

# HORTICULTURE AND ARABLE OVERVIEW



The Horticulture and Arable Monitoring Programme 2009 shows that profitable outcomes are being achieved for many of the sectors reported on despite downward pressure on prices in overseas markets. Favourable climatic conditions leading to improved yields and quality and a weaker New Zealand dollar are the main contributing factors.

In the year ahead, growers are focusing on keeping tight constraints on expenses and are continuing efforts to extract price premiums through improved product quality and targeted marketing strategies. Many of the export fruit sectors are steadily advancing redevelopment into new and better-returning varieties.

Budgeted results for the 2009 season<sup>1</sup> are based on grower views collected in May 2009. 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. Vegetables, export fruit crops, maize and apiculture are covered in less detail in the commentary chapters.

Kiwifruit and pipfruit growers contributing to the monitoring programme were cautiously optimistic about market returns when the data was collected, expecting favourable exchange rates, good fruit quality and a favourable variety mix to offset any downward pressure on prices in overseas markets. On the other hand, winegrape growers expressed concern about financial outcomes in the short term because of lower grape prices and caps on yields.

<sup>1</sup> Different horticultural and arable products are harvested at varying times throughout the year. The 2009 season refers to crops harvested in the main in summer and autumn 2009. 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 2009 season as ending on 31 March 2010 for kiwifruit, 31 December 2009 for pipfruit, and 30 June 2009 for viticulture and arable crops. All crop covered by commentaries report on a June year end.

The changes in the gross margins achieved in the crops covered by commentaries in 2008/09 vary greatly compared with 2007/08. Generally, the fresh fruit, apiculture and maize sectors managed to maintain or improve financial performance due to increased yields and/or better prices. However, world prices for frozen berryfruit products, including blueberries and boysenberries, have fallen and stocks are high, reducing gross margins for New Zealand growers.

Growers of most vegetable crops, with the exception of asparagus and processed potatoes and sweetcorn, experienced a poorer outcome in 2008/09 compared with the previous year as the rise in input costs was not matched by improvements in yields or prices.

The incursion of the tomato/potato psyllid (*Bactericera cockerelli*) in 2006 and its associated bacterium, *Candidatus Liberibacter solanacearum* (detected in 2008) has caused significant problems for tomato, capsicum and potato growers. These growers face reduced crop yields and quality with additional costs for insecticide control and export compliance. Successfully established integrated pest management (IPM) programmes for tomatoes have been disrupted. Export restrictions are being managed with new compliance programmes or specific quarantine measures requested by importing countries.

Varroa was found in Canterbury outside the varroa Controlled Area. This resulted in the disestablishment of movement restrictions in apiculture related risk goods, including inter-island movements. Surveillance and beekeeper education activities continued until 30 June 2009, when MAF Biosecurity New Zealand's varroa programme officially ended.

An adequate supply of seasonal labour, assisted by the Recognised Seasonal Employer (RSE) Scheme, and the increasing availability of New Zealand workers meant that the large crops of pipfruit, kiwifruit, strawberries and summerfruit in the 2009 season could be harvested at the optimum time for fruit quality, resulting in higher packout rates.



Photo: Bob Zuur.



Photo: Bob Zuur.





## FACTORS AFFECTING FINANCIAL PERFORMANCE IN THE 2009 SEASON

The most significant factors affecting financial performance of the horticultural and arable sectors in 2009 were market demand, exchange rates, crop performance, and costs.

### MARKET DEMAND

Whilst the global recession has weakened consumer demand in overseas markets for some horticulture products, supply imbalances have also had an impact.

Contract winegrape prices fell by up to 25 percent for the 2009 vintage as wineries sought to match grape supplies with wine demand. The biggest drop in price was for Marlborough Sauvignon Blanc as increased plantings over recent years have put wine supply out of synch with current market demand.

Early season apple sales into Asia experienced good demand with similar prices to last year. However, sales into Europe, our main market for Royal Gala and Braeburn, have been more challenging due to large volumes of competing fruit and weakened consumer demand.

Kiwifruit growers are looking to gold kiwifruit to enhance consumer demand and supplement returns from green kiwifruit.

Large onion crops in the UK and the Netherlands, coupled with weaker consumer demand, reduced export volume and prices for New Zealand onions in traditional markets in the UK and continental Europe.

Increased prices due to a reduction in world honey supplies helped New Zealand honey producers capitalise on a record crop volume in both the 2008 and 2009 seasons. A switch in demand from the more expensive white honeys to the cheaper light and amber grades has benefited producers of clover honey, lifting returns by 25–50 percent compared with 2008 levels.

Weaker consumer demand and high stock levels have caused world prices for frozen berryfruit, including blueberries and boysenberries, to fall impacting on income and cash flow for New Zealand producers of these crops.

World and domestic grain prices fell sharply between March and December 2008 due to weaker consumer demand and substitution with cheaper feed types for livestock. As a result of falling demand, many arable farmers are carrying an increased quantity of crop on hand at year end, impacting on cash flow.

### EXCHANGE RATE EFFECT CONTINUES TO INFLUENCE EXPORT PERFORMANCE

Since 2001 the horticulture export sector has faced the challenge of an exchange rate that has in the main, strengthened against our major trading partners as reflected in the Trade Weighted Index (TWI) (Figure 1). A weakening of the New Zealand dollar, particularly during the last quarter of 2008 and early months of 2009 has helped offset reduced prices for horticulture exports in many overseas markets. Significantly higher export returns for asparagus, capsicums, summerfruit and honey products in the 2009 season compared with the previous year, were largely the result of favourable exchange rates against the United States dollar (USD) and Japanese yen.

The exchange rate has demonstrated a lot of volatility during the 2009 season. The New Zealand dollar depreciated 17 percent against the USD between 9 January and 3 March 2009 to a low of 0.49 USD, and then appreciated by 39 percent between 3 March and 31 August to over 0.68 USD. Fluctuations in the exchange rate within the marketing season in particular, make it difficult for horticulture exporters and growers to negotiate in-market prices and budget likely export returns.

## CROP PERFORMANCE

Favourable climatic conditions in the main pipfruit growing regions helped growers achieve a significant lift in export volumes in 2009. Increases of 40 percent and 13 percent are expected for the Hawkes Bay and Nelson models respectively. Strong return bloom on trees affected by frost last season in Hawkes Bay, and recently planted orchards coming into full production, are also contributing factors.

Growing conditions in the predominant kiwifruit growing region of the Bay of Plenty were good until marred by a hail storm about half way through harvest on 11 May 2009. More damage occurred to green kiwifruit than gold kiwifruit as more of the gold kiwifruit is picked earlier. Estimates are that 2.4 million trays<sup>2</sup> of green fruit and 200 000 trays of gold fruit were lost due to hail damage. Despite the hail, record total and average kiwifruit production is still expected.

Favourable growing conditions led to record cherry exports, increased apricot exports and higher strawberry yields. In contrast blackcurrant production was reduced due to spring frosts in the main growing regions of Canterbury and Nelson.

2 2.4 million trays represent c.2 percent of New Zealand kiwifruit exports estimated for 2009/10.

**FIGURE 1: TRENDS IN NEW ZEALAND'S TRADE WEIGHTED INDEX<sup>1</sup>**



**Note**

<sup>1</sup> The Trade Weighted Index (TWI) is the weighted value of the New Zealand dollar in relation to the currencies of our major trading partners. Data shown are monthly TWI values from January 1999 to August 2009.

**Source**

Reserve Bank of New Zealand.

A return to average to above average rainfall and heat units in the Waikato region following last season's drought resulted in higher than average maize yields. Honey production in the region was 40 percent above the six-year average level contributing to the record honey crop achieved nationwide.

Yield caps rather than climatic intervention had the most significant impact on winegrape yields in the 2009 vintage, particularly in the Marlborough region where average yields were capped at around 10 tonnes per hectare.

Yields were below average for cereal and vegetable crops grown in the Canterbury region as a result of adverse weather conditions, including a wet winter, frost and hail events in late spring, high temperatures in January, and rain in February which disrupted harvest.

## COSTS

All sectors covered in the models reported that their working expenses for the 2009 season increased due to the rising cost of inputs. Increased costs of electricity and labour are having a significant direct impact on the financial performance of the pipfruit, kiwifruit and viticulture sectors. These cost increases are also impacting indirectly through increases in post-harvest and contract machinery charges.

Crop management expenditure increased for green kiwifruit as growers thinned fruit to better size the crop. Labour expenses for crop and canopy management also increased for winegrapes as growers took action to match the yield caps set by wineries.

Fertiliser, electricity, fuel and seed inputs make up a significant proportion of operating expenses for the arable and vegetable sectors. Prices for fertiliser and fuel were high at the start of the growing season and impacted particularly on the production costs of early sown crops. The cost of leasing land also increased significantly at the start of the 2009 season because of competing land uses, such as arable and dairy farming and dairy support.

Reduced demand and prices means that growers of uncontracted grain crops may struggle to recoup the high costs of production from crops harvested in 2009. Growers of most fresh vegetable crops have not

been able to achieve the yield or price increases necessary to compensate for the rise in input costs in the 2009 season, with adverse effects on their financial outcomes. Vegetable processors increased prices paid to growers of potatoes, peas and sweetcorn in order to secure supply against alternative, more profitable land uses resulting in an improved financial performance for most process crops in the 2009 season.



## SECTORAL AND REGIONAL VARIATION IN OUTCOMES

There is significant variation in the financial performance of the models covered in this report, as illustrated in Figures 2 and 3. The cash operating surpluses<sup>3</sup> 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.

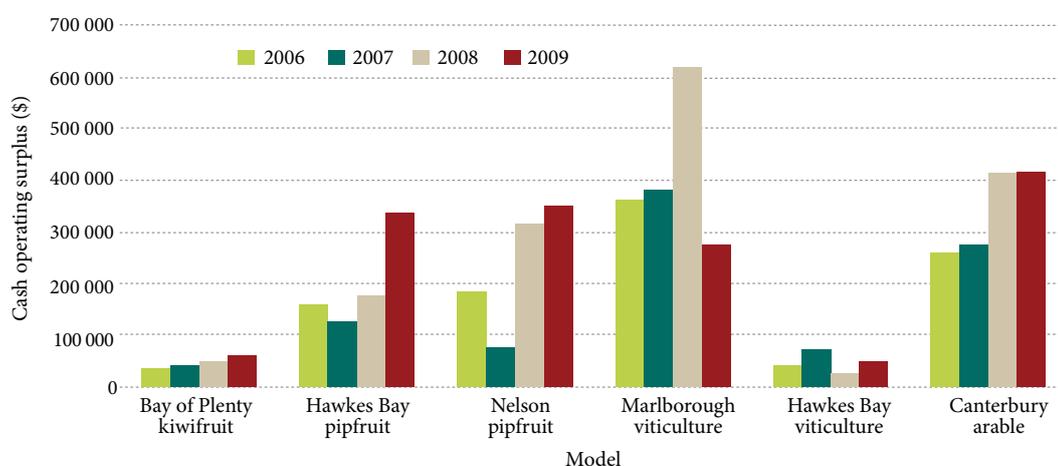
The business unit models representing the pipfruit and kiwifruit sectors project an improved financial outcome for the 2009 season, compared with the preceding three years. Improvements in orchard productivity and an increasing proportion of higher-paying varieties are helping to enhance the financial performance of the pipfruit and kiwifruit models. Favourable movements in the exchange rate and exporters' ability to meet customer criteria across a range of export markets are also assisting.

In contrast, grape growers in Marlborough experienced a major downward correction in cash operating surplus in 2008/09 as supply levels for Marlborough Sauvignon Blanc finally exceeded market demand. Hawkes Bay grape growers managed a small improvement in cash operating surplus in 2009 as yields bounced back from a frost affected crop in 2008. However, lower grape prices restricted any significant improvement in overall financial performance.

Increased operating costs and reduced demand for grains resulted in arable farmers experiencing some retraction in cash operating surplus on a per hectare basis in the 2009 season.

<sup>3</sup> The cash operating surplus represents total revenue from the orchard, vineyard or farm business, less working expenses (and adjusted for stock purchases and stock value in the arable model). From this surplus, debt servicing, tax, depreciation, development, and capital expenditures must be met.

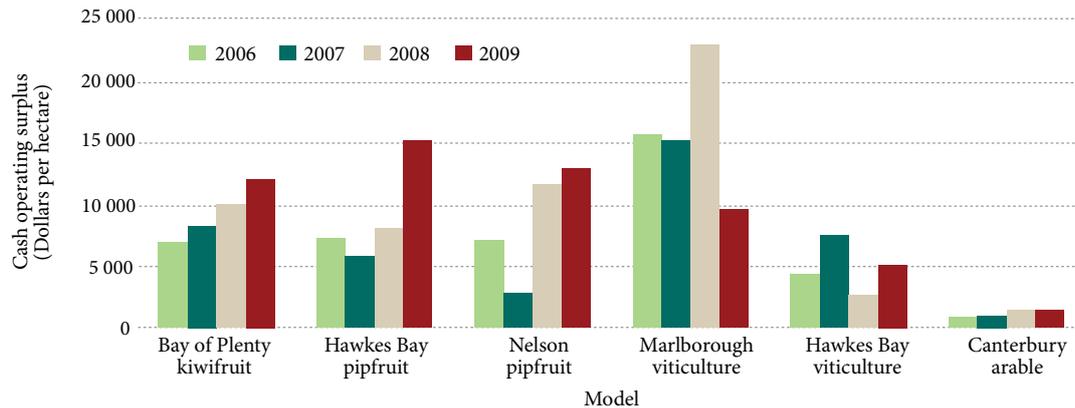
**FIGURE 2: VARIATION IN CASH OPERATING SURPLUS PER BUSINESS UNIT, 2006 TO 2009 SEASONS**



**Source**

MAF Monitoring Reports; 2006 to 2009.

FIGURE 3: VARIATION IN CASH OPERATING SURPLUS PER HECTARE, 2006 TO 2009 SEASONS

**Source**

MAF Monitoring Reports; 2006 to 2009.

TABLE 1: VARIATION IN SURPLUS FOR REINVESTMENT<sup>1</sup> PER BUSINESS UNIT, 2006 TO 2009 SEASONS

MODEL	2006 SEASON (\$)	2007 SEASON (\$)	2008 SEASON (\$)	2009 SEASON (\$)
Bay of Plenty kiwifruit	-17 700	-26 600	-23 800	-12 900
Hawkes Bay pipfruit	42 000	-5 600	31 600	186 700
Nelson pipfruit	17 600	-77 200	104 600	108 000
Marlborough viticulture	165 000	186 500	334 700	35 700
Hawkes Bay viticulture	-19 400	13 900	-39 500	1 600
Canterbury arable	28 200	54 400	81 500	48 200

**Note**

<sup>1</sup> 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 2009.

Where good profit levels are being achieved, growers and farmers are seeking to improve business efficiencies, reduce overall debt levels and undertake some redevelopment.

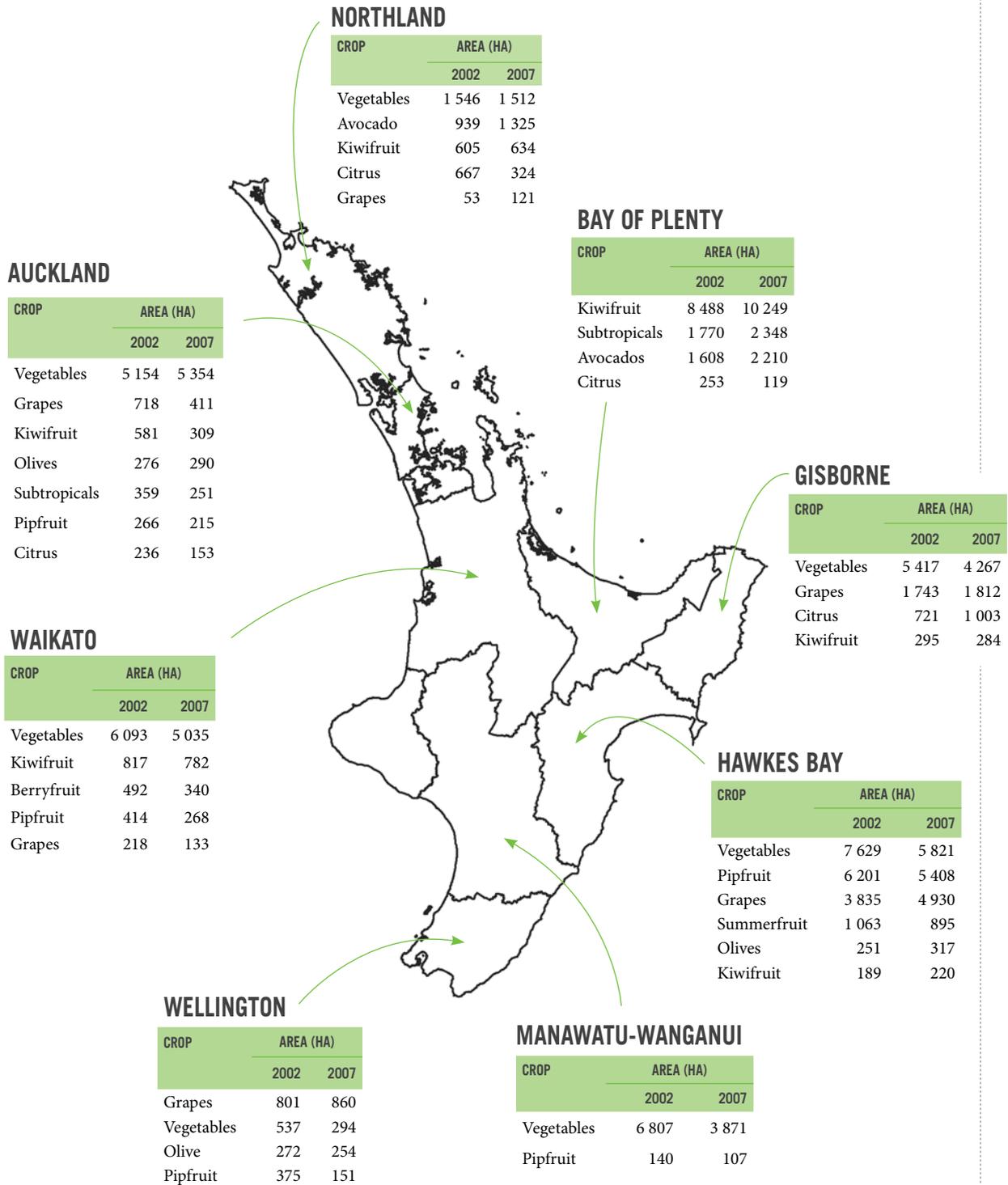
The short-term profitability of some sectors remains challenged with inadequate funds for reinvestment (Table 1). In these circumstances, growers or farmers have either cut back on development and capital expenditure or funded it through off-business income and investments, rather than by increasing their borrowings.

## FACING THE FUTURE

The New Zealand horticulture and arable sectors are dynamic, responding to past market pressures and opportunities by changing the areas of crops grown (Figures 4 to 7). Considerable challenges face the sectors in the 2009 season and further into the future, not least, changes in market demand arising from the global recession. However, growers and farmers are generally optimistic. World demand is increasing for food products with assurances of safety and environmental sustainability. An important factor in future success is likely to be the degree to which partnering and collaboration occurs.



FIGURE 4: NORTH ISLAND HORTICULTURE STATISTICS, 2002 AND 2007

**Source**

Agricultural Production Statistics, Statistics New Zealand.

FIGURE 5: SOUTH ISLAND HORTICULTURE STATISTICS, 2002 AND 2007

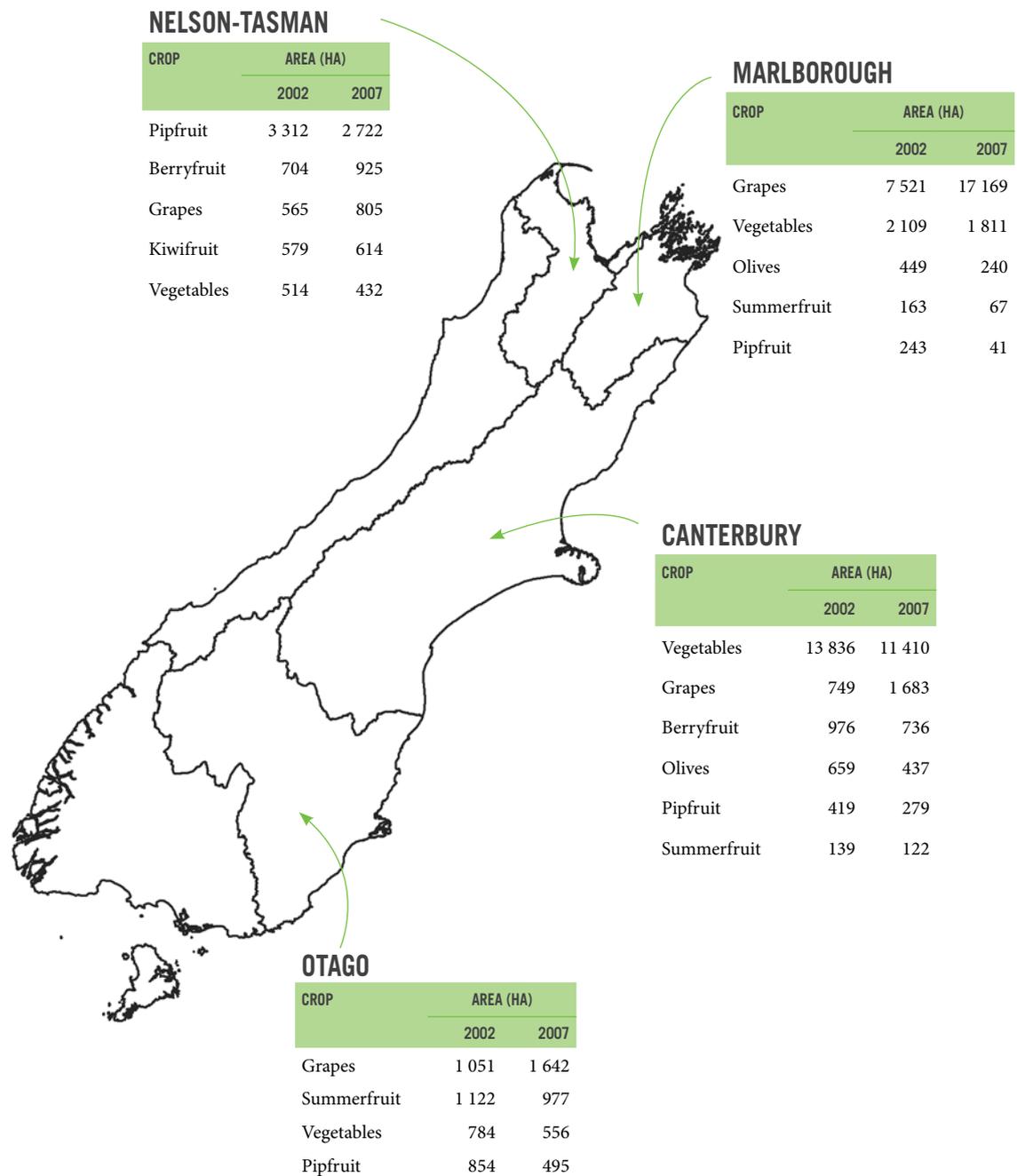
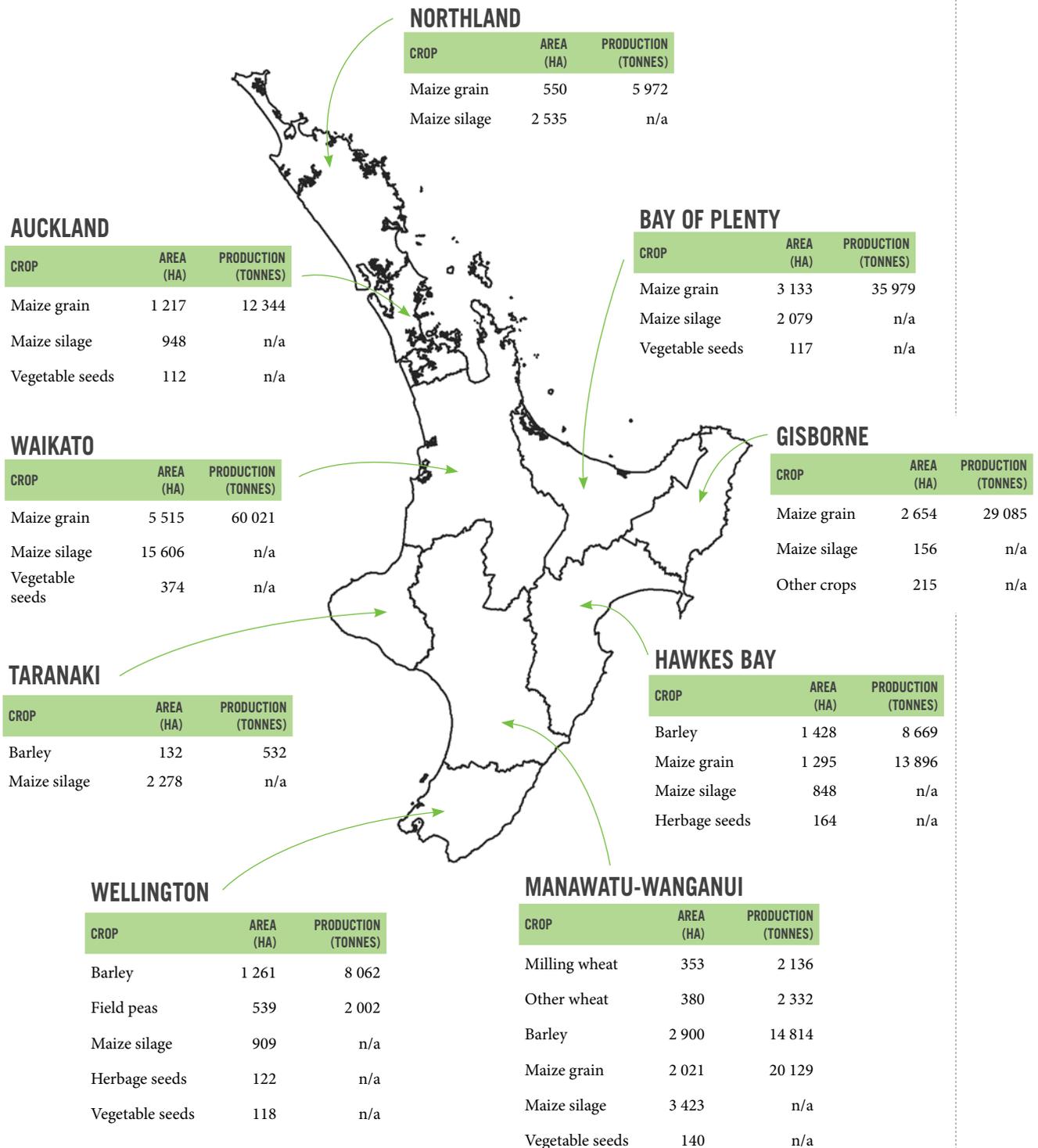
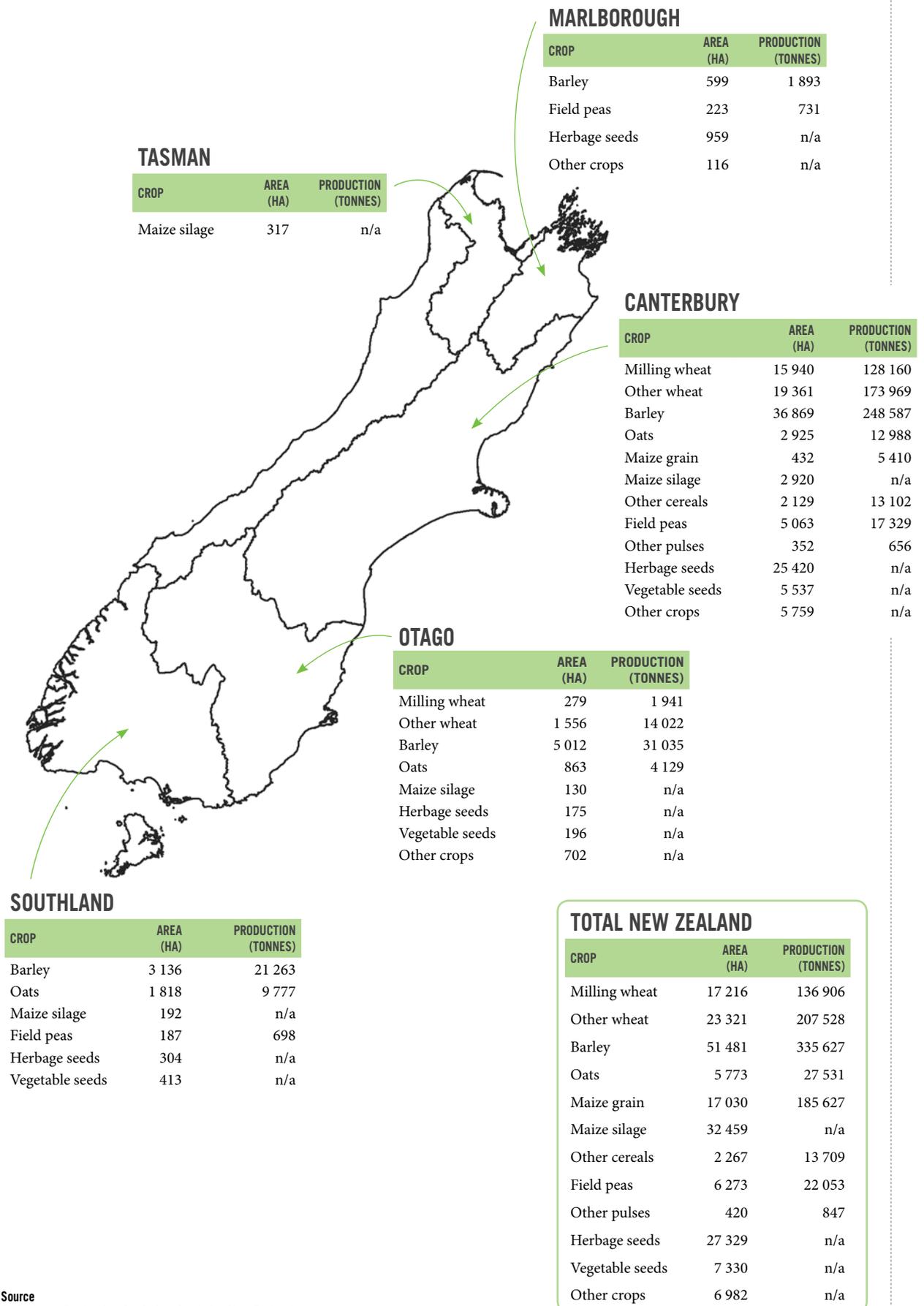


FIGURE 6: NORTH ISLAND ARABLE STATISTICS, JUNE 2007

**Source**

Agricultural Production Statistics, Statistics New Zealand.

FIGURE 7: SOUTH ISLAND ARABLE STATISTICS, JUNE 2007



**PUBLISHER**

Ministry of Agriculture and Forestry  
PO Box 2526, Wellington 6140, New Zealand  
Tel +64 4 894 0100 or Freephone 0800 008 333  
Email: [policy.publications@maf.govt.nz](mailto:policy.publications@maf.govt.nz)  
Web: [www.maf.govt.nz](http://www.maf.govt.nz)



ISBN 978-0-478-35182-8 (Online)

© Crown copyright – Ministry of Agriculture and Forestry 2009

This report can be downloaded from [www.maf.govt.nz](http://www.maf.govt.nz)

**DISCLAIMER**

The information in this report by the Ministry of Agriculture and Forestry is based on the best information available to the the Ministry at the time it was drawn up and all due care was exercised in its preparation. As it is not possible to foresee all uses of this information or to predict all future developments and trends, any subsequent action that relies on the accuracy of the information in this report is the sole commercial decision of the user and is taken at his/her own risk. Accordingly, the Ministry of Agriculture and Forestry disclaims any liability whatsoever for any losses or damages arising out of the use of this information, or in respect of any actions taken.

New Zealand Government