



2016 PIPFRUIT MONITORING PROGRAMME

BACKGROUND

This report provides summary production and financial information for the Hawke's Bay and Nelson pipfruit orchard models for the 2015 actual and 2016 budget years. Data for 2013 and 2014 is included for comparison.

KEY POINTS

The New Zealand pipfruit industry is performing well with most growers achieving four consecutive years of substantial profits. In 2015, higher prices compensated for lower export production due to hail damage in the main growing regions of Hawke's Bay and Nelson. Higher export production and prices are being achieved by Hawke's Bay orchards in 2016. The Nelson region was impacted by hail again in the 2015/16 growing season; higher prices are expected to buffer the drop in production for most growers.

Production

» Varieties with IP protection account for an estimated 50 percent of the planted area in the orchard models, up from around 20 to 30 percent a decade ago. Notably

in the Hawke's Bay model, the planted area in Pacific Queen™ ('Scired') in 2016 exceeds that of Braeburn.

- » Export production in 2015 fell by 1 percent in the Hawke's Bay model, whilst export production in Nelson was down 8 percent due to significant hail damage in spring 2014.
- » Orchards in Hawke's Bay and Nelson had the potential to carry large crops in 2015 following lighter crops in the previous year, and younger orchards reaching maturity. Orchards in the Riwaka and Moutere areas of the Tasman District were impacted by a devastating hail storm on 5 November 2014. Two further hail storms of lesser intensity in November/December affected additional orchards in the Tasman district. Orchards in the Hawke's Bay region were impacted to varying degrees by hail storms in late October and November 2014 and in January 2015.
- » Hail damage in both regions, combined with poor colour development for some later varieties in Hawke's Bay resulted in some of the lowest export recovery rates recorded for the pipfruit models in recent years.

- » Export production for the Hawke's Bay model is budgeted to increase by 8 percent in 2016, despite a 4 percent drop in gross production. Favourable growing conditions lifted export recovery rates.
- » A widespread hail storm hit the Nelson region on 16 December 2015 when many orchard blocks had already been hand thinned. The Nelson model is anticipating similar export production in 2016 to the previous year.

Prices

- » Export returns for all varieties in 2015 were much higher than anticipated at the start of the season. Prices for New Zealand apples in Europe and the US were maintained despite larger domestic crops and the import ban by Russia on fresh produce from these countries. Demand from Asian markets for New Zealand apples increased in 2015, lifting prices for Pacific Queen™ and Envy™ in particular. Favourable exchange rates from April 2015 also helped lift export prices.
- » Price increases are expected for most varieties in 2016. Market demand has been strong throughout the 2016 export season with good early demand from Taiwan. More fruit was shipped to the US earlier than usual; likely to be the result of a reduced local crop in 2015. New Zealand apples continue to achieve price premiums in Europe over competing southern hemisphere suppliers.
- » Ongoing investment in high colour sports and strains of Fuji and Gala/Royal Gala has helped in lifting the prices for these varieties.

Expenditure

- » Orchard working expenses have increased in recent years with growers spending more on higher value crops. Expenditure has risen on weed, pest and disease control to help deliver high quality fruit and meet market access requirements. An increased focus on managing European canker disease has also contributed to this increase.
- » Hail events have forced increased expenditure on hand thinning. Growers are also investing more in hail insurance as part of their strategies for managing hail risk.
- » Wage expenditure has lifted in both regions due to a combination of higher pay rates, orchardists being able to afford to hire more staff than in previous years, and increasing labour requirements to manage new plantings and the use of reflective cloth.

Net result

- » Higher prices led to an increase in operating profits¹ for the Hawke's Bay and Nelson orchard models in 2015.

It is noted that some orchards in the Nelson region were severely impacted by the November 2014 hail, resulting in operating losses where crops were completely wiped out.

- » Operating profits in 2016 are budgeted to increase 15 percent for the Hawke's Bay model and by 25 percent for the Nelson model. The budget result may be weaker or stronger for individual growers depending upon variety mix and in addition in the Nelson region, the severity of hail damage.
- » Growers in both regions have used recent orchard profits to reduce or clear overdrafts, pay down term debt, upgrade or replace orchard machinery, catch up on deferred orchard repairs and maintenance, and invest in new or replacement orchard plantings. However, growers in the Nelson region who have been severely impacted by hail two years in a row will be under financial pressure and may need bank loans to fund losses.

Industry trends and issues

- » Morale amongst pipfruit growers is good due to strong global demand for high quality New Zealand apples and pears, improved market and variety mix, and improved productivity. Both owner operators and larger corporate growers are feeling positive about the prospects for their businesses and the wider industry.
- » Growers and post-harvest operators are investing in technologies and practices to continually improve fruit quality and lift productivity. Such investments include new orchard production and training systems (such as slim, well-supported hedge row systems), picking platforms, hail netting, use of reflective mulch and modern fruit sorting systems.
- » Growth constraints identified include (i) having an adequate supply of suitably skilled seasonal and full time staff, (ii) available land and (iii) the lead time in obtaining trees on desired rootstocks. Long term security of water supply in the main growing regions was also noted as a concern.
- » Areas deserving increased attention and investment were cited as (i) investment in people and staff wellness, (ii) off-shore infrastructure and marketing and (iii) precision technologies and data management.
- » The most commonly cited perceived threats to the New Zealand pipfruit industry include (i) potential restrictions to the Recognised Seasonal Employer scheme, (ii) loss of access to key markets and (iii) biosecurity breaches. There is also a recognition that increasing global apple production will put downward pressure on prices.

¹ Operating profit is reported in the pipfruit orchard models as Earnings before Interest and Tax.

Table 1: Key parameters, financial results and budgets for the pipfruit orchard models

Year ended 31 December	2013	2014	2015	2016 Budget
Hawke's Bay model				
Total planted area (ha)	40.0	40.0	40.0	40.0
Owned planted area (ha)	24.0	24.0	24.0	24.0
Leased planted area (ha)	16.0	16.0	16.0	16.0
Total TCE ¹	145 925	127 390	135 500	129 870
Export TCE	96 615	92 200	91 085	98 225
Weighted average return at FAS (\$/export TCE) ²	25.45	26.80	28.75	30.10
Net cash income (\$) ³	1 585 300	1 602 900	1 844 500	1 979 400
Earnings before interest and tax (\$)	514 900	538 000	687 200	790 400
On-orchard working expenses ⁴ /Net cash income	65%	63%	60%	57%
Earnings before interest and tax/Net cash income	33%	34%	37%	40%
Return on assets = Earnings before interest and tax less lease expenses/Total owned orchard assets	16.6%	15.9%	19.9%	21.3%
Nelson model				
Total planted area (ha)	40.0	40.0	40.0	40.0
Owned planted area (ha)	32.0	32.0	32.0	32.0
Leased planted area (ha)	8.0	8.0	8.0	8.0
Total TCE	129 340	123 135	123 325	121 310
Export TCE	97 565	96 350	89 035	89 300
Weighted average return at FAS (\$/export TCE)	25.50	25.65	28.10	29.25
Net cash income (\$)	1 545 400	1 572 500	1 751 400	1 856 100
Earnings before interest and tax (\$)	425 400	379 800	498 600	621 500
On-orchard working expenses/Net cash income	69%	72%	68%	63%
Earnings before interest and tax/Net cash income	28%	24%	29%	34%
Return on assets = Earnings before interest and tax less lease expenses/Total owned orchard assets	11.1%	8.7%	11.5%	14.2%

Notes

The pipfruit orchard models are representative of export pipfruit orchards and based on a company structure.

The pipfruit orchard models were modified substantially in 2013 following a review of the MPI pipfruit monitoring programme. Hence direct comparisons with prior models are not recommended.

Figures may not add to totals due to rounding.

1 Tray carton equivalent 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.

2 Returns per export TCE are expressed at free alongside ship (FAS return). This is the value of the product at the ship's side net of commission, additional packaging costs and controlled atmosphere or SmartFresh™ costs.

3 Net cash income (NCI) to the orchard.

4 On-orchard working expenses include wages of management.

INFORMATION ABOUT THE MODELS

The MPI pipfruit models are orchard production and profitability models representative of export pipfruit orchards in the main pipfruit growing regions of Hawke's Bay and Nelson.

The model parameters of orchard size and variety mix are guided by regional statistics from Statistics New Zealand's Agriculture Production Survey and Pipfruit New Zealand Inc.

Production, income and expenditure information is collected from a monitored panel of contributing orchards, representing a cross-section of orchards in each region. Specifically the monitored panel includes representative orchards from each of the main supply chain categories, namely grower suppliers, grower-packers and grower-packer-marketers.

Data from the contributing properties are averaged, adjusted as necessary and used to create the orchard models.

Income figures include income from pipfruit and other pipfruit orchard income.

Expenditure figures include post-harvest expenses, orchard production costs, overheads and leasing. Labour expenses include wages of management.

The model business structure is a limited company.

The value of land and buildings in each model is attributed to the owned title area, including a dwelling and is an estimated market value.

The pipfruit model budgets are prepared using a 31 December balance date.

Hawke's Bay pipfruit model

The Hawke's Bay pipfruit model is 40 hectares planted, with 24 hectares owned and 16 hectares leased. The model is based on data from 24 orchards located in the Heretaunga Plains. Royal Gala is the predominant apple variety in the model, accounting for 32 percent of the planted area. The planting density distribution of the orchard model, guided by the monitored panel and based on the 2015 variety mix, is:

- » 50 percent planted area is at standard density (<1000 trees per hectare);
- » 25 percent planted area is at semi-intensive density (>1000 and <1800 trees per hectare);
- » 25 percent planted area is intensive (>1800 trees per hectare).

Nelson pipfruit model

The Nelson model is 40 hectares planted, with 32 hectares owned and 8 hectares leased. The model is based on data sourced from 20 orchards. Braeburn, Royal Gala and Jazz™ ('Scifresh') account for similar planted areas in the model at around 20 percent each. The planting density distribution of the orchard model, guided by the monitored panel and based on the 2015 variety mix, is:

- » 35 percent planted area is at standard density (<1000 trees per hectare);
- » 5 percent planted area is at semi-intensive density (>1000 and <1800 trees per hectare);
- » 60 percent planted area is intensive (>1800 trees per hectare).

For further information on these models contact:
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