CHAPTER ONE INDUSTRY OVERVIEW









This chapter provides the reader with an historical overview of New Zealand's kiwifruit industry, which explains the major events throughout the past century that shaped the kiwifruit industry into what it is today.

Section 1.7 looks at the current industry structure and the key organisations within, and **Section 1.8** examines New Zealand's unique growing environment and recent performance statistics from the 2020/21 period.

With 2021 impacted by ongoing disruption from the global pandemic, **Section 1.9** records the Kiwifruit Industry's response to Covid-19.

THE SECTION IS DIVIDED AS FOLLOWS

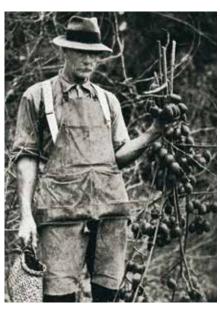
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1.1 THE BEGINNINGS

Kiwifruit seeds were first brought into New Zealand from China in 1904 by Isabel Fraser who was a teacher hailing from Whanganui. At the time, kiwifruit was known by its Chinese name Yang Tao and English names Chinese Gooseberry and Monkey Peach. In 1928, New Zealand grower Hayward Wright

bred a cultivar of kiwifruit known as 'Havward'. This is still one of the most widely grown green varieties worldwide. The first Kiwifruit exports were in 1952, to England. The name change to "Kiwifruit" didn't occur until 1959, connecting the fruit to our national bird.

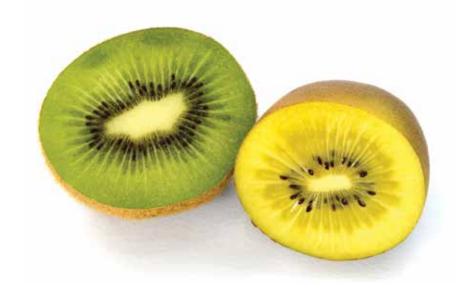




Right: Isabel Fraser

Far right: Hayward Wright

> At the time, kiwifruit was known by its Chinese name Yang Tao and English names Chinese Gooseberry and Monkey Peach."



1.2 1960 - 1980

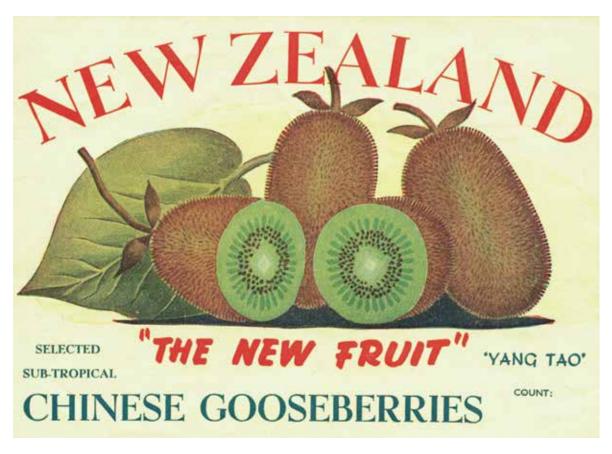
The kiwifruit industry in New Zealand is youthful in comparison to many other primary industries. Its real commercial beginnings sit in the 1960s. The first industry body, the Kiwifruit Export Promotion Committee, was formed in 1970. This led to the New Zealand Kiwifruit Authority (NZKA), which was established in October 1977.

The structure of NZKA was very different to what exists today with its role being to license exporters, such as Turners and Growers, the New Zealand Fruitgrowers' Federation and Auckland Export and at its peak had up to seven exporters licensed.

As well as licensing, the NZKA coordinated packaging and had authority over export grade standards and promotion, but it had no control over sales and marketing activities.



Right & below: The first commercial exports of kiwifruit showing the packaging and advertisements of the era



1.3 1980 - 1990

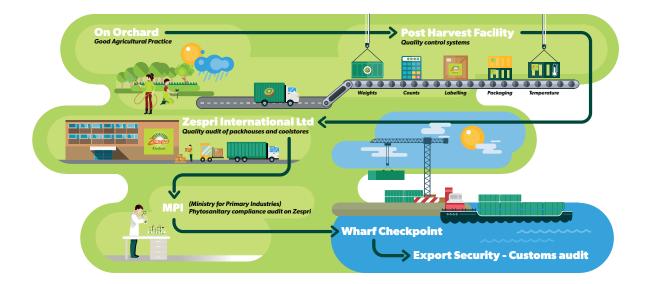
From the mid-1980s production was booming. In 1981 for example, 22,000 tonnes of kiwifruit were exported. By 1987, that had risen to 203,000 tonnes. Over the same period the return to growers per tray had dropped from \$7.84 in 1981 to \$3.00 in 1987. This resulted in 91 percent of growers making a loss from their kiwifruit operations. A dramatic rise in the New Zealand dollar (NZD) in 1987, followed by inflation reducing policies by the Reserve Bank of New Zealand (RBNZ), led to interest rates reaching their peak at 20.5% in June 1987.

Over-production along with the rise of the NZD made the price of New Zealand kiwifruit expensive in overseas markets and therefore reduced demand. The lack of returns combined with kiwifruit land values falling led to an equity crisis for many growers. This was the turning point that started the debate about the advantages of having one exporter (known today as Single Point of Entry or SPE) over multiple exporters.

In 1987, because of heated debate on the topic, the NZKA engaged a consultant's report. A referendum was then held in September 1988. The industry's set target was to get 80% grower support for the SPE. The fall in export prices and the undercutting between the seven kiwifruit exporters were key arguments in favour of the creation of the SPE. In the end, 84% of growers supported the creation of the Kiwifruit Marketing Board with statutory powers to buy all kiwifruit that was to be exported. The New Zealand Kiwifruit Marketing Board (NZKMB) came into being and its first season of operation was 1989/90. This ended the multi-exporter regime and replaced it with the single desk marketing structure that the kiwifruit industry has today. This foresight has allowed New Zealand kiwifruit growers to collectively develop their industry into a global business with concerted investment in branding, marketing, quality, and research and development.

Below:

The Zespri System showing how the single point of entry simplifies the exportation process





1.4 1990 - 2000

The 1992/93 season was a disaster for the New Zealand kiwifruit industry. New Zealand and international kiwifruit volumes continued to grow, and problems came to a peak during this season as a result of various factors such as bad management and governance. The NZKMB got into serious difficulty with growers being over-paid resulting in massive debt. The NZKMB with strong grower support reacted decisively, and the debt was paid off over the ensuing 18 months.

Because of what had occurred, the industry put in place a three-stage review that incorporated major structural change.

- **1. New Zealand Kiwifruit Growers Incorporated** (NZKGI) became operational in July 1994.
- 2. Marketing and branding were reviewed which led to the creation of the Zespri brand, which was launched in the 1996/97 season, and the creation of Zespri as a separate marketing and sales organisation.

3. Corporatisation, collaborative marketing and the industry's operational structures were looked at and as a result, a report was presented to NZKGI. A referendum was held, and the structure of the industry altered (in 1996/97) to include: Zespri as a marketing company, a NZKGI Forum, and the NZKMB (which remained in existence).

The positive results of the three-stage review included the formation of the Zespri business, the establishment of collaborative marketing, and a more efficient on-shore operational structure. The three-stage review also incorporated 12-month supply, new varieties and plant breeding.

It was in 1997 that Zespri Gold was launched on a commercial basis and was the first time there was an alternate successful variety to the Hayward. Furthermore, the three-stage review formed the basis of today's kiwifruit industry, and the way in which it operates.



Above: NZKGI became operational in July 1994





1.6 2010 ONWARDS AND THE ESTABLISHMENT OF KISP

In 2014, the Kiwifruit Industry Strategy Project (KISP) was established with the aim of developing a strategy to achieve the industry's long-term market, strategic and financial goals for the benefit of New Zealand's kiwifruit growers.

To help shape the core KISP principles and guidelines, the Industry Advisory Council (IAC) appointed a working group made up from the three corners of the industry structure – growers, postharvest and Zespri. The KISP project began by establishing a broadly agreed set of key principles to guide industry discussion and decision-making when agreeing to a long-term strategy for the New Zealand kiwifruit industry.

These Key Principles Included:

KISP Framework

• The New Zealand kiwifruit industry must act responsibly and ethically on all economic, sustainability, environmental, social and regulatory issues to the benefit of New Zealand kiwifruit growers and the wider New Zealand community.



Single Point of Entry (SPE)

 The Single Point of Entry is retained and enhanced to maximise its performance for New Zealand kiwifruit growers.

Industry Governance

- Given the increasingly competitive international market, Zespri governance must meet world-best practice standards so that it delivers on its purpose.
- Effective leadership and governance of all industry structures must be supported by effective New Zealand kiwifruit grower control, representation and consultation.

Zespri Ownership

 New Zealand kiwifruit growers must own and control Zespri and be the main beneficiaries of Zespri performance.

Marketing

 Zespri's purpose is to be the "best in class" international branded kiwifruit sales and marketing organisation to ensure a sustainable New Zealand kiwifruit industry that maximises New Zealand kiwifruit grower returns.

- Zespri-branded kiwifruit is the best available kiwifruit around the world 12 months of the year for the overall benefit of New Zealand kiwifruit growers.
- The New Zealand kiwifruit industry must have a process to evaluate and implement genuine innovative commercial and marketing ideas, including collaborative marketing, that are aligned to Zespri's global marketing strategy and for the long-term benefit of New Zealand kiwifruit growers.

Supply Chain Effectiveness

• The New Zealand kiwifruit industry must have an efficient, competitive and responsive onshore postharvest sector that is aligned with the industry strategy, offering grower choice that is integrated into an efficient global supply chain. The New Zealand kiwifruit industry must have a world-class global supply chain from orchard to consumer.

Innovation

- To maximise the New Zealand kiwifruit industry's global competitive advantage, the New Zealand kiwifruit industry must continue to develop and implement a world-class and sustainable R&D programme.
- As an integral part of the SPE, the New Zealand kiwifruit industry must have the ability to develop, own, licence, control and maximise the value generated from the world's leading portfolio of kiwifruit Plant Variety Right varieties.

Funding

 Zespri is funded and remunerated appropriately to ensure it can deliver the full scope of its responsibilities.

KISP Principles Established

In a referendum held in March 2015, New Zealand kiwifruit growers turned out in record numbers to vote on the proposed KISP Principles developed by the KISP working group. Two thirds of New Zealand growers representing 80 percent of production voted in the Kiwifruit Industry Strategy Project referendum. 91% of growers who voted supported the ten propositions.

The key results in the referendum were:

- 98% of growers supporting the industry's Single Point of Entry structure
- 92% of growers supporting the implementation of a cap on Zespri share-holding
- 91% of growers supporting a change to how Zespri is funded to maximise returns to New Zealand growers
- 94% of growers supporting changes to their industry representation to ensure they determine grower equity decisions about grower payments

Following the referendum, the KISP group asked the Ministry for Primary Industries to revise the Kiwifruit Regulations to allow implementation of the KISP recommendations. MPI issued a public consultation paper in early 2016 and a revision of the Kiwifruit Regulations was announced in August 2016.

Amendment of Kiwifruit Regulations

In July 2017, an amendment was made to the Kiwifruit Export Regulations which resulted from growers requests in the 2015 KISP Referendum. The revised regulations address three main areas:

- · Shareholder alignment;
- · Zespri's core business, and;
- The governance and funding of the regulator Kiwifruit New Zealand (KNZ).

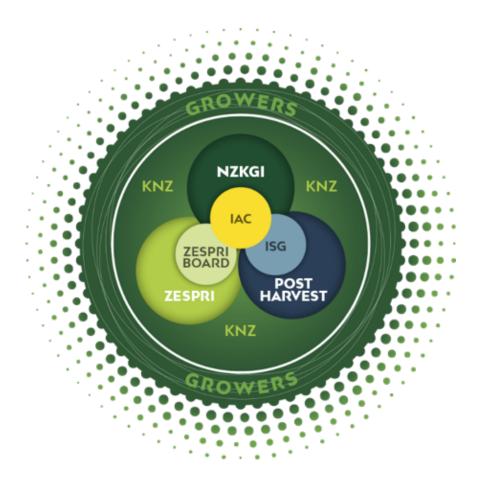
The regulations enable Zespri to make changes to its constitution to allow for greater alignment between Growers and shareholders. The regulations also expand the definition of core business which is expected to provide stability to Zespri as the industry grows, maximizing the wealth of New Zealand kiwifruit Growers. The regulations have made significant changes to the governance and funding of KNZ and while growers no longer had a majority on the KNZ Board, independent expertise was made available. As supported by the KISP referendum, KNZ also have greater flexibility in funding their operations but also enhanced reporting requirements.

Changes for Zespri Shareholders

In March 2018, more than 75% of Zespri Shareholders voted to strengthen grower ownership and control of Zespri. The new constitution introduced dividend restrictions on shareholders who no longer grow kiwifruit and a share cap with a maximum shareholding of four shares for each tray of production. Further, to improve alignment between growers and Zespri, a targeted share issue and buyback programme is planned for late 2018. The share issue and buyback programme will be based on an independent valuation and target a share issue to unshared and under-shared growers, and a buy-back offer to non-producers and over-shared shareholders. More information about KISP can be read on the website. www.kisp.co.nz

KEY ORGANISATIONS 1.7

Right: This diagram shows the different groups in the kiwifruit industry and how they work together to make industry decisions





Zespri International Limited (Zespri)

Zespri is a limited liability company, owned by NZ kiwifruit producers (shareholders), which in addition to its role as the single desk marketer also provides logistics services and research and development management for the kiwifruit industry. The Zespri team is made up of almost 700 employees based in Mount Maunganui and throughout Asia, Europe, and the Americas.

Zespri Board

The Board provides strategic direction for the company and ensure it meets all regulatory requirements. Zespri's eight Board Members bring a wide range of experience, from international marketing and corporate governance to industry knowledge and financial expertise.



Kiwifruit Vine Health (KVH)

KVH is a biosecurity organisation, established in 2010 to lead the response to the Psa incursion. Since 2012, KVH has been the organisation responsible for managing all biosecurity readiness, response, and operations on behalf of the kiwifruit industry. KVH works collaboratively with Growers, Zespri, NZKGI, the postharvest and associated industries, and Government.



New Zealand Kiwifruit Growers Incorporated (NZKGI)

NZKGI was formed following the downturn in the kiwifruit industry in 1993 to give growers their own organisation to develop a secure and stable kiwifruit industry. NZKGI represents kiwifruit growers and protects their political and commercial interests. Key roles include safeguarding the Single Point of Entry (SPE), supporting grower well-being and welfare, consulting with growers on industry initiatives and reporting on Zespri's performance. The NZKGI Forum is made up of 17 elected regional grower reps, 1 Māori Forum rep, and 9 supply entity reps.



Plant & Food Research

Plant & Food Research is a New Zealand-based science company that is a government owned Crown Research Institute. Approximately 100 of the 900 people employed by Plant & Food Research carry out 60% of the kiwifruit industry's research. Kiwifruit has a broad research programme which covers new cultivar development, supply chain and consumer added value. Plant & Food Research have a site in Te Puke that is home to the largest kiwifruit breeding population outside of China.



Māori Kiwifruit Growers Incorporated

The Māori Kiwifruit Growers Forum Incorporated has been created to advocate for the interests of Māori kiwifruit growers and is a partnership between Māori kiwifruit growers, Te Puni Kokiri and Zespri. It aims to improve information dissemination, and to ultimately assist and help improve net returns for Māori growers. The Forum is governed by 9 elected Members who represent the Māori communities involved in the kiwifruit industry.



Kiwifruit New Zealand (KNZ)

The export of New Zealand kiwifruit is regulated through the Kiwifruit Export Regulations 1999. These regulations permit a single marketer to export and market the majority of New Zealand grown kiwifruit outside of Australasia. This position is called the 'Single Point of Entry' (SPE). The Kiwifruit Export Regulations are monitored and enforced by Kiwifruit New Zealand (KNZ). As the kiwifruit industry's regulator, KNZ gives Zespri the mandate to be the vehicle of the SPE. KNZ also have the mandate to allow other exporters to trade New Zealand grown kiwifruit outside of Australasia and do so on a case-by-case basis in collaboration with Zespri. This is dependent on the value those exporters can derive for growers over and above what is achieved by Zespri.

Industry Advisory Council (IAC)

The Industry Advisory Council is specifically concerned with the financial, tax and government related aspects of the kiwifruit industry, for the improvement of grower wealth. IAC manage issues relating to the Supply Contract, decisions relating to the treatment of and payment for fruit and matters with material financial implications for growers. IAC has 5 Grower reps, 5 Zespri reps, and 5 Supply Entity reps.

The Industry Supply Group (ISG)

The Industry Supply Group manages decisions relating to the global supply chain process. Specifically, they monitor quality assurance and rules around labelling, packaging, and the export of kiwifruit. ISG also help in the negotiation of industry wide commercial contracts relating to supply chain activities. ISG has 3 Grower reps, 6 Zespri reps, and 13 Supply Entity reps.

1.7.1 Levy-Funded Organisations

KVH

KVH is funded through two grower levies: a National Pest Management levy for the management of Psa, which from 1 April 2021 is set at 0.1 cents/tray; and a levy for biosecurity readiness and response activities which is set at 1.5 cents/tray. KVH's levy is renewed annually at their AGM.

NZKGI

A grower levy is used to fund the operations of NZKGI. In 2017, NZKGI were given a mandate by kiwifruit growers to work on their behalf for the next six-year kiwifruit levy cycle. 85% of growers participating in the referendum voted to continue the levy. The levy is set at 1.1 cents/tray (\$0.0028/kg) and can only be increased by vote at a NZKGI AGM or Special General Meeting.



1.8 NEW ZEALAND'S COMPETITIVE POSITION GLOBALLY

Above:

Birds eye view of kiwifruit and avocado orchards in the Bay of Plenty (Bevan Jelly, NZ Avocado)

Right:

Regional production of kiwifruit in New Zealand

New Zealand has some of the best growing conditions in the world. Clean air, fertile soils, a cool ocean, generous climate, and fewer pests and diseases all contribute to the unique quality and taste of New Zealand grown kiwifruit. 80% of New Zealand grown kiwifruit comes from the Bay of Plenty.

There are approximately 2,813 kiwifruit growers in New Zealand and around 13,334 hectares of kiwifruit in production. Zespri markets the majority of New Zealand grown kiwifruit and is the most recognised fruit brand in the largest cities in Greater China.

New Zealand grown Zespri kiwifruit generated global sales revenue of \$2,599 billion in the 2020/21 season and sold 158 million trays (3.55kg = 1 tray).



The return made by New Zealand kiwifruit export revenue in the 2020 year is significant in comparison to other fruit and vegetables. Kiwifruit was \$2.5 billion whilst total horticultural export revenue was \$6.6 billion. Kiwifruit represents 38% of the total horticultural export revenue. Although New Zealand grown kiwifruit export returns are large in comparison to other horticultural products, kiwifruit is a small fruit category in a global context. While the world total production of kiwifruit has been increasing, the kiwifruit remains a niche fruit, taking up an estimated 0.22% of the global fruit bowl, which is dominated by apples, oranges, and bananas.

Right: Number of hectares of kiwifruit produced in each region

Regional production of kiwifruit by hectare in the 2020/2021 year			
Northland	476		
Auckland	494		
ВОР	10,736		
Waikato	551		
Poverty Bay	353		
Hawke's Bay	212		
Lower North Island	73		
South Island	438		

New Zealand kiwifruit growers compete against other kiwifruit growers from other countries and other fruits available in the market at the same time as New Zealand kiwifruit. New Zealand kiwifruit faces competition in all markets from a wide range of fresh fruit and consumer products. Many other producers attempt to capture market space using price while the New Zealand strategy is more about adding value through product taste, quality and consistency, branding, promotional support and reliable supply.

Right:
Picture of fruit stand
representing the
competition New Zealand
faces in the market place



INDUSTRY RESPONSE TO COVID-19 1.9

Late in 2019, worrying reports of a pneumonia caused by an unknown pathogen began to emerge from Wuhan, China. It was identified as being caused by a novel coronavirus SARS-CoV-2 in Jan 2020, when the first cases began appearing outside of China. The disease was eventually named Covid-19, with the WHO declaring the epidemic a global health emergency, and later a pandemic.

In early February, New Zealand temporarily prevented entry of foreigners who were from, or had travelled through, mainland China. Returning New Zealanders were required to self-isolate for 14 days. On February 28, the first Covid-19 case in New Zealand was reported. The list of countries from which visitors were prevented from entry increased, as did those needing to self-isolate. By March 11, the WHO upgraded the epidemic to a pandemic, by which time NZ had 6 reported cases. Increasing restrictions followed e.g., around the size of group meetings. New Zealanders were urged not to travel overseas, and the borders were closed to most visitors.

On March 21, the alert levels were announced, and New Zealand was placed in Level 2 with 52 confirmed cases. This lifted to Level 3 two days later, and upcoming widespread restrictions

on movement were announced to be brought in under Level 4 from 11.59pm on March 25. By this stage there were 155 new and probable cases in the country. Food producers and their essential supply chain businesses were considered essential services and could continue to operate under both level 3 and 4, but within strict conditions

Under Level 4 restrictions, the Kiwifruit Industry was faced with a huge challenge. Harvest was underway, with an expected increase in fruit volumes coming through. Across the country approximately 23,000 people are employed as seasonal workers in kiwifruit packhouses or on orchards from March until June. Usually around half of these workers would be New 7ealanders, 20% would be RSF workers. with the rest non RSE visa holders (e.g., working holiday) or backpackers. With the borders closed this mix would have to change. And all those people would need to be kept safe from the virus.

Businesses with more than 5 people had to register with MPI. Vulnerable workers (those aged over 70 or with underlying health conditions) were asked to stay at home. More stringent pre-employment protocols and site registers were required. As a food industry, Kiwifruit already had hygiene protocols and contract tracing in place. Improvements were made regarding worker hygiene and facilities, with workers required to wash their hands at least 8x per day including on arrival to the site and before and after every break. It was social distancing that caused the greatest upheaval, with the requirement that people be kept 2m apart at all times. Workspaces had to be modified, break times had to be coordinated differently and access to canteens and break spaces reconfigured.

A partnership between Zespri and NZKGI - the Labour Co-ordination centre, was set up to link companies and individuals whose work had been displaced by Covid-19 with kiwifruit businesses that needed workers. From April 6 more than 1000 people registered with the centre, and 200-550 vacant positions were being filled each week.

Right: Practice good hygiene poster (source: https://covid19.govt. nz/updates-and-resources/ posters/)















New Zealand Government

Case study: On-Orchard - Mat Johnson Contracting

Mat and Kris Johnson run their own orchards in Te Puke as well as harvest fruit from 90Ha of client orchards. Despite the kiwifruit industry being declared an essential service there was still a lot of uncertainty in the early days of the pandemic.

"We really didn't know if we could pick our fruit or our clients' fruit" Mat Johnson.

"We had delayed the arrival of our RSE (Recognised Seasonal Employer) scheme workers from Samoa as we wanted to have them here later in the year for pruning. I regret that now because they never got here" Kris Johnson

The couple feel for their RSE workers, many of whom would have been returning for their third season. The border closure meant those workers missed out on earnings vital for the well-being of themselves, their families, and communities. They were also a loss to the kiwifruit industry.

"They are highly skilled pruners and that's something you can't teach anyone in a day or two, like you can with picking or bud thinning." says Kris.

Anticipating that their staffing needs would change, Kris increased her

recruitment efforts, mainly through social media. Other industries were also impacted by the Covid restrictions (particularly Tourism and Hospitality), so there were opportunities to recruit New Zealanders who had lost their jobs.

"We had an Air New Zealand cabin crew member, a vegan baker, black water rafting guides, and of course hospitality workers, a real mix of good people" Kris Johnson.

They co-ordinated picking teams, reducing the size of teams from 18 people to between 12 and 14 per team to meet social distancing rules imposed by Government. They colour-coded their teams, issuing them coloured wristbands and tags on their picking bags to help identify family and housing bubbles.

"Only 3 people could be around bins emptying bags at one time, slowing things down. We were probably 20% down on bin numbers picked during the start of the season" says Mat.

Thankfully, the weather throughout most of April and May was good, meaning pickers could work a longer day (extended from 6-7 hours over the gold period to 9-hour days), and all the available fruit was eventually harvested.

Case study: Packhouse – Trevelyan's

Prewarned of the impending consequences of Covid-19 by friends and colleagues overseas, James Trevelyan had already implemented changes in the packhouse prior to the March lockdown, tripling the company's cleaning team and marking out 1m distancing. However, the Level 4 protocols were still a big step.

"We had two Covid-19 teams, each with four people to monitor the protocols and documentation for the day and night shifts" James Trevelyan.

Staff had their temperature taken each time they arrived at work. Packhouse staff were allocated to specific zones which

were the only ones within which they could move. Shift times were staggered, and holes were cut in the sides of the packing shed so staff could maintain a one-way system when moving around. The cafeteria that normally seats 200 people could only hold 40 under the social distancing protocols, so marquees were hired to take the overflow. Special handwashing and drying areas were set up with a screened one-way walk-through system to allow 2m distancing, handling 130 people each shift. Plastic screens were erected to allow separation of staff working closely on the packing lines.

James estimated the additional costs to meet the Covid-19 protocols (including increasing security on site) are in the region of \$300,000 - \$500,000, with added reduced productivity, but were worth it for the reassurance it offered staff that they could be safe at work.

"we were able to harvest and pack the fruit, which was very fortunate" James Trevelyan.

The industry was also impacted when the independent laboratory Eurofins was unable to meet the Covid-19 protocols and stopped carrying out maturity sampling and testing. A separate sample is also tested for the presence of chemical residues on the fruit. Successful completion of both these tests leads to the block receiving clearance to pick. Zespri chose to remove the need for dry matter testing from the clearance criteria for the 2020 harvest, opening the process up to allow postharvest operators with their own laboratories to complete the remaining maturity tests. Removal of dry matter testing resulted in changes in the way growers were paid for their fruit (refer to Chapter 6 for more information on Maturity Testing and Grower Payments).

Eventually, through hard work, ingenuity and cooperation, the industry picked, packed and shipped 145.3 million trays of class 1 fruit.

Right: Screens installed to protect packing staff where the 2m distancing rule could not be met. (Source: Trevelyan's)



Right: Trevelyan's extensive washbasin set-up allowed staff to wash and dry their hands in a one-way system, with 2m distancing maintained at all times. (Source: Trevelyan's)

