



HORTICULTURE AND ARABLE MONITORING REPORT

2008



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This report is produced by

MAF Policy

PO Box 11016, Hastings 4158

Tel: 64 6 974 8800

Fax: 64 6 974 8801

Data collection services provided by Fruition Horticulture Ltd, AgFirst Consultants Hawkes Bay Ltd and Macfarlane Rural Business Ltd. Andrew Barber is the author of the chapter *Increasing energy efficiency*.

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PO Box 2526

Wellington 6140

Tel: 64 4 894 0252

Email: policy.publications@maf.govt.nz

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Ministry of Agriculture and Forestry

Pastoral House

25 The Terrace

PO Box 2526

Wellington 6140

New Zealand

Tel: 64 4 894 0100

Fax: 64 4 894 0720

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FOREWORD

Welcome to the *Horticulture and Arable Monitoring Report 2008*. This report provides information on the production and financial status of growers, as well as trends, issues and sector concerns. The report also examines the relationship between financial results and the sustainability, productivity and adaptability of the different horticultural and arable sectors.

These sectors are very important to New Zealand. Horticultural and arable export revenue continues to grow and the domestic market is of significant value. Increasing demand for products produced in an environmentally sound and energy-efficient manner is creating both challenges and opportunities for the sectors.

A range of environmental and management indicators are included in the monitoring programme. This allows us to monitor trends in these indicators over time and helps to improve our understanding of sustainable development and productivity in the horticultural and arable sectors.

For the first time this year, the Ministry of Agriculture and Forestry published early web releases of horticulture and arable model budgets to improve the usefulness of this information for New Zealanders. Each early release highlights key points, as well as model budget and expenditure financial results and forecasts. The feedback has been positive and we intend to continue these early releases in future years.

This is the second year we have presented the horticultural and arable sectors in one major report. The combined report allows the different horticultural and arable sectors to be compared and contrasted, and provides an overall picture of the current and forecast situation. The *Pastoral Monitoring Report 2008* will be published in December, and will cover the dairy, deer, and sheep and beef sectors.

I am proud of the way that the *Horticulture and Arable Monitoring Report 2008* continues to develop and I look forward to future enhancements.



Paul Stocks
Deputy Director-General
MAF Policy

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OVERVIEW

1

The *Horticulture and Arable Monitoring Report 2008* shows that increases in production and/or prices have improved the financial performance of many of the sectors reported on.

Forecast results for the 2008 season¹ in this report are based on grower views collected in May 2008. These views are combined with input from those servicing the sector to create short-term physical and financial forecasts for model enterprises in the kiwifruit, pipfruit, viticulture and arable farming sectors. Model controllers in the Ministry of Agriculture and Forestry (MAF) (see the list in Appendix 1) analysed the implications of the trends highlighted in the models. Vegetables, export fruit crops, maize and apiculture are covered in less detail in the commentary chapters.

Growers contributing to the monitoring programme were largely optimistic when the data was collected, due to improvements in market prices and a favourable movement in the exchange rate against the euro.

The changes in the gross margins achieved in the crops covered in the commentaries in 2007/08 compared with 2006/07 vary greatly. Generally, the fruit, apiculture and maize sectors managed to maintain or improve their financial performance due to increased yields or better prices. Growers of most vegetable crops, with the exception of fresh potatoes, experienced a poorer outcome in 2007/08 compared with the previous year, as the rise in input costs was not matched by improved yields or prices.

Unlike recent years, a shortage in the supply of seasonal labour for harvesting, packing and pruning did not become a major constraint for growers in the 2008 season. Growers acknowledge that changes in seasonal labour policy, particularly the introduction of the Recognised Seasonal Employer (RSE) scheme² in April 2007, are assisting with the supply of seasonal labour. The sectors hope that the higher costs involved in the RSE scheme can be offset by productivity improvements due to reduced staff turnover and higher skill levels.

»» FACTORS AFFECTING FINANCIAL PERFORMANCE IN THE 2008 SEASON

The most significant factors affecting the financial performance of the horticultural and arable sectors in 2008 are exchange rates, crop performance, market demand and costs.

» EXCHANGE RATE EFFECT CONTINUES TO INFLUENCE EXPORT PERFORMANCE

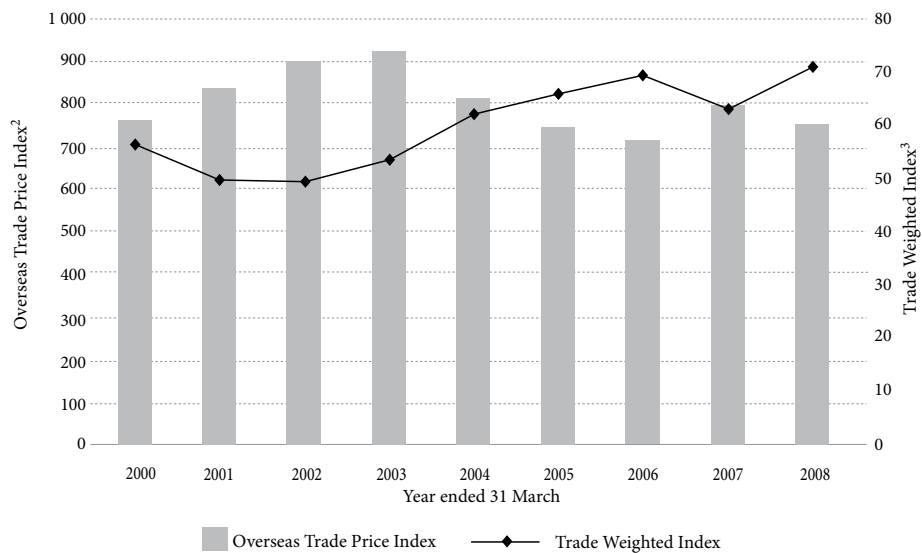
The effect of the exchange rate on grower prices dominates the financial performance of the export-orientated horticultural and arable crops covered in this report. Analysis of trade data for fresh and processed fruit and vegetables shows an inverse relationship between movements in the exchange rate, as reflected in the Trade Weighted Index, and the Overseas Trade Price Index (Figure 1.1). The increase in overall export earnings for horticulture and arable crops in recent years is driven primarily by increases in export volumes, rather than in market returns.

¹ Different horticultural and arable products are harvested at varying times throughout the year. The 2008 season refers to crops harvested mainly in summer and autumn 2008. Different year ends are used in this report, as monitoring reflects as far as possible the year end used by growers in the various sectors. For this reason, this report shows the 2008 season as ending on 31 March 2009 for kiwifruit, 31 December 2008 for pipfruit and 30 June 2008 for viticulture and arable crops.

² The RSE scheme is a New Zealand Government policy introduced in April 2007 to facilitate the temporary entry of overseas workers to plant, maintain, harvest and pack crops in the horticulture and viticulture industries to meet seasonal labour shortages.



»» FIGURE 1.1: TRENDS IN EXCHANGE RATES AND EXPORT EARNINGS FOR FRESH AND PROCESSED FRUIT AND VEGETABLES¹



Notes

- 1 The overseas trade data analysed is for fresh and processed fruit and vegetables and does not include wine, seeds, flowers and plants.
- 2 The Overseas Trade Price Index is a measure of the change in price level. It is calculated primarily from the overseas trade value and volume data, using surveyed price information in some instances.
- 3 The Trade Weighted Index (TWI) is the average value of the New Zealand dollar in relation to the currencies of our major trading partners. The TWI figures used in each year are from the September quarter of the previous year, as this is the quarter in which a significant proportion of horticultural export earnings are repatriated back to New Zealand.

Source

Statistics New Zealand.

The exchange rate reached record highs in the year ended 31 March 2008. This had an adverse effect on the financial performance of the key export fruit crops of pipfruit and kiwifruit in the 2007 season. The 2008 season has seen a favourable movement in the exchange rate, particularly in the second and third quarters, which is when a significant proportion of horticultural export earnings are repatriated back to New Zealand.

» CROP PERFORMANCE

Spring frosts impacted on fruit crops in Hawkes Bay reducing yields by around 15 percent for the pipfruit model and 29 percent for the viticulture model compared with 2007.

A combination of high yields and increased producing area delivered record production levels in 2008 for avocados, honey and Marlborough winegrapes.

Below-average rainfall in spring and mid-summer across most of the North Island resulted in reduced yields for potatoes and maize, in particular. However, increased prices more than compensated for the loss in production of these crops.

› MARKET DEMAND

Concerns about the impact of frost damage early in the season meant that higher contract grape prices were achieved for almost all varieties in the 2008 vintage. Fewer apples were exported from New Zealand and other southern hemisphere countries, which prompted good demand in northern hemisphere markets and improved market prices for Royal Gala and Braeburn in particular. Increased prices due to a reduction in world honey supplies helped New Zealand honey producers capitalise on a record crop in the 2008 season. Reduced overseas supplies also resulted in improved prices for blackcurrants and lemons in 2007/08 compared with the previous year. Lower world grain stocks lifted prices for cereal and maize grain crops in 2007/08.

› COSTS

All sectors covered in the models reported that their working expenses for the 2008 season increased due to the rising cost of inputs. The strong New Zealand dollar has provided a buffer against the high prices of imported oil and fertiliser. Increased costs of fuel, electricity and labour are having a significant direct impact on the financial performance of the pipfruit, kiwifruit and viticulture sectors. These cost increases also have an indirect impact through increases in post-harvest and contract machinery charges.

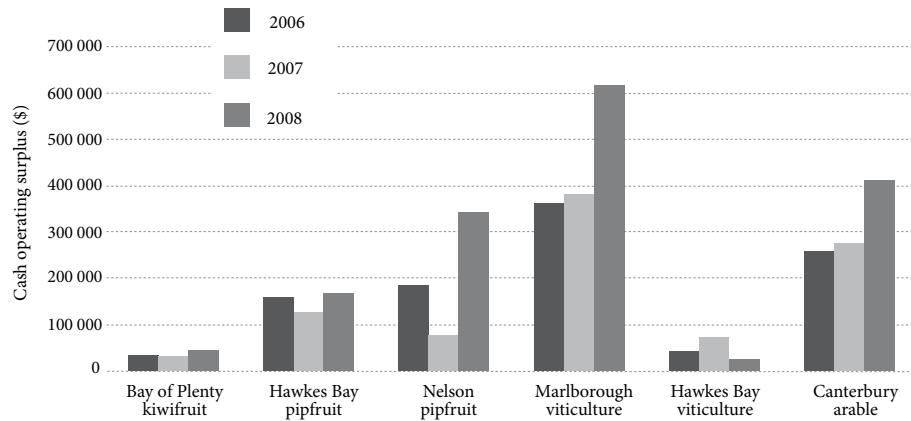
Fertiliser, electricity and fuel costs make up a significant proportion of total operating costs for the arable and vegetable sectors. Higher cereal prices are assisting the arable sector to buffer the rising costs. However, growers of most vegetable crops have not been able to increase their yields or prices enough which has had an adverse effect on their financial outcomes.

››› SECTORAL AND REGIONAL VARIATION IN OUTCOMES

The financial performance of the models covered in this report varies significantly, as illustrated in Figures 1.2 and 1.3. The cash operating surpluses³ illustrated should be viewed in the context of the investment required, which varies between enterprise types and regions. Further details are provided in the individual model budgets.

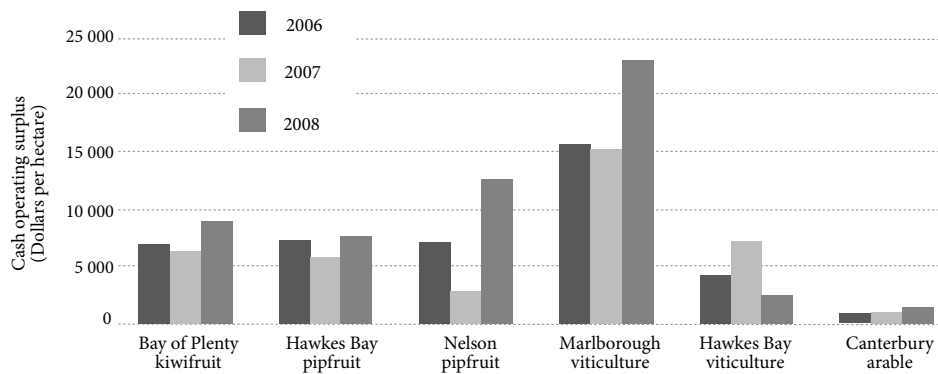
³The cash operating surplus represents the total revenue from the orchard, vineyard or farm business, less working expenses (and adjusted for stock purchases and stock value in the arable model). This surplus must service debt and meet tax, depreciation, development and capital expenditures.

»» FIGURE 1.2: VARIATION IN CASH OPERATING SURPLUS PER BUSINESS UNIT, 2006–2008 SEASONS



Source
MAF Monitoring Reports: 2006 to 2008.

»» FIGURE 1.3: VARIATION IN CASH OPERATING SURPLUS PER HECTARE, 2006–2008 SEASONS



Source
MAF Monitoring Reports: 2006 to 2008.

»» TABLE 1.1: VARIATION IN SURPLUS FOR REINVESTMENT¹ PER BUSINESS UNIT, 2006–2008 SEASONS

MODEL	2006 (\$)	2007 (\$)	2008 (\$)
Bay of Plenty kiwifruit	-17 684	-36 601	-30 067
Hawkes Bay pipfruit	42 092	-5 647	26 832
Nelson pipfruit	17 599	-77 244	181 332
Marlborough viticulture	164 991	186 461	334 690
Hawkes Bay viticulture	-19 391	13 892	-39 534
Canterbury arable	28 200	54 400	81 500

Note

¹ The surplus for reinvestment represents the cash available from the business after meeting living costs. The surplus is available for investment on the orchard, vineyard or farm, or for principal repayments. It is calculated as discretionary cash less off-orchard/vineyard/farm income and drawings. The surplus for reinvestment provides a short-term measure of performance as it does not take account of depreciation or changes in inventory, for example, stock numbers on arable farms.

Source

MAF Monitoring Reports: 2006 to 2008.

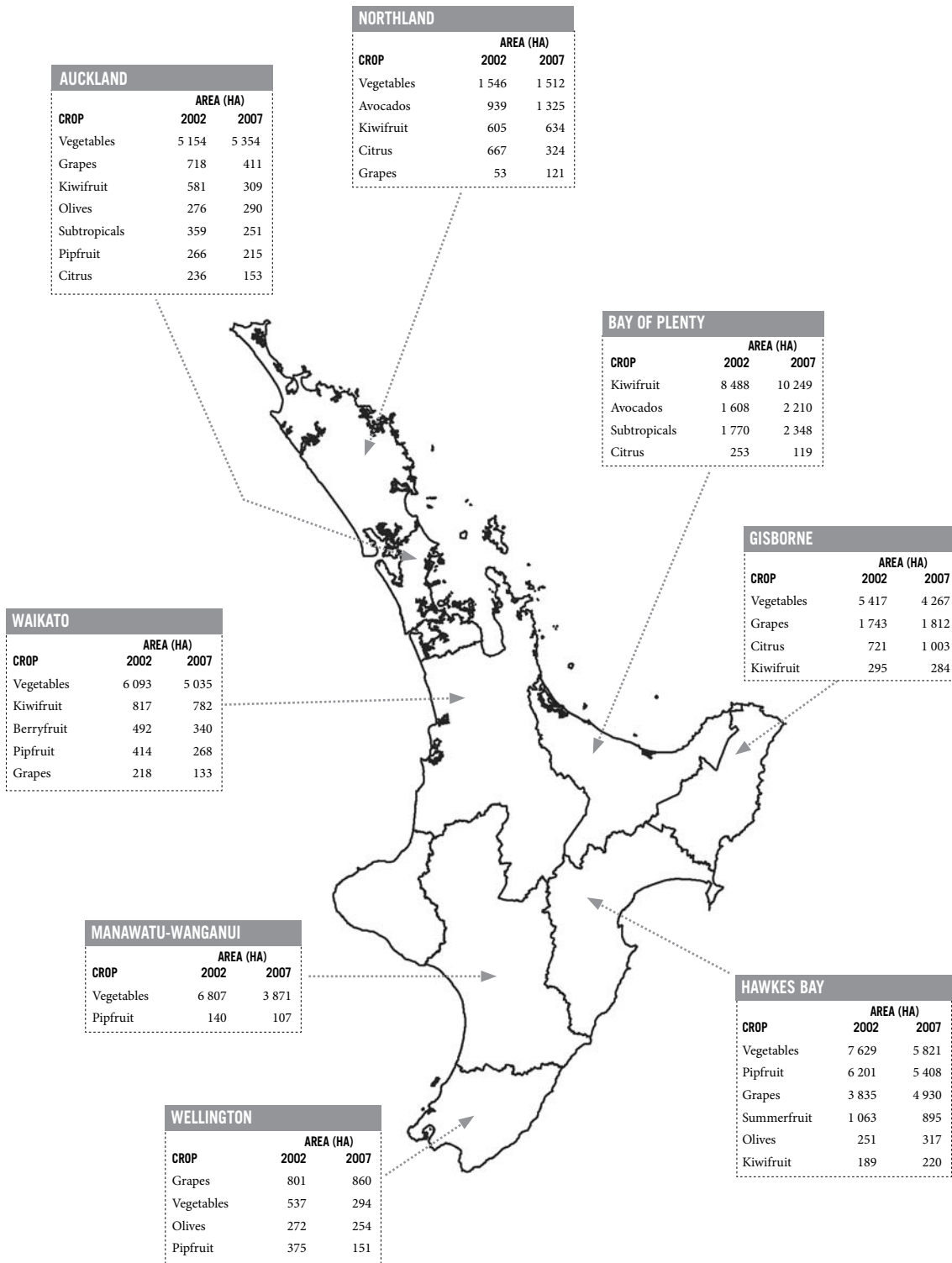
All but one of the modelled business units, project an improved financial outcome for the 2008 season, compared with 2006 and 2007. Despite this, the short-term profitability of some sectors remains seriously challenged, with inadequate funds for reinvestment (Table 1.1). In these circumstances, growers have either cut back on development and capital expenditure or funded it through off-orchard/vineyard/farm income and investments, rather than by increasing their borrowings.

Where good profit levels are being achieved, such as in the Marlborough vineyard and Canterbury arable farm models, growers and farmers are seeking to improve the efficiency of their businesses and reduce overall debt levels.

»» **FACING THE FUTURE**

The New Zealand horticultural and arable sectors responded to market pressures and opportunities in the past by changing the areas of crops grown (see Figures 1.4 to 1.7). Considerable challenges face the sectors in the 2008 season and the future. However, growers and farmers are generally optimistic. World demand is increasing for food products with assurances of safety and environmental sustainability, and the decline in world cereal grain stocks and the expansion of the dairy sector in New Zealand are providing growers of vegetables and arable crops, in particular, with opportunities to increase income.

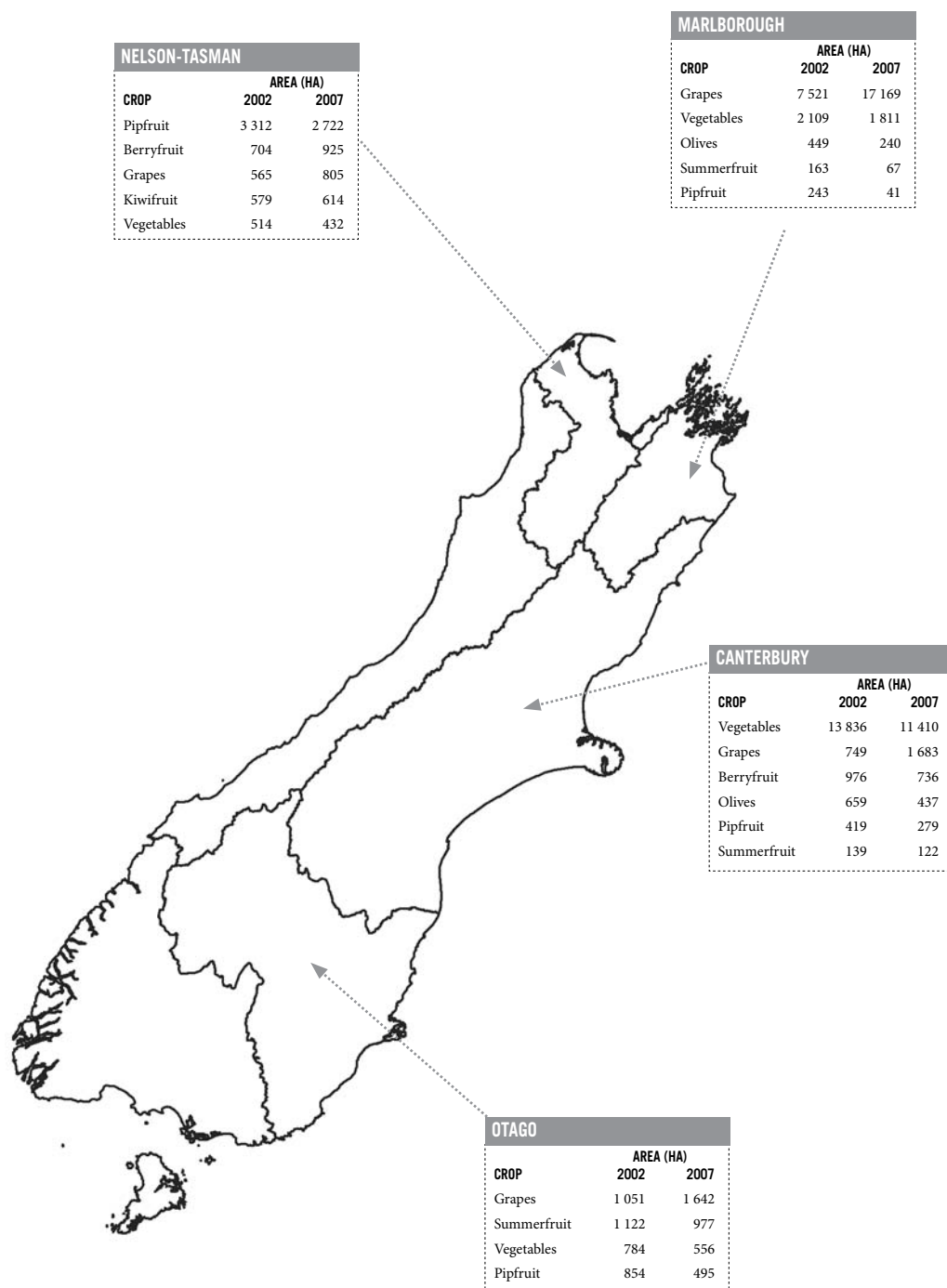
»» FIGURE 1.4: NORTH ISLAND HORTICULTURE STATISTICS, 2002 AND 2007



Sources

Statistics New Zealand (2008). *Agricultural Production Statistics (Final): June 2007*; and (2003) *Agricultural Production Census (Final Results): June 2002*. Statistics NZ, Wellington.

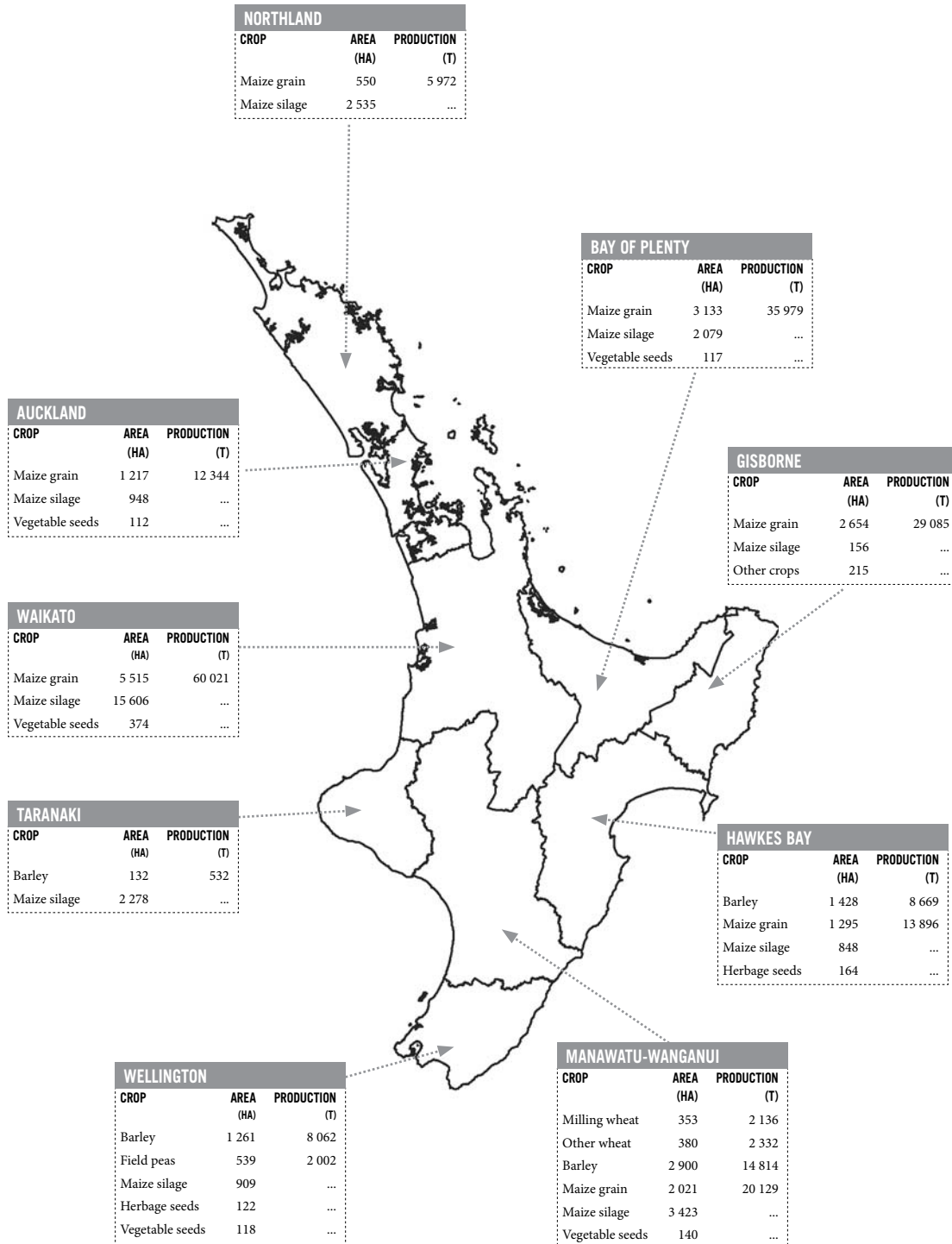
»» FIGURE 1.5: SOUTH ISLAND HORTICULTURE STATISTICS, 2002 AND 2007



Sources

Statistics New Zealand (2008). *Agricultural Production Statistics (Final): June 2007*; and (2003) *Agricultural Production Census (Final Results): June 2002*. Statistics NZ; Wellington.

»» FIGURE 1.6: NORTH ISLAND ARABLE STATISTICS, JUNE 2007



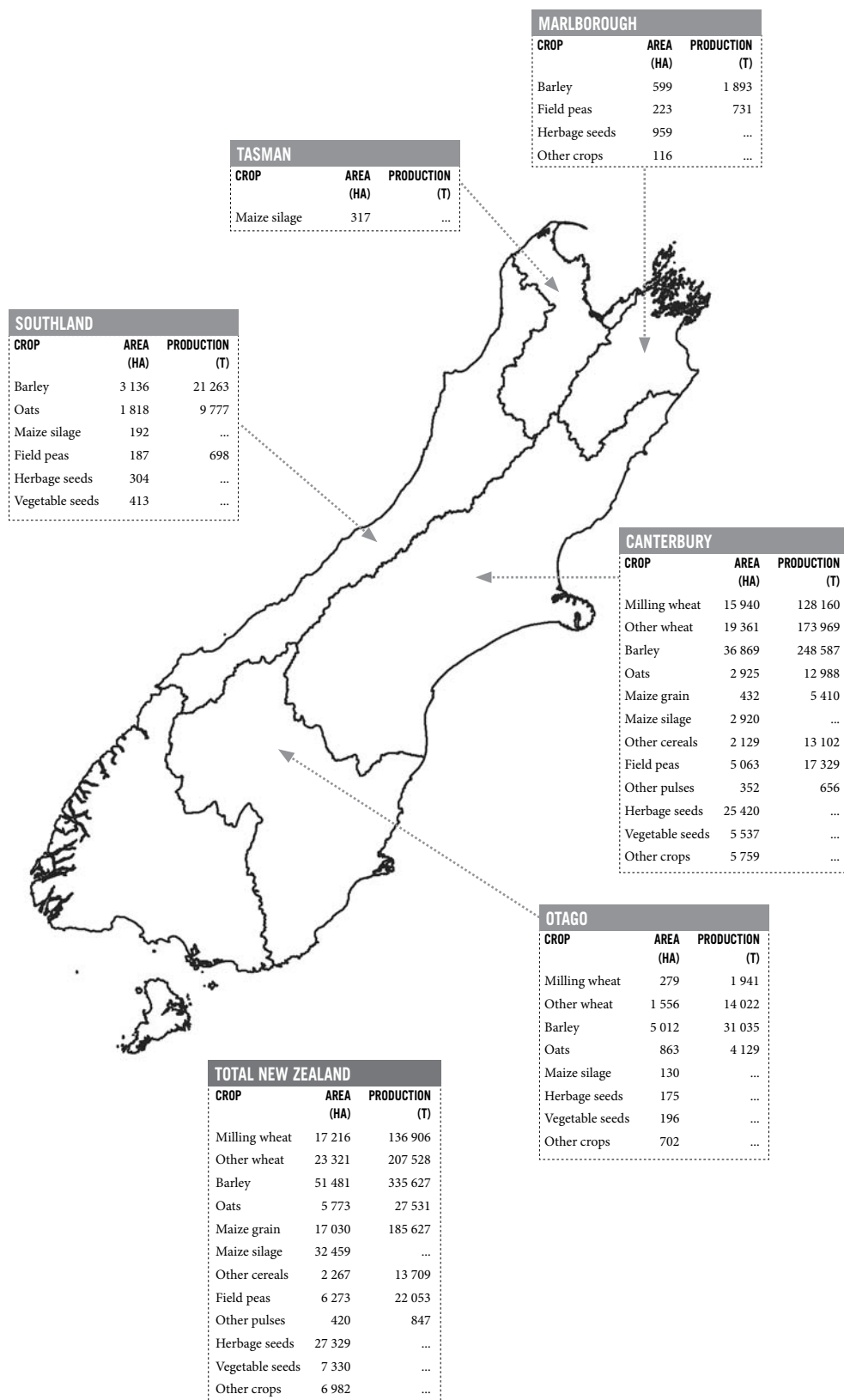
Symbol

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Source

Statistics New Zealand (2008). *Agricultural Production Statistics (Final): June 2007*. Statistics NZ; Wellington.

»» FIGURE 1.7: SOUTH ISLAND ARABLE STATISTICS, JUNE 2007



Symbol

... Not applicable.

Source

Statistics New Zealand (2008) *Agricultural Production Statistics (Final): June 2007*. Statistics NZ; Wellington.

