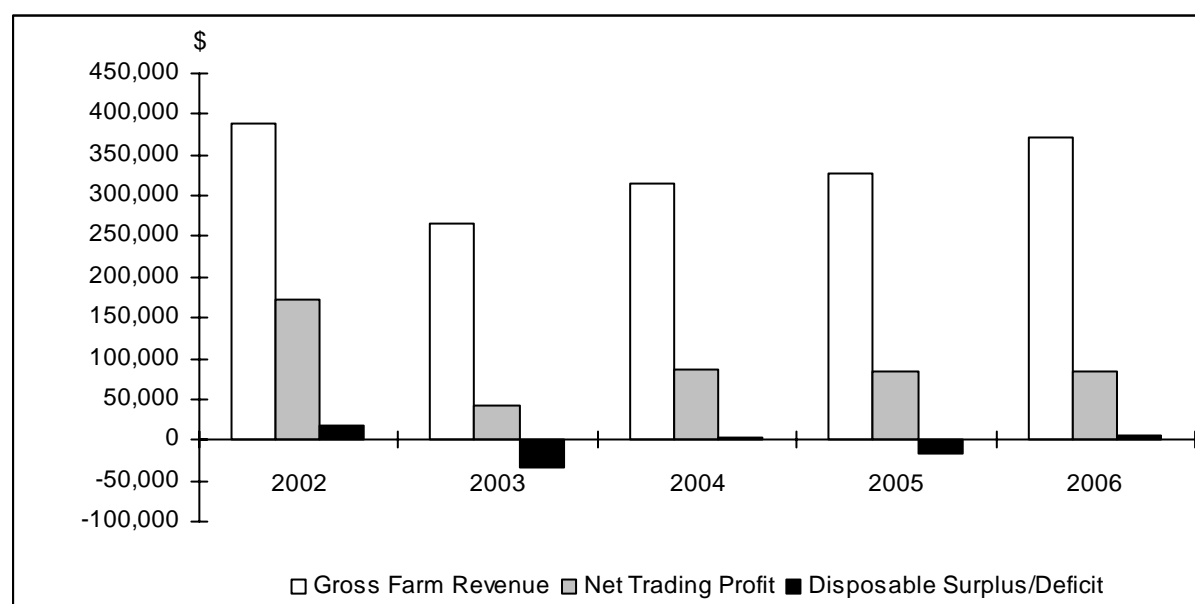
Overall cash farm expenditure is up by \$23,000 on the previous year to \$201,000 - an increase of 13%. Increased costs include labour (now with a permanent employee and with rising salaries/wages); animal health; power; and more purchased supplement, mostly in the form of haylage and palm kernel. Other areas where increases in farm expenditure occurred are re-grassing and, partly as a result of the flooding, repairs and maintenance costs are also up, especially on access races on flood-affected farms. There was an increase in fertiliser expenditure, mainly as a result of price increases for both potassic super and nitrogen.

Net Result

Cash farm surplus is \$87,200 – a decrease of \$11,625 on 2003/04.

Overall, there is a net cash position of negative \$5,132 after the model paid off some principal on mortgages. This is a decrease on the net cash position for 2003/04, which was \$11,658. Taxation has increased to \$29,000. Overall, in the lower North Island, the net cash position is essentially break even, with lower milk production and higher farm expenditure being offset by higher milk prices.

Lower North Island Profitability Trends



2005/06 Forecast

Revenue

The budget for the 2005/06 season is based on 84,000 kgMS, reflecting a more normal level of production and an increase in the model farm size. Dairy farms in the area are getting bigger.

Farmers expect a total payment for the 2004/05 year of \$4.60/kgMS. The advance price to the end of June 2006 is expected to be \$3.50/kgMS – a decrease of 45 c over the 2004/05 season price of \$3.95/kgMS. Overall, there is an increase in milksolids revenue of approximately \$33,000 to \$342,000 – an increase of 11%. This is partly due to the increase in the model farm size of approximately 8%. Total stock revenue is expected to increase by \$8,600 to \$29,700. Gross farm revenue is expected to increase by \$43,000 (13%) to \$371,590 for the 2005/06 season.

Expenditure

Overall cash expenditure is expected to increase by 11% to \$223,946. Additional expenditure will be needed for more labour, with increasing farm size. Farmers expect to spend less on repairs and maintenance, while continuing with normal levels of fertiliser inputs.

Net Result

Cash farm surplus has increased by \$8,295 to \$95,494 for the 2005/06 year.

With the increase in the model farm size to 100 effective ha, more debt/borrowing has been undertaken, with the level of debt servicing around 17-18% of gross farm income. The net cash change for the model is estimated to be approximately \$20,000, compared with a loss of \$2,500 for the 2004/05 season. The net cash change position does include \$12,000 of non-farm revenue.

Issues and Trends

Fonterra's shareholders voted in a new capital structure, separating the capital requirement and milk payment associated with peak milk production. This will be introduced at the end of the 2005/06 season. The value of shareholding has increased to \$5.44/kgMS, plus peak notes. This is an increase of 75 c/kgMS in share value.

There has been a significant increase in the price of livestock, with herds averaging \$1,050-\$1,150/cow and in calf heifers around \$900-\$1,100/hd. This is an increase of \$250-\$300/hd. The increase in livestock prices has been associated with sales of heifers to China, and higher empty rates.

With lower milk production, there will be minimal requirement to purchase extra shareholding. However, there may be a requirement to purchase peak notes, depending on the production curve and whether farmers elected to use surplus peak notes last year to help pay for extra dairy company shareholding. Fonterra have stated that they would like an annual increase in milk submitted of 3%.

There have been very few 50:50 sharemilking positions, a continuing trend from previous years. This trend has resulted from farm amalgamations and farm owners opting to purchase livestock and employ lower order sharemilkers or managers. There is a small but steady interest in equity partnerships as an avenue for people to enter land ownership.

There is increasing interest in winter milk production by milking empty cows through the winter. Many farmers are commenting on the difficulty of getting cows in calf, and are struggling with a high empty rate when breeding cows for higher milk production. This has been compounded by the emphasis on reducing the level of inductions. Fonterra is currently reviewing the payment structure and price for its winter milk requirements, which should be finalised by the end of this year. The new system will be introduced for winter 2007. There has been a steady increase in the number of winter milk farms in the lower North Island.

There appears to be increasing availability of grazing for heifers. However, this has not yet resulted in lower grazing charges for them.

Skilled labour shortages continue, especially a shortage of managers and herd managers. Labour and staffing issues are quoted as some of the major challenges and issues for dairy farming, and are reasons why some people have exited the industry.

There is only limited interest in OAD milking in the lower North Island, with those farmers considering that option placing high value on lifestyle changes.

With the wet winter and spring, farms that were severely affected with the February floods have struggled and there have been high levels of pasture and pugging damage, especially on farms where a significant proportion of the property was re-grassed.

Farmers are concerned about rapidly increasing costs and the amount of paperwork associated with compliance and resource management issues.

The price of land/farms continues to increase, but not dramatically, even though there is a forecast decline in milksolids payout. With the inclusion of Fonterra shares, farms are selling for \$27-\$30/kgMS on the East Coast,; \$34-\$40/kgMS in Manawatu/Rangitikei, and \$35-\$40/kgMS in Taranaki. With the increase in land/farm prices and no corresponding increase in incomes, there is a requirement for a higher level of equity as farms cannot service any greater levels of debt.

Feed pads are becoming more popular to improve the utilisation of supplement, especially on the heavier soils in the Manawatu/Rangitikei and Wairarapa regions. There has been a significant increase in the use of palm kernel, which is anticipated to continue given the current competitive pricing of this supplement. It may result in less maize silage being grown.

With the predicted lower payouts, it is anticipated most dairy farmers will be cautious. It is also anticipated maintenance inputs of fertiliser will be applied, with cautious expenditure on repairs and maintenance.

Farmers are concerned about potential nitrogen fertiliser application limits being imposed, and are watching carefully what is happening in the Waikato.

Lower North Island Budget

	2004/05			2005/06f		
	\$			\$		
	Whole farm	per cow	per kgMS	Whole farm	per cow	per kgMS
Revenue						
Milksolids	307,325	1,302	4.49	341,950	1,295	4.07
Cattle	29,448	125	0.43	32,490	123	0.39
Other farm income	0	0	0.00	0	0	0.00
Less:						
Cattle purchases	8,350	35	0.12	2,850	11	0.03
Gross farm revenue	328,423	1,392	4.79	371,590	1,408	4.42
Cash farm expenditure	201,074	852	2.94	223,946	848	2.67
Interest	40,150	170	0.59	52,150	198	0.62
Rent and/or leases	0	0	0.00	0	0	0.00
Cash farm surplus	87,199	369	1.27	95,494	362	1.14
Stock value adjustment	6,261	27	0.09	330	1	0.00
Minus depreciation	10,500	44	0.15	11,175	42	0.13
Net trading profit	82,960	352	1.21	84,649	321	1.01
Taxation	28,857	122	0.42	15,750	60	0.19
Net trading profit after tax	54,103	229	0.79	68,899	261	0.82
Allocation of Funds						
Add back depreciation	10,500	44	0.15	11,175	42	0.13
Reverse stock value adjustment	-6,261	-27	-0.09	-330	-1	0.00
Drawings	47,000	199	0.69	50,000	189	0.60
Principal repayments	13,174	56	0.19	9,189	35	0.11
Development	0	0	0.00	0	0	0.00
Capital purchases	15,000	64	0.22	14,000	53	0.17
Disposable surplus/deficit	-16,832	-71	-0.25	6,555	25	0.08
Other Cash Sources						
New borrowing	0	0	0.00	0	0	0.00
Off-farm income	11,700	50	0.17	12,000	45	0.14
Other cash income	0	0	0.00	0	0	0.00
Net cash change	-5,132	-22	-0.07	18,555	70	0.22
Assets and Liabilities						
Farm, forest & building (opening)	2,000,000	8,475	29.20	2,500,000	9,470	29.76
Plant and machinery (opening)	70,000	297	1.02	74,500	282	0.89
Stock valuation (opening)	294,062	1,246	4.29	322,042	1,220	3.83
Dairy company shares	414,540	1,757	6.05	469,665	1,779	5.59
Total farm capital	2,778,602	11,774	40.56	3,366,207	12,751	40.07
Total debt opening	500,000	2,119	7.30	630,000	2,386	7.50
Equity (assets-liabilities)	2,278,602	9,655	33.26	2,736,207	10,364	32.57

Lower North Island Budget

	2004/05			2005/06f		
	\$			\$		
	Whole farm	per cow	per kgMS	Whole farm	per cow	per kgMS
Farm Working Expenses						
Permanent wages	0	0	0.00	23,000	87	0.27
Casual wages	17,000	72	0.25	2,000	8	0.02
ACC	3,011	13	0.04	3,714	14	0.04
Animal health	12,000	51	0.18	13,500	51	0.16
Breeding	6,800	29	0.10	8,000	30	0.10
Dairy shed expenses	5,100	22	0.07	5,800	22	0.07
Electricity	8,300	35	0.12	9,400	36	0.11
Feed (hay and silage)	17,720	75	0.26	19,800	75	0.24
Feed (feed crops)	1,600	7	0.02	2,000	8	0.02
Feed (grazing)	18,480	78	0.27	21,600	82	0.26
Feed (other)	12,300	52	0.18	12,300	47	0.15
Fertiliser	28,132	119	0.41	33,095	125	0.39
Lime	0	0	0.00	0	0	0.00
Freight (not elsewhere deducted)	2,300	10	0.03	2,300	9	0.03
Re-grassing costs	2,400	10	0.04	2,400	9	0.03
Weed and pest control	2,100	9	0.03	2,100	8	0.03
Fuel	6,600	28	0.10	6,600	25	0.08
Vehicle costs (excluding fuel)	7,000	30	0.10	7,000	27	0.08
Repairs and maintenance	22,000	93	0.32	18,000	68	0.21
Communication costs (phone and mail)	3,200	14	0.05	3,300	13	0.04
Accountancy	2,700	11	0.04	2,700	10	0.03
Legal and consultancy	2,100	9	0.03	2,100	8	0.03
Other administration	4,132	18	0.06	4,737	18	0.06
Water charges (irrigation)	0	0	0.00	0	0	0.00
Rates	6,300	27	0.09	8,000	30	0.10
Insurance	4,300	18	0.06	4,800	18	0.06
Other expenditure	5,500	23	0.08	5,700	22	0.07
Cash farm expenditure	201,074	852	2.94	223,946	848	2.66
Calculated Ratios						
Economic farm surplus (or EBIT)	57,324	243	0.84	65,137	247	0.78
Cash farm expenditure/GFR	61%			60%		
EFS/total farm capital	2.1%			1.9%		
EFS less interest and lease/equity	0.8%			0.5%		
Interest+rent+lease/GFR	12.2%			14.0%		
EFS/GFR	17.5%			17.5%		
Economic Farm Surplus (EFS) is calculated as follows:						
Gross Revenue+Change in Livestock Value-Farm Working Expenses-Depreciation-Wages of Management						
Wages of Management = 1% of Opening Total Farm Capital + \$38,000 (to a maximum of \$75,000)						

Canterbury

Model Description

This model represents approximately 700 dairy farms throughout Canterbury and North Otago.

The model is representative of a sample of 20 farms, ranging from 300-1,500 milking cows. The surveyed farms have been selected to represent a similar geographic and size distribution to the statistical population.

Within the Canterbury area there is a mix of border dyke and spray irrigated properties, with a wide range of grazing, feeding and stocking policies. The farms surveyed are all owner operated and all supply Fonterra's Clandeboye factory.

Table 1: The Model in Summary 2004/05

Effective area:	195 ha	Opening stock wintered:	804 hd
		Milking cows	637 hd
		Replacement heifers	155 hd
		Other cattle	12 hd

Table 2: Key Parameters

	2001/02	2002/03	2003/04	2004/05	2005/06f
Effective area (ha)	180	185	192	195	195
Cows wintered	540	579	607	637	642
Cows milked at 15 December	535	553	586	613	617
Stocking rate (cows/ha)	3.0	3.0	3.1	3.1	3.2
Total milksolids (kg)	187,500	210,000	225,000	237,682	246,904
Milksolids/ha	1,041	1,135	1,172	1,219	1,266
KgMS/cow milked	350	380	384	388	400
MS advance to end June (\$/kg)	4.70	3.30	3.72	3.95	3.5
MS deferred payment (\$/kg)	0.60	0.60	0.27	0.45	0.55
Gross farm revenue (\$)	1,090,900	881,100	961,030	1,127,030	1,086,671
Cash farm surplus (\$)	429,500	126,200	198,946	303,756	265,985
Disposable surplus/deficit (\$)	-145,500	-228,200	-52,627	-139,496	-159,473

Key Points

- Difficult climatic season in which to convert grass to milksolids.
- Gross farm revenue increased 15% and profit doubled compared with 2003/04, due to an increase in payout.
- Payout for 2005/06 season is expected to be around \$4.00/kgMS, with farmers expecting profitability to fall only slightly.
- Debt continues to rise, mainly to purchase Fonterra shares.
- Disappointment that progress to resolve water allocation issues is slow..

Physical Factors

There were adequate feed supplies for winter 2004, resulting in good wintering conditions, so cows were in good condition at calving. The late winter/early spring was cooler and drier than normal. From July through to October, soil temperatures were half to 1.3°C below average. Pasture growth was

slower than normal, although pasture covers following winter were reasonable. However, the weather pattern changed quickly. Pasture growth rates from mid October to near the end of November were 25% higher than average as the soil temperature was 1°C above average. Large feed surpluses were created, and silage contracting businesses experienced problems servicing clients on time. The result was that while large areas of silage were harvested, much of the later supplement was of lower than ideal quality (9-10 MJME/kgDM rather than 10-11 MJME/kgDM).

December saw another complete climate reversal. Soil temperatures dropped below November levels, rainfall was more than double the average, and pasture growth rates fell significantly. Many farmers fed out supplement that had just been harvested to maintain milk production, as there was very little feed ahead of the cows at some points.

January became warmer again, with high pasture growth rates at levels similar to the spring, before falling back to normal levels for the time of year.

Overall, many farmers commented that it was one of the most difficult years they could remember to convert grass to milksolids. Effectively, there were two pasture production peaks, a normal one in November and another in mid-January. Pasture management was therefore very challenging.

Milk production for the season from the Canterbury region is expected to be up around 3-4% on the previous year compared with a forecast increase of 3%. Most of this has come from increased numbers of cows milked on existing farms and through new conversions.

The Culverden area in North Canterbury was cooler for longer into the spring, and also remained drier than the rest of Canterbury.

Autumn conditions were average to good, with most farms being in a position to milk to the end of May. High levels of supplement are still available, albeit of variable quality, and cow condition is good heading into winter.

There were no significant periods of water supply restrictions on any of the river-fed irrigation schemes, due to reduced irrigation demand following regular rainfall in December and from February on. For areas served by ground water, irrigation was also scaled back considerably. Aquifer levels throughout Canterbury are generally lower due to several successive poor years for winter recharge, so the reprieve due to the weather prevented what may have been a difficult situation for some dairy farms that are dependent on groundwater. For the whole season, industry commentators suggest irrigation was used on 30 less days than would normally be expected.

Herd empty rates range from 5-30% with most being in the 15-22% range. Such high rates of empty cows create significant replacement costs. The causes are most likely due to many farms having a nil induction policy, bulls being removed from herds early to minimise inductions, and the cool period in December reducing the feed energy available for the cows on many farms. Lameness was also an issue in autumn during wet periods as tracks cut up badly.

There were 16 new dairy farm conversions for the 2004/05 season, and around 20 more are expected for the 2005/06 season, milking about 15,000 cows. Industry commentators note there is already considerable interest in developing more conversions for 2006/07, stimulated particularly by new irrigation development and good prospects relative to other sectors.

Existing farmers, as exhibited in the model, are budgeting on further increases in production for the 2005/06 season. These increases are expected to come from better pasture growth resulting from what they hope will be a comparatively more normal climatic season. Farmers are also continually improving the utilisation of their farms; for example, by improving irrigation systems and developing watering systems for the corners of paddocks not covered by centre pivot irrigators.

Financial Factors

2004/05 Review

Revenue

The model shows a 15% increase in per hectare revenue for the 2004/05 year. This is mainly due to improved milksolids price and also to a 4% increase in per hectare production. The model was increased by 3 ha to reflect the continuing trend to larger farms. Within the sample, some farms contributing to the model had a better production year than predicted, and some not so good.

At the start of the season payouts of not much over \$4.00/kgMS were expected. However, Fonterra regularly revised payouts from about November to finally reach \$4.50/kgMS.

Net cattle revenue increased by 37% compared with 2003/04. This was due to better beef prices, coupled with high prices for heifers as a result of the trade with China. This flowed through to better cull cow prices.

Expenditure

Overall, farm working expenses rose from \$2.64/kgMS in 2003/04 to \$2.78/kgMS for 2004/05. This is 5% up on last year, but represents a holding of operating costs per unit of output over the last five years. Note that the 2004/05 expenditure includes the dairy industry levy of 3.7 c/kgMS, which previously was deducted from the revenue. With this adjustment made, this level of expenditure was 4% higher per kgMS than farmers intended when the 2004/05 budget was completed in June 2004. This reflects a general across the board rise in costs, rather than farmers using more and more inputs. It also reflects that the outlook for the payout at the start of the season was for a reduction compared with the previous year, so a tight rein was kept on early season expenses, which was later lifted as the outlook and the season improved.

Labour expenditure increased by 11%, largely due to increased wage rates, particularly for junior level staff. Not shown in these figures is the cost of improved accommodation and other conditions of work that are required to secure suitably skilled labour. There is also a trend towards more casual staff, to give permanent staff better hours and meet the requirements of employment legislation.

ACC costs show a marked increase compared with the 2003/04 year. This mostly reflects the incorporation into the model of the owner's ACC liability as well as the staff.

Animal health costs increased by 2.4 c/kgMS. Costs have risen, and there has been greater use of dry cow therapy and hormone therapy to increase cycling in cows to concentrate calving. Industry commentators also note that with higher payouts, animal health expenditure tends to increase, as farmers spend more on their productive asset.

Electricity expenditure reflects a rise, despite lower overall irrigation use during 2004/05. The model reflects a mix of spray and border dyke application methods, so is a derived figure. Generally, there has been a move towards more spray irrigation as borders are replaced by centre pivot irrigators which need electricity. The model therefore reflects changes in circumstances, and increased costs, particularly line charges, rather than increasing usage. Some deep well irrigation is costing upwards of \$540/ha, which represents around \$100,000 of expenditure for a farm of this size.

Feed costs were up by around 6 c/kgMS, mainly due to higher feed surpluses being conserved as silage, thus adding considerably to those contracting costs that are reported as feed costs in the model. This increase in feed on hand is not captured in the model. Grazing and feed purchase costs were similar to 2003/04. The industry notes a maturing of the relationship between dairy farmers and graziers, with a longer term view increasingly being taken by both parties.

Fertiliser expenditure reflects a significant drop, due mainly to falling prices at critical points in the year. However, prices have since risen. Use overall is about the same, with farmers being more aware

of their nitrogen use, in particular, and trying to be as efficient as possible. The use of nutrient budgeting is increasing. Eco-N has been tried on around 30-40% of farms, with good results reported.

Re-grassing cost increases reflect more activity in pasture upgrading, with better payouts than expected.

Administrative expenses continue to increase steadily. The large rise in “Other administration” expenses reflects the inclusion of the dairy industry levy. The drop in “Other expenditure” reflects moving the owners’ ACC levies to the ACC category. Interest payments have risen to reflect higher debt levels, with some farmers having to renew fixed rate loans at slightly higher rates. Overdrafts are also reported to be at higher levels than last year.

The high empty cow rates previously reported, combined with live export of heifers to China, have put pressure on herd prices. Dairy herds are now selling for \$1,100-\$1,200/cow, up \$200 on last year. In-calf heifers are trading at \$950-\$1,000/hd, with yearlings being around \$550/hd.

Development expenditure continues to be focused on irrigation, particularly with old border dykes being converted to either wide borders or to spray using centre pivots. In both cases, efficiency of water use and of grass production is improved significantly. Purchase of runoffs has slowed, with around 50% of Canterbury dairy farmers now either owning or long-term leasing runoffs.

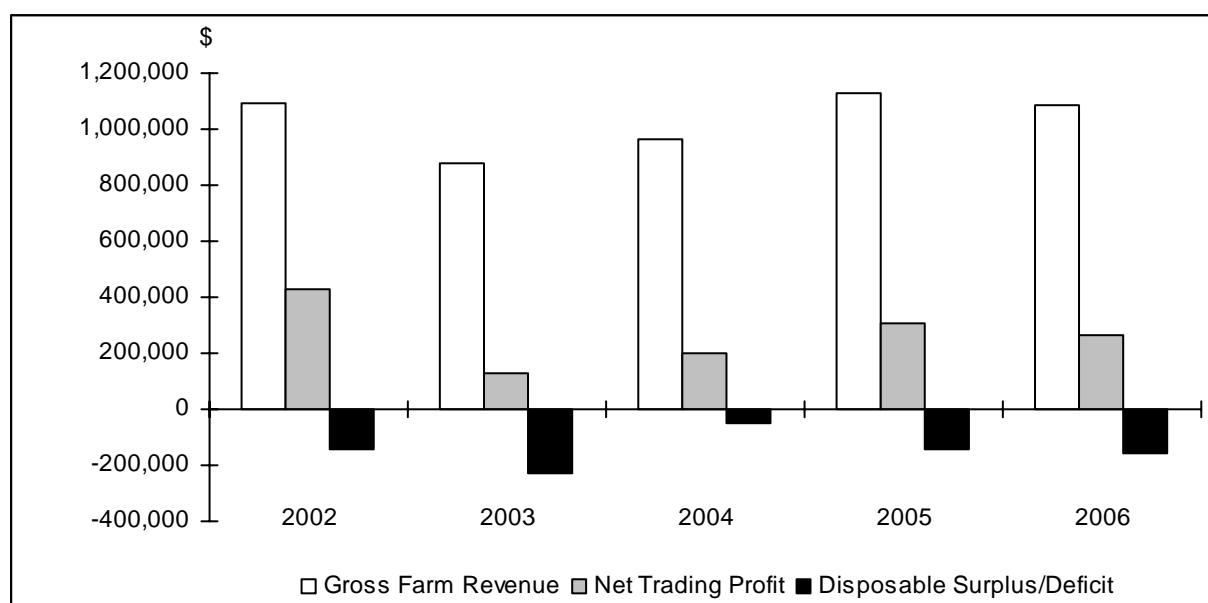
Capital expenditure on tractors and, for the larger farms, on their own silage-making equipment, seems to have increased. The high New Zealand dollar makes some good deals on machinery possible, and following the difficulty in getting contractors on time for silage making, farmers have identified this as a cost they can address.

Drawings have increased further, despite farmers trying to reign in their personal expenses in last year’s budget. This probably also reflects a better payout than thought likely this time last year.

Net Result

The Canterbury dairy farm continues to generate high profits, but at levels which are substantially lower than when farm revenue was at a similar level in 2002. This reflects the evolution to a higher cost operation, and also that the unit cost of most inputs has risen. Profit is double that forecast by farmers in 2004, a much better than expected result.

Canterbury Profitability Trends



There is a disposable cash deficit, made up by increased borrowings that are generally used to purchase additional shares. According to industry commentators, this reflects the overall situation accurately.

Farm values have lifted significantly through the year. Last year, premium spray irrigated farms were selling for up to \$27,000/ha including shares. This year they are selling for \$33,000/ha (an increase of 22%) with most sales making \$29,000-\$33,000/ha including dairy company shares. Border dyke farms are trading around \$30,000/ha. These rises are reflected in the model farm value (including shares) rising 18% to \$6 million.

2005/06 Forecast

Revenue

For the 2005/06 year, farmers are anticipating a modest fall in revenue as the payout expectation of \$4.00/kgMS is below the 2004/05 result. Farmers are expecting to again lift production, as reflected in the model, with output rising 4% to 247,000 kgMS, or 1,266 kgMS/ha, from a small increase in cow numbers and a rise in per head performance. Cattle revenue is expected to remain similar to 2004/05.

Expenditure

Expenses are forecast by farmers to be reduced on a per kgMS basis, which means costs are expected to be held at current levels in total. While there is scope to achieve this, industry commentators note that most input costs are continuing to increase, and doubt that costs can realistically be held to this level.

Labour costs and electricity increases are becoming accepted as inevitable, but farmers are seeking to reduce semi-discretionary costs such as animal health, fertilisers, repairs and maintenance, feed and administration costs.

Winter feed availability is at an all-time high, with prices for conserved feed dropping by 10-20% this autumn over last year. Such is the supply of feed that some graziers may not be able to source cows this winter. These lower costs should be reflected in feed costs in the 2005/06 year. However, unit rates for winter grazing have remained steady at \$14-\$15/week, or 16-18 c/kgDM. This reflects the other options that pastoral and arable farmers have for grazing stock.

Net Result

The model reflects a modest fall in profit before tax as expenditure is forecast to reduce to make up for the expected fall in revenue. However, capital expenditure and a high calculated tax liability (which includes a reassessment of the provisional tax based on a lower profit) combine to cause another large cash deficit. As in the 2004/05 year, the model will need to borrow the funds to purchase shares and to maintain a net cash change around zero.

Issues and Trends

As reported last year, 12 farmers in the Canterbury area adopted all year once-a-day (OAD) milking for the 2004/05 season. Most are happy with the change and expect to see improvements this year as herds are better adapted to OAD milking. The main advantages are with savings in labour, benefits from a condensed calving pattern, and cows finishing the season in better condition than under twice a day. A similar number of farmers are considering switching for 2005/06, although there are comments from some that more information is required for them to be certain it is a good idea. Most farmers are therefore waiting to see how the early adopters fare.

The trade of heifers to China has slowed markedly, probably for price reasons. There is some continuing trade with Mexico, but on a much smaller scale. Prices of heifers have dropped back, but

there is pressure on cow prices due to the created shortage of replacement stock. This is expected to correct in the next few years. Overall, some 66,000-68,000 heifers are believed to have left New Zealand.

Suppliers continue to have confidence in Fonterra and are interested to see how the recently announced Synlait venture will fare. Some farmers are perplexed about how such a venture can compete, while others see possible opportunities to supply another company in future if the venture establishes itself. Generally, most farmers consider that having shares in one of the largest exporting dairy companies in the world makes good strategic and business sense. Industry commentators note that supplying contract milk to Fonterra or to anyone else may suit those without access to sufficient capital, or those who specifically want to diversify their investments due to stage of life or philosophy. However, most Canterbury dairy farmers tend to be building assets and therefore consider Fonterra shares a good investment.

Winter milk contract trends are encouraging larger seasonal suppliers to carry a percentage of their cows through the winter. This will put considerable pressure on those remaining dedicated winter milk suppliers whose herds are of similar size. In two years' time, when a tendering contracts arrangement will come into operation, it is likely that those traditional winter milking herds will cease in their current form. From an asset point of view, their land is generally close to Christchurch and is valuable for other uses, so financially those farmers are not at risk.

Fertiliser use is generally being held at current levels, slowing the trend towards increasing use. This is in response to awareness of public perceptions, and also possibly more focus on efficiency of nitrogen use. The nitrification inhibiting product being marketed by Ravensdown, called Eco-N, was tried on an estimated 25-30% of farms last year and is expected to increase in use in the 2005/06 year. This follows research results that show increases in annual pasture dry matter production of 15-18% and favourable farmer comments from their own experimentation. How farmers continue to use the product will be interesting. Some may use it to reduce their nitrogen fertiliser use, while some may use it to improve the efficiency of their current fertiliser programme, and others may use it to justify increasing stocking rates without further increasing the risk of nitrate leaching.

Severe labour shortages continue to be experienced, with many advertised positions receiving little interest, particularly in remote areas. This is having the effect of pushing up salary levels, particularly in the new entrant junior area. Starting salaries for a school leaver are now typically \$25,000 with a house provided, increasing quickly thereafter. What's more, young people are demanding that these levels of remuneration be provided. Quality overseas workers are in high demand as local employment resources cannot cope.

Sharemilking positions continue to be scarce, although some corporate dairy farmers are moving from contract milkers to sharemilkers or other forms of management that have equity and therefore an interest in the business succeeding. Equity partnerships continue to attract interest, but overall are difficult to pull together and hold together successfully.

Water issues continue to be at the forefront of dairy farmers' and financiers' minds. In the past year, there has been little or no change to the situation, in either the supply of water available or the development of solutions or ways forward to address supply issues. The creation of the red zones is seen by most farmers as a necessary cautionary approach as there are wells that no longer yield what they did a few years ago. However, they believe clear leadership is needed to make the necessary decisions for the backlog of over 100 consents that have been lodged so the industry can move forward.

It appears that while latest research is showing water availability is not the limiting factor, Environment Canterbury is viewed as reluctant to change their stated stance of being conservative in the assessment of how much abstraction can take place. There are irrigators who have been in a holding pattern for 18 months due to an inability to gain consent, even though they have good supplies of water. This will be costing a 250 ha runoff up to \$200,000/year in lost feed supplies and interest on unused capital that has been outlaid. The well will have cost in the order of \$80,000, plus any

underground pipe, electricity supply installed and irrigation application equipment purchased, along with the cost of the consent application at around \$8,000-\$10,000.

Meanwhile, more consent applicants are queuing up as farmers view this as the last chance to access water freely and that water will be relatively more valuable in future. Where storage options are possible, farmers are frustrated that progress is so slow. Schemes, particularly Central Plains, are viewed as absolutely essential for future water management in Canterbury as demand grows and water supply patterns change due to climate variations.

Where consents are already held, farmers are increasingly more protective of the rights conferred by these consents, and are nervous at how their perceived rights may have changed. Protection of interests by objecting to consent applications by neighbours is the norm now, rather than the exception as it was a few years ago. Industry commentators suggest there is more enthusiasm for metering among farmers as both a management tool to get the best outcomes from water use, and also as a monitoring check that everyone is playing by their consent rules.

There are some industry developments underway at present that potentially will adjust the way various parts of the industry relate to one another. For example, the management contract between Fonterra and Dexel. The implications of these are as yet unclear. Farmers generally support any changes that provide them with better value for their levies. It remains to be seen whether the changes will provide such improvements.

Canterbury Budget

	2004/05			2005/06f		
	\$			\$		
	Whole farm	per cow	per kgMS	Whole farm	per cow	per kgMS
Revenue						
Milksolids	1,040,092	1,697	4.38	994,889	1,612	4.03
Cattle	83,438	136	0.35	88,282	143	0.36
Other farm income	9,000	15	0.04	9,000	15	0.04
Less:						
Cattle purchases	5,500	9	0.02	5,500	9	0.02
Gross farm revenue	1,127,030	1,839	4.74	1,086,671	1,761	4.40
Cash farm expenditure	660,600	1,078	2.78	659,759	1,069	2.67
Interest	162,674	265	0.68	160,928	261	0.65
Rent and/or leases	0	0	0.00	0	0	0.00
Cash farm surplus	303,756	496	1.28	265,985	431	1.08
Stock value adjustment	8,560	14	0.04	4,459	7	0.02
Minus depreciation	25,950	42	0.11	28,058	45	0.11
Net trading profit	286,366	467	1.20	242,386	393	0.98
Taxation	82,947	135	0.35	103,798	168	0.42
Net trading profit after tax	203,419	332	0.86	138,588	225	0.56
Allocation of Funds						
Add back depreciation	25,950	42	0.11	28,058	45	0.11
Reverse stock value adjustment	-8,560	-14	-0.04	-4,459	-7	-0.02
Drawings	69,000	113	0.29	67,000	109	0.27
Principal repayments	45,000	73	0.19	30,000	49	0.12
Development	71,304	116	0.30	74,071	120	0.30
Capital purchases	175,000	285	0.74	150,588	244	0.61
Disposable surplus/deficit	-139,496	-228	-0.59	-159,473	-258	-0.65
Other Cash Sources						
New borrowing	120,000	196	0.50	150,000	243	0.61
Off-farm income	0	0	0.00	0	0	0.00
Other cash income	0	0	0.00	0	0	0.00
Net cash change	-19,496	-32	-0.08	-9,473	-15	-0.04
Assets and Liabilities						
Farm, forest & building (opening)	3,900,000	6,362	16.41	4,500,000	7,293	18.23
Plant and machinery (opening)	173,000	282	0.73	187,050	303	0.76
Stock valuation (opening)	751,445	1,226	3.16	760,005	1,232	3.08
Dairy company shares	1,184,400	1,932	4.98	1,518,785	2,462	6.15
Total farm capital	6,008,845	9,802	25.28	6,965,840	11,290	28.21
Total debt opening	1,936,600	3,159	8.15	2,011,600	3,260	8.15
Equity (assets-liabilities)	4,072,245	6,643	17.13	4,954,240	8,030	20.07

Canterbury Budget

	2004/05			2005/06f		
	\$			\$		
	Whole farm	per cow	per kgMS	Whole farm	per cow	per kgMS
Farm Working Expenses						
Permanent wages	105,531	172	0.44	111,107	180	0.45
Casual wages	5,942	10	0.03	7,407	12	0.03
ACC	7,912	13	0.03	9,582	16	0.04
Animal health	43,523	71	0.18	39,505	64	0.16
Breeding	16,638	27	0.07	17,283	28	0.07
Dairy shed expenses	12,260	20	0.05	12,345	20	0.05
Electricity	47,536	78	0.20	54,319	88	0.22
Feed (hay and silage)	83,189	136	0.35	81,478	132	0.33
Feed (feed crops)	0	0	0.00	0	0	0.00
Feed (grazing)	80,812	132	0.34	79,009	128	0.32
Feed (other)	28,522	47	0.12	27,159	44	0.11
Fertiliser	77,235	126	0.32	76,100	123	0.31
Lime	2,852	5	0.01	2,469	4	0.01
Freight (not elsewhere deducted)	4,754	8	0.02	4,938	8	0.02
Re-grassing costs	11,884	19	0.05	9,876	16	0.04
Weed and pest control	5,704	9	0.02	4,938	8	0.02
Fuel	11,884	19	0.05	9,876	16	0.04
Vehicle costs (excluding fuel)	19,015	31	0.08	19,752	32	0.08
Repairs and maintenance	47,536	78	0.20	41,974	68	0.17
Communication costs (phone and mail)	4,754	8	0.02	4,938	8	0.02
Accountancy	2,377	4	0.01	2,469	4	0.01
Legal and consultancy	1,901	3	0.01	2,469	4	0.01
Other administration	14,974	24	0.06	16,543	27	0.07
Water charges (irrigation)	4,278	7	0.02	4,938	8	0.02
Rates	10,458	17	0.04	9,876	16	0.04
Insurance	7,130	12	0.03	7,407	12	0.03
Other expenditure	2,000	3	0.01	2,000	3	0.01
Cash farm expenditure	660,600	1,078	2.78	659,759	1,069	2.67
Calculated Ratios						
Economic farm surplus (or EBIT)	374,040	610	1.57	328,314	532	1.33
Cash farm expenditure/GFR	59%			61%		
EFS/total farm capital	6.2%			4.7%		
EFS less interest and lease/equity	5.2%			3.4%		
Interest+rent+lease/GFR	14.4%			14.8%		
EFS/GFR	33.2%			30.2%		
Economic Farm Surplus (EFS) is calculated as follows:						
Gross Revenue+Change in Livestock Value-Farm Working Expenses-Depreciation-Wages of Management						
Wages of Management = 1% of Opening Total Farm Capital + \$38,000 (to a maximum of \$75,000)						

Southland

Model Description

The Southland dairy model relates to owner operators who supply milk to the Fonterra factory at Edendale.

This model has increased significantly in size, stocking rate and production over several years. In 1995 the average farm size was 130 hectares (ha). In 2000/01 it was 182 ha, made up of a 152 ha milking platform and a 30 ha leased run-off. The model has been increased in size from the 2001/02 season to a 162 ha milking platform and a purchased 30 ha run-off.

Many farms in the model have been producing milk for less than seven years.

Table 1: The Model in Summary 2004/05

Effective area:	162 ha	Opening stock wintered:	559 hd
		Milking cows	455 hd
		Replacement heifers	100 hd
		Other cattle	4 hd

Table 2: Key Parameters

	2000/01	2001/02	2002/03	2003/04	2004/05f
Effective area (ha)	152	162	162	162	162
Cows wintered	426	455	455	455	455
Cows milked at 15 December	404	428	435	432	440
Stocking rate (cows/ha)	2.60	2.64	2.68	2.7	2.7
Total milksolids (kg)	151,500	162,640	152,250	152,120	163,200
Milksolids/ha	996	1,003	940	939	1,007
KgMS/cow milked	375	380	350	352	371
MS advance to end June (\$/kg)	4.40	4.70	3.30	3.95	3.50
MS deferred payment (\$/kg)	0.55	0.60	0.60	0.45	0.55
Gross farm revenue (\$)	810,109	947,022	651,574	709,095	690,306
Net trading profit (\$)	344,145	43,493	93,170	101,287	76,744
Disposable surplus/deficit (\$)	-331,249	-109,302	27,120	6,045	-2,219

Key Points

- Wet and cold conditions in spring reduced pasture growth rates by 44% of the long-term average.
- Production in 2004/05 fell 5% over the southern South Island.
- An increase in the 2004/05 advance payment helped to nullify the financial impact of poorer production.
- Dairy land values continued to increase, as well as dairy share values.

Physical Factors

After an uneventful July, the August to mid-January period was extremely wet and cold. Rainfall records were broken, especially in December.

The extreme wet meant very poor utilisation of both grass and supplements fed on pasture. Major pooling of water in low spots for extensive periods led to pasture death in these areas. Pugging damage

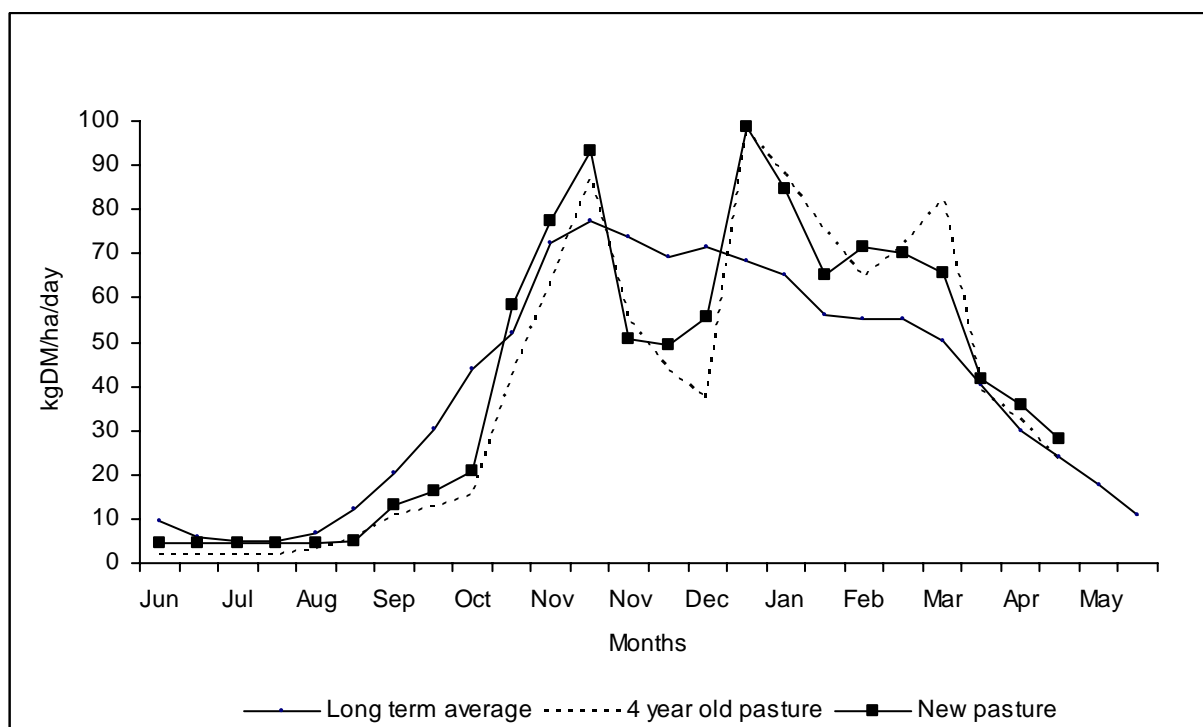
was severe on farms that were high stocked or had heavier soils. All stocks of forage were exhausted by November, with early season silage/hay yields reduced by 40% from average.

A brief interlude of fine weather in early October allowed some early planting of kale. However, some of these crops suffered such temperature extremes that plant maturity was accelerated, leading to some necking in swedes, followed by flowering.

Most farmers fed grain or molasses at some point, usually over mating.

Grass growth was only 44% of average during August/December 2004 (see Figure 1).

Figure 1: Pasture Growth Rates at Woodlands Compared with Long-term Average



Weather conditions improved from mid-January, but poor ground conditions continued to hamper silage contractors. Severe rutting was apparent on many farms in silage and early hay paddocks. Consequently, the quantity of feed conserved increased, but quality was below average.

Delayed re-grassing of ex-brassica paddocks and slow establishment of new brassica paddocks also created additional feed pressures.

Grass purchased for silage averaged 12 c/kgDM, with whole crop cereal averaging 14.5 c/kgDM. The whole crop cereal matured mid-late February just when grass growth exploded, which severely reduced the market price to 12 c/kgDM in a few cases. Disease in whole crop cereals, along with poor growing conditions, reduced yields significantly (30-35%).

Mid-March saw pasture growth rates increase by 64% on average, allowing rotations to lengthen successfully for the autumn.

By early April, pasture covers were 2,500 kgDM/ha (an increase of 350 kgDM/ha compared with an average season). A run of sharp frosts in early April, along with a very cold southerly, lowered soil temperatures to 9°C and, in 10 days, pasture covers had dropped, on average, 300 kgDM/ha.

A fine early May allowed for excellent utilisation of pastures and fed out supplements. Heavy rain in mid-May followed by no rain to the end of May created a better than average May growth rate.

By early June an extremely wet period caused surface flooding and ponding, which was worse than the December/January period. Gore had received 98% of its normal annual rainfall by 8 June.

Pasture covers at the beginning of June were at the long-term average of 1,800 kgDM/ha. Pastures on the heavier soils of West Otago and Eastern Southland struggled through April/May to produce 1,750 kgDM/ha average due to the effect of pugging prior to Christmas.

Nitrogen use (120 kgN/ha) was less than 2003/04 due to the difficulties in getting fertiliser spread.

Poor growing conditions combined with disease (clubroot, soft rot and dry rot) severely reduced brassica yields (35-40%). Swede yields averaged 8.5 tDM/ha and kale 6.0 tDM/ha.

Purchased brassica grazing prices remained steady for the season at \$0.17/kgDM, an increase of 6% on last year. Cow wintering prices remained steady at \$18/hd/week with self-fed silage/pad options costing \$21/hd/week. Early baleage prices of \$55-\$65 were carried through November/December, but the market relaxed to \$48/bale by May.

Stock were culled early in the season (January) with feed pressure reducing many herds to once-a-day (OAD) or 16-hourly milkings from mid-December.

The empty rate continued to climb, with the 2004/05 season averaging 15.0%, an increase of 3.0% from last season.

Farmer and vet concerns that cows were not cycling prompted early scanning from mid-January with less than average results, forcing the decision to leave bulls out longer than previously planned.

Cow condition suffered through the mating period with whole herds averaging condition score 4.0-4.25. Even with milk yields well below normal at 1.35 kgMS/cow through March/April, cow condition only reached 4.75 by the end of May.

The majority of herds (60%) were dry by 20 May. Good weather saw a further 35% milk to the end of May. A small proportion milked into June, especially those choosing to keep their empty cows milking.

Mastitis was a major problem in herds throughout the spring/summer due to the wet conditions. Cell counts rose and the challenge of OAD or 16-hourly milkings created some early cases of drying off.

Milk production decreased by 5% from last season matching the 2002/03 season's production. Total production for the season was 353 kgMS/cow and 939 kgMS/ha. Milk production peaked at 1.9 kgMS/cow in October but slipped dramatically by late December to 1.35 kgMS/cow, which held to mid-April before dropping again. The relatively favourable May allowed cows to achieve an average lactation length (265 days).

There was an extremely high incidence of lameness, which peaked in November, when up to 15-20% of some herds were in a lame mob. Lameness remained a problem until February.

Table 3: Supplementary Feed Costs

	May 2003	May 2004	May 2005
Baleage (\$/180 kgDM)	60.00	50.00	48
Hay (\$/225 kgDM)	55.00	45.00	34
High energy meal (\$/t)	400.00	380.00	335
Winter crop (\$/kgDM)	0.17	0.16	0.17
Winter grazing cows (\$/hd/wk)	18.00	18.00	18.00
Grazing 2yr heifers (\$/hd/wk)	6.35	6.25	6.20
Grazing calves (\$/hd/wk)	3.75	3.65	3.60
Straw (\$/160 kgDM)	40.00	35.00	28.00

Table 4: Number of Suppliers and Production

	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05
Number of suppliers	498	504	555	617	613	613
Total supplied (million kgMS)	60	74.4	76.2*	101*	109	109.6
Litres (million)	773	885	983	1,191*	1,300	1,281
Volumes (tonnes):						
Cheese	26,700	23,400	29,129	14,803	15,127	9,457
Milk powder	40,395	40,489	36,396	108,530	159,011	155,545
Lactose	6,000	6,164	6,583	5,312	6,574	5,243
Whey cheese	1,650	1,179	1,209	1,452	1,022	1,067
AMF	14,300	19,496	22,738	32,240	28,274	33,474
Casein	7,790	14,433	12,936	8,183	2,487	3,787

*Does not include Southland milksolids processed at other factories.

Source: Fonterra, Edendale

Financial Factors

2004/05 Review

Gross farm revenue increased 3.8% to \$709,095 (\$1,640/cow). This resulted from a better payout within the season (\$4.40/kgMS net) which compensated for a 5% decrease in milksolids per hectare.

In a reverse of the 2003/04 season, the drier areas enjoyed a better season compared with the wetter areas.

Calf sales and cull cow prices were below what was expected at \$35/hd and \$300/hd respectively. The sale of heifers for export to China has slowed, and local cow and in-calf heifer prices have risen significantly. One factor in the increased price of in-calf cows and heifers has been the increased empty rates.

Milksolids revenue made up 95% of gross farm revenue.

Other farm revenue was \$2,425 and came from rebates, pool payments and incidentals.

Expenditure

Cash farm expenditure was \$2.89/kgMS (62%) of gross farm revenue. This was an increase of 13% on the previous season, mainly due to increased feed costs and a decrease in total milksolids produced. There were also increases in the amount spent on labour, and repairs and maintenance. Farmers initially planned to spend \$2.50/kgMS, but found it difficult to prune costs to this extent. The awkward season meant farmers had to purchase feed early and spend more money later to conserve feed when a surplus occurred.

Feed (\$132,922), labour (\$76,060) and fertiliser (\$57,142) remained the three highest expenditure items.

Development (\$5,000) and capital expenditure (\$30,000) were lower than the 2003/04 season, but still at levels that maintained plant, land and buildings.

The model did not repay any principal and debt servicing was higher due to increased current account balances and a small proportion of debt going onto higher interest rates. However, the effects of interest rate rises were buffered by the amount of term debt on fixed interest rate loans. Debt servicing accounted for 20% of gross farm revenue.

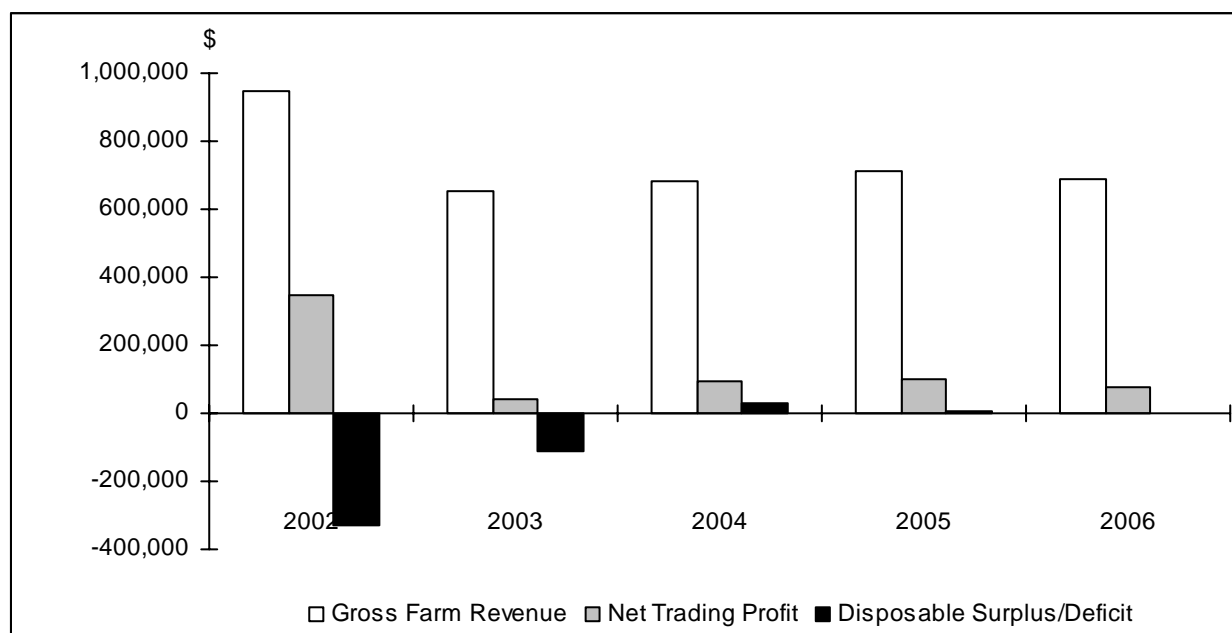
Net Result

The model showed a cash farm surplus of \$125,136 (\$290/cow). This is similar to the 2003/04 season and reflects the increase in payout, but lower production and continued high levels of cash farm expenditure.

After adjustments for depreciation and change in the value of livestock, the net trading profit was \$101,287 (\$234/cow).

This profit was available for taxation, drawings, principal repayments, development and capital purchases. The net cash change was a \$6,045 surplus

Southland Profitability Trends



2005/06 Forecast

Revenue

The advance to the end of the 2005/06 season is expected to be \$3.50/kgMS, with a final payout of \$4.00/kgMS. The deferred payment from the 2004/05 season is 55 c/kgMS, which is higher than average.

Milksolid revenue is expected to be down \$18,787 (\$42.70/cow) due to the lower advance. However, farmers are hoping for better production than the 2004/05 season. Cows in milk will increase to 440 and production is predicted to increase to 1,007 kgMS/ha.

Gross farm revenue for 2005/06 is budgeted at \$690,306 (\$1,569/cow).

Expenditure

Cash farm expenditure is budgeted to stay at a similar level, but decrease 6.5% on a per kgMS basis to \$2.70/kgMS. Cash farm expenditure is difficult to curb on dairy farms as there is very little discretionary spending and most expenditure is related directly to production.

Feed costs remain relatively constant, although some feeds decreased in price from previous years. There is concern over the quality of feed made and for sale.

Farmers are still not factoring in increases in fuel costs and are hoping the recent capital expenditure on new gear will mean fewer and smaller repair bills.

Cash farm expenditure, as a percentage of gross farm revenue, will stay at around 64%, the highest ratio for many seasons.

Although farmers had a small cash surplus in 2005/06, the advance in kgMS price means they will have overdrafts for longer. Farmers expect the interest rate to rise by 0.25-0.3% over the year on loans with floating rates. Debt servicing as a percentage of gross farm revenue will be 21%. Farmers are not planning on repaying any principal.

Farmers still plan some development (\$5,000), but will reduce capital expenditure (\$20,000).

Net Result

The model predicts a cash farm surplus of \$101,258 (\$235/cow). After adjustments for depreciation and change in livestock values, the net trading profit is expected to be \$78,844. This is a 21% decrease on the 2004/05 season.

After tax, drawings, principal, development and capital purchases are paid, the disposable deficit is negative \$2,219.

Issues and Trends

Conversions of sheep farms to dairy have slowed. However, there are estimated to be 15 new conversions for 2005/06 season south of Dunedin. The high capital cost of entry to dairy and the lower milk solid payout projections have also curbed enthusiasm for conversions.

Increasing empty rates (now 15%, 2002/03 was 10%) combined with a shortage of breeding young stock due to the export of heifers, have increased herd values. This means some farmers are looking to sell their herds and put on a sharemilker. Another reason for changing to sharemilkers was the continuing issue of finding and successfully managing staff in the increasingly tight labour market.

Farm values have lifted 20-25% over the season, boosting farmers' equity position and the opportunity to keep investing capital either in more land or off-farm investments.

The Overseer nutrient balancing software program has meant lower amounts but more targeted fertiliser, was being applied on dairy farms. However, the increase in fertiliser product prices and fuel, affecting cartage and spreading, will make containing expenditure difficult.

Interest in nitrification inhibitors has been strong, but application has been limited to a small area at this stage. Farmers are still debating the economics on a farm scale.

Farmers are moving away from inducing cows. Tighter codes of practice for induction mean more veterinary supervision in the process.

Herd testing, by Livestock Improvement Ltd, is increasing as herd sizes consolidate and production traits/cell count information become more valued.

Wintering costs, while steady, are still a significant expense and pad/housing options are slowly becoming more prevalent. However, concern over effluent management, the costs of conserved forage feed, machinery and labour costs are limiting the trend.

Imported feed options (palm kernel/copra and molasses) are competing with the cereal feed market. The strategic use of high energy feeds, especially over mating, is becoming more common.

Second year swede varieties appear to have little disease resistance. This is causing concern over sustainable brassica rotations.

Agricultural contractors had a frustrating but extremely busy season, which was in contrast to the previous year when drought conditions affected the amount of grass for conservation. Fuel price rises will put pressure on the contracting industry as well as other cash farm expenditure items.

Southland Budget

	2004/05			2005/06f		
	\$			\$		
	Whole farm	per cow	per kgMS	Whole farm	per cow	per kgMS
Revenue						
Milksolids	672,930	1,558	4.42	654,866	1,488	4.01
Cattle	35,740	83	0.23	36,940	84	0.23
Other farm income	2,425	6	0.02	2,500	6	0.02
Less:						
Cattle purchases	2,000	5	0.01	4,000	9	0.02
Gross farm revenue	709,095	1,641	4.66	690,306	1,569	4.23
Cash farm expenditure	439,417	1,017	2.89	440,626	1,001	2.70
Interest	144,542	335	0.95	146,322	333	0.90
Rent and/or leases	0	0	0.00	0	0	0.00
Cash farm surplus	125,136	290	0.82	101,258	235	0.63
Stock value adjustment	5,138	12	0.03	4,626	11	0.03
Minus depreciation	28,988	67	0.19	29,139	66	0.18
Net trading profit	101,287	234	0.67	76,744	179	0.48
Taxation	33,091	77	0.22	25,977	59	0.16
Net trading profit after tax	68,195	158	0.45	50,767	120	0.32
Allocation of Funds						
Add back depreciation	28,988	67	0.19	29,139	66	0.18
Reverse stock value adjustment	-5,138	-12	-0.03	-4,626	-11	-0.03
Drawings	51,000	118	0.34	53,000	120	0.32
Principal repayments	0	0	0.00	0	0	0.00
Development	5,000	12	0.03	2,500	6	0.02
Capital purchases	30,000	69	0.20	22,000	50	0.13
Disposable surplus/deficit	6,045	14	0.04	-2,219	0	0.00
Other Cash Sources						
New borrowing	0	0	0.00	0	0	0.00
Off-farm income	0	0	0.00	0	0	0.00
Other cash income	0	0	0.00	0	0	0.00
Net cash change	6,045	14	0.04	-2,219	0	0.00
Assets and Liabilities						
Farm, forest & building (opening)*	2,702,875	6,257	17.77	3,159,000	7,180	19.36
Plant and machinery (opening)	193,250	447	1.27	194,263	442	1.19
Stock valuation (opening)	524,611	1,214	3.45	529,749	1,204	3.25
Dairy company shares	908,375	2,103	5.97	1,030,250	2,341	6.31
Total farm capital	4,329,111	10,021	28.46	4,913,262	11,167	30.11
Total debt opening	1,828,078	4,232	12.02	1,822,078	4,093	11.04
Equity (assets-liabilities)	2,501,033	5,789	16.44	3,091,184	7,073	19.07
* Includes run off block						

Southland Budget

	2004/05			2005/06f		
	\$			\$		
	Whole farm	per cow	per kgMS	Whole farm	per cow	per kgMS
Farm Working Expenses						
Permanent wages	69,975	162	0.46	69,000	157	0.42
Casual wages	6,085	14	0.04	6,080	14	0.04
ACC	4,841	11	0.03	5,970	14	0.04
Animal health	25,920	60	0.17	26,400	60	0.16
Breeding	12,342	29	0.08	13,640	31	0.08
Dairy shed expenses	9,323	22	0.06	10,120	23	0.06
Electricity	14,342	33	0.09	15,400	35	0.09
Feed (hay and silage)	37,450	87	0.25	35,200	80	0.22
Feed (feed crops)	17,280	40	0.11	17,600	40	0.11
Feed (grazing)	54,432	126	0.36	55,440	126	0.34
Feed (other)	23,760	55	0.16	13,200	30	0.08
Fertiliser	53,302	123	0.35	63,744	145	0.39
Lime	3,840	9	0.03	6,528	15	0.04
Freight (not elsewhere deducted)	3,698	9	0.02	3,278	7	0.02
Re-grassing costs	5,616	13	0.04	5,676	13	0.03
Weed and pest control	2,540	6	0.02	2,310	5	0.01
Fuel	11,664	27	0.08	11,132	25	0.07
Vehicle costs (excluding fuel)	11,880	28	0.08	12,892	29	0.08
Repairs and maintenance	28,339	66	0.19	22,000	50	0.13
Communication costs (phone and mail)	4,532	10	0.03	4,840	11	0.03
Accountancy	3,175	7	0.02	3,436	8	0.02
Legal and consultancy	3,983	9	0.03	4,400	10	0.03
Other administration	5,660	13	0.04	8,360	19	0.05
Water charges (irrigation)	0	0	0.00	0	0	0.00
Rates	10,670	25	0.07	11,000	25	0.07
Insurance	5,175	12	0.03	5,104	12	0.03
Other expenditure	9,592	22	0.06	7,876	18	0.05
Cash farm expenditure	439,417	1,017	2.89	440,626	1,001	2.70
Calculated Ratios						
Economic farm surplus (or EBIT)	170,829	395	1.12	150,167	341	0.92
Cash farm expenditure/GFR	62%			64%		
EFS/total farm capital	3.9%			3.1%		
EFS less interest and lease/equity	1.1%			0.1%		
Interest+rent+lease/GFR	20%			21%		
EFS/GFR	24%			22%		
Economic Farm Surplus (EFS) is calculated as follows:						
Gross Revenue+Change in Livestock Value-Farm Working Expenses-Depreciation-Wages of Management						
Wages of Management = 1% of Opening Total Farm Capital + \$38,000 (to a maximum of \$75,000)						

West Coast South Island

This commentary describes the collective dairy industry's perspective of the 2004/05 season and the outlook for the 2005/06 season on the West Coast of the South Island.

A typical West Coast dairy farm milks about 310 cows and produces around 96,000 kgMS on 155 effective hectares (ha). Farm size and cow numbers have gradually increased during the past ten years.

The number of dairy conversions has now stabilised, with most easily convertible land for dairying now carrying dairy cows.

Key Points

- The 2004/05 season was notable for extremely variable weather. At the start of the season, and for much of the spring and early summer, the weather was cold and wet with average rainfall, but more rainy days. This was followed by an unseasonably mild autumn.
- Mild weather conditions through the autumn have led to above-average pasture growth rates. Most farms are approaching the winter with adequate pasture cover levels and adequate cow condition.
- Westland Milk Products continues on its expansion path, with Stage 1 of the Protein Plant due to commence manufacturing in September 2005.

Physical Factors

The 2004/05 season has been one of climatic contrasts. Some farmers described the winter and spring as the worst for 30 years, but the summer and autumn were above average in terms of temperature and growth. The season ended with Westland Milk Products total production being only slightly ahead (<1%) of 2003/04, despite almost 8,000 extra cows being milked through the majority of the season.

Milk production through the first half of 2005/05 was around 2% behind 2003/04, well below the 12% growth budgeted for the total season. However, 2003/04 production was exceptional compared with the below-average production season in 2004/05.

Total peak production levels in 2004/05 were equal with the previous season, but per cow production was well below last season, with many farmers down 0.2-0.3 kgMS/cow. From January onwards, pasture growing conditions improved and many farmers were able to maintain per cow production at stable levels for 6-8 weeks.

Pasture covers at calving and supplement levels on most farms were such that most farms started the season with high expectations for record production and a good season. In addition, with bigger farms and more cows, continued growth was anticipated. However, the continued wet and cool growing conditions slowed pasture growth rates and increased the need to purchase extra, high quality supplements, and to stand milking cows off wet paddocks.

Good pasture growing conditions through the mid-summer and autumn period allowed some harvesting of late supplements, meaning many farmers will commence winter with adequate supplement levels. Others will need to purchase extra supplements. Those that did manage to harvest supplements before Christmas were confounded by the wet conditions and, as a result, the quality of these supplements is low to average.

Cow census figures collected by Westland Milk Products indicate that about 6,200 extra cows are likely to be milked by existing suppliers next season, with an additional 3,000 to be milked by seven new suppliers. This should see around 390 suppliers supplying Westland Milk Products next season. Even though 8,000 extra cows were milked through the majority of this season, conditions were such that they were not able to perform to their potential.

Despite the extra production challenges through the season, stock health has not posed too many problems. With the push to reduce inductions, and challenging conditions over the mating period, there was some nervousness about the level of in-calf rates. West Coast vets report empty cow rates of 5-20%, mostly dependent on the date that mating ceased. It was also noted that submission and conception rates varied with the weather conditions over the mating period. In order to compress the calving spread, a number of farmers removed bulls earlier and, as a result, have tended to have higher empty cow rates. Although the range is wider than in other seasons, the average empty rate was similar to the long-term average.

Autumn fertiliser sales on the West Coast have been higher than in previous seasons as farmers applied their spring fertiliser in the autumn when the weather conditions were more favourable. Nitrogen use has been constant throughout the season, with smaller quantities being applied more often. Annual applications of 100-130 kgN/ha are now typical. More farmers are using the “trickle” application approach behind the cows after each grazing, with each application kept at 25-30 kgN/ha.

Once daily or 16 hour milkings were used strategically by a number of farmers throughout the season, depending on weather conditions and feed availability. These less frequent milkings allow a rotation length more suited to the pasture covers and wet conditions. Approximately six herds were milked on a once daily regime for the entire season. Reasons given were mainly lifestyle or constraints of dairy shed size. There is considerable interest in their progress and there could well be an increase in the number of herds milking once daily next season.

Colostrum collections will again take place on the West Coast for the 2005/06 season, with numbers of suppliers similar to last season. Westland Milk Products processes the colostrum into a variety of products, including health food additives and sports supplements.

Financial Factors

2004/05 Review

Revenue

The advance by Westland Milk Products is expected to reach \$3.75/kgMS by the end of June 2005. Indications are that a further 55 c/kgMS will be paid over the winter months. A final payout level of \$4.30/kgMS is expected. With many farms incurring extra feed costs this season, it is likely that much of this increase will be used to reduce overdraft levels.

Expenditure

Farmers continued to meet full maintenance expenditure through the season, despite lower production levels. In some cases, bank overdrafts exceeded normal levels. Financiers were, in the main, supportive and the extended overdraft levels have been accommodated and reduced through the latter part of the season. In some cases some overdrafts will need to be transferred to term loans, but this is not felt to be significantly higher than in other seasons. Additional feed purchases and extra fertiliser applications forced expenditure levels up during a reduced income season.

Some concern is being voiced over the increase in high-cost production systems. Meal and molasses feeding, higher nitrogen use and grazing stock off the property have become essential parts of the management system for an increasing number of farms, and the sustainability of these systems at payouts of around \$4.00/kgMS is being questioned.

Essential maintenance expenditure is likely to be met over the coming season, but it is expected that discretionary expenditure will be kept to a minimum, at least until later in the season, when a better indication of the markets and the season can be gauged. In the same vein, capital expenditure is likely to be restricted to essential purchases only.

Net Result

The typical budget improved its net cash position by just over \$20,500 for the 2004/05 year. This is down by about \$6,000 on the previous season's result and reflects the reduced production levels and increased expenditure levels. Continued development, albeit on a reduced scale, and targeting of increases in production, remain the focus of most dairy farmers. Targeted capital expenditure is likely to take place to achieve these objectives.

2005/06 Forecast

Revenue

Herd size on the West Coast will continue to increase. Westland Milk Products cow census data indicates that cow numbers will continue to rise by just under 10% annually. Farmers are budgeting on production levels per cow on a par with the long term average.

Suppliers have already been told that the advance will be at a similar level to the 2004/05 season and to budget accordingly. An interim advance of \$3.00/kgMS has been announced, with indications that a final payout in the region of \$4.05-\$4.15/kgMS should be used in financial budgets.

Expenditure

Despite the expected reduction in payout, most dairy farmers will continue to budget for full maintenance expenditure. Reduced capital purchases are likely, targeting aged plant and machinery. Less expenditure on some of the higher cost items in the 2004/05 season should allow some capital expenditure and overdraft reduction to occur.

Net Result

The net cash position for the 2006 year is likely to be similar to the initial 2005 budget of approximately \$30,000, with budgeted production back to normal expectations. A reduction in purchased feed and fertiliser should balance the final result.

Issues and Trends

The processing capital at Westland Milk Products continues to expand, with the protein plant due to commence production in September 2005. Once all current expansion plans have been completed, Westland Milk Products will be able to process four million litres of milk per day, from an expected 150,000 cows in the traditional supply area. Westland Milk Products are confident of their ability to market the increased volume.

The lower payout and more difficult season have resulted in variable real estate activity. Enquiries and sales have been steady and properties have been selling at around the \$18-\$20/kgMS mark. There continues to be strong interest from outside the West Coast.

Agricultural education activities have continued at high levels, with over 120 AgITO training agreements currently in place. This reflects the continued growth in the dairying sector on the West Coast, and improved public perceptions of farming as a career option.

An investigation into the Westland Milk Products share structure is about to commence. The impetus for this has come from some suppliers. It is felt that the current share value of \$1.50/kgMS has been instrumental in achieving the recent production growth, and that an increase in share value could affect future growth.

West Coast dairy farmers are seriously concerned by the recent announcement of Fonterra taking more of a role in the control and management of Dexcel. They feel that the level of service available to them could be reduced due to their location in an area with no Fonterra suppliers. With limited information

available on how the new structure will function, Westland Milk Products and Dairy Farmers of New Zealand are seeking further clarification on behalf of suppliers.

The West Coast Regional Council (WCRC) has been taking a far more active role in effluent management (dairy shed, silage and stand-off areas) during the past season. They have adopted a more educative than regulatory stance, with the objective of working through any problems with farmers to try and obtain more commitment to the outcome. As part of this approach, the WCRC have employed a Sustainable Development Co-ordinator to help farmers formulate and document farm plans which outline work that will be done to enhance the environment, e.g., bridging of waterways, and fencing of streams. Once farm plans are completed in the Brunner Catchment, the Orowaiti Catchment in Westport will be targeted.

A number of research projects are now well established on the West Coast. In the Lake Brunner Catchment, research is being carried out into nutrient runoff from humps and hollows, and into possible solutions to mitigate runoff. In the Inchbonnie Catchment, a project has been established as part of the nationwide Best Practice Dairy Catchment Project to look at the effects of farming on soil and water. Forage Systems for the West Coast is another project that has just completed its second year. The project aims to identify suitable forage crops for the West Coast, and to provide management advice on how to grow them successfully.

The West Coast dairy farmers have also established a West Coast Focus Farm which has been set up using the Lincoln University Dairy Farm as a model. In year one, the farm aims to monitor and document all aspects of the farm management, and in years two and three, to trial farm management practices suitable for the West Coast.

National Dairy Budget

The following budget has been constructed via a weighted average of the models. The weighting, on a model basis, was as follows: Northland 9.3%, Waikato/Bay of Plenty 43.9%, Lower North Island 24.1%, Canterbury 10.3%, and Southland 12.3%. This weighting is based on the number of dairy cows in each region from the 2004 Livestock Improvement Corporation survey.

	2004/05			2005/06f		
	\$			\$		
	Whole farm	per cow	per kgMS	Whole farm	per cow	per kgMS
Revenue						
Milksolids	451,686	1,400	4.43	443,559	1,338	4.03
Cattle	37,981	123	0.39	41,832	132	0.41
Other farm income	1,225	2	0.01	1,235	2	0.01
Less:						
Cattle purchases	4,702	17	0.06	3,886	13	0.04
Gross farm revenue	486,191	1,508	4.77	482,739	1,460	4.41
Cash farm expenditure	286,062	884	2.80	292,470	880	2.65
Interest	72,061	215	0.67	74,846	219	0.65
Rent and/or leases	0	0	0.00	0	0	0.00
Cash farm surplus	128,068	408	1.30	115,423	361	1.10
Stock value adjustment	7,993	28	0.09	2,371	7	0.02
Minus depreciation	24,150	82	0.26	24,440	81	0.25
Net trading profit	111,911	355	1.13	93,354	287	0.88
Taxation	33,488	106	0.34	29,790	86	0.26
Net trading profit after tax	78,423	249	0.80	63,564	201	0.62
Allocation of Funds						
Add back depreciation	24,150	82	0.26	24,440	81	0.25
Reverse stock value adjustment	-7,993	-28	-0.09	-2,371	-7	-0.02
Drawings	55,005	190	0.61	55,577	186	0.57
Principal repayments	19,994	67	0.22	17,607	60	0.19
Development	14,102	37	0.11	9,758	20	0.06
Capital purchases	34,499	89	0.27	26,219	62	0.18
Disposable surplus/deficit	-29,021	-81	-0.25	-23,526	-53	-0.15
Other Cash Sources						
New borrowing	12,360	20	0.05	15,450	25	0.06
Off-farm income	15,050	59	0.19	13,227	50	0.16
Other cash income	0	0	0.00	0	0	0.00
Net cash change	-1,611	-2	0.00	5,151	22	0.07
Assets and Liabilities						
Farm, forest & building (opening)	2,487,326	8,315	26.66	2,926,582	9,477	28.90
Plant and machinery (opening)	117,101	380	1.21	120,130	378	1.15
Stock valuation (opening)	378,225	1,212	3.87	391,453	1,218	3.71
Dairy company shares	582,790	1,835	5.82	675,949	2,030	6.11
Total farm capital	3,565,443	11,743	37.56	4,114,115	13,104	39.87
Total debt opening	883,563	2,643	8.24	921,880	2,696	8.01
Equity (assets-liabilities)	2,681,880	9,099	29.32	3,192,236	10,408	31.86

National Dairy Budget

	2004/05			2005/06f		
	\$			\$		
	Whole farm	per cow	per kgMS	Whole farm	per cow	per kgMS
Farm Working Expenses						
Permanent wages	35,933	100	0.30	42,661	123	0.36
Casual wages	6,239	23	0.08	2,774	8	0.03
ACC	3,934	13	0.04	4,981	16	0.05
Animal health	18,790	59	0.19	18,925	58	0.18
Breeding	9,214	30	0.10	9,632	30	0.09
Dairy shed expenses	6,358	20	0.07	6,571	20	0.06
Electricity	12,631	36	0.11	13,813	37	0.11
Feed (hay and silage)	26,660	78	0.24	26,111	74	0.22
Feed (feed crops)	3,055	9	0.03	3,191	9	0.03
Feed (grazing)	30,343	89	0.28	31,158	90	0.27
Feed (other)	12,650	39	0.12	11,721	36	0.11
Fertiliser	39,779	128	0.41	42,691	133	0.41
Lime	987	3	0.01	1,278	3	0.01
Freight (not elsewhere deducted)	2,379	8	0.02	2,378	7	0.02
Re-grassing costs	3,472	10	0.03	3,251	9	0.03
Weed and pest control	2,443	8	0.03	2,413	8	0.02
Fuel	7,903	26	0.08	7,776	25	0.08
Vehicle costs (excluding fuel)	9,075	29	0.09	9,095	28	0.08
Repairs and maintenance	21,002	67	0.21	17,847	54	0.16
Communication costs (phone and mail)	3,170	11	0.03	3,264	10	0.03
Accountancy	2,926	10	0.03	2,988	10	0.03
Legal and consultancy	2,897	10	0.03	2,496	8	0.02
Other administration	5,241	16	0.05	5,894	17	0.05
Water charges (irrigation)	441	1	0.00	509	1	0.00
Rates	7,626	125	0.08	8,096	26	0.08
Insurance	4,866	17	0.05	5,031	17	0.05
Other expenditure	6,048	22	0.07	5,926	21	0.07
Cash farm expenditure	286,062	884	2.80	292,470	880	2.65
Calculated Ratios						
Economic farm surplus (or EBIT)	113,508	325	1.02	98,701	273	0.81
Cash farm expenditure/GFR	58.6%			59.6%		
EFS/total farm capital	2.6%			2.0%		
EFS less interest and lease/equity	1.4%			0.6%		
Interest+rent+lease/GFR	14.1%			14.7%		
EFS/GFR	21.3%			17.7%		
Physical Parameters						
Effective area (ha)	117			119		
Cows milked	312			321		
Milksolids (kg)	102,177			109,967		
Economic Farm Surplus (EFS) is calculated as follows:						
Gross Revenue+Change in Livestock Value-Farm Working Expenses-Depreciation-Wages of Management						
Wages of Management = 1% of Opening Total Farm Capital + \$38,000 (to a maximum of \$75,000)						
The ratios shown above are weighted average ratios calculated from the regional ratios. The results can differ slightly from ratios calculated using the national model data.						

Sector Quartile Analysis

The following table is based on an analysis of the actual dairy farms monitored as part of the MAF Farm Monitoring programme. It is across the total national sample of 100 farms, and gives a breakdown from the bottom 10% of farms to the top 10%, both on a physical and financial basis. The analysis was based on sorting the farms according to their net trading profit before tax per hectare.

Quartile Assessment of Dairy Monitoring Farms: Financial Data

	Average of:			Mean	Median	Average of:		
	Bottom 10%	Bottom 25%	Bottom 25-50%			Top 50-75%	Top 25%	Top 10%
Revenue								
Milksolids	579,115	504,374	537,710	617,454	466,257	542,095	847,863	803,010
Cattle sales	58,936	47,613	45,691	53,373	39,949	46,107	70,936	61,351
Other revenue	2,678	2,079	7,262	5,189	814	2,191	8,618	10,687
Cattle purchases	17,929	9,784	7,009	11,408	2,700	14,057	14,108	19,259
Gross farm revenue	622,330	544,086	584,741	664,833	510,396	576,336	913,310	855,789
Cash farm expenses	381,638	328,357	321,603	366,040	251,527	305,868	487,016	428,294
Interest	192,623	137,281	117,905	298,793	88,759	102,189	426,294	427,495
Rent	6,600	5,284	6,726	5,723	-	4,485	6,119	5,452
Cash farm surplus	240,692	215,729	263,138	125,932	218,662	270,468	140,709	121,943
Depreciation	35,304	36,239	29,934	28,783	22,600	24,352	24,979	22,323
Stock value adjustment	-12,781	3,023	10,859	17,285	8,604	18,895	34,280	28,288
Net trading profit	-6,616	39,947	119,431	155,639	113,224	158,337	288,766	306,064
Tax	15,468	15,521	21,272	25,854	16,943	24,948	40,061	45,835
Net trading profit after tax	-22,084	24,426	98,159	129,785	91,224	133,388	248,705	260,229
Drawings	59,190	50,673	55,334	55,077	48,800	49,493	63,820	55,007
Principal	15,891	16,140	20,028	29,626	16,092	35,564	43,968	21,496
Development	13,649	7,187	22,244	26,564	-	24,299	48,901	27,556
Capital purchases	63,904	56,927	42,076	75,658	25,000	30,868	173,459	188,377
Disposable surplus/deficit	-126,632	-73,285	-22,448	-45,640	-12,809	-1,380	-90,743	-38,171
New borrowing	120,900	68,292	18,926	75,060	-	12,409	188,281	158,300
Off-farm income	23,546	16,109	18,709	15,674	2,400	10,221	16,945	6,657
Off-farm investment	62,200	26,042	600	15,587	-	7,840	26,766	10,559
Net cash change	-29,387	-5,760	14,588	30,809	14,842	9,821	87,717	116,227
Negative NTP after tax	60%	25%	0%	6%		0%	0%	0%
Negative disposable surplus	90%	71%	60%	59%		46%	63%	25%
Net trading profit/ha	-31	238	793	1,073	1,056	1,265	1,914	2,230

Quartile Assessment of Dairy Monitoring Farms: Physical Performance Data

	Average of:			Mean	Median	Average of:		
	Bottom 10%	Bottom 25%	Bottom 25-50%			Top 50-75%	Top 25%	Top 10%
Milking area (ha)	186	179	154	154	122	124	155	141
Opening cow numbers	428	380	361	402	333	349	491	454
Closing cow numbers	441	385	379	416	363	362	512	478
Total opening stock numbers	576	494	468	524	411	446	652	588
Total closing stock numbers	565	499	475	544	444	469	694	610
Cows in milk (15 December)	399	358	355	388	330	340	473	438
Total milk production (kgMS)	130,029	113,831	121,262	139,349	102,000	121,358	189,132	177,657
Milksolids per hectare (kg/ha)	694	641	819	891	909	961	1,114	1,161
Milksolids production per cow	310	302	336	337	331	337	367	377
Stocking rate (cows/ha)	2.17	2.05	2.42	2.59	2.77	2.86	3.02	3.06