



TARANAKI DAIRY

KEY POINTS

- Overall, milk production was up 9 percent across the region in 2011/12. It was a good season for pasture growth following an initial tight start and including two snow storms and two wind storms, which impacted on individuals in some parts of the region. A 3 percent decrease for production is expected for 2012/13, with farmers unsure what the weather will bring.
- Milk payout was down substantially but the effect was countered by the increased milk production, which provided a similar gross income, down 1 percent, to the previous year. Milk income is expected to decline further in 2012/13.
- Levels of some farm inputs increased with the good

Key results from the Ministry for Primary Industries 2012 dairy monitoring programme

- 2011/12 production season but are expected to decrease with the predicted lower payout for 2012/13.
- Despite good pasture growth, purchased feed inputs increased – initially to cover an early spring feed deficit and then to improve milk production. Feed costs were also higher.
- The 2011/12 model has a cash surplus of \$40 000, while a small cash deficit is budgeted for the 2012/13 year.
- Most high-debt high-risk farms have survived another season but are still at risk with increasing operating costs and milk payouts dropping. Overall, farmers remain positive for the long-term.

Table 1: Key parameters, financial results and budget for the Taranaki dairy model

| Year ended 30 June | 2008/09 | 2009/10 ¹ | 2010/11 ² | 2011/12 actual | 2012/13 budget |
|---|---------|----------------------|----------------------|----------------|----------------|
| Effective area (ha) | 96 | 96 | 96 | 96 | 96 |
| Cows wintered (head) | 284 | 284 | 284 | 288 | 291 |
| Replacement heifers (head) | 69 | 69 | 70 | 71 | 71 |
| Cows milked 15th December (head) | 267 | 267 | 270 | 270 | 273 |
| Stocking rate (cows/ha) | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 |
| Total milksolids (kg) | 90 000 | 89 100 | 92 600 | 100 500 | 97 000 |
| Milksolids per ha (kg/ha) | 938 | 928 | 965 | 1 047 | 1 010 |
| Milksolids per cow milked (kg/cow) | 337 | 334 | 343 | 372 | 355 |
| Milksolids advance to end June (\$/kg) | 4.15 | 5.15 | 6.20 | 5.20 | 4.40 |
| Milksolids deferred payment (\$/kg) | 1.00 | 1.05 | 0.95 | 1.39 | 0.85 |
| Net cash income (\$) | 493 030 | 591 391 | 724 472 | 720 346 | 586 369 |
| Farm working expenses (\$) | 300 013 | 302 400 | 326 192 | 376 234 | 361 465 |
| Farm profit before tax (\$) | 32 317 | 150 794 | 278 614 | 238 799 | 130 377 |
| Farm surplus for reinvestment ³ (\$) | 2 787 | 106 452 | 108 033 | 109 518 | 57 429 |

Notes

1 The sample of farms used to compile this model changed between 2008/09 and 2009/10. Caution is advised if comparing data between these two years.

2 The model parameters have been updated as from 2010/11 using the latest dairy statistics. Caution should be used in comparing with earlier published material.

3 Farm surplus for reinvestment is the cash available from the farm business, after meeting living costs, which is available for investment on the farm or for principal repayments. It is calculated as farm profit after tax plus depreciation plus stock adjustments less drawings.

Table 2: Taranaki dairy model budget

| | 2011/12 | | | 2012/13 budget | | |
|--|------------------|---------------|---------------------------|------------------|---------------|---------------------------|
| | Whole farm (\$) | Per cow (\$) | Per kg of milksolids (\$) | Whole farm (\$) | Per cow (\$) | Per kg of milksolids (\$) |
| Revenue | | | | | | |
| Milksolids | 651 314 | 2 412 | 6.48 | 512 225 | 1 876 | 5.28 |
| Dividend on wet shares | 28 212 | 104 | 0.28 | 30 580 | 112 | 0.32 |
| Cattle | 47 620 | 176 | 0.47 | 50 364 | 184 | 0.52 |
| Other farm income | 1 200 | 4 | 0.01 | 1 200 | 4 | 0.01 |
| Less: | | | | | | |
| Cattle purchases | 8 000 | 30 | 0.08 | 8 000 | 29 | 0.08 |
| Net cash income | 720 346 | 2 668 | 7.17 | 586 369 | 2 148 | 6.05 |
| Farm working expenses | 376 234 | 1 393 | 3.74 | 361 465 | 1 324 | 3.73 |
| Cash operating surplus | 344 112 | 1 274 | 3.42 | 224 904 | 824 | 2.32 |
| Interest | 103 329 | 383 | 1.03 | 87 300 | 320 | 0.90 |
| Rent and/or leases | 0 | 0 | 0.00 | 0 | 0 | 0.00 |
| Stock value adjustment | 6 116 | 23 | 0.06 | 2 468 | 9 | 0.03 |
| Minus depreciation | 8 100 | 30 | 0.08 | 9 695 | 36 | 0.10 |
| Farm profit before tax | 238 799 | 884 | 2.38 | 130 377 | 478 | 1.34 |
| Income equalisation | 0 | 0 | 0.00 | -45 000 | -165 | -0.46 |
| Taxation | 56 265 | 208 | 0.56 | 52 175 | 191 | 0.54 |
| Farm profit after tax | 182 534 | 676 | 1.82 | 123 202 | 451 | 1.27 |
| Allocation of funds | | | | | | |
| Add back depreciation | 8 100 | 30 | 0.08 | 9 695 | 36 | 0.10 |
| Reverse stock value adjustment | -6 116 | -23 | -0.06 | -2 468 | -9 | -0.03 |
| Drawings | 75 000 | 278 | 0.75 | 73 000 | 267 | 0.75 |
| Farm surplus for reinvestment¹ | 109 518 | 406 | 1.09 | 57 429 | 210 | 0.59 |
| Reinvestment | | | | | | |
| Net capital purchases | 40 000 | 148 | 0.40 | 35 708 | 131 | 0.37 |
| Development | 5 000 | 19 | 0.05 | 0 | 0 | 0.00 |
| Principal repayments | 24 464 | 91 | 0.24 | 24 157 | 88 | 0.25 |
| Farm cash surplus/deficit | 40 053 | 148 | 0.40 | -2 436 | -9 | -0.03 |
| Other cash sources | | | | | | |
| Dividend on dry shares | 0 | 0 | 0.00 | 0 | 0 | 0.00 |
| Introduced funds | 0 | 0 | 0.00 | 0 | 0 | 0.00 |
| New borrowings | 0 | 0 | 0.00 | 0 | 0 | 0.00 |
| Off-farm income | 17 000 | 63 | 0.17 | 17 000 | 62 | 0.18 |
| Net cash position | 57 053 | 211 | 0.57 | 14 564 | 53 | 0.15 |
| Assets and Liabilities | | | | | | |
| Farm, forest and building (opening) | 4 300 000 | 15 926 | 42.79 | 4 300 000 | 15 751 | 44.33 |
| Plant and machinery (opening) | 162 000 | 600 | 1.61 | 193 900 | 710 | 2.00 |
| Stock valuation (opening) | 684 522 | 2 535 | 6.81 | 690 638 | 2 530 | 7.12 |
| Dairy company shares | 418 552 | 1 550 | 4.16 | 454 260 | 1 664 | 4.68 |
| Other farm-related investments (opening) | 0 | 0 | 0.00 | 0 | 0 | 0.00 |
| Total farm assets | 5 565 074 | 20 611 | 55.37 | 5 638 798 | 20 655 | 58.13 |
| Total liabilities (opening) | 1 456 134 | 5 393 | 14.49 | 1 431 670 | 5 244 | 14.76 |
| Total equity (assets-liabilities) | 4 108 940 | 15 218 | 40.88 | 4 207 128 | 15 411 | 43.37 |

Notes

1 Farm surplus for reinvestment is the cash available from the farm business, after meeting living costs, which is available for investment on the farm or for principal repayments. It is calculated as farm profit after tax plus depreciation plus stock adjustments less drawings.

Please note that several budget parameters have changed between 2009/10 and 2010/11. These changes have been made to better reflect the financial position of the farm. New and adjusted definitions include farm surplus for reinvestment, farm cash surplus/deficit and net cash position. Caution should be taken when comparing this year's publication to previous years.

Table 3: Taranaki dairy model expenditure

| | 2011/12 | | | 2012/13 budget | | |
|---|-----------------|--------------|---------------------------|-----------------|--------------|---------------------------|
| | Whole farm (\$) | Per cow (\$) | Per kg of milksolids (\$) | Whole farm (\$) | Per cow (\$) | Per kg of milksolids (\$) |
| Farm working expenses | | | | | | |
| Permanent wages | 38 500 | 143 | 0.38 | 38 500 | 141 | 0.40 |
| Casual wages | 4 000 | 15 | 0.04 | 4 000 | 15 | 0.04 |
| ACC | 1 589 | 6 | 0.02 | 1 284 | 5 | 0.01 |
| Total labour expenses | 44 089 | 163 | 0.44 | 43 784 | 160 | 0.45 |
| Animal health | 22 000 | 81 | 0.22 | 22 000 | 81 | 0.23 |
| Breeding | 13 500 | 50 | 0.13 | 13 500 | 49 | 0.14 |
| Dairy shed expenses | 6 300 | 23 | 0.06 | 6 500 | 24 | 0.07 |
| Electricity | 10 000 | 37 | 0.10 | 10 100 | 37 | 0.10 |
| Feed (hay and silage) | 12 500 | 46 | 0.12 | 11 500 | 42 | 0.12 |
| Feed (feed crops) | 2 500 | 9 | 0.02 | 2 700 | 10 | 0.03 |
| Feed (grazing) | 37 628 | 139 | 0.37 | 39 551 | 145 | 0.41 |
| Feed (other) | 72 500 | 269 | 0.72 | 64 200 | 235 | 0.66 |
| Fertiliser | 53 852 | 199 | 0.54 | 53 159 | 195 | 0.55 |
| Lime | 510 | 2 | 0.01 | 510 | 2 | 0.01 |
| Freight (not elsewhere deducted) | 2 600 | 10 | 0.03 | 2 700 | 10 | 0.03 |
| Regrassing costs | 2 550 | 9 | 0.03 | 2 550 | 9 | 0.03 |
| Weed and pest control | 2 300 | 9 | 0.02 | 2 300 | 8 | 0.02 |
| Fuel | 6 800 | 25 | 0.07 | 7 000 | 26 | 0.07 |
| Vehicle costs (excluding fuel) | 12 000 | 44 | 0.12 | 12 000 | 44 | 0.12 |
| Repairs and maintenance | 36 000 | 133 | 0.36 | 28 000 | 103 | 0.29 |
| Total other working expenses | 293 540 | 1 087 | 2.92 | 278 270 | 1 019 | 2.87 |
| Communication costs (phone and mail) | 2 500 | 9 | 0.02 | 2 600 | 10 | 0.03 |
| Accountancy | 5 200 | 19 | 0.05 | 5 200 | 19 | 0.05 |
| Legal and consultancy | 2 200 | 8 | 0.02 | 2 400 | 9 | 0.02 |
| Other administration | 2 400 | 9 | 0.02 | 2 500 | 9 | 0.03 |
| Water charges (irrigation) | 0 | 0 | 0.00 | 0 | 0 | 0.00 |
| Rates | 10 100 | 37 | 0.10 | 10 100 | 37 | 0.10 |
| Insurance | 7 900 | 29 | 0.08 | 8 100 | 30 | 0.08 |
| ACC employer | 4 686 | 17 | 0.05 | 5 019 | 18 | 0.05 |
| Other expenditure ¹ | 3 618 | 13 | 0.04 | 3 492 | 13 | 0.04 |
| Total overhead expenses | 38 604 | 143 | 0.38 | 39 411 | 144 | 0.41 |
| Total farm working expenses | 376 234 | 1 393 | 3.74 | 361 465 | 1 324 | 3.73 |
| Calculated ratios | | | | | | |
| Economic farm surplus (EFS ²) | 257 128 | 952 | 2.56 | 132 677 | 486 | 1.37 |
| Farm working expenses/NCI ³ | 52% | | | 62% | | |
| EFS/total farm assets | 5% | | | 2% | | |
| EFS less interest and lease/equity | 4% | | | 1% | | |
| Interest+rent+lease/NCI | 14% | | | 15% | | |
| EFS/NCI | 36% | | | 23% | | |
| Wages of management | 85 000 | 315 | 0.85 | 85 000 | 311 | 0.88 |

Notes

1 Includes DairyNZ levy.

2 EFS is calculated as follows: net cash income plus change in livestock values less farm working expenses less depreciation less wages of management (WOM). WOM is calculated as follows: \$38 000 allowance for labour input plus 1 percent of opening total farm assets to a maximum of \$85 000.

3 Net cash income.

FINANCIAL PERFORMANCE OF THE TARANAKI DAIRY MODEL FARM IN 2011/12

The cash operating surplus for the model decreased 14 percent over 2010/11, despite the increase in production. This reflected the decreased milk payout and higher expenditure.

SIMILAR REVENUE

For 2011/12, net cash income on the monitored farms was at a similar level (down 1 percent) to 2010/11. Milk production was up 9 percent but this gain was offset by the drop in milk payout of 16 percent. Milk production increases were higher in the lower altitude normally summer-dry areas of Taranaki, whereas higher altitude summer-wet areas had minimal if any increase in production. Net cattle income was similar to the 2010/11 season with minimal change for all stock classes.

A variable season

A favourable 2011 late autumn resulted in farms going into the winter with good pasture covers and reasonable cow condition. However, farms had only just adequate overall feed levels as supplement levels were low. The late winter and early spring were cold, with two snowfalls in the region. One was in mid-August, in the middle of the calving period, with snow covering most of the region and was deemed to be the heaviest snowfall for the region in living memory. High levels of supplementary feed were required on farms during the snow period of two to five days, and there were disruptions to electricity supply and milk collections.

The cold August conditions resulted in poor pasture growth and tight feed conditions at the start of September 2011, and many dairy farmers had to buy in extra supplements at this stage. September conditions improved markedly and, by the end of that month, cows were milking well. October weather, however, was wet and cool. Pasture growth was good but milk production only held near late September levels, so a high but not unmanageable peak was achieved.

The 2011/12 summer and 2012 autumn were generally good for rain, pasture growth and milk production. Levels of surplus grass for supplement harvesting were good and the demand for summer supplements was low. This resulted in production of generally high levels of supplementary feed, and cows were milked for longer in the autumn.

Severe wind storms in early March caused substantial tree and building damage especially in the Patea and Waverley areas of South Taranaki. About two-thirds of the region had major electricity outages and this disrupted milking for up to a week. A dry April 2012 and cold start to May prompted many to dry off their herds in early May. This decision was also helped by farmers having surpassed production targets and the fact that many had to buy extra dairy company shares at a net cash loss.

ON-FARM EXPENDITURE INCREASES

Total farm working expenses increased 15 percent over 2010/11 levels and were higher than originally forecast in June 2011. There were generally small inflationary increases in most areas of expenditure. The main effect, however, was increases in expenditure on feed, fertiliser, insurance and repairs and maintenance as a consequence of the storms and effluent system improvements.

Feed expenditure increased

Supplementary feed levels made on-farm were well up on the low of the previous season. Feed levels were at or above average due to reasonable spring and good summer conditions, which supported strong pasture growth. Harvesting expenses were therefore higher, with more silage made. The cold August and an early spring feed deficit resulted in extra spring feed purchases. Farmers were expecting a good milk payout at the time of contracting feed, resulting in the purchase of more palm kernel expeller (PKE) for milkers to increase production. Prices for PKE and meal mixes were higher in 2011/12 than the previous year, as were replacement stock grazing prices. The price for purchased hay was lower, with a much better supply this year. This had little effect on the feed bill, however, as farmers used less purchased hay due to the surplus made on-farm.

No change in fertiliser use but prices up

Overall, the change in fertiliser use was minimal compared with 2010/11. Most farmers applied maintenance levels as calculated by fertiliser representatives' nutrient budgets. Fertiliser expenditure increased by around 11 percent as a result of price increases.

Repairs and maintenance at a moderate level

Repairs and maintenance expenditure was up significantly (33 percent) on 2010/11 levels as farmers increased spending through the season in line with the improving level of production. Expenditure was across all areas of repairs and maintenance, with additional repairs required on some farms due to the two snow and two storm events. Many farmers had to spend money on upgrading their dairy effluent management systems and are continuing with ongoing riparian protection programmes.

Higher insurance levies

Insurance premiums increased substantially, up 22 percent for the model, as expected.

Interest and debt servicing

Interest rates and, thus, mortgage interest payments were lower than the 2010/11 year (the 2010/11 interest payment published was \$100 561 but this was later amended in 2012 to \$105 561). Overdraft levels were, however, higher than expected. Many farmers are on long-term fixed-interest rates so have not benefited much from the recent decline in interest rates.

NET RESULT – A SMALL LOSS

With similar income but higher costs, the model's

2011/12 farm profit before tax has decreased substantially from the 2010/11 year (down 14 percent). It has also decreased from the 2011/12 budget forecast done in June 2011 (down 45 percent).

Overall, the monitored farms have produced a small cash deficit for the year, which has generally been covered by the previous year's surplus. The lower income for the year resulted in fewer one-off principal repayments than predicted at the start of the year. High-debt farms have had mixed results with some surviving on sub-maintenance expenditure and others liquidating assets where possible to reduce debt and improve viability.

Similar tax payments

In general, tax payments on the monitored farms were similar to the previous season. However, 20 percent of the farms monitored still paid minimal or no tax at all due to tax losses carried forward.

Development and capital

Development expenditure was at a moderate level for the season while capital purchases increased as anticipated in line with the good financial situation. A reasonable number of dairy farmers purchased generators as a consequence of storms and electricity outages plus many had dairy company share purchases at the start of the season as a result of increased production.

BUDGET FINANCIAL PERFORMANCE ON THE TARANAKI DAIRY MODEL FARM IN 2012/13

Milk production levels are expected to decrease by 3 percent compared with 2011/12 results, although farmers are generally optimistic for another good year. Forecasted milk payouts are much lower so a decrease of around 35 percent is expected in the cash operating surplus compared with 2011/12. At the time of data collection from the monitored farms, farmer expectations for the 2012/13 payout were higher than subsequently announced by Fonterra. Early season advance milk payouts will be lower compared with 2011/12, resulting in tight early season cash-flow conditions. Farmers are generally optimistic that the final result for 2012/13 will be better than budgeted.

REVENUE

With lower milk production and lower milk payouts, forecast milk income is expected to reduce by 21 percent. In early May, monitored farmers were not budgeting on any reduction in Fonterra's

2011/12 final milk payout and generally were not budgeting on much of a decrease in payout for 2012/13. The payout forecast announcement in late May 2012 was, therefore, a surprise to most especially the reduction in the 2011/12 payout. Cattle income is expected to remain at similar levels to 2011/12, so the cash operating income is expected to be down 35 percent compared with 2011/12.

PRODUCTION AND STOCK

Farmers are optimistic about milk production levels in 2012/13. Consultants, however, expect a decrease in production for the season as the 2011/12 year had good pasture growth and production in most areas. With lower milk payouts and a tighter financial situation, farmers also are expected to be less likely to buy in supplements to cover feed deficits. A small 1 percent increase in stocking rates is planned.

EXPENDITURE

Farm working expenses are expected to decrease overall by 4 percent. Small inflationary increases are expected on many farm working costs and some discretionary costs are expected to reduce.

Feed costs

Farmers are planning to reduce overall levels of purchased feed. With plenty of feed on hand and minimal changes in per unit costs, feed expenditure is expected to decrease 6 percent in 2012/13. Supplement levels made on-farm are expected to return to normal in 2012/13.

Fertiliser

Fertiliser use and prices are expected to remain at similar levels as for 2011/12.

Major lime applications are unlikely unless cash-flow levels are good in the autumn. The 2012/13 model holds lime expenditure at the same level as in 2011/12.

Lower repairs and maintenance

Less expenditure on repairs and maintenance is expected as farmers try to reduce costs. A 22 percent reduction in spending is budgeted for compared with 2011/12.

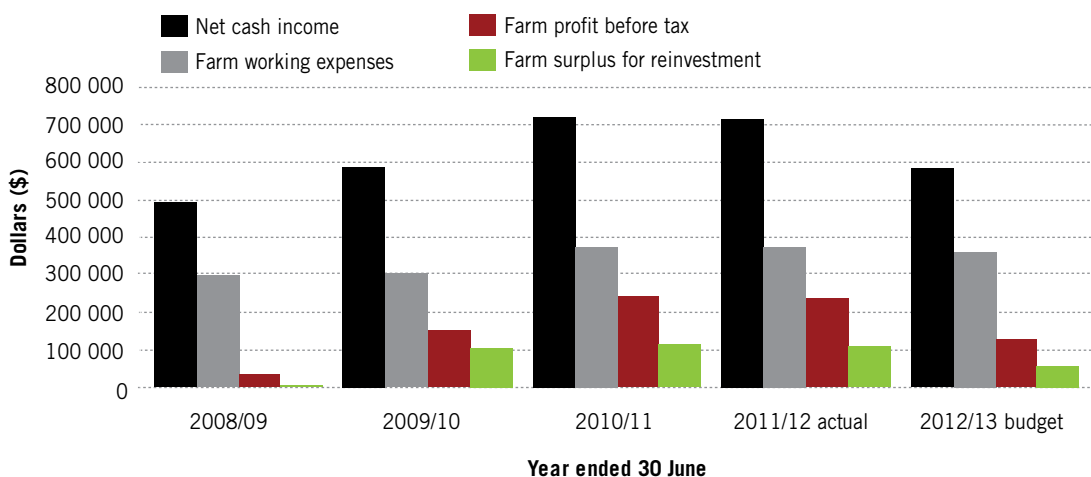
Other costs

Except for increases for inflation, minimal changes in other general expenses are expected. The benefits of lower interest rates should start flowing through as farmers come off fixed rates, and reduced interest payments are expected.

NET RESULT

While the model's 2011/12 farm profit before tax was down 14 percent compared with 2010/11, expectations are that the 2012/13 farm profit before tax will be down a further 45 percent compared with 2011/12 as a result of the reduced milk payout. Tax payments are down slightly (7 percent) and drawings are reduced 3 percent. Many dairy farms will have significant capital expenditure on dairy company shares at the start of the season as a result of the increased milk production in 2011/12. The result for the Taranaki model is a cash deficit of \$2400, a \$42 500 change on 2011/12. Most farmers will monitor this situation as the year progresses and potentially reduce spending, where possible (for example, development, principal repayments), to pull the budget towards a more break-even situation.

Figure 1: Taranaki dairy model profitability trends



INFORMATION ABOUT THE MODEL

This model represents nearly 1740 dairy farms in the Taranaki region. It is based on an owner-operated business (two partners) with a predominantly cross-bred herd. The model farm does not own a run-off but grazes replacement stock off-farm and, in a usual season, buys in 10 to 15 percent of feed used.

The model is created from information drawn from 25 dairy farms and a wide cross section of

agribusiness representatives. The aim of the model is to typify an average dairy farm for Taranaki.

Please note, since 2010/11, the model uses Coverplus Extra for its Accident Compensation Corporation (ACC) calculation. In previous years, the ACC levy was calculated on total income.

For further information on the model contact:

deborah.hackell@mpi.govt.nz

Ministry for Primary Industries
PO Box 2526, Wellington 6140, New Zealand
Tel +64 4 894 0100 or Freephone 0800 00 83 33
Email: brand@mpi.govt.nz
Web: www.mpi.govt.nz

ISBN 978-0-478-40037-3 (Print)
ISBN 978-0-478-40036-6 (Online)

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