

KIWIFRUIT



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

KEY POINTS

- › In 2007/08, production per hectare on the model orchard rose by 11 percent compared with the previous season, as a result of good seasonal conditions. Production in 2008/09 is expected to rise by a further 4 percent. The adoption of new management techniques is leading to sustained increases in average yields per hectare.
- › Orchard gate returns per tray fell in 2007/08 as a result of unfavourable exchange rate movements, increased crop volume, smaller fruit size in the green variety, and higher post-harvest and shipping costs. Prices are expected to improve in 2008/09 due to favourable opening market conditions in the EU, good fruit size and quality, an early start to the season and reduced foreign exchange rate impacts.
- › Orchard working expenses fell by 6 percent in 2007/08 on the model orchard, but are expected to rise by a similar percentage in 2008/09 due to increased wage rates and input prices. Growers cut spending in 2007/08 in response to lower revenue, aided by seasonal factors such as reduced fruit thinning and frost fighting requirements.
- › The model orchard made a loss before tax in 2007/08, and is expected to make a small taxable profit in 2008/09. These profit levels are well below those achieved in the period from 1999/00 to 2003/04, and are primarily the result of an exchange-rate related fall in orchard gate returns, rather than falling international prices.
- › The model orchard surplus for reinvestment remains negative in 2007/08 and 2008/09. However, orchard maintenance and development is continuing, albeit at reduced levels, as many growers have off-orchard income and/or investments, and most have high equity levels, providing a degree of financial resilience.

»»» TABLE 1: KEY PARAMETERS, FINANCIAL RESULTS AND FORECAST FOR THE KIWIFRUIT MODEL ORCHARD

| YEAR ENDED 31 MARCH | 2004/05 | 2005/06 | 2006/07 | 2007/08 | 2008/09 FORECAST |
|--|---------|---------|---------|---------|------------------|
| Total effective area (ha) ¹ | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| ZESPRI™ GREEN | | | | | |
| Production (export trays/ha) ² | 7 385 | 7 750 | 7 270 | 8 060 | 8 400 |
| Total production (export trays) | 33 233 | 34 875 | 32 715 | 36 270 | 37 800 |
| Total revenue (OGR ³ \$/tray) | 4.32 | 3.46 | 4.09 | 3.11 | 3.60 |
| Revenue before 31 March ⁴ (\$/tray) | 3.85 | 3.07 | 3.62 | 2.86 | 3.35 |
| Revenue after 31 March (\$/tray) | 0.47 | 0.39 | 0.47 | 0.25 | 0.25 |
| ZESPRI™ GOLD | | | | | |
| Production (export trays/ha) | 9 800 | 9 300 | 9 480 | 10 360 | 11 000 |
| Total production (export trays) | 4 900 | 4 650 | 4 740 | 5 180 | 5 500 |
| Total revenue (OGR \$/tray) | 5.50 | 5.46 | 5.18 | 4.45 | 4.95 |
| Revenue before 31 March (\$/tray) | 4.93 | 4.92 | 4.73 | 4.15 | 4.65 |
| Revenue after 31 March (\$/tray) | 0.57 | 0.54 | 0.45 | 0.30 | 0.30 |
| Net cash income (\$) | 171 028 | 152 810 | 162 946 | 147 975 | 167 997 |
| Orchard working expenses (\$) | 125 340 | 123 840 | 123 739 | 116 626 | 123 373 |
| Orchard profit before tax (\$) | 17 568 | -230 | 9 447 | -2 651 | 6 724 |
| Orchard surplus for reinvestment ⁵ (\$) | -44 512 | -40 430 | -17 684 | -36 601 | -30 067 |

Notes

1 The model orchard is a mature orchard with 4.5 hectares of Hayward (ZESPRI™ GREEN) and 0.5 hectares of Hort 16A (ZESPRI™ GOLD). The orchard is not organic.

2 The kiwifruit crop is harvested from April to June, so the 2007 crop is recorded in the 2007/08 year. A tray contains approximately 3.6 kg of kiwifruit.

3 Orchard gate return.

4 Financial data relates to the year ending 31 March. Kiwifruit income spans two financial years, with the residual payment for each crop occurring in the next financial year.

5 Orchard surplus for reinvestment is the cash available from the orchard business, after meeting living costs, which is available for investment on the orchard or for principal repayments. It is calculated as discretionary cash less off-orchard income and drawings.





»» TABLE 2: KIWIFRUIT ORCHARD BUDGET

| | 2007/08 | | | 2008/09 FORECAST | | |
|---|--------------------|------------------|-----------------------|--------------------|------------------|-----------------------|
| | WHOLE ORCHARD (\$) | PER HECTARE (\$) | PER CLASS I TRAY (\$) | WHOLE ORCHARD (\$) | PER HECTARE (\$) | PER CLASS I TRAY (\$) |
| REVENUE | | | | | | |
| Green – OGR progress | 103 732 | 23 052 | 2.86 | 126 630 | 28 140 | 3.35 |
| – previous crop final | 14 722 | 3 272 | 0.41 | 9 068 | 2 015 | 0.24 |
| Gold – OGR progress | 21 497 | 42 994 | 4.15 | 25 575 | 51 150 | 4.65 |
| – previous crop final | 1 754 | 3 508 | 0.34 | 1 554 | 3 108 | 0.28 |
| Other fruit crops | 3 300 | 660 | 0.08 | 2 200 | 440 | 0.05 |
| Sundry orchard income | 2 970 | 594 | 0.07 | 2 970 | 594 | 0.07 |
| Net cash income | 147 975 | 29 595 | 3.57 | 167 997 | 33 599 | 3.88 |
| Orchard working expenses | 116 626 | 23 325 | 2.81 | 123 373 | 24 675 | 2.85 |
| Cash operating surplus | 31 349 | 6 270 | 0.76 | 44 624 | 8 924 | 1.03 |
| Interest | 21 000 | 4 200 | 0.51 | 26 600 | 5 320 | 0.61 |
| Rent and/or leases | 0 | 0 | 0.00 | 0 | 0 | 0.00 |
| Depreciation | 13 000 | 2 600 | 0.31 | 11 300 | 2 260 | 0.26 |
| Orchard profit before tax | -2 651 | -530 | -0.06 | 6 724 | 1 345 | 0.16 |
| Tax | 650 | 130 | 0.02 | 800 | 160 | 0.02 |
| Orchard profit after tax | -3 301 | -660 | -0.08 | 5 924 | 1 185 | 0.14 |
| Add back depreciation | 13 000 | 2 600 | 0.31 | 11 300 | 2 260 | 0.26 |
| Net non-fruit cash income | 10 400 | 2 080 | 0.25 | 8 710 | 1 742 | 0.20 |
| Off-orchard cash income | 26 180 | 5 236 | 0.63 | 23 820 | 4 764 | 0.55 |
| Discretionary cash | 46 279 | 9 256 | 1.12 | 49 754 | 9 951 | 1.15 |
| APPLIED TO: | | | | | | |
| Net capital purchases | 4 100 | 820 | 0.10 | 2 100 | 420 | 0.05 |
| Development | 3 900 | 780 | 0.09 | 1 500 | 300 | 0.03 |
| Drawings | 56 700 | 11 340 | 1.37 | 56 000 | 11 200 | 1.29 |
| Principal repayments | 0 | 0 | 0.00 | 0 | 0 | 0.00 |
| New borrowings | 0 | 0 | 0.00 | 0 | 0 | 0.00 |
| Introduced Funds | 0 | 0 | 0.00 | 0 | 0 | 0.00 |
| Cash surplus/deficit | -18 421 | -3 684 | -0.44 | -9 847 | -1 969 | -0.23 |
| Orchard surplus for reinvestment¹ | -36 601 | -7 320 | -0.88 | -30 067 | -6 013 | -0.69 |
| ASSETS AND LIABILITIES | | | | | | |
| Land and building (opening) | 1 575 000 | 315 000 | 37.95 | 1 400 000 | 280 000 | 32.33 |
| Plant and machinery (opening) | 65 110 | 13 022 | 1.57 | 71 910 | 14 382 | 1.66 |
| Orchard related investments (opening) | 65 000 | 13 000 | 1.57 | 65 000 | 13 000 | 1.50 |
| Total orchard assets (opening) | 1 705 110 | 341 022 | 41.09 | 1 536 910 | 307 382 | 35.49 |
| Total orchard liabilities (opening) | 202 000 | 40 400 | 4.87 | 221 871 | 44 374 | 5.12 |
| Total equity | 1 503 110 | 300 622 | 36.22 | 1 315 039 | 263 008 | 30.37 |

Note

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

»» TABLE 3: KIWIFRUIT ORCHARD EXPENDITURE

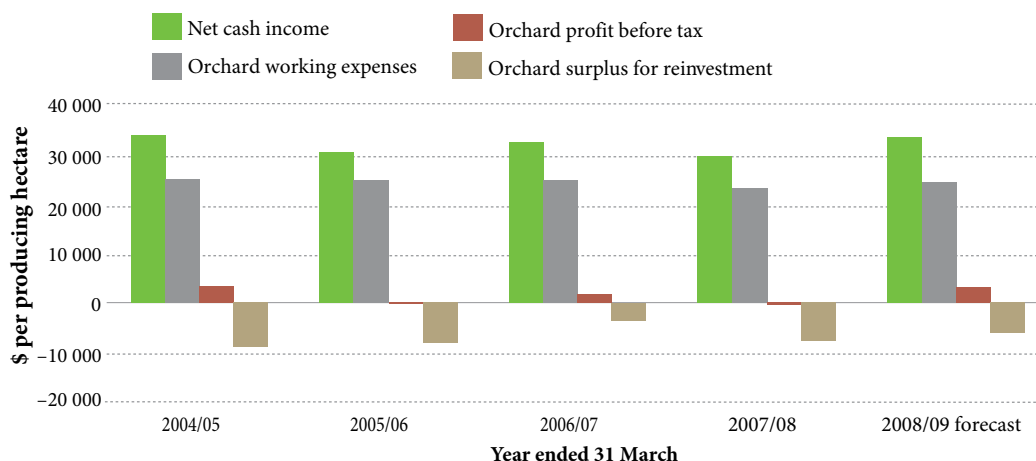
| | 2007/08 | | | 2008/09 FORECAST | | |
|---|--------------------|------------------|-----------------------|--------------------|------------------|-----------------------|
| | WHOLE ORCHARD (\$) | PER HECTARE (\$) | PER CLASS I TRAY (\$) | WHOLE ORCHARD (\$) | PER HECTARE (\$) | PER CLASS I TRAY (\$) |
| ORCHARD WORKING EXPENSES | | | | | | |
| Wages | 45 000 | 9 000 | 1.09 | 48 500 | 9 700 | 1.12 |
| Picking wages | 16 166 | 3 233 | 0.39 | 17 753 | 3 551 | 0.41 |
| ACC – employees | 0 | 0 | 0.00 | 0 | 0 | 0.00 |
| Total labour expenses | 61 166 | 12 233 | 1.48 | 66 253 | 13 251 | 1.53 |
| Weed and pest control | 6 750 | 1 350 | 0.16 | 6 750 | 1 350 | 0.16 |
| Pollination | 7 600 | 1 520 | 0.18 | 7 600 | 1 520 | 0.18 |
| Fertiliser and lime | 6 250 | 1 250 | 0.15 | 6 750 | 1 350 | 0.16 |
| Electricity | 1 000 | 200 | 0.02 | 1 050 | 210 | 0.02 |
| Vehicle (including fuel) | 7 000 | 1 400 | 0.17 | 6 800 | 1 360 | 0.16 |
| Repairs and maintenance | 6 950 | 1 390 | 0.17 | 8 300 | 1 660 | 0.19 |
| General | 2 250 | 450 | 0.05 | 2 100 | 420 | 0.05 |
| Frost protection | 0 | 0 | 0.00 | 0 | 0 | 0.00 |
| Contract machine work | 800 | 160 | 0.02 | 850 | 170 | 0.02 |
| Total other working expenses | 38 600 | 7 720 | 0.93 | 40 200 | 8 040 | 0.93 |
| Rates | 3 600 | 720 | 0.09 | 3 600 | 720 | 0.08 |
| Insurance | 2 070 | 414 | 0.05 | 2 070 | 414 | 0.05 |
| ACC – owners | 1 520 | 304 | 0.04 | 1 570 | 314 | 0.04 |
| Communication | 2 700 | 540 | 0.07 | 2 700 | 540 | 0.06 |
| Accountancy | 3 600 | 720 | 0.09 | 3 600 | 720 | 0.08 |
| Legal and consultancy | 1 870 | 374 | 0.05 | 1 870 | 374 | 0.04 |
| Levies and subscriptions | 400 | 80 | 0.01 | 410 | 82 | 0.01 |
| Other administration | 1 100 | 220 | 0.03 | 1 100 | 220 | 0.03 |
| Total overheads | 16 860 | 3 372 | 0.41 | 16 920 | 3 384 | 0.39 |
| Orchard working expenses | 116 626 | 23 325 | 2.81 | 123 373 | 24 675 | 2.85 |
| Wages of management | 48 051 | 9 610 | 1.16 | 46 369 | 11 944 | 1.38 |
| Depreciation | 13 000 | 2 600 | 0.31 | 11 300 | 2 260 | 0.26 |
| Total orchard operating expenses | 177 677 | 35 535 | 4.29 | 181 042 | 36 208 | 4.18 |
| CALCULATED RATIOS | | | | | | |
| Economic orchard surplus (EOS) ¹ | -29 702 | -5 940 | -0.72 | -13 046 | -2 609 | -0.30 |
| Orchard working expenses/NCI ² | 79% | | | 73% | | |
| EOS/total orchard assets | -1.7% | | | -0.8% | | |
| EOS less interest and lease/equity | -3.4% | | | -3.0% | | |
| Interest + rent + lease/NCI | 14.2% | | | 15.8% | | |
| EOS/NCI | -20.1% | | | -7.8% | | |

Notes

1 EOS (or earnings before interest and tax) is calculated as follows: net cash income less orchard working expenses less depreciation less wages of management (WOM). WOM is calculated as follows: \$31 000 allowance for labour input plus 1 percent of opening total orchard assets to a maximum of \$75 000.

2 Net cash income.

»»» FIGURE 1: KIWIFRUIT MODEL PROFITABILITY TRENDS



INFORMATION ABOUT THE MODEL

The model kiwifruit orchard is in the Bay of Plenty, which is the major growing region producing around 80 percent of the New Zealand kiwifruit crop. The model budget represents an established owner-operator orchard. The model is created from data collected from 17 orchards located from Te Puke to north of Katikati, and information from a wide cross section of agribusiness representatives.

Financial data relates to the year ending 31 March. Kiwifruit income spans two financial years, with the residual payment for each crop occurring in the next financial year. For example, final payments on the crop harvested in May 2007 occur in the 2008/09 forecast year.

The aim of the model is to typify an average kiwifruit orchard for the region. Budget figures are averaged from the contributing orchards and adjusted to represent real orchards. Income figures include off-orchard income, new borrowing, and other cash income. Expenditure figures include costs of management, production, debt, leasing, drawings, and development and capital purchases.

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