



MINISTRY OF AGRICULTURE AND FORESTRY

# HORTICULTURE AND ARABLE OVERVIEW

SEPTEMBER 2010



Ministry of Agriculture and Forestry  
Te Manatū Ahuwhenua, Ngāherehere



## OVERVIEW

The *Horticulture and Arable Monitoring Programme 2010* shows mixed outcomes for the sectors reported on, despite downward pressure on prices in most overseas markets.

Profitability decreased for many wine grape growers in 2009/10 as grape prices fell due to supply exceeding demand.

A poor cereal market significantly impacted on cash flow for arable cropping farmers. Land use pressure from other industries, in particular dairying, continues.

The depressed markets in Europe and the United States during 2009 eroded premiums for higher priced pipfruit varieties.

In contrast, strong market demand and an improved exchange rate with the Japanese Yen underpinned the significant increase in gold kiwifruit returns.

Growers are cautiously optimistic about the year ahead as the world continues to recover from the global economic crisis. Generally, growers are budgeting for steady to increased profitability in their businesses in 2010/11 (2010 year for pipfruit) although for some sectors the outlook is more uncertain.

Growers are focused on keeping tight constraints on expenses and continuing efforts to improve productivity, product quality, and targeting marketing strategies that aim to extract premiums in the marketplace.

Budgeted results for 2010/11 are based on grower views collected in May 2010. 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.



## FACTORS AFFECTING FINANCIAL PERFORMANCE

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

### MARKET DEMAND

#### KIWIFRUIT

Grower returns for green kiwifruit stabilised in 2009/10. Strong market demand in Asia helped to lift returns for gold kiwifruit by 37 percent, in turn improving the profitability of the average orchard in 2009/10.

Growers are confident that prices for green and gold kiwifruit will be maintained or increase slightly in 2010/11.

#### PIPFRUIT

The high in-market prices reached in 2008 continued into 2009 for fruit sold into Asian markets. In contrast, in the UK and Continental Europe (the main markets for New Zealand apples) weaker consumer demand and a plentiful supply of competing fruit led to price falls of up to 30 percent in 2009 compared with the previous year. As a result, premiums were eroded for higher priced varieties, as well as for organic apples. Late season varieties such as Braeburn and Jazz™ were affected the most.

Growers with a variety mix more suited to Asian markets (predominantly Hawke's Bay growers) would have achieved a profitable outcome in 2009. However, those more reliant on European markets (predominantly Nelson growers) would have struggled to cover costs – most would have made a loss.

Good prices have been achieved in 2010 for early season fixed price sales into Asian markets. European and UK markets are expected to be challenging due to on-going recessionary pressures and some overhang of fruit from the Northern Hemisphere season. Despite the challenging market conditions, growers and industry leaders are predicting average export returns to be at least 10 percent higher in 2010 than in 2009, assisted by a smaller export crop from New Zealand.

#### VITICULTURE

In 2009/10 grape supply, especially of the Sauvignon Blanc varietal, continued to exceed market demand. This forced wineries to restrict yields and reduce prices paid per tonne. The price for Marlborough Sauvignon Blanc grapes fell 20 percent to \$1345 per tonne. Red wine grape varieties generally maintained their prices.

Grape growers are hopeful that the lower than expected national vintage of 266 000 tonnes in 2010 will achieve some supply-side stability, following the record vintage of 2008. Hence, growers are cautiously anticipating small improvements in yield and price parameters to be negotiated with wineries in 2010/11.

#### ARABLE

Domestic grain production was stimulated in 2008/09 by the high grain prices globally in 2008. Prices subsequently fell in response to the global economic crisis, increased international stocks, and reduced demand from dairy farmers. As a result, many farmers were forced to take cereals to market at low spot prices in 2009/10 to make way for the crops harvested in 2010.

Most cereal farmers have increased crop on hand at the start of 2010/11. Whilst there is short-term uncertainty and weekly volatility in feed grain markets, farmers are hopeful that the positive outlook for milk prices will increase demand for grain feedstuffs.

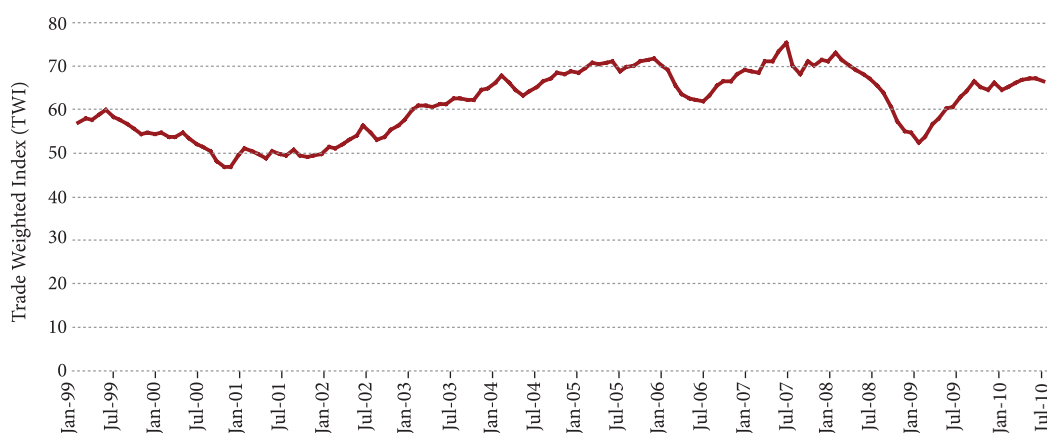
## EXCHANGE RATE

Favourable exchange rates against the United States dollar and Japanese yen in the early months of 2009 helped to deliver significantly higher export returns for early apple sales into Asia and gold kiwifruit into Japan.

However, the buffering effect of a weaker New Zealand dollar against reduced prices in many overseas markets was short-lived. The dollar strengthened considerably from June 2009 against the currencies of our main trading nations, impacting on grower returns.

The Euro and UK pound remain very weak against the New Zealand dollar, reflecting the weak performance of European economies. Any significant increases in market prices to compensate for the high exchange rate will likely be resisted by retailers. Export returns for wine, pipfruit and kiwifruit sold in these markets during 2010/11 are expected to be impacted, particularly where little or no forward exchange rate options are undertaken.

**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 2010.

**Source**

Reserve Bank of New Zealand.

## CROP PERFORMANCE

### KIWIFRUIT

Good growing conditions in the Bay of Plenty during the 2008/09 growing season resulted in high spring crop estimations so growers thinned excess flowers and small fruit to enhance fruit size at harvest. A severe hailstorm in May 2009 significantly impacted some un-harvested orchards. Overall, average production per hectare fell by 2 to 5 percent in 2009/10 from the previous season's record high levels.

The cold winter of 2009 induced good bud break. However, the main period of flowering and fruit set in October was much colder than average. Rainfall was 40 percent of normal levels for the six months to April 2010, resulting in a significant period of drought in the Bay of Plenty. As a result, in 2010/11 average production per hectare for green kiwifruit is expected to fall by 2 percent compared with 2009/10, and by 5 percent for gold kiwifruit. Average fruit size is expected to be lower, with higher dry matter levels.

### PIPFRUIT

The 2008/09 growing season was one of the best in both the Hawke's Bay and Nelson regions for many years. An absence of damaging spring frosts and hail events, along with favourable fruit set and fruit finish conditions resulted in good brix levels, good colour, high gross yields and good export recovery rates.

The 2009/10 growing season in both Hawke's Bay and Nelson was extremely challenging with mixed results. Unfavourable weather conditions during spring 2009 (including hail damage in the Hawke's Bay region in late October 2009), and an increased presence of pests and diseases, significantly reduced gross yields and export recovery rates for many varieties.

### VITICULTURE

Growing conditions in Marlborough in 2009/10 were generally good following delayed flowering. In Hawke's Bay, cooler weather in December with a significant rain event at flowering resulted in a low fruit set and subsequently decreased yields across the region. Favourable conditions during ripening delivered excellent quality for all varieties.

Growers have been limiting yields from their vines, using pruning as their main tool for achieving their yield caps but also shoot thinning on some varieties. Growers are hoping for average yields to increase slightly in 2010/11 with some easing in yield caps by wineries.

### ARABLE

Cereals thrived during a mild 2009 winter and warm, dry spring conditions in Canterbury. Crops were able to be planted on time and disease pressure was low. Grass seed yields improved and brassica, vegetables, carrot and radish seed yields were at average levels. Irrigation systems were more efficient with very few drying north-westerly winds.

Cereal and small seed yields are expected to return to average levels in 2010/11.

## OPERATING COSTS

Good yields and export recovery rates generated cost efficiencies for pipfruit growers in 2009. In early winter 2009, growers were still optimistic about good market returns so many spent large on deferred repairs and maintenance. An increase in expenditure on weed and pest control was due to the wet spring in 2009. Higher costs of production in the Nelson region compared with Hawke's Bay are linked to the increasing proportion of intensive orchard systems in Nelson.

The additional thinning required on the 2010 kiwifruit crop to manage seasonal conditions increased labour expenditure.

Reduced fertiliser prices assisted arable farmers to reduce working expenses in 2009/10. Farmers are continuing to focus on nutrient budgeting to optimise nutrient inputs, in order to manage costs and increase efficiencies.

Wine grape growers responded to lower grape income in 2009/10 by cutting back on wages, reducing inputs and deferring unnecessary expenditure. Labour inputs are being replaced by contract machine work such as the use of stripping machines to mechanically remove the previous season's unwanted canes. In both the Marlborough and Hawke's Bay regions, vineyard working expenses per hectare dropped to an average of \$8500 per hectare, a level similar to three years ago (2006/07).

Some growers have been able to take advantage of lower interest rates when re-fixing term debt while others have chosen to ride the floating rate for a period of time.





## SECTORAL AND REGIONAL VARIATION IN OUTCOMES

### KIWIFRUIT

Profitability of the Bay of Plenty kiwifruit orchard model improved in 2009/10, driven by higher returns for gold kiwifruit. Growers expect similar profit levels in 2010/11, with price improvements compensating for the drop in yield.

Kiwifruit growers are excited about the potential for new varieties to continue the growth of the industry in coming years.

### PIPFRUIT

Variety mix had a major influence on the financial outcome of pipfruit businesses in 2009. The orchard model representing the pipfruit sector in Hawke's Bay achieved a level of profitability similar to recent years.

However, most growers in the Nelson region would have struggled to cover costs of production – due to a combination of poor market returns from varieties mainly sold in Europe, and increased operating costs.

Growers are expecting pipfruit prices to improve in 2010. Because of the reduced yield and packout, the profitability of Hawke's Bay orchards is expected to only improve slightly, whilst Nelson orchards are expected to make a small loss. Development and capital expenditure are expected to drop back significantly as growers take stock of their redevelopment plans.

### VITICULTURE

Vineyard profitability fell significantly in 2009/10 on the back of low grape prices. Growers in Hawke's Bay were also impacted by reduced yields due to poor weather conditions at flowering. New plantings have all but ceased.

There is a lot of uncertainty amongst grape growers about the year ahead (2010/11). Growers believe they have cut their costs back as far as they can without impacting severely on vineyard health and have deferred all non-essential repairs and maintenance. There is an increasing reliance on income sourced from off-vineyard wages, other businesses and investments. Many in the industry expect that it will take a further two to three years to achieve better alignment between grape supply and market demand.

### ARABLE

Profitability improved slightly for Canterbury arable farmers in 2009/10. However, much of the increase comes from crop on hand rather than cash in the bank. Farmer morale is low due to the poor cereal market and limited grass and clover seed growing opportunities for 2010/11. There is persistent land use pressure on arable farmers from other industries, particularly dairy.



**TABLE 1: KEY PARAMETERS AND FINANCIAL RESULTS FOR HORTICULTURE AND ARABLE MODELS, 2009/10<sup>1</sup> AND 2010/11<sup>1</sup> BUDGET**

MODEL	BOP KIWIFRUIT	HAWKE'S BAY PIPFRUIT	NELSON PIPFRUIT	MARLBOROUGH VITICULTURE	HAWKE'S BAY VITICULTURE	CANTERBURY ARABLE
YEAR END	March	December	December	June	June	June
Effective area (ha)	5	22	27	30	10	300
Total production 2009/10	44 130 trays <sup>2</sup>	68 135 cartons <sup>3</sup>	80 500 cartons <sup>3</sup>	285 tonnes	73 tonnes	...
<b>Net cash income (\$)</b>						
2009/10	208 580	1 130 050	1 208 100	417 680	98 965	1 041 300
2010/11 budget	205 830	1 034 250	1 376 660	479 495	129 070	1 012 500
<b>Orchard/farm working expenses (\$)</b>						
2009/10	141 800	952 850	1 284 740	257 550	82 320	566 000
2010/11 budget	139 680	820 400	1 267 195	251 190	82 990	564 700
<b>Cash operating surplus<sup>4</sup></b>						
2009/10	66 780	177 200	-76 640	160 130	16 645	475 300
2010/11 budget	66 150	213 850	109 465	228 305	46 080	447 800
<b>Cash operating surplus (ha)</b>						
2009/10	13 356	8 054	-2 839	5 338	1 700	1 585
2010/11 budget	13 230	9 720	4 054	7 610	4 608	1 492
<b>Orchard/farm profit before tax (\$)</b>						
2009/10	37 120	78 700	-226 540	55 730	-28 055	254 700
2010/11 budget	36 310	118 600	-28 335	127 405	4 180	218 400
<b>Orchard/farm surplus for reinvestment (\$)<sup>5</sup></b>						
2009/10	-1 250	31 700	-228 640	54 530	-6 855	116 300
2010/11 budget	-2 460	68 850	-38 335	126 405	22 680	159 200
<b>Ratios 2009/10 (%)</b>						
Working expenses/net cash income	68	84	106	62	83	54
Equity ratio <sup>6</sup>	86	66	64	88	79	83
Return on equity <sup>7</sup>	-0.7	2.6	-16.4	-0.4	-6.1	2.6
Return on assets <sup>8</sup>	0.7	5.8	-6.3	0.7	-3.2	3.6

**Notes**

1 The pipfruit models use a December year end. Hence data for 2009/10 and 2010/11 for the pipfruit models refer to the years ending December 2009 and 2010, respectively.

2 A tray contains approximately 3.6 kilograms of kiwifruit.

3 Carton refers to a tray carton equivalent (TCE) which is a measure of apple and pear weight. A TCE is defined as 18.6 kg packed weight which equates to 18.0 kg sale weight.

4 Net cash income less orchard/vineyard/farm working expenses.

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

6 Ratio of orchard/vineyard/farm assets less debt (equity) to total assets.

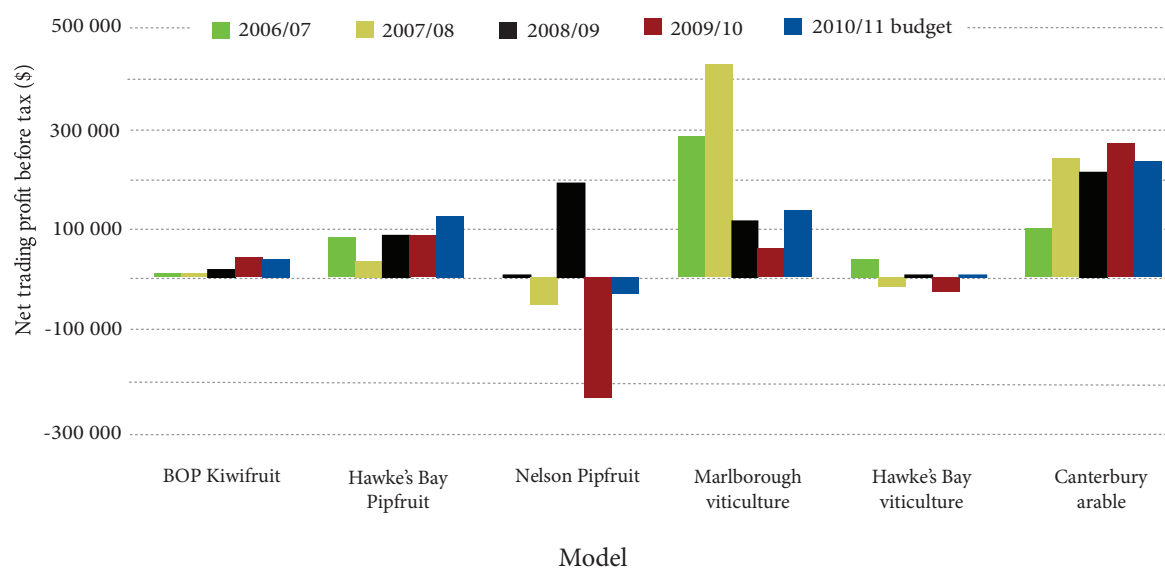
7 Economic orchard/vineyard/farm surplus less interest and lease as a percentage of equity.

8 Economic orchard/vineyard/farm surplus divided by total assets.

**Symbol**

... Not applicable.

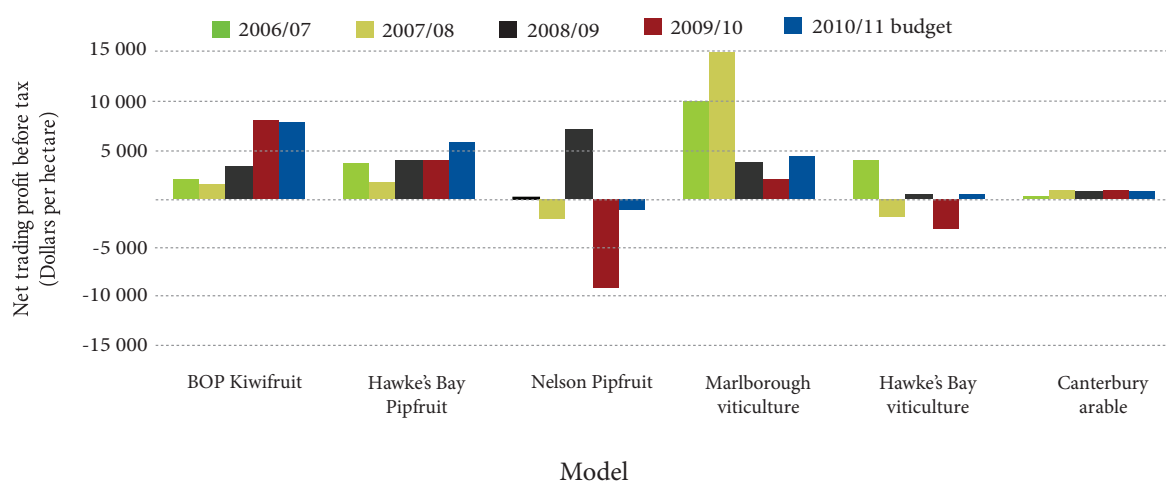


**FIGURE 2: PROFIT BEFORE TAX PER BUSINESS UNIT, 2006/07<sup>1</sup> TO 2010/11<sup>1</sup> BUDGET****Source**

MAF Monitoring Reports; 2007 to 2010.

**Note**

<sup>1</sup> The pipfruit models use a December year end. Hence data for 2006/07 to 2010/11 budget for the pipfruit models refer to the years ending December 2006 to 2010, respectively.

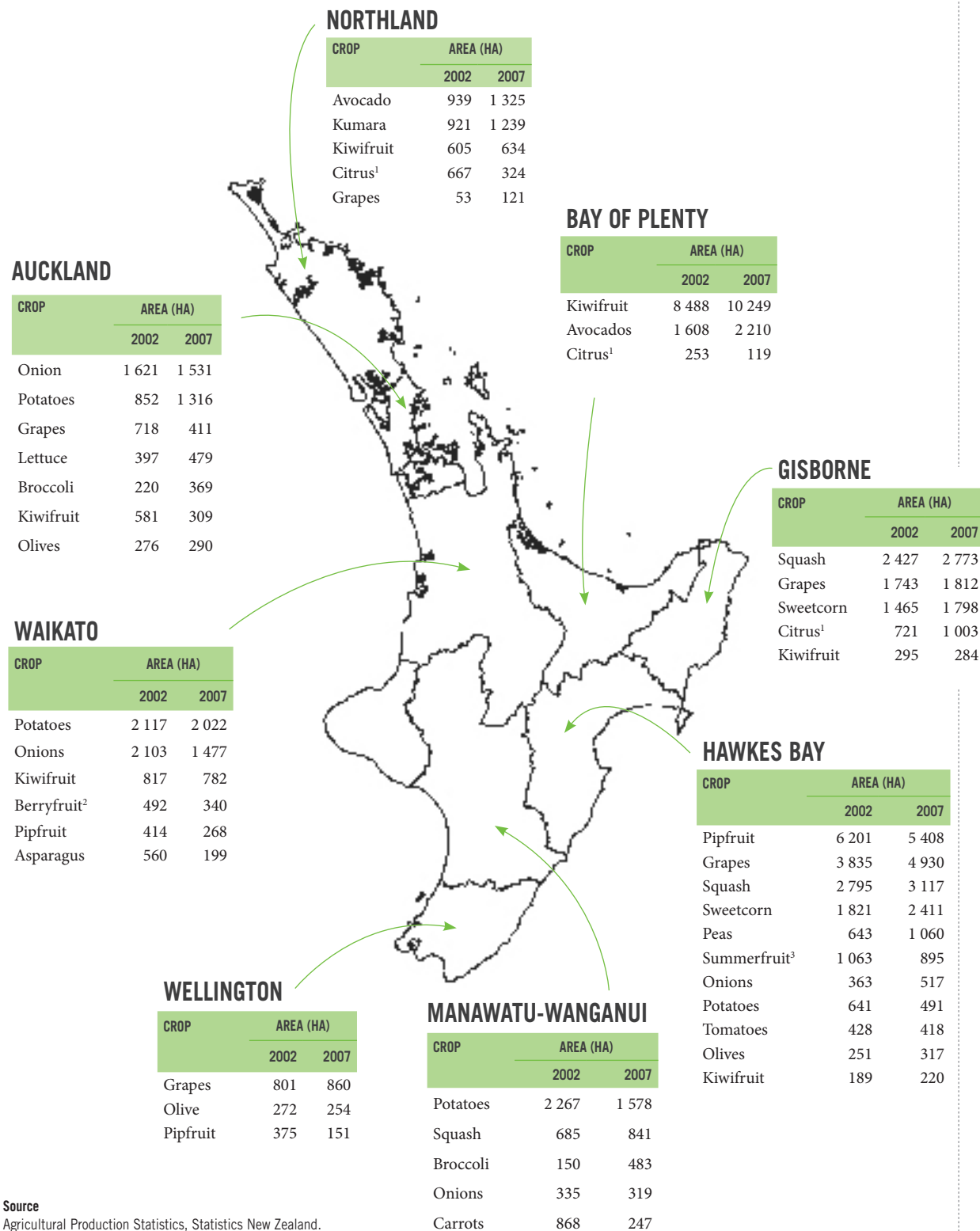
**FIGURE 3: PROFIT BEFORE TAX PER PLANTED HECTARE, 2006/07<sup>1</sup> TO 2010/11<sup>1</sup> BUDGET****Source**

MAF Monitoring Reports; 2007 to 2010.

**Note**

<sup>1</sup> The pipfruit models use a December year end. Hence data for 2006/07 to 2010/11 budget for the pipfruit models refer to the years ending December 2006 to 2010, respectively.

FIGURE 4: NORTH ISLAND HORTICULTURE STATISTICS, 2002 AND 2007



## Source

Agricultural Production Statistics, Statistics New Zealand.

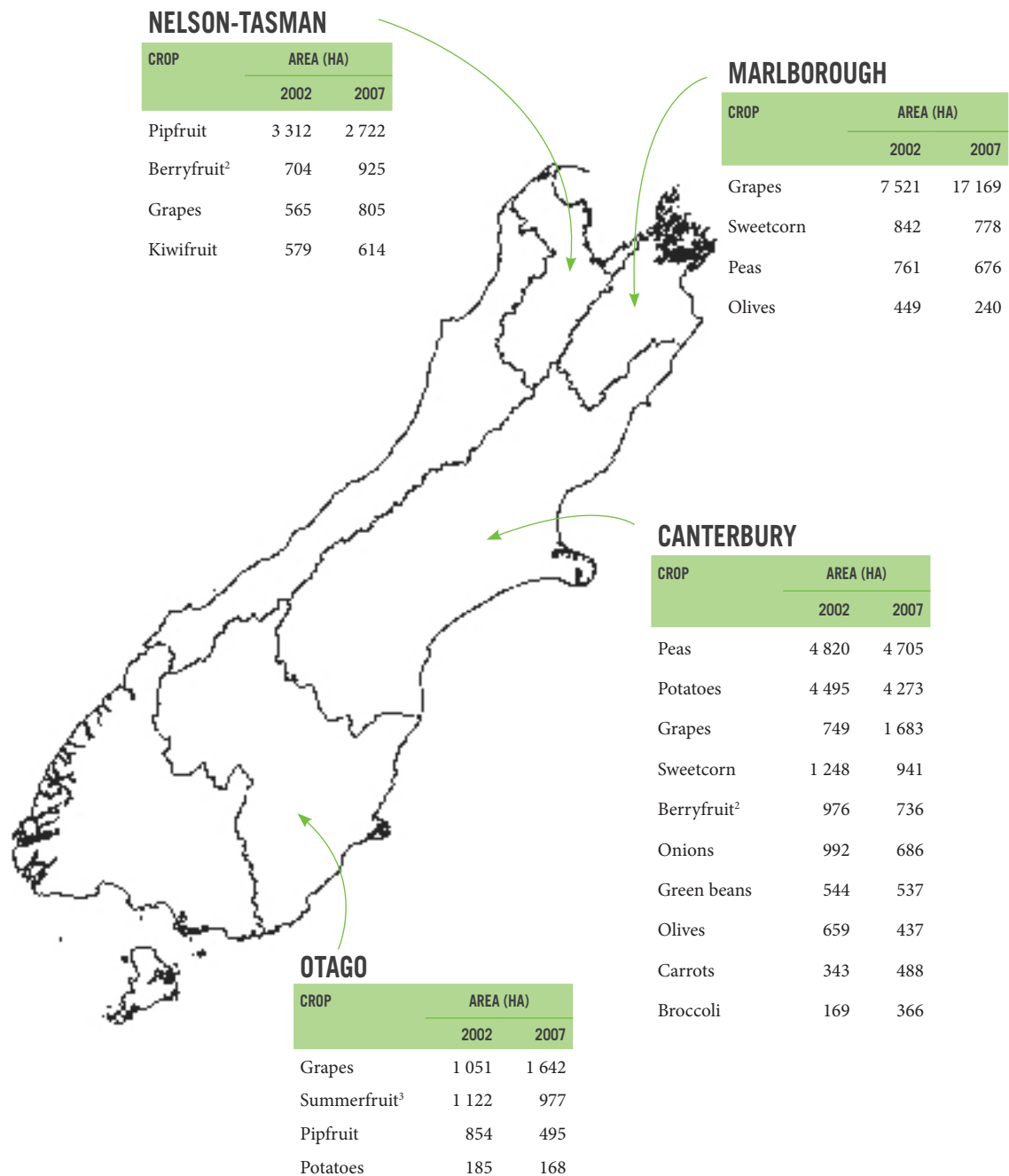
## Notes

1 Citrus includes: oranges, grapefruit/goldfruit, lemons, mandarins and tangelos.

2 Berryfruit includes: blackcurrants, blueberries, boysenberries, raspberries and strawberries.

3 Summerfruit includes: peaches, apricots, nectarines, cherries and plums.

FIGURE 5: SOUTH ISLAND HORTICULTURE STATISTICS, 2002 AND 2007

**Source**

Agricultural Production Statistics, Statistics New Zealand.

**Notes**

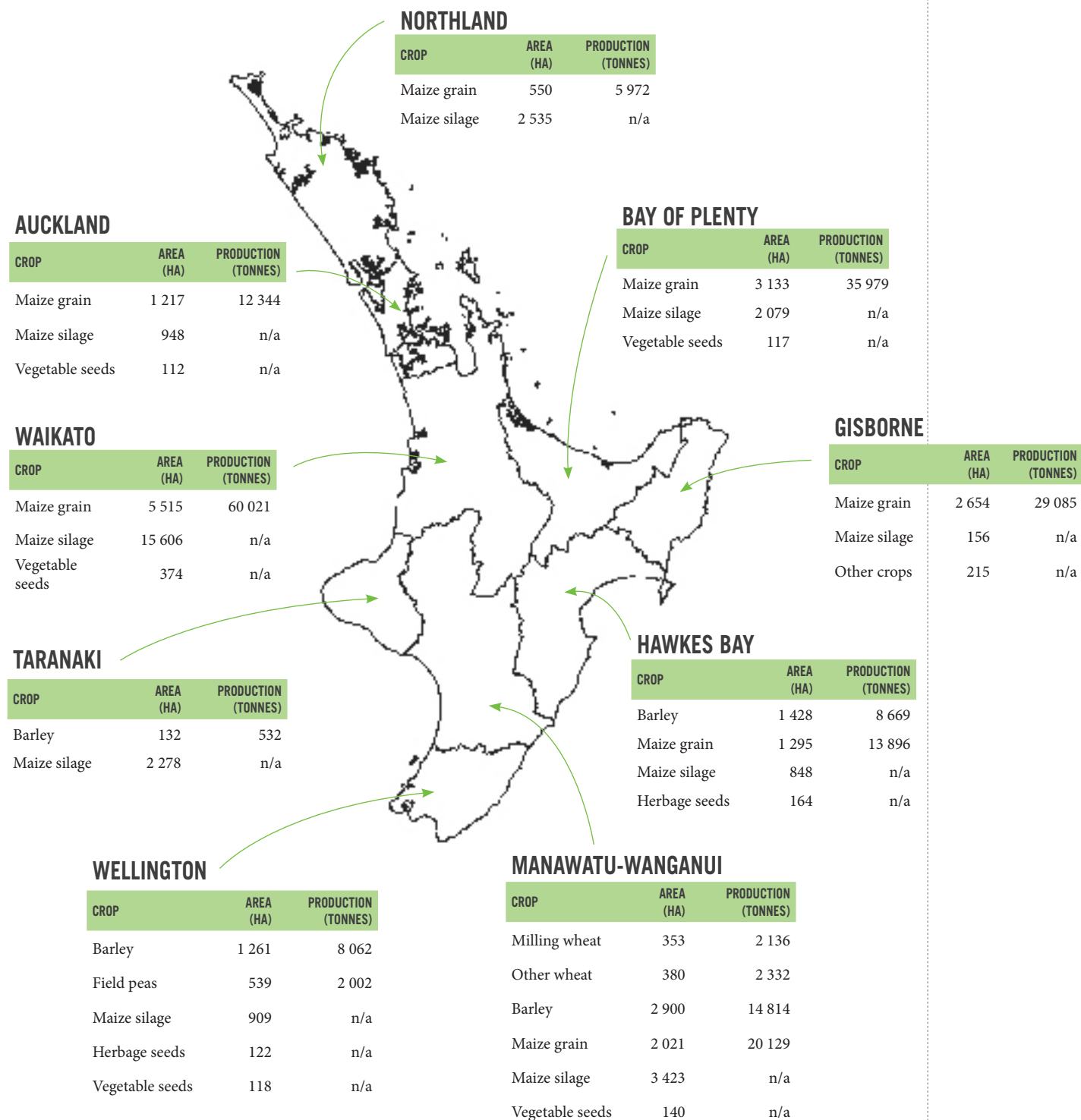
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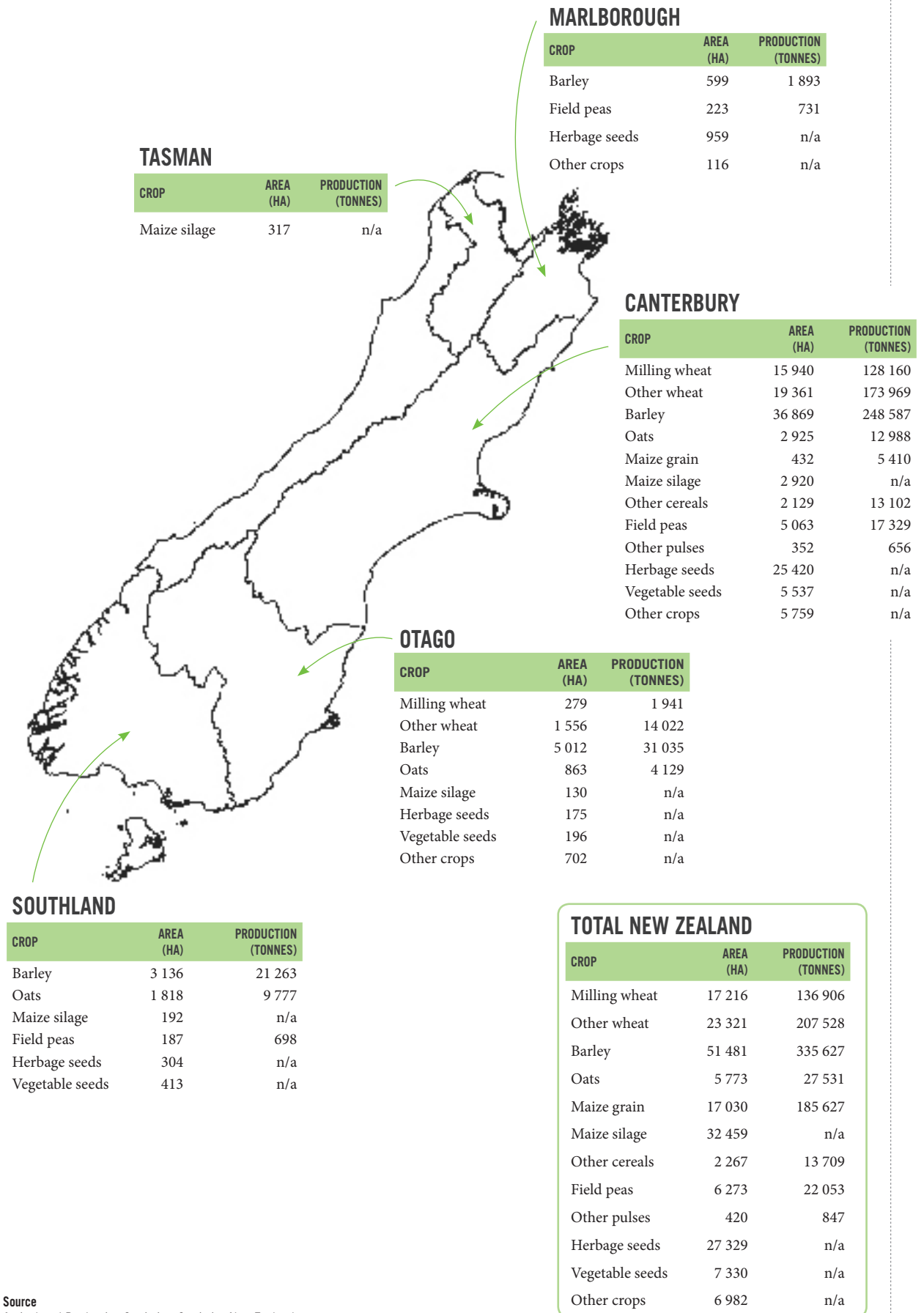


FIGURE 6: NORTH ISLAND ARABLE STATISTICS, JUNE 2007

**Source**

Agricultural Production Statistics, Statistics New Zealand.

FIGURE 7: SOUTH ISLAND ARABLE STATISTICS, JUNE 2007



**Source**  
Agricultural Production Statistics, Statistics New Zealand.

**PUBLISHER**

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