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Food and Fibre Centre of Vocational Excellence (FFCoVE)

Attraction and Retention Research Programme

Situational analysis – Desk research

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Executive summary

The problem to be solved

For many years the food and fibre industry has struggled to attract and retain people into its workforce, and to attract students to food and fibre related studies. In response to this challenge, industry organisations, government agencies and employers, have researched, trialled, and implemented a range of strategies and interventions to address workforce shortages. These interventions have focused on attracting people to the workforce, retaining people in the workforce, and improving productivity to reduce the workforce requirement.

Despite these efforts, businesses across the industry continue to struggle to find and keep the employees they require to operate. Workforce shortages have been exacerbated in recent years by the COVID-19 pandemic, and the closure of New Zealand's borders during this time causing tight immigration settings.

Issues affecting attraction and retention

There is an abundance of research that identifies issues that make it hard to attract and retain talent in the food and fibre industry. Most of the issues internal to the food and fibre industry will be familiar to industry stakeholders. These issues include poor public perception, low rates of pay and unappealing workplaces. Many of these internal issues are not new – some predate the workforce shortages the industry is experiencing currently.

Less discussed in industry research, are the external factors that reduce the competitiveness of the food and fibre industry as a place to work. New jobs – think drone operators, social media influencers, cloud computing specialists ... – are being created in the wider economy. However, the overall New Zealand workforce is not growing. As the pool of talent is not expanding to cover the new jobs being created, existing workforces need to either shrink, or become much more competitive.

Why attraction and retention initiatives have not worked

We identify four possible reasons why workplace shortages have persisted in the food and fibre industry despite many years of investment in attraction and retention programmes:

1. Strategies have not allocated investment to the right interventions
2. Interventions have not been executed well
3. Interventions need more time to work
4. Investment has not been at the scale needed to make a significant difference

All four of these reasons play at least some role.

For the most part the strategies that have guided investment in attraction and retention have been high-level and aspirational. They do not have the rigour or detail to meaningfully guide investment choices.

The interventions that are undertaken are mostly uncoordinated, and lessons from the evaluations of past initiatives are not reflected in the activities that are occurring today. The interventions are typically led by industry bodies and government agencies, but it is ultimately individual employers that hire and employ staff. This disconnect blunts the effectiveness of both attraction and retention interventions. It

is also noted that connections between the education and training system on one hand and industry investment in talent attraction on the other, are weak.

Investment is typically made through projects, which means that most interventions have only a finite life. This makes them costly to run and more difficult to integrate, and it reduces the opportunity to build enduring brands with key audiences.

Current landscape

We identify 184 interventions of different sizes, modes of engagement, level of investment and primary focus which include attraction and/or retention as a feature. We estimate that approximately 40 of these interventions are active in 2022 and have either attraction and/or retention as their *primary* objective. These 40 are the core interventions in the analysis of the current landscape. Between \$6 to \$11 million¹ is expected to be invested in these 40 interventions in 2022; this has been broken down by primary focus in the following table.

Table 1: Breakdown of investment in core interventions by primary focus

Primary focus	Intervention breakdown		Investment breakdown	
	#	%	\$ millions	%
Attraction only	26	65%	\$4 - \$8	71%
Retention only	5	13%	\$0.4 - \$0.7	7%
Combination of attraction and retention	9	23%	\$1 - \$2	23%
Total	40	100%	\$6 - \$11	100%

The current range of interventions identified for this analysis suggests that much of the direction provided by strategy documents are being neglected when designing attraction and/or retention interventions. Observations on the current landscape include:

- The industry requires a stronger mechanism to co-ordinate investments which have been fragmented and disconnected across the industry to date,
- Attraction and retention interventions could be better targeted at audiences which are already close to being ready to work in the food and fibre sector, particularly career changers which have been the largest source of new entrants in the past, and
- More should be done to align industry investment with the education system given the better scale and leverage that connecting with the training sector offers.

Testing the case for attraction and retention interventions

A fundamental question that arises from the points above is whether industry and government should invest in attraction and retention interventions at all. What quantitative evaluation is available, suggests that talent attraction projects have more than covered costs but offer lower returns than other investments, such as extension, available to both industry and government investors. Unless this

¹ An investment range has been used to acknowledge the uncertainty of the investment made in each of the core interventions, and the uncertainty with which interventions should be considered core or not. An investment range is more meaningful to the analysis than a precise estimate of the total investment.

changes dramatically, the current scale of investment will continue to fall many times short of that needed to close the workforce shortage. Given this, it may be better to:

- Raise system productivity to reduce the number of people needed, and / or ...
- ... be able to pay employees more and restore competitiveness in that way.
- Continue to use immigration to fix shortages (acknowledging that takes control away from the business owners and the industry, and puts it in the hands of politicians who set immigration policy)
- Reduce the size of the industry by scaling down outputs and/or re-purposing assets to activities with lower labour requirements.

Hypotheses for further testing

From this situational analysis, we have identified two groups of hypotheses which we intend to address and test in the subsequent workstreams of this Attraction and Retention Research Programme. The first group addresses possible causes to why the workforce shortages in the food and fibre industry have persisted despite the various efforts of the industry to mitigate the issues. These include:

- Attraction and retention strategies and investments are not focusing on the right areas.
- Strategies and investments are focusing on the right areas, although the execution is poor.
- The intended outcomes of past attraction and retention interventions have not had sufficient time to be realised.
- Strategies and investments are focusing on the right areas, and execution is good, however the investment is not of a sufficient scale to affect meaningful changes.
- The industry should NOT invest in attraction and retention initiatives.

In most instances, these hypotheses will be tested in the next stage of this work by using the impact model developed under the 'Performance measurement' workstream. The impact model will be used to quantitatively indicate which types of interventions are more effective and why.

The second set of hypotheses proposes an attraction, retention, training and pastoral care integrated model to improve attraction and retention rates. This model is intended to be tested during the piloting workstream.

About this document

Context

For many years the food and fibre industry has struggled to attract and retain people into its workforce, and to attract students to food and fibre related studies. In response to this challenge, industry organisations, government agencies and employers, have researched, trialled, and implemented a range of strategies and interventions to address workforce shortages. These interventions have focused on attracting people to the workforce, retaining people in the workforce, and improving productivity to reduce the workforce requirement.

Despite these efforts, businesses across the industry continue to struggle to find and keep the employees they require to operate. Workforce shortages have been exacerbated in recent years by the COVID-19 pandemic, and the closure of New Zealand's borders during this time. It is noted that these issues are not unique to the food and fibre sector – they are shared by many other industries.

Attraction and retention research programme

The Food and Fibre Centre of Vocational Excellence (FFCoVE) have contracted Scarlatti to undertake the attraction and retention research programme. Key activities within this work include:

1. Undertaking a situational analysis
2. Evaluating performance measurements
3. Piloting retention interventions
4. Writing a final insights report

This paper presents the findings from the situational analysis desk research.

Objectives

The objectives of the desk research were to identify, characterise, record and synthesise:

- The **issues** relating to the attraction and retention of students and workers in the food and fibre sector
- The current and past **research projects** addressing and exploring the causes of attraction and retention issues
- The current and past **strategies** developed to address workforce shortages
- The attraction and retention **interventions** designed and implemented across the food and fibre industry
- **Evaluations** of attraction and retention both strategies and interventions to understand whether they were successful, and if not, why that was the case.

Methodology

This work was undertaken between July and August 2022 and involved sourcing and reviewing key documents and undertaking informal interviews with industry stakeholders.

To improve the readability of this document in-text citations haven't been included, instead the list of source documents that have informed this work can be found in Appendix D (refer to page 53).

Structure and scope of this document

Structure

This report is divided into two parts.

- **Part A: Synthesis of key findings.** The sections within this part are structured around the project objectives:
 - Attraction and retention issues affecting the food and fibre industry
 - Historic approaches to address attraction and retention issues
 - Evaluations of attraction and retention strategies and interventions
 - Current strategies for food and fibre industry attraction and retention
 - Current interventions for food and fibre industry attraction and retention.

Within each section, the content is structured to address key research questions.

The final section in Part A presents a set of hypotheses, developed from the analyses in the previous sections, to test:

- Why, despite investment in attraction and retention interventions, the observed workforce shortages have persisted in the food and fibre sector.
 - What attraction and retention interventions will offer the best returns.
- **Part B: Appendices.** The appendices provide the list of source documents used in this report, along with descriptive information about:
 - Evaluations of attraction and retention strategies and interventions
 - Current strategies
 - Current interventions.

Scope

This document considers both attraction into tertiary training and attraction into the workforce. For the most part, the issues and opportunities for these two different pathways are closely related. Thus, they are considered as such throughout this report and are differentiated only where / when appropriate. The discussion about retention focusses mainly on employment / workforce retention rather than retention within training programmes, although these will clearly overlap in the case of work-based training.

This report focuses on the horticulture, dairy farming, sheep and beef farming, and forestry sectors. Where issues for other sectors are identified, they are noted.

Part A: Synthesis of key findings



Attraction and retention issues affecting the food and fibre industry

This section presents a summary and synthesis of findings related to the attraction and retention issues affecting the food and fibre industry. The following research questions are addressed in this section:

- What are the issues associated with attracting and retaining workers and students in the food and fibre industry?
- To what extent are the attraction and retention issues different for each food and fibre sector?
- What are the specific attraction and retention issues experienced by Māori?
- What are the specific attraction and retention issues experienced by other worker segments?
- How do the attraction and retention issues in New Zealand compare to those experienced by the food and fibre sectors of other countries?

We suspect that most readers of this report will be familiar with the points raised in this section and therefore we do not dwell in any depth on the issues raised here. For those wishing to probe these issues further, a list of the documents used in this work are included in Appendix D (refer to page 53).

What are the issues associated with attracting and retaining workers and students in the food and fibre industry?

Internal issues affecting attraction and retention

A small set of issues appear repeatedly in research on the issues affecting attraction and retention across the food and fibre industry.

- **The work has some inherently negative aspects.** Some factors associated with the work in the food and fibre industry are an inherent feature of the job but act as barriers to attracting and retaining people. These include the remote location and nature of the work – physical, sometimes dirty, and often completed in adverse weather conditions.
- **Poor public perception of some sectors impacts on the ability to attract new people.** Several food and fibre sectors have, at times, developed poor reputations. Particular issues captured in the mainstream media relate to the environment (i.e., nutrient leaching, Greenhouse Gas emissions, water quality, etc) and to animal welfare.
- **Workplaces are perceived, and communicated, to be poor-quality.** Poor workplaces act as barriers to both to attraction and retention. Issues include:
 - **Long and inflexible working hours** can limit employees' ability to socialise, which can cause stress and have negative impacts on mental health
 - Related to the above, **work rosters and working patterns** may not support good work-life balance
 - **Unrewarding work** which can be repetitive and boring.

- **Managers with poor people management skills can affect retention rates.** Poor employers and people managers impact on attraction and retention. This issue is shared with all industries but arguably the high proportion of small enterprises with owner-operators limits the ability to weed out poor managers when compared to other industries.
- **An absence of clear career and development opportunities can be a deterrent.** While work in the food and fibre industry is varied, features such as the small-scale enterprises of individual employers; and the cost to purchase assets such as land, stock and machinery; limit career progression in some cases.
- **Rates of pay are low.** This is true by definition – there is a level of pay at which food and fibre industry employers will have no trouble attracting and retaining the people that they need. The fact that employers are not attracting the people they need, suggests that rates of pay are not high enough to offset the internal factors listed above, and the external factors discussed below.

External attraction and retention issues affecting the food and fibre industry

Many of the issues affecting the market for talent in the food and fibre industry are the result of economy-wide trends over which participants in the food and fibre industry have little or no control. Relevant issues include:

- **The wider economy has created new employment options.** Job market trends have evolved over recent decades, which has led to increased competition in New Zealand’s job market. For example:
 - A range of **new jobs** have emerged that didn’t exist in the past, such as drone operators, social media influencers, and cloud computing specialists.
 - **Globalisation** has increased the opportunities for New Zealanders to work in international roles, which then places pressure on the domestic workforce.
- **The overall workforce is flatlining.** While new jobs are being created, the size of New Zealand’s working age population has changed little in the past decade and is projected to shrink slowly in coming decades. That is, the pool of talent is not expanding to cover the new jobs being created meaning that existing industries need to either shrink, or become much more competitive over time.
- **Increased urbanisation has made it harder to attract people to the sector.** The proportion of New Zealand’s population living in urban areas continues to grow. This makes it challenging to attract people into rurally based food and fibre industry-related study and employment. Presumably the urbanisation trend reflects, in part, the relative attractiveness of urban roles over rural ones. The trend becomes self-fulfilling as urbanites lack awareness and exposure to rural opportunities.
- **Increased numbers of people are obtaining transferrable education and skills.** This has added to the challenges of food and fibre industry attraction and retention by creating more opportunities for individuals to be employed outside of the food and fibre industry workforce.

The internal issues (outlined in the previous section) affecting attraction and retention have, for the most part, been well-explored in research. However, less attention has been given to the role that changes in the wider economy have had on the competitiveness of jobs in New Zealand’s food and fibre

industry. However, it seems plausible that external forces which reduce the competitiveness of food and fibre industry jobs are more potent than attraction and retention interventions can hope to offset. In this case, the food and fibre industry may be better to abandon attraction and retention interventions entirely and look instead to productivity gains and / or increased wages to address workforce shortages. The quantitative analysis in a subsequent workstream of this project will be useful to explore this further.

To what extent are the attraction and retention issues different for each food and fibre sector?

Each sector within the food and fibre industry has its own unique challenges relating to attraction and retention. Some of these are discussed below.

Dairy sector

Attraction and retention issues in the dairy sector include:

- **The dairy sector has a relentless work routine.** Work on dairy farms follows a structured routine that aligns with the rhythm of the animals. For about nine months of the year, cows need to be milked every day. Typically, this involves early mornings and fractured days.
- **The dairy sector has a particularly poor public perception.** The dairy farming sector faces greater environmental challenges than other parts of the food and fibre industry, and this results in negative public perception among some parts of the public.

Forestry sector

Attraction and retention issues in the forestry sector include:

- **The forestry sector has strict drug testing requirements.** Undergoing regular drug tests and returning a clean result has become a common requirement in the forestry workplaces. This has created a barrier to both attraction and retention.
- **The perception of the forestry sector impacts attraction.** The forestry working environment may be perceived as inhospitable, unsafe and male dominated.

Horticulture sector

Attraction and retention issues in the horticulture sector include:

- **Demand for horticulture work is highly seasonal.** An important feature of the horticulture industry is the seasonal production systems and variable labour demand. This often results in temporary and inconsistent employment, which may deter people from seeking employment in the sector, due to a lack of job security. Conversely though, seasonal work is attractive to many people not interested in full-time work. The seasonal workforce may also provide a rich talent pool from which to recruit permanent staff.

Sheep and beef sector

The attraction and retention issues in the sheep and beef sector include:

- **The sheep and beef sector features high levels of self-employment.** A high proportion of sheep and beef farmers are self-employed, which may constrain career development opportunities.

What are the specific attraction and retention issues experienced by Māori?

There appears to have been little research work done to date to explore attraction and retention issues specific to Māori in the food and fibre industry. However, it seems likely that the issues discussed above will apply as much to Māori as to other ethnicities. Based on the limited research available, and drawing on wider areas of work, we also note that:

- **Māori participation in the food and fibre workforce is broadly representative of the wider working age population.** While the proportion of the workforce that identify as Māori varies somewhat by sector, the overall participation of Māori in the food and fibre workforce suggests that there not any *strong* issues relating specifically to attraction that either encourage or discourage Māori relative to other ethnicities. There may, however, be *weak* issues that do not show up in overall industry statistics.
- **Māori may be less likely than other ethnicities to stay in food and fibre jobs.** Research conducted for Growing NZ in 2016 identified Māori were less likely to stay in the dairy farming workforce than New Zealand Europeans. The reason(s) for the difference are not immediately clear from the research. The difference was not seen for the forestry workforce, and small numbers meant that the situation was uncertain in the sheep and beef sector. Undertaking further work in subsequent stages of this research programme, including for the horticulture and sheep and beef sectors, will be useful to explore this further.
- **Many iwi-owned farms aspire to attract and retain their own people.** Māori trust and iwi-owned farms often have an aspiration to increase opportunities for their people (particularly their rangatahi) to work, grow and thrive on their own land. However, only a few would prioritise this over the need to employ the people they need to achieve the other objectives of their enterprises. There may be an opportunity to explore targeted attraction, training and retention initiatives working closely with iwi enterprises, to attract and retain their own tangata whenua when developing retention pilots later in this research programme.
- **Māori retention and/or progression into management roles is low** – While there is little hard evidence to support this yet, anecdotally, we understand that Māori retention rates and/or progression into management roles is low and that Māori are under-represented in management roles.

Further analysis will be useful to understand Māori specific attraction and retention issues across the food and fibre sectors. This work is intended to be done in the following workstreams of this research programme.

What are the specific attraction and retention issues experienced by other worker segments?

The following section highlights the attraction and retention issues for two additional groups – Pacific peoples and women – that have been historically under-represented in at least some parts of the food and fibre workforce.

Pacific peoples

Research on attraction and retention issues for Pacific peoples within the food and fibre workforce remains a gap. Some work has been undertaken identifying the key challenges Pacific peoples face in finding employment and thriving within workplaces generally. It is likely that these challenges are also experienced within the food and fibre industry. These challenges include:

- Bias towards Pacific workers held by employers
- English as a second language
- Conflict between work and meeting cultural and family obligations
- Communication gap as a barrier to career progression.

It is also noted that around two thirds of New Zealand's Pacific peoples live in Auckland, which creates a geographical barrier for engagement with many food and fibre industry roles due to their unwillingness to move away from their established community links (e.g., churches, extended families, etc).

Women

The food and fibre workforce has historically employed more men than women, although not strongly so – the overall split is approximately 2/3 male, 1/3 female. However, women's involvement does vary amongst the different sectors, with forestry still noted as being largely a male-dominated sector.

Research on gender-specific attraction and retention issues is very limited. It is noted, that in contrast to industries like construction, the food and fibre industry is perceived to be more inclusive for women.

How do the attraction and retention issues in New Zealand compare to those experienced by the food and fibre sectors of other countries?

The issues and challenges discussed above, are typically not unique to New Zealand. Based on the research undertaken for this work, and Scarlatti's own experience in working with international clients, it is notable how similar the issues are amongst the food and fibre industries of other high-income countries.

Several of the common attraction and retention issues evidenced across the world include:

- Attracting **appropriately skilled individuals** has been difficult globally, with the growth of opportunities in the job market creating a range of alternative employment options
- The **ageing of the global food and fibre industry workforce** creates succession concerns for the ongoing viability of the industry, as well as creating cultural gaps between the expectations of older employers and younger employees
- Unfavourable **workplace designs** have created barriers for attracting individuals to the food and fibre industry workforce globally, and for retaining them in these roles
- Mainstream **perceptions of the food and fibre industry** create challenges for both attraction and retention
- The differences between the **location of a workforce**, and where the demand for that workforce is, has creates regional workforce shortages

- There are challenges associated with attracting the required workforce to satisfy **seasonal employment demands** in horticultural production systems.

Historic approaches to address attraction and retention issues

This section presents a summary and synthesis of the historic approaches that have been undertaken to address attraction and retention issues in the food and fibre industry. The following research questions are addressed in this section:

- What attraction and retention efforts have been undertaken in the past 10 – 20 years:
 - In each sector?
 - Across sectors?
 - Across industries?
- What challenges can be identified from historic approaches?

What attraction and retention efforts have been undertaken in the past 10 – 20 years?

Historic approaches for specific food and fibre sectors

A range of attraction and retention focused approaches have been implemented within each sector in recent history. Some common themes emerge across these efforts. **Attraction efforts** have mostly aimed to:

- Improve public perception about working in the sector. This work has typically overlapped with work to build a positive perception more generally, although the relative importance of these different objectives has not always been made clear.
- Promote pathways to food and fibre employment by exposing youth to the sector.
- Attract individuals approaching a transition in their career, normally school leavers and tertiary study graduates, into the sector.

Retention efforts have commonly aimed to:

- Address employment related issues (e.g., hard work, long hours, repetitive work)
- Improve the design of the work environment
- Improve people management capabilities.

In addition to the above, each sector has also focused their attraction and retention efforts on the unique opportunities, issues and challenges within their respective sectors. These are outlined in the following sections.

Horticulture sector

In addition to running interventions focused on the shared attraction and retention themes (refer above), the horticulture sector has focused efforts on addressing challenges around seasonality. Activities included:

- **Encouraging the creation of permanent employment opportunities** by encouraging employers to merge multiple seasonal activities to make up a full-time role.

- **Undertaking a seasonal worker exit survey²** within the kiwifruit sector annually to review the performance of their workforce attraction strategies and identify areas for future improvement. This also provides useful feedback to employers to understand employee expectations.

Typically, attraction activities in the horticulture sector have primarily been led by industry bodies while retention efforts have been undertaken by individual employers, with some guidance from industry bodies. Historic interventions include:

- **Establishing designated labour coordinator roles** in the kiwifruit, apple and pear sectors to coordinate attraction and retention efforts by engaging with industry stakeholders.
- **Building the GoHort platform** to ensure a consistent, fit-for-purpose tertiary training pathway to the sector, by awarding non-formal badges for completing micro credentials.
- **Using social media as a communication and platform to raise awareness** of the industry and dispel myths, which can reach a considerable audience with relatively low cost.
- **Offering financial incentives for shift work**, running events to improve morale, providing living and transport benefits to attend work and live in the area, and create flexible working environments. These retention efforts have been undertaken by individual employers.

Dairy sector

In addition to running interventions focused on the shared attraction and retention themes (refer above), the dairy sector has focused on addressing challenges such as long working hours and inflexible routines. Other retention efforts in the dairy sector have been predominantly implemented by individual employers and farm managers, with support and guidance from DairyNZ.

In the attraction space, DairyNZ have had the primary responsibility for developing and implementing strategies within the dairy sector, with support from other sector organisations. Key attraction interventions include:

- **DairyNZ education initiatives** have been designed to increase awareness and educate people about the sector. Activities have included developing resources for teachers, creating curriculum-based online learning resources, facilitating school farm visits, and developing Rosie's World (an online site with educational videos, activities and games).
- **A long-running scholarship programme** for undergraduate students studying towards agri-related degrees.
- **An attraction and pre-employment training programme**, Go Dairy, was developed by DairyNZ with support from other industry partners in 2020. The Go Dairy branding has since been developed into an attraction-focused website with links to job advertisements and articles highlighting what dairy employment involves.
- **Multi-media platforms** have become an important way for DairyNZ to connect with different audiences to promote and increase awareness of the sector.

² <https://www.nzkgi.org.nz/wp-content/uploads/2021/11/NZKGI-Seasonal-Worker-Survey-Final.pdf>

DairyNZ have also advocated for favourable immigration policies to attract migrant workers to the sector to alleviate the labour shortages.

Sheep and beef sector

Beef + Lamb New Zealand have had the primary responsibility for developing and implementing attraction strategies within the sector, with support from other industry organisations.

Over a period of about five years to 2020, the Red Meat Profit Partnership (RMPP) invested in a range of attraction activities within the sector. This programme took a system-wide approach and developed an interconnected range of projects and programmes from primary school to tertiary education, through to supporting workforce development. Key interventions included club memberships under NZYF, school curriculum resources (Agrication), Future Food Network and school farm visits.

It is noted that because a large portion of attraction and retention activities have been funded through one-off project funding (like RMPP), it becomes hard to sustain them when the project funding ends.

Forestry sector

The dangerous nature of the forestry work has been a unique issue for the sector, and efforts have been made to address this in two ways:

- **Equipping employers and employees with skills and knowledge about workplace safety.** Multiple programmes have been run by the Forest Industry Safety Council to support employers to create a safer workplace and provide the employees with safety training opportunities.
- **Automating the labour intensive and dangerous activities** to improve workplace safety. Forestry Work in the Modern Age Programme supported by MPI PGP funding and other industry fundings is an example.

Generally, forestry sector attraction and retention efforts are perceived to be quite fragmented across the sector. Some attraction and retention interventions implemented across the forestry sector have included:

- **Facilitating high-school and field visits** to attract school leavers and youth into tertiary training and employment in the forestry sector.
- **Placing a significant emphasis on the pastoral care** which wraps around the tertiary study provision to support the transition into permanent employment. This often involves going 'above and beyond' to overcome drug dependence and promoting a healthy lifestyle and mental wellbeing.
- **Combining training and employment** to encourage upskilling and capability development with various scholarships and awards offered

Historic cross-sector attraction and retention efforts

In addition to the sector specific approaches happening within each sector, several cross-sector strategies and interventions have been undertaken to address the attraction and retention issues within the food and fibre industry as a whole. **The cross-sector efforts have been mainly focused on attraction**, and a range of programmes have been led by government, cross-sector organisations and tertiary training institutions.

Government-led cross-sector efforts

Strategies and interventions implemented by government across New Zealand's food and fibre industry include:

- **Information hubs**, such as Opportunity Grows Here, have been used to provide information about food and fibre industry training and employment opportunities.
- **Open Farm Days** were funded through the SFFF funding which drew support from various sector organisations. The programmes were designed to connect urban and rural kiwis to increase awareness of food and fibre industry businesses and build social licence to operate.
- **Agribusiness and horticulture are registered under the NZQA framework** as secondary school subjects. However, they have struggled to be adopted across New Zealand schools for several reasons including teacher and resource availability, along with lower prioritisation relative to other curriculum subjects. The Horticulture and Agriculture Teachers' Association (HATA) has worked to address these issues by providing secondary school teachers with the resources necessary to deliver agribusiness and agriscience subjects.

Organisation-led cross sector efforts

The strategies and interventions implemented by various cross-industry food and fibre industry organisations include:

- **The Primary Industry Capability Alliance (PICA)**, branded as Growing NZ, was a group established between industry, educators and government to attract and grow the food and fibre industry workforce. PICA undertook several attraction activities with a focus on secondary schools including 'Teacher Days Out' on farm, career expos, challenges and competitions for school-aged students and connecting school students with industry professionals.
- **New Zealand Young Farmers (NZYF)** has addressed retention within the food and fibre workforce by:
 1. Offering club memberships to create a forum where industry youth can socialise with peers
 2. Facilitating skill and knowledge competitions for primary and high school students, through to young farmers in the industry.

Tertiary training led cross-sector efforts

The strategies and interventions implemented by tertiary training organisations to attract and retain the workforce have mostly been centred around financial sensitivities. For example, efforts to attract individuals to the food and fibre industry workforce and tertiary study have included:

- **TEC subsidised fees** including Targeted Training and Apprenticeship Fund (TTAF), Fees Free, and the Apprenticeship Boost Fund enable tertiary students and apprentices to participate in training at no cost, which aimed to increase the attraction of tertiary study to individuals in the industry.
- **Trades Academies and School Gateway programmes** have been used to bridge the gap between secondary school and tertiary study by creating an integrated pathway for students into further education.

- **Various scholarships for tertiary study** have been identified as methods to attract students to, and support them through, tertiary study. There are a range of companies, and industry organisations which have offered scholarships to attract students to particular programmes.

Historic cross-industry efforts

Strategies and interventions, developed centrally with application across New Zealand's economic industries, and with some attraction and / or retention focus include:

- **Careers NZ website** support industry attraction, through providing information and tools about a wide range of roles across all industries.
- **A range of workplace and individual wellness programmes** support industry retention, for example KYND Wellness and GoodYarn.
- **Programmes to create better workplaces and improve management skills** also aim to support retention, for example Creating an Inclusive Workplace Culture and People and Team Leadership Programme.
- **Regional Labour Governance Groups (RLGG)**. There is little information publicly available about the RLGGs (note – these are different to Regional Skills Leadership Groups – RSLGs). However, the Bay of Plenty (BOP) RLGG chaired by NZKGI has succeeded in attracting a range of stakeholders to be involved and has amassed a distribution list of over 180 workforce related stakeholders (e.g., government, employers, industry bodies, etc.). While there is no industry-specific focus for this group, it is open to those with an interest in workforce issues across the BOP region, which means its membership is predominantly from food and fibre sectors.

What challenges can be identified from historic approaches?

Two challenges highlighted by historic approaches to attraction and retention programmes are:

- **Investment is normally unsustainable.** Many of the historic initiatives were funded by project funding and / or by industry organisation levies, which are subject to changes in personnel and organisational priorities. This means that most individual initiatives have had limited lifespans, even if the general approaches they adopted have changed little over time. Negative implications of this include:
 - The cost to develop initiatives is high relative to the cost to implement them. This means investment has been used inefficiently.
 - Initiatives do not last long enough for brands to become established among target audiences such as teachers or parents.
 - It is difficult for initiatives to be integrated and managed together when the rate of project births and deaths is high.
- **There is a disconnect between centrally-led interventions, and individual employers.** Industry bodies or government agencies have normally had the responsibility to lead attraction efforts to bring individuals into their respective sectors, but they do not normally have access to individual employers to place people into jobs. Similarly, central agencies can promote good employment practice, but ultimately the responsibility for this falls with individual employers. For both attraction and retention initiatives therefore, the effects of interventions are significantly blunted by the structure of the industry.

Evaluations of attraction and retention strategies and interventions

This section presents a synthesis of evaluations focused on food and fibre industry attraction and retention strategies and interventions. The following research questions are addressed:

- What evaluations have been completed for past and current strategies and interventions?
- What did the evaluations find to work and / or not to work, and why?

Compared to the numbers of attraction and retention strategies that have been written, and the interventions that have been implemented, only a limited number of reviews to evaluate their effectiveness were found. Among them, most are linked to DairyNZ, RMPP and NZYF, which may limit the scope of the findings in this area. We also acknowledge that Scarlatti was involved in many of the evaluations and reviews that we could find so our analysis here will be somewhat skewed towards our own findings.

What evaluations have been completed for past and current strategies and interventions?

The evaluations are grouped into two categories:

1. **Evaluations of a portfolio of interventions.** Four of these evaluations were reviewed, including of RMPP's talent attraction programme and a review of talent attraction programmes led by DairyNZ.
2. **Evaluations of individual interventions.** Eight individual intervention evaluations were reviewed, including Agrication and FarmStrong.

A summary of each of the evaluations reviewed as part of this work can be found in Appendix A (refer to page 34).

What did the evaluations find to work and / or not to work, and why?

Based on the limited evaluation work that has been reviewed, both strategies and interventions have yielded mixed returns. While the factors contributing to performance vary amongst the different strategies and interventions, some overarching themes emerge.

- **Integration between initiatives is weak.** For example, the DairyNZ talent attraction programme, involves a range of interventions from primary school to post-graduate level. However, the interventions were not well-linked to create an 'attraction pathway'. That said, there are contrasting schools of thought on whether an attraction pathway would be a useful goal at all. A counter point of view is that investment would be better targeted only at transition points and not spread thinly over the course of a learner's education journey.
- **Cross-sector collaboration is weak.** Even though the collaboration between sectors is listed as a priority in some strategy documents, like those discussed in the next section, cross-sector collaboration is consistently identified as being weak. This is despite the Primary Industry Capability Alliance (PICA) – an organisation whose purpose was to facilitate cross-sector collaboration – operating at the time of the portfolio reviews we considered.

- **Linkages to the education system are very attractive.** Arguably, attraction interventions have been most successful when they are linked to either the secondary and / or tertiary education systems as this gives them some, or all, of:
 - **Scalability.** A programme that is successful in one school can be rolled out to other schools.
 - **Leverage.** Programmes are most successful when they can reach one person (for example a teacher), who in turn reaches multiple others (for example groups of students), as this increases leverage and reach.
 - **A sustainable business model.** Funding for education is ongoing, whereas industry and government investment is almost always packaged into projects with a finite life, which means interventions run out of steam once the money is gone.
- **Returns are positive, but not convincingly so.** The very high returns to having talented people working in the food and fibre industry probably means that the benefits created by attraction and retention interventions justify the cost of those interventions. However:
 - **Better returns may be available elsewhere.** While the analyses of returns from talent attraction programmes suggest that they have more than covered their costs, the returns are probably less than those for alternative investments available. For example, RMPP's talent attraction programmes were estimated to provide a collective benefit of about \$3.00 for every dollar invested, but investment in the RMPP Action Network, an extension programme, returned between \$20 and \$30 for each dollar invested. It may be better use of investment to, for example, grow productivity by investing in capability building, which would increase capability to pay higher wages.
 - **Returns from individual initiatives vary.** The range of returns is likely to vary considerably by intervention. This suggests that poorer performing interventions probably do not justify their costs.
 - **The benefits have mostly gone to a small number of businesses.** The absolute number of new entrants that have come into the food and fibre industry because of talent attraction programmes is probably small compared the magnitude of current workforce shortages. This means that only a small number of businesses have reaped the benefits of the investment.

Current strategies for food and fibre industry attraction and retention

This section presents a summary and synthesis of the current food and fibre industry attraction and retention strategies. Note - we employ the word *strategies* somewhat loosely to encompass a range of plans and similar documents. The following research questions are addressed in this section:

- What current strategies and plans have been developed to address attraction and retention issues in the food and fibre industry?
- How robust are these strategies?

What current strategies and plans have been developed to address attraction and retention issues in the food and fibre industry?

A range of recent strategies have been developed to address the attraction and retention issues within the food and fibre industry. The current strategies and planning documents can be grouped by their scope:

1. **Food and fibre industry-wide strategies.** These strategies have focused on the food and fibre industry as a whole. For example, the *Food and Fibre Skills Action Plan* and *Pathways into Primary Industries (PiPI)*.
2. **Sector-specific strategies.** These strategies have been developed with a focus on an individual sector within the food and fibre industry.
3. **Wider strategies that overlap with the food and fibre industry.** There are some strategies which are pan-industry, that have an impact on, or connection with, the industry's workforce attraction and retention. These include *the Regional Workforce Plans* developed by the Regional Skills Leadership Groups and *Māori Employment Action Plan*.

A summary of each of the strategies reviewed as part of this work can be found in Appendix B (refer to page 42).

How robust are these strategies?

To enable us to comment on the robustness of these strategies, they have been reviewed by testing them against the criteria below.

- **Is there a detailed action plan?** While it is often helpful to take a high-level, aspirational perspective to see the big picture, detailed action plans are needed to guide stakeholders across the industry or sectors.
- **What prioritisation is included in the strategy?** Without some way of making choices between options, and allocating scarce resources accordingly, an action plan risks simply becoming a wish list. We have used a three-star scale to assess the level of prioritisation that exists within each of the strategies we considered.
 - ★ ★ ★ A range of actions are listed without any prioritisation.
 - ★ ★ ★ The actions have been ordered in some way (e.g., by timeframe)

- ★★★ The actions have been prioritised, and areas of lower priority have been identified
- ★★★ The actions have been prioritised, and areas of lower priority have been identified, as have actions / activities that should not be undertaken.
- **What depth of analysis has been undertaken?** A three-star scale has also been used to examine the depth of analysis included with action plan.
 - ★★★ No supporting analysis has been included.
 - ★★★ Qualitative analysis has been included and consensus has been achieved amongst stakeholders.
 - ★★★ Both qualitative and quantitative analysis have been included, as has some level of cost-benefit analysis.
 - ★★★ A good combination of qualitative and quantitative analysis has been included, along with a robust cost-benefit analysis and business case.

The following table presents the findings from this review.

Table 2: How robust are the current strategies?

Strategies	Is there a detailed action plan?	What level of prioritisation is included in the action plan?	What level of analysis has been undertaken?
Food and fibre industry-wide strategies			
Food and Fibre Skills Action Plan	Yes	★☆☆	★☆☆
Fit for a Better World Roadmap	No	☆☆☆	☆☆☆
Initial Sector Workforce Development Plan	Yes	☆☆☆	★☆☆
Pathway into Primary Industries	No ³	★☆☆	★☆☆
Sector-specific strategies			
Great Futures in Dairying Plan	Yes	★★☆☆	★★☆☆
Forestry and Wood Processing Workforce Action Plan	Yes	★☆☆	★☆☆
Horticulture Workforce Transition Plan	Yes	★☆☆	★☆☆
Wider strategies that overlap with the food and fibre industry			
RSLG Regional Workforce Plans	Yes	★☆☆ ⁴	★☆☆
Māori Employment Action Plan	Yes	★☆☆	★☆☆

Some themes emerge from this analysis:

- **Industry-wide strategies are high-level and aspirational.** They do not contain detailed plans, supporting analysis or, importantly, statements about what *not* to do in the attraction and retention area.
- **Sector-specific strategies vary in their detail and specificity.** While all these strategies describe more specific steps to be undertaken, only the Great Futures in Dairying Plan provides quantitative analysis to support the recommendations. This plan is also notable in that it argues for a reduced focus on attraction, in favour of retention and productivity gains.
- **The strategies guiding current investment generally appear light on analysis.** This analysis would be valuable to make choices about the best places allocate investment, or indeed whether investment should be allocated to attraction and retention at all.

³ PIPi's action plan is not included, however, seven specific workstreams have been proposed, discussed and prioritised.

⁴ A mixture of prioritisation is found amongst the regional workforce plans, some have prioritised actions with timeframes while others don't.

Current interventions for food and fibre industry attraction and retention

This section presents a summary and synthesis of the current food and fibre industry attraction and retention interventions. The following research questions are addressed in this section:

- What interventions are currently underway to address attraction and retention issues in the food and fibre sector?
- How much is being invested in attraction and retention interventions between industries in 2022?
- Which of the current interventions have a finite lifetime, and which will provide ongoing engagement?
- Are current interventions consistent with the direction set out by the strategies, and do they display evidence of learning from past evaluations?

What interventions are currently underway to address attraction and retention issues in the food and fibre sector?

There are a lot of activities going on currently to address attraction and retention issues in the food and fibre sector. However, those efforts are highly varied and disjointed with a lack of cohesion among them. Many of the interventions feature goals that are wider than attraction and retention, including training, workplace design, productivity, and public perception as some examples.

Based on several assumptions, we've estimated the scale of investment that is expected to be made in food and fibre attraction and retention interventions during 2022. While the values provide a general indication of investment in 2022, they need to be considered with a few important caveats:

- The totals are sensitive to judgements about whether an initiative is 'core' or 'related'. Many initiatives, such as Trade Academies and Gateway programmes, sit at the cusp between these categories.
- There is a wide range in the scale of investment. Investments made through the education system, such as Trade Academies and Gateway programmes are typically much larger than those of 'pure' attraction and retention initiatives.
- It is sometime unclear whether programmes are still active, and assumptions have been made based on the information available.
- We do not have good data about the investment in most of the programmes we have identified. The totals noted above are aggregates of our best guesses at an individual programme level.
- The investment in several interventions, particularly those relating to the tertiary or training sector (e.g., Trades Academies and Gateway), will include a delivery component and an attraction component – only the attraction component has been considered in this analysis.

All attraction and retention interventions (current and historic)

A stocktake of current or recent interventions, that have or had some link to attraction and retention in the food and fibre industry, identified 184 such interventions (see Appendix C on page 47). These varied by size, mode of engagement, level of investment, relevant sectors, and primary focus (e.g., whether attraction and / or retention were either a primary focus, or a secondary focus).

The majority of the interventions were related to attraction (129 or 70%), 32 (17%) were related to retention and 23 (13%) had a dual focus of attraction and retention.

Current attraction and retention interventions

For the purpose of this analysis, the 184 attraction and retention interventions identified during the stocktake (see Appendix C on page 47) were narrowed to consider only those interventions that are currently active, and that have attraction and / or retention as a primary focus⁵. Forty of the interventions met these criteria.

Of these 40 interventions, 26 (65%) were attraction focused, 5 (13%) were retention focused and 9 (23%) were both attraction *and* retention focused (Figure 1). All the attraction interventions in this group had *push*⁶ attributes, while a handful also had *pull*⁷ attributes integrated. The interventions with a combination of both push and pull attributes tended to be brochures, advertisements or websites which promote the sector as being an attractive place to work, but also promote employment opportunities with a call to action (e.g., links to job advertisements). The relative effectiveness of push and pull attraction interventions will be able to be tested using the impact model developed in a separate workstream of this research programme.

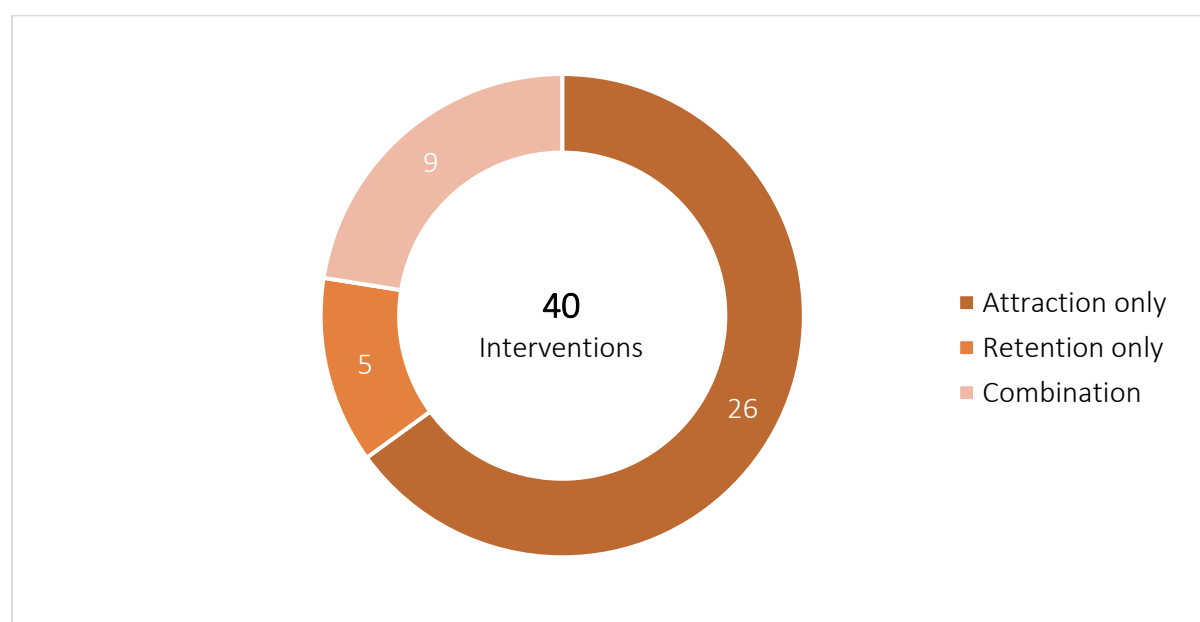


Figure 1: Interventions by primary focus

⁵ Some examples of interventions where attraction and / or retention was a secondary focus include tertiary scholarships, field day and open day events, wellbeing programmes, and health and safety workshops.

⁶ As defined in the RFP for this work, 'push' attraction interventions are practices which – actively or passively – expose a student or potential worker to food and fibre related studies, or short periods of work experience on a farm or orchard.

⁷ As defined in the RFP for this work, 'pull' attraction interventions are practices which actively promote the food and fibre sector as an attractive place to work.

Current attraction and retention interventions by sector

The attraction and retention interventions spanned several food and fibre sectors. Of the 40 interventions, 15 covered more than one sector; seven of which were attraction only interventions, three were retention only interventions and five covered both attraction and retention.

Forestry was the sector covered the most interventions (23), with horticulture (19) and sheep and beef (16) not far behind (refer to Figure 2).

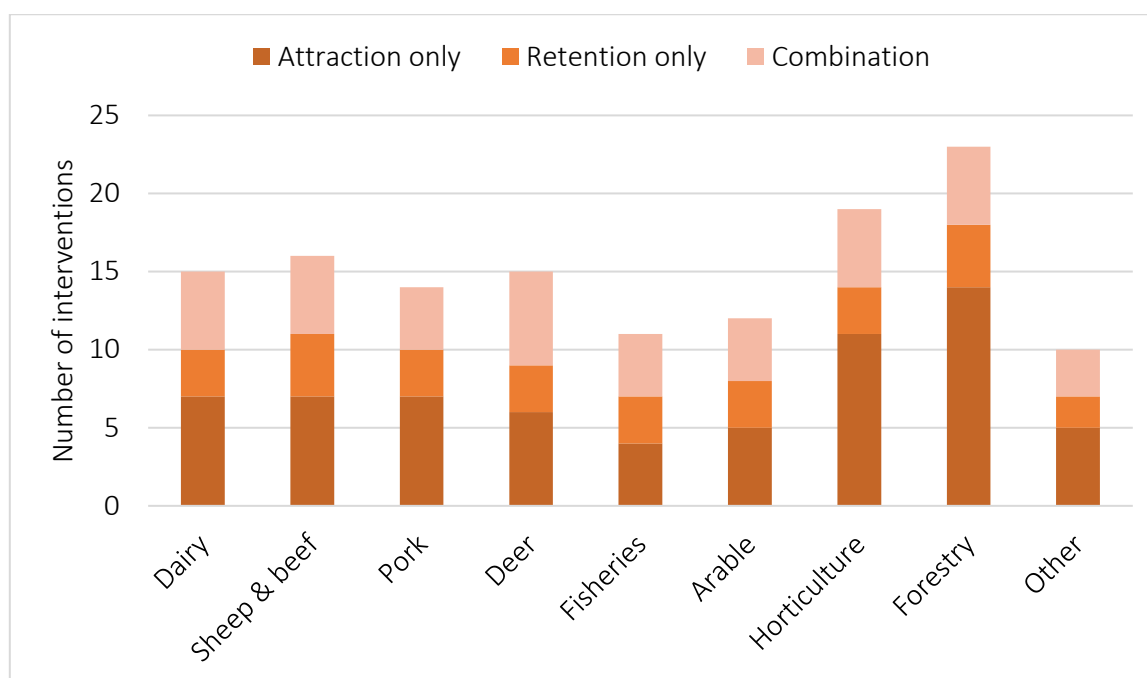


Figure 2: Industry attraction and retention interventions by primary focus

How much is being invested on attraction and retention interventions between industries in 2022?

The total expenditure in 2022 on these 40 attraction and retention interventions is estimated to be between \$6 million and \$11 million⁸ (Figure 3). The estimated investment on attraction only interventions is estimated to be between \$4 million and \$8 million (71% of spending for 65% of interventions), whereas the investment on retention only interventions is estimated to be between \$400,000 and \$700,000 (7% of spending for 13% of interventions).

⁸ An investment range has been used to acknowledge the uncertainty of the investment made in each of the core interventions, and the uncertainty with which interventions should be considered core or not. An investment range is more meaningful to the analysis than a precise estimate of the total investment.

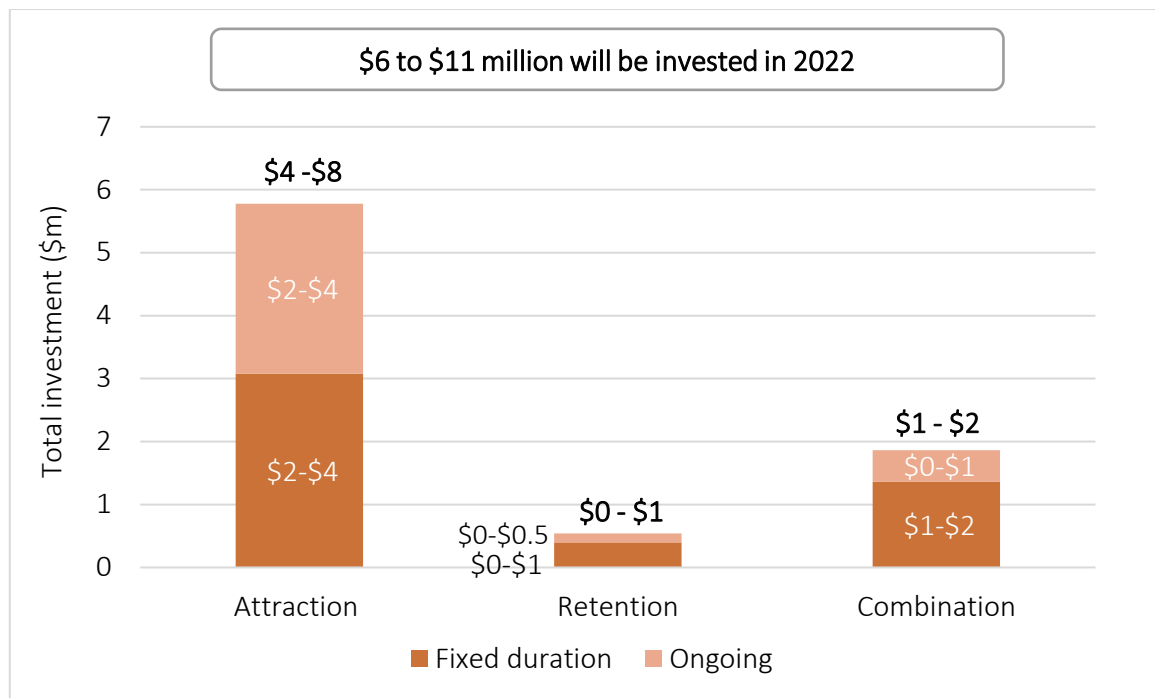


Figure 3: Estimated intervention expenditure in 2022

Which of the current interventions have a finite lifetime and which will provide ongoing engagement?

The attraction and retention interventions identified during this work had different funding sources and varied in duration. Several of the interventions were funded by SFFF and other government funds which meant the intervention, at least in the first instance, was intended to facilitate engagement for a fixed duration. While other interventions, such as websites, marketing videos and online resources, are intended to provide ongoing engagement, although with less expected efficacy. Of the forty interventions, twenty-four (60%) of the interventions were characterised as being 'ongoing' while sixteen (40%) have a finite life (Figure 4).

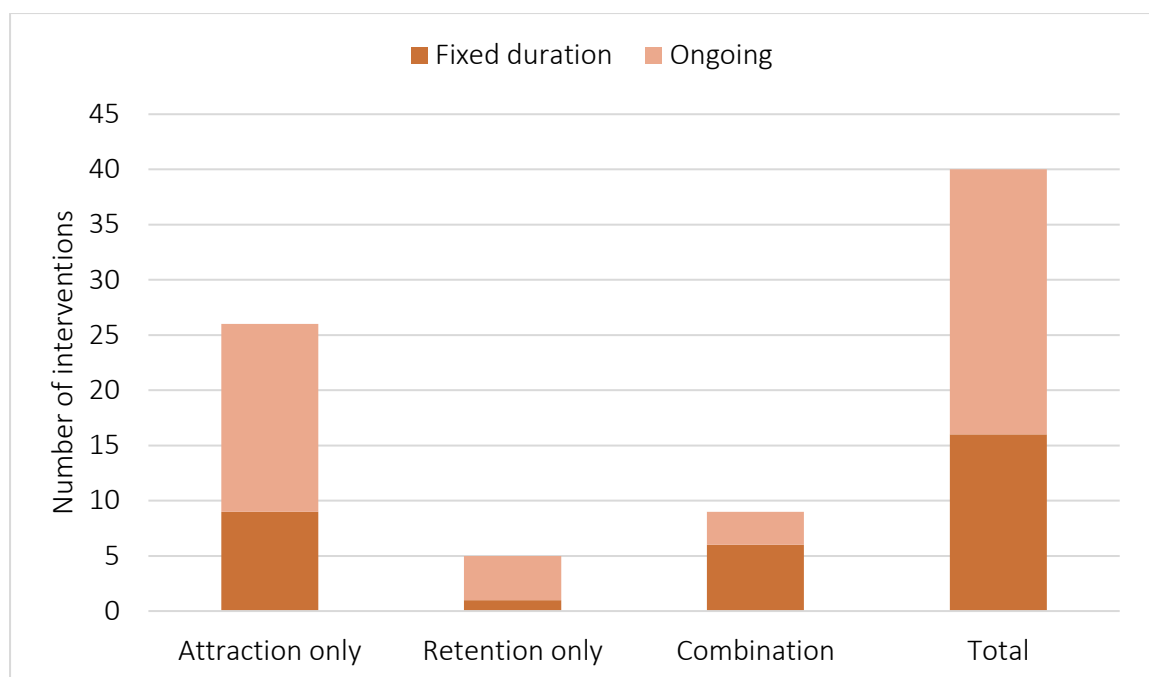


Figure 4: Intended duration of interventions by primary focus

Are current interventions consistent with the direction set out by the strategies, and do they display evidence of learning from past evaluations?

The current range of interventions suggests that much of the direction provided by strategy documents and past evaluations is being neglected or overlooked:

- **A stronger mechanism is needed to co-ordinate investments.** When scanning the list of initiatives identified in the stocktake, it is clear that investment in attraction and retention is fragmented. This is despite the intent stated in national and sector strategies to co-ordinate and collaborate across the industry. The recent demise of PICA suggests that, if anything, progress from this perspective is going backwards. If the intent to co-ordinate investment is to be taken seriously, major funders will need to commit to not ‘going it alone’ in the future.
- **Interventions can be better targeted.** A recommendation from a few of the evaluations, like those conducted on RMPP and DairyNZ, was to direct investment more narrowly on audiences that are already close to being ready to work in the food and fibre sector and ‘nudging’ them with personalised approaches. The broad audiences targeted by campaigns such as Opportunity Grows Here appears to run counter to this.
- **More should be done to align industry investment with the education system.** Given the scale and leverage that connecting with the training sector offers, interventions that integrate industry investment with the education system are likely to offer better returns than many current investments. For example, the investment in marketing programmes like GoDairy might be better allocated to, for example:
 - A programme to talk individually with every student enrolled in a relevant Trade Academy and broker employment opportunities for those that can be ‘nudged’ into this.

- A programme to top up the salaries of agriculture and horticulture teachers to make careers in the food and fibre sector more attractive to near-school leavers.
- **Consider initiatives to attract people from other workforces.** For the past five years there has been widespread understanding that the largest source of new entrants into the food and fibre workforce is from other workforces. However, few attraction initiatives target this group.

Hypotheses on workforce shortages and maximising the impact of interventions

In this section we seek to synthesise the discussion in the previous sections by proposing hypotheses about why workforce shortages have persisted in the food and fibre industry, and how investment in interventions can be best deployed. We also outline work that can be undertaken to test these hypotheses in more detail.

Hypotheses on why workforce shortages have persisted in the food and fibre industry

We identify four possible reasons why workforce shortages persist, and one that relates to how the industry should respond.

1. **Attraction and retention strategies and investments are not focusing on the right areas.** It is possible that the types of interventions being undertaken are not the right ones. Given the limited depth of analysis available in industry and sector strategies, and the fact that many funders do not appear to be using the analysis that does exist, it seems very likely that this is true to some extent.

Approach to test this hypothesis – Use the impact model being developed as part of the Attraction and retention project to test the relative returns of a range of intervention types. Use this work to inform recommendations about what interventions offer the best returns and which ones should be avoided.

2. **Strategies and investments are focusing on the right areas, although the execution is poor.** While it seems likely that the quality of execution will vary from intervention to intervention, it will be difficult to evaluate this given diversity of interventions and the consequent difficulty in benchmarking them. One aspect of execution that is clearly poor, is the degree of co-ordination between investors. However, the experience of PICA has illustrated the difficulty in solving this problem.

Approach to test this hypothesis – We do not propose further work to test this hypothesis.

3. **The intended outcomes of past attraction and retention interventions have not had sufficient time to be realised.** Several of the interventions identified in the stocktake of current and past attraction and retention interventions were targeted at primary and secondary school-aged children. The effect of these interventions is unlikely to have been realised in full as there is a lag of between 2 to 12 years between engagement with the intervention and entering the sector's workforce.

Approach to test this hypothesis – Use the impact model to test the lag between engagement with an intervention and the intended outcomes. This will be achieved through simulating engagement over several decades to understand how the timing of engagement can affect when an individual may enter the food and fibre workforce.

4. **Strategies and investments are focusing on the right areas, and execution is good, however the investment is not of a sufficient scale to affect meaningful changes.** Even if the interventions to improve attraction and retention in the food and fibre sector were well-directed and well-executed, it is possible that the amount of change that can be affected by the investment available is not enough to meaningfully reduce the industry's workforce shortages. This could be, for example, because the external forces that are reducing the food and fibre industry's relative competitiveness in the market for talent are too strong to be countered by attraction and retention programme alone.

Approach to test this hypothesis – Use the impact model to make an indicative assessment of the amount of investment needed to close workforce shortages by investing in the highest returning attraction and retention interventions.

5. **The industry should NOT invest in attraction and retention initiatives.** We include this hypothesis here to explore whether better alternatives exist. Rather than spending money on attraction and retention initiatives, the industry may be better to:
- Raise labour productivity to reduce the number of people needed, and / or ...
 - ... be able to pay employees more and restore competitiveness in that way.
 - Continue to use immigration to fix shortages (acknowledging that takes control away from the business owners and the industry, and puts it in the hands of politicians who set immigration policy)
 - Shrink the size of the industry

Approach to test this hypothesis – Develop an analysis to explore the costs and impact of these alternative approaches and compare them to those of attraction and retention initiatives.

Hypotheses on how to improve the impact of interventions

We initially identify just one approach to test, to increase the effectiveness of interventions:

1. **Integrating attraction, retention, training, and pastoral care elements will improve attraction and retention rates.** Earlier in this report we identified a disconnect between the organisations running attraction efforts, e.g., industry bodies, government agencies, and the organisations that employ people, i.e., food and fibre businesses. Similarly, there is a disconnect between the agencies that advocate for better employment practices and the employers that need to implement them. If an intervention could offer a joined-up pathway including initial attraction, pre-employment training, job placement, work-based training and ongoing pastoral care, it may be possible to improve on the effectiveness of current initiatives.

Approach to test this hypothesis – Run at least one pilot aimed at testing this model.

Part B: Appendices



Appendix A: Evaluations

This appendix summarises the evaluations of attraction and retention strategies and interventions. These evaluations are grouped into the following parts:

1. Evaluations of a portfolio of interventions
2. Evaluations of individual interventions.

Evaluations of strategies

DairyNZ talent attraction evaluation

Programme stakeholders	DairyNZ
Evaluators	Barry Brook, Ben Allomes, Adam Barker and Geoff Taylor
Date	2018
Scope	Dairy sector
Type	Strategy
Focus	Attraction

DairyNZ runs a range of programmes aimed to contribute to talent attraction. The programmes cover target different audiences, from primary school through to post-graduate study. Findings from this evaluation include:

- **Overall investment effectiveness is moderate.** The return on investment varies greatly amongst the different programmes that were evaluated.
- **Programmes that target influencers (such as teachers) delivered higher returns.** This is because teachers have the ability to reach wider audiences and for this reach to extend over long periods of time. However, it is noted that parents, another group of important influencers, are missed out from the programme.
- **It was recommended that a greater effort is made at secondary school level and above.** While raising perceptions at the primary school level is important, the evaluation found that more investment should go to secondary school interventions, especially seniors, in order to reach school leavers.
- **Better collaboration across the sector is needed.** It was noted that current programmes are not well linked, which meant there were opportunities to increase synergy and reduce duplication in order to impact on the effectiveness of these investments.

RMPP talent attraction evaluation

Programme stakeholders	RMPP is funded by meat processors (Alliance Group, ANZCO, Blue Sky Meats, Greenlea Premier Meats, Progressive Meats and Silver Fern Farms), banks (ANZ Bank and Rabobank), B+LNZ and MPI
Evaluator	Tony Brenton-Rule, Red Meat Profit Partnership, Scarlatti
Date	2020
Scope	Red meat pastoral sectors
Type	Strategy
Focus	Attraction

The Red Meat Profit Partnership (RMPP) was an initiative aimed at improving the productivity and profitability of the red meat livestock sector. Attracting young people to a career in the red meat sector was one of the four components of RMPP. Findings from this evaluation include:

- **A system-wide approach was taken by RMPP.** This work developed an interconnected range of projects and programme across the education system. This work sought to maximise the impact and sustainability of the investment by creating awareness at an early age and enabling accumulative benefits overtime. The business case for RMPP suggested that "targeting the low-hanging fruit opportunities would risk making a naïve investment decision and although seductive on face value, would be to underestimate the size and complexity of the problem identified, the education system, teaching and learning (including pedagogy) and extension and uptake".
- **The RMPP evaluation suggested a more targeted approach would achieve better investment outcomes.** Despite the possible cumulative effect that can be created when an individual is engaged in many points in the education system, when facing a large group of students with a finite budget, the greatest impact will be achieved by only investing in interventions with the best ROI. This means, that those who are most susceptible to influence should be targeted, including those who already are predisposed to employment or study in the primary sector or close to the decision making.

NZYF leadership pipeline programme evaluation

Programme stakeholders	A range of stakeholders were involved with the different parts of this programme, key stakeholders included NZYF, RMPP, DairyNZ, Dairy PGP
Evaluators	David Moore, Peter MacIntyre, Ben Barton, Steve Murphy and Bruce Campbell
Evaluation Date	2019
Scope	Dairy and pastoral sectors
Type	Intervention
Focus	Attraction

The leadership pipeline consists of AgriKids, TeenAg, NZ Young Farmers and Rural Business Network, covering age groups from primary school all the way through to full workforce age. The objective is to develop a group of skilled and engaged people to promote and increase the future dairy workforce capability. Findings from this evaluation include:

- **Great success has been achieved.** AgriKids reached a large audience through national competitions and were able to convert this into a school-based network. TeenAg achieved success through reaching over 100 schools and feeding new members into NZ Young Farmers. Results from this work showed that students from schools with TeenAg are approximately 2.4 times more likely to enter the primary sector compared to schools without TeenAg.
- **The biggest issue is securing sustainable funding.** There have been large losses sustained by NZ Young Farmers, and without further industry or corporate funding, these programmes are likely to finish upon the end of RMPP funding.

DairyNZ educational programme evaluation

Programme stakeholders	DairyNZ
Evaluator	Perceptive
Date	2018
Scope	Dairy sector
Type	Intervention
Focus	Largely industry perception

DairyNZ educational programme include three main components, Rosie's World, Rosie's Education and school farm visits. Rosie's World is an interactive dairy industry focused website targeted at children aged 5-12. Rosie's Education provides curriculum resources to primary and junior secondary school teachers that incorporate dairy farming context into core subjects. School farm visits are delivered as part of Rosie's Education, this provides opportunities for schools to visit local dairy farms.

Note that Rosie's World was primarily aimed at improving public perception of the dairy industry rather than being a talent attraction programme. Findings from this evaluation include:

- **Positive impact has been identified within these programmes.** It was found that
 - Rosie's World improved children's interest in, and impression of, the dairy sector. It also had some reach to parents as well.
 - Farm visits helped to increase children's interest in dairy careers.
 - Rosie's Education improved teachers' impression and perception of the dairy sector. It was noted that this programme didn't familiarise teachers with the dairy sector as much as Rosie's World has helped parents and children.
- **More support for teachers is needed.** A lack of time and knowledge are barriers for teachers to fully utilise the Rosie's Education resources. Closer links to the current curriculum and further support from DairyNZ could improve programme outcome.

Evaluations of individual interventions

Teachers' Day Out evaluation

Programme stakeholders	Run by NZYF, funded by DairyNZ, Beef + Lamb New Zealand and Primary ITO
Evaluator	Scarlatti
Date	2020
Scope	Dairy and pastoral sectors
Type	Intervention
Focus	Attraction

Teachers' Day Out is a professional development day that provides teachers with the chance to visit a variety of businesses in the sector and gain a better understanding of the science, technology and commerce involved. Findings from this evaluation include:

- **Positive impact has been achieved by the Teachers' Day Out.** A survey conducted with teachers, showed that the project had had a strong positive impact on their understanding of the primary sector. Resulting in an increase in the frequency and quality of conversations within classrooms about the career opportunities the food and fibre industry has to offer.
- **Teachers' Day Out provides a very good return on investment.** Teachers have a wide reach and influence across a number of students, which means investment in teacher interventions can result in a good return on investment.

Agrication evaluation

Programme stakeholders	Developed by NZYF and CORE Education to host RMPP resources
Evaluators	Tony Brenton-Rule, Red Meat Profit Partnership, Scarlatti
Date	2020
Scope	Land-based sectors in the food and fibre industry
Type	Intervention
Focus	Attraction

Agrication is a website that holds a wide range of teaching and learning resources, which align with the New Zealand curriculum. They aim to support teachers and students to learn more about the land-based sectors. Findings from this evaluation include:

- **A small positive effect was identified.** While based on a limited data set, the evaluation results indicated that students who leave schools that have engaged with Agrication curriculum are 20% more likely to enter the food and fibre workforce or to enrol in industry related tertiary courses.
- **Investment return can be improved if a lower cost model was used.** Agrication adopted an intensive model, although may have achieved higher impact, resulted in a higher cost per resource distributed.

- **The alignment with the formal curriculum and its high-quality content produces better possibility to attract support and funding.** Robust resources have been developed across STEM areas (Science, Technology, Engineering and Maths), including NCEA resources for Year 11 and 12, which are Quality Assured Assessment Materials (QAAM) endorsed by NZQA.

Future Food Network evaluation

Programme stakeholders	NZ Young Farmers
Evaluator	Scarlati
Date	2020
Scope	Agriculture industries
Type	Intervention
Focus	Attraction

The Future Food Network aims to enable tertiary students to gain industry understanding and networks before they leave their training. Guest speakers are invited to the meetings to offer their career stories and insights. Findings from this evaluation include:

- **Limited additional recruits have been generated.** This is because any of the participants were already planning to enter the agriculture workforce. However, it is noted that **their intentions have been reinforced by the Future Food Network meetings.** Potential positive impacts of the programme could also include support for their transition into the workforce and for their network building.
- **A lower return on investment is generated.** While the programme has a strong impact on the students it reaches, the limited reach lead to a relatively low investment outcome.

Agribusiness in Schools evaluation

Programme stakeholder	St Paul's Collegiate school, DairyNZ and B+LNZ
Evaluator	Agribusiness in Schools
Date	2022
Scope	Food and fibre industry
Type	Intervention
Focus	Attraction

A pilot agribusiness programme was developed by St Paul's Collegiate School to encourage students to consider careers in the food and fibre industry. The programme has now been made available to other schools across New Zealand. Findings from this evaluation include:

- **The Agribusiness in Schools programme is delivering great results.** The programme has been running for eight years, in this time the number of schools and students reached by the programme have steadily increased. One hundred and seven schools have adopted agribusiness as a key subject and 8,577 students have been reached over the last five years. Young graduates from the programme have now started entering the food and fibre industry workforce.

- The programme has been successful mainly due to, it managed to:
 - Create an easily scalable model that could be rolled out across schools with little marginal development
 - Target teachers who in turn reach a large group of students, achieving leverage effects
 - Link to the TEC funding system, which provides sustainable funding.

GoDairy Training programme evaluation

Programme stakeholders	DairyNZ
Evaluator	Scarlatti
Date	2020
Scope	Dairy
Type	Intervention
Focus	Attraction

In response to COVID-19, and the government's expectation that unemployment would rise in 2020 as a result, GoDairy was established to attract people into the dairy sector. Participants were involved in an initial training programme which introduced them to the sector and provided some basic on-farm training. Findings from this evaluation include:

- **Project management could be improved.** Unclear responsibility and roles had a negative impact on programme delivery, including time, cost, quality and scope.
- **Recruitment was challenging and the completion rates were lower than anticipated.** The unemployment rate was lower than expected, which meant the supply of talent to the GoDairy training programme didn't reach the level it aspired to. Among people who did register, many didn't turn up or withdrew halfway through the programme.
- **The training itself worked well.** Participants and tutors provided positive feedback about the programme, and success stories have been received from those who completed the training.
- **More support is needed to transition people from training to employment.** Much effort was focused on getting people through training, while the support to connect graduates with jobs was more limited. As a result, fewer graduates have moved into the workforce than was expected.
- **Overall, GoDairy has not generated a good return for its investors.**

FarmStrong evaluations

Programme stakeholders	Mental Health Foundation and FMG
Evaluators	Taken from two reports, one authored by Allan Wyllie and one by Michelle Stevens
Date	2021; 2019
Scope	Dairy, sheep and beef and horticulture sectors
Type	Intervention
Focus	Attraction

By providing online resources and using multi-media channels, FarmStrong helps farmers to develop small, positive habits to improve their wellbeing and cope with ups and downs in farming. Findings were drawn from two evaluation reports, insights include:

- **FarmStrong plays an active part in improving farmers' wellbeing.** After a few years of operation, FarmStrong has achieved a good level of awareness amongst farmers, with increasing numbers engaging with FarmStrong resources. Improvements in wellbeing have been identified by farmers who engaged with Farmstrong, positive feedback has also been received from organisations across the industry.
- **Farmstrong is working better for sheep and beef farmers than dairy farmers.** A possible factor contributing to this could be the challenge dairy farmers face getting off farm during the day (a long-standing issue which is difficult to address).
- **A stronger focus on horticulture is developing.** FarmStrong is just starting to increase engagement with the horticulture sector and information about the increasing focus has started to be communicated more widely.

Open Farms evaluation

Programme stakeholders	B+LNZ, Our Land and Water, MPI
Evaluator	Our Land and Water
Date	2020
Scope	Sheep and beef, arable, dairy, horticulture and viticulture sectors
Type	Intervention
Focus	Largely industry perception

Open Farms is a platform to enable nationwide, cross-industry farm experience days to reconnect urban Kiwis with the land. Findings from this evaluation include:

- **Farm visits promote trust between urban and rural Kiwis and encourage changes in perception.** Feedback shows it has been highly positive experience for both the farmer hosts and visitors. Particularly, visitors to the farms felt more connected to farmers and developed a better understanding about the sustainability of farming.
- **While support for farmers increases, concerns about farming practices have been raised.** People are starting to differentiate the criticism of farming with criticism of farmers, with more focus now on some farming practices. Awareness is growing about the sustainable farming practices that farmers have been undertaking.

Fees Free and Targeted Training and Apprenticeship Fund (TTAF)

Programme stakeholders	TEC
Evaluator	TEC
Date	2021
Scope	All industries
Type	Intervention
Focus	Attraction

The Fees Free programme was introduced in 2018 to support learners financially in their first year of tertiary study, or their first two years of industry training. Targeted Training and Apprenticeship Fund (TTAF) was introduced in 2020 to cover fees of vocational education and training in selected programmes, including apprenticeships until December 2022. Findings from this evaluation include:

- Since Fees Free started in 2018, over 179,745 learners have received benefit from the programme.
- As at the end of 2021, 183,745 learners had been supported by TTAF, of which 18% (or 33,400) were enrolled in food and fibre industry related programmes. Amongst those who were enrolled in food and fibre industry programmes:
 - 40% were enrolled in industry training
 - 40% were enrolled in provider-based programmes
 - 20% were enrolled in apprenticeships.
- Learner demographics differ between the two programmes, with TTAF including more male, older learners with more ethnic diversity.

Appendix B: Current strategies

This appendix summarises selected strategies and planning documents that cover attraction and / or retention for the food and fibre industry.

The strategies and planning documents are grouped by their scope, into three sections:

1. Food and fibre industry-wide strategies
2. Sector-specific strategies
3. Wider strategies that overlap with the food and fibre industry.

Food and fibre industry-wide strategies

Food and Fibre Skills Action Plan

Programme owner	Primary Industries Skills Leaders Working Group
Link to the strategy	Food and Fibre Skills Action Plan
Date	2019
Scope	Food and fibre industry
Focus	Attraction and retention

The Food and Fibre Skills Action Plan was launched in 2019, aiming to address the workforce challenges the sector faced to attract, train and retain people with the right skills. Elements of the plan include:

- **Taking a pan-industry approach** to engage and benefit all food and fibre sectors.
- **Identifying four key focus areas** include knowledge, attraction, education and employment.
- Within the attraction focus area, the plan proposes to:
 - Support a pan-sector investment approach to the delivery and evaluation of attraction interventions
 - Assess the impact of, and improve alignment amongst, industry curriculum resources
 - Support teachers to improve their knowledge of the food and fibre industry and available careers
 - Support TEC's food and fibre industry careers hub and Inspiring the Futures Programme
 - Develop a targeted marketing campaign.

Fit for a Better World Roadmap

Programme owner	Ministry for Primary Industries
Link to the strategy	Fit for a Better World Roadmap
Date	2020
Scope	Food and fibre industry
Focus	More focused on attraction

The Fit for a Better World – Accelerating our economic potential was released in 2020 as a 10-year action plan to achieve a more productive, sustainable and inclusive food and fibre sector. The key elements of strategy include:

- Among the three key targets of the roadmap, **inclusiveness is closely related to the food and fibre workforce**. The goal is to employ 10 percent more New Zealanders in the workforce by 2030.
- **Attraction, training and retention of new workers is a major focus** within the inclusiveness target. The Opportunity Grows Here campaign is promoted as a critical component within this strategy. Connecting displaced New Zealanders with primary sector jobs and developing solutions to improve seasonal workforce mobilisation were also identified as ways to reach the target.

Initial Sector Workforce Development Plan 2022

Programme owner	Muka Tangata
Link to the strategy	Initial Sector Workforce Development Plan 2022
Date	2022
Scope	Food and fibre industry
Focus	Attraction and retention

As the first workforce development plan for Muka Tangata, this plan identified challenges and opportunities within the food and fibre sector and proposed key actions and focus areas for vocational education and training.

Relevant aspects of the strategy include:

- The plan looks at the **current challenges and opportunities the industry is facing** and identified four key focus areas for actions. These include analysis and advice, Māori partnerships and perspectives, qualifications, training delivery and quality assurance and equity and inclusion.
- Among them, the qualifications, training delivery and quality assurance area touches on talent attraction within the food and fibre industry. Muka Tangata aims to **develop a picture of the training and skills ecosystems to co-ordinate training opportunities across the industry**. In this way, learners are able to develop better career pathways within the industry, as well as transferable skills that support mobility and life-long learning.

Pathways into Primary Industries

Programme owner	Primary ITO
Link to the strategy	Pathways into Primary Industries
Date	2021
Scope	Food and fibre industry
Focus	More focus on attraction

The Pathways into Primary Industries (PiPI) programme was intended to co-ordinate a broad range of activities and create more cohesive training pathways in the industry. The goal of this strategy was to remove barriers to entry into the workforce and to increase retention rates, which in turn will lead to more sustained training and employment for more New Zealanders. To achieve that, seven workstreams were specified to cover the three stages of employment, including pre-employment, transitioning into employment and in employment. Among the seven workstreams, three prioritised ones have been identified:

- The **badging / passport system** seeks to recognise the transferrable skills that people bring into the industry from previous roles and training.
- People with an interest in the industry will be connected with potential employers through the **new entrant trainee experience** workstream. And for the new entrants, pastoral care and skill development will be provided to ensure smooth transitions into the industry.
- The **employer experience and employment obligations** workstream aims to support employers to build their resilience and become better employers, which aims to improve employee retention.

Sector-specific strategies

Great Futures in Dairying Plan

Programme owner	DairyNZ, Ministry for Primary Industries
Link to the strategy	Great Futures in Dairying
Date	2022
Scope	Dairy sector
Focus	More focus on retention

The Great Futures in Dairying plan was launched early in 2022 to address the critical workforce shortage the dairy industry is facing and to identify ways to better attract and retain people to meet its workforce need. The key elements of the strategy include:

- The report has placed **more emphasis on retention**. It is advocated to reduce investment in attraction interventions and focus on improving productivity to remove the need for more people.
- Two of the focus areas, shape up and change the job both aim to **create more attractive workplaces** by improving working terms and conditions and by using new technologies to achieve better work-life balance. The third focus area, look in new places, is intended to **attract a larger and more diverse talent pool**.

Forestry and Wood Processing Workforce Action Plan

Programme owner	DairyNZ, Ministry for Primary Industries
Link to the strategy	Forestry and Wood Processing Workforce Action Plan
Date	2022
Scope	Forestry sector
Focus	Attraction and retention

The Forestry and Wood Processing Workforce Action Plan was developed by MPI and representatives from across the forestry sector in 2019. This plan aims to support a diverse, skilled and safe workforce.

The key elements of the strategy include:

- The plan is structured in a similar way to the Food and Fibre Skills Action Plan with four focus areas, knowledge, attraction, education and training and employment.
- Apart from the shared themes mentioned in the food and fibre plan, this plan has put special emphasis on
 - Supporting Māori rangatahi with culturally appropriate and regionally relevant on-the-job training opportunities
 - Developing a safety culture in the workplace across the sector.

Horticulture Workforce Transition Plan

Programme owner	HortNZ
Link to the strategy	Horticulture Workforce Transition Plan
Date	n.d.
Scope	Horticulture sector
Focus	Attraction and retention

The Horticulture Workforce Transition Plan is a national strategic document that coordinates the needs of each part of the horticulture sector. It describes the process of transitioning the workforce into a future state, which will better meet the sector transformation goals.

The key elements of this strategy include:

- This transition plan **assumes that automation will play an increasingly important part** in the growth of the sector. Consequently, the demand for skilled workers who are capable of managing and operating complex systems, automations and technology will increase.
- To develop a workforce with a high proportion of skilled New Zealanders in permanent roles, the plan puts forward **five objectives**, attract, retain, grow, transition and innovation. Among them, attraction and retention issues are to be addressed under:
 - Actions are proposed to attract New Zealanders to enter and stay in the sector and to improve working conditions for horticulture workers
 - It points out ways to increase permanent roles and provide year-round opportunities, as well as to develop dynamic career pathways for both skilled and unskilled workers.

All industries

RSLG Regional Workforce Plans

Programme owner	Regional Skills Leadership Groups
Link to the strategy	RSLG Regional Workforce Plans
Date	2022
Scope	All industries
Focus	Attraction and retention

Regional Workforce Plans were developed by the 15 regional skills leadership groups and released in 2022. These plans are intended to find regional solutions to regional workforce and skills challenges.

The key elements of the strategy include:

- **Providing fit-for-purpose training and improving pathways to employment** are shared objectives across most regions.
- **Working with Muka Tangata, Te Pūkenga, FFCoVE and other organisations** is identified by several regions as a way to promote the design and delivery of training programmes and to create a robust pathway into the workforce.
- **Addressing seasonality** is a focus for a few regions who has horticulture and viticulture as major industries. Actions include defining cross-sector seasonal workforce patterns and removing barriers for people to enter seasonal roles.
- Supporting Māori workers and business to thrive and ensuring te ao Māori is embedded in training and practice are shared goals across the plans across four of the regions.

Te Mahere Whai Mahi Māori - Māori Employment Action Plan

Programme owner	Ministry of Business, Innovation and Employment
Link to the strategy	Te Mahere Whai Mahi Māori - Māori Employment Action Plan
Date	2022
Scope	All industries
Focus	Attraction and retention

The key elements of the strategy include:

- This plan aims to address the persistent gaps of employment outcomes for Māori employees. To achieve the goal, three main elements have been developed, including people, workplaces and futures.
- The workplaces element, in particular, is relevant to the improve the retention of Māori employee. The goal is to create better working environments for Māori to thrive.

Appendix C: Overview of current attraction and retention interventions

ID	Title	Status	Core/related initiatives	Fixed duration/Ongoing	Est. spend relating to attraction and retention during 2022	Focus	Industry								
							Dairy	Sheep & beef	Pork	Deer	Fisheries	Arable	Horticulture	Forestry	Other
1	Akongoue: Pasifika Horticulture Programme	Active	Core	Fixed duration	\$100,000-\$200,000	Attraction	-	-	-	-	-	-	Y	-	-
2	PIPI: Pathways Into Primary Industries	Active	Core	Fixed duration	\$300,000-\$500,000	Combination	Y	Y	Y	Y	Y	Y	Y	Y	Y
3	Opportunity Grows Here	Active	Core	Fixed duration	\$1,000,000-\$2,000,000	Attraction	Y	Y	Y	-	Y	-	Y	Y	Y
4	GoDairy Campaign	Active	Core	Fixed duration	\$300,000-\$500,000	Attraction	Y	-	-	-	-	-	-	-	-
5	Creating an Inclusive Workplace Culture	Active	Core	Ongoing	\$20,000-\$30,000	Retention	Y	Y	Y	Y	Y	Y	Y	Y	Y
6	Make Time For Your People	Active	Core	Fixed duration	\$10,000-\$20,000	Combination	Y	-	-	-	-	-	-	-	-
7	Te Mahi Ngahere i te Ao Hurihuri – Forestry Work in the Modern Age	Active	Core	Fixed duration	\$200,000-\$300,000	Combination	-	-	-	-	-	-	-	Y	-
8	Growing Future Farmers Training Scheme	Active	Core	Ongoing	\$300,000-\$500,000	Combination	-	Y	-	Y	-	-	-	-	-
9	Tahatū	Active	Core	Ongoing	\$100,000-\$200,000	Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y
10	SSEP-Waikato	Active	Core	Fixed duration	\$200,000-\$300,000	Attraction	-	-	-	-	-	-	-	-	Y
11	SSEP-Canterbury	Active	Core	Fixed duration	\$200,000-\$300,000	Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y
12	Meat your Career	Active	Core	Ongoing	\$50,000-\$100,000	Attraction	-	Y	Y	Y	-	-	-	-	-
13	ASB MAGS Farm Experience Centre	Active	Core	Ongoing	\$50,000-\$100,000	Attraction	Y	Y	Y	Y	-	Y	-	-	-
14	Big Deer Tour	Active	Core	Ongoing	\$50,000-\$100,000	Combination	-	-	-	Y	-	-	-	-	-
15	the Generation Programme	Active	Core	Ongoing	\$200,000-\$300,000	Attraction	-	-	-	-	-	-	-	Y	-
16	GoHort Internship program	Active	Core	Ongoing	\$50,000-\$100,000	Attraction	-	-	-	-	-	-	Y	-	-
17	Wāhine o te Whenua: Maori women leadership programme	Active	Core	Fixed duration	\$300,000-\$500,000	Retention	Y	Y	Y	Y	Y	Y	Y	Y	-
18	Generation Change workshop	Active	Core	Fixed duration	\$100,000-\$200,000	Combination	Y	Y	Y	Y	Y	Y	Y	Y	Y
19	Generation Change: Mentoring	Active	Core	Fixed duration	\$100,000-\$200,000	Combination	Y	Y	Y	Y	Y	Y	Y	Y	Y
20	Agribusiness in schools	Active	Core	Fixed duration	\$300,000-\$500,000	Combination	Y	Y	Y	Y	Y	Y	Y	Y	-
21	Find Your Fit In Forestry campaign	Active	Core	Fixed duration	\$50,000-\$100,000	Attraction	-	-	-	-	-	-	-	Y	-
22	Tū Te Wana programme (specially the pastrol care)	Active	Core	Ongoing	\$50,000-\$100,000	Attraction	-	-	-	-	-	-	Y	-	-
23	Trades Academies and Gateway	Active	Core	Ongoing	\$500,000-\$1,000,000	Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y
24	Little green and gold book	Active	Core	Fixed duration	\$10,000-\$20,000	Attraction	-	-	-	-	-	-	Y	-	-
25	Kiwifruit social media campaign	Active	Core	Fixed duration	\$30,000-\$50,000	Attraction	-	-	-	-	-	-	Y	-	-
26	Forestry Careers Website	Active	Core	Ongoing	\$20,000-\$30,000	Attraction	-	-	-	-	-	-	-	Y	-
27	Women in Horticulture website	Active	Core	Ongoing	\$20,000-\$30,000	Combination	-	-	-	-	-	-	Y	-	-
28	PickNZ website	Active	Core	Ongoing	\$20,000-\$30,000	Attraction	-	-	-	-	-	-	Y	-	-
29	GoHort website	Active	Core	Ongoing	\$20,000-\$30,000	Attraction	-	-	-	-	-	-	Y	-	-
30	National Forestry Careers Portal	Active	Core	Ongoing	\$20,000-\$30,000	Attraction	-	-	-	-	-	-	-	Y	-
31	Grow Me – Forestry Careers Website	Active	Core	Ongoing	\$20,000-\$30,000	Attraction	-	-	-	-	-	-	-	Y	-
32	Grow Me – Forestry big day out	Active	Core	Ongoing	\$50,000-\$100,000	Attraction	-	-	-	-	-	-	-	Y	-
33	Grow Me – career expos	Active	Core	Ongoing	\$50,000-\$100,000	Attraction	-	-	-	-	-	-	-	Y	-
34	Grow Me – Work experience & Ride along trips	Active	Core	Ongoing	\$50,000-\$100,000	Attraction	-	-	-	-	-	-	-	Y	-
35	Learn While You Earn forestry training programme	Active	Core	Ongoing	\$500,000-\$1,000,000	Attraction	-	-	-	-	-	-	-	Y	-

ID	Title	Status	Core/related initiatives	Fixed duration/Ongoing	Est. spend relating to attraction and retention during 2022	Focus	Industry									
							Dairy	Sheep & beef	Pork	Deer	Fisheries	Arable	Horticulture	Forestry	Other	
36	Good Boss	Active	Core	Ongoing	\$10,000-\$20,000	Retention	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
37	Tokomairiro Training	Active	Core	Ongoing	\$100,000-\$200,000	Attraction	-	-	-	-	-	-	-	Y	-	-
38	Employment Hub	Active	Core	Ongoing	\$20,000-\$30,000	Retention	-	Y	-	-	-	-	-	-	-	-
39	Mahi program	Active	Core	Fixed duration	\$300,000-\$500,000	Attraction	Y	Y	Y	Y	-	Y	-	-	-	-
40	Future Foresters	Active	Core	Ongoing	\$50,000-\$100,000	Retention	-	-	-	-	-	-	-	Y	-	-
41	GoDairy training programme	Inactive	Core	Fixed duration	\$0-\$0	Attraction	Y	-	-	-	-	-	-	-	-	-
42	Safetree Teamup Workshops	Inactive	Core	Fixed duration	\$0-\$0	Retention	-	-	-	-	-	-	-	Y	-	-
43	Careers EXPOs	Inactive	Core	Fixed duration		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
44	Ambassadors programme	Inactive	Core	Fixed duration	\$0-\$0	Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
45	Enterprising Primary Industries Careers (EPIC) challenge	Inactive	Core	Fixed duration		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
46	Tertiary level - Future Food Network	Inactive	Core	Ongoing	\$100,000-\$200,000	Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
47	Careers NZ website	Inactive	Core	Ongoing	\$50,000-\$100,000	Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
48	100 Horticulture Apprenticeship Scheme	Inactive	Core	Fixed duration	\$3,000,000-\$5,000,000	Attraction	-	-	-	-	-	-	Y	-	-	-
49	Advertising campaign on recruitment -seafood sector	Inactive	Core	Fixed duration	\$0-\$0	Attraction	-	-	-	-	Y	-	-	-	-	-
50	Silviculture recruitment campaign	Inactive	Core	Fixed duration	\$0-\$0	Attraction	-	-	-	-	-	-	-	Y	-	-
51	Let's Clear the Air Campaign	Inactive	Core	Fixed duration	\$0-\$0	Attraction	-	-	-	-	-	-	-	Y	-	-
52	Manaia Safe	Inactive	Core	Ongoing		Attraction	-	-	-	-	-	-	-	Y	-	-
53	Handpicked campaign	Inactive	Core	Fixed duration	\$0-\$0	Attraction	-	-	-	-	-	-	Y	-	-	-
54	Take your pick campaign	Inactive	Core	Fixed duration	\$0-\$0	Attraction	-	-	-	-	-	-	Y	-	-	-
55	InZone Careers Bus	Inactive	Core	Fixed duration		Attraction	-	-	-	-	-	-	-	Y	-	-
56	Tāne Mahuta taster courses	Inactive	Core	Fixed duration	\$100,000-\$200,000	Attraction	-	-	-	-	-	-	-	Y	-	-
57	Poutama Whenua Ora Big Day Out	Inactive	Core	Fixed duration		Attraction	Y	Y	Y	Y	-	-	Y	-	-	-
58	Recognised Seasonal Employer (RSE) scheme	Active	Related	Ongoing	\$5,000,000-\$10,000,000	Attraction	-	-	-	-	-	-	Y	-	Y	-
59	New Zealand Seasonal Worker Scheme	Active	Related	Ongoing	\$1,000,000-\$2,000,000	Attraction	-	-	-	-	-	-	Y	-	-	-
60	Vocational Pathways - Primary Industries	Active	Related	Ongoing	\$20,000-\$30,000	Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
61	TTAF	Active	Related	Fixed duration	\$500,000-\$1,000,000	Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
62	People Section	Active	Related	Ongoing		Retention	Y	-	-	-	-	-	-	-	-	-
63	Farm 4 Life	Active	Related	Ongoing		Retention	Y	-	-	-	-	-	-	-	-	-
64	Generation Next Programme	Active	Related	Fixed duration		Retention	-	Y	-	-	-	-	-	-	-	-
65	Escalator	Active	Related	Fixed duration		Retention	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
66	Farmstrong	Active	Related	Ongoing		Retention	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
67	Good Yarn	Active	Related	Ongoing		Retention	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
68	It's All About You	Active	Related	Fixed duration		Combination	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
69	KYND Wellness	Active	Related	Fixed duration		Retention	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
70	Learning to Lead	Active	Related	Ongoing		Retention	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

ID	Title	Status	Core/related initiatives	Fixed duration/Ongoing	Est. spend relating to attraction and retention during 2022	Focus	Industry									
							Dairy	Sheep & beef	Pork	Deer	Fisheries	Arable	Horticulture	Forestry	Other	
71	People and Team Leadership Programme	Active	Related	Fixed duration		Retention	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
72	Safetree Leadership Workshops	Active	Related	Fixed duration		Retention	-	-	-	-	-	-	-	Y	-	-
73	Growing Our Safety Culture programme	Active	Related	Ongoing		Retention	-	-	-	-	-	-	-	Y	-	-
74	Tahi Ngātahi	Active	Related	Ongoing		Retention	-	Y	-	-	-	-	-	-	-	-
75	Hawkes Bay: Training Hub	Active	Related	Fixed duration		Retention	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
76	Rosie's World	Active	Related	Ongoing		Attraction	Y	-	-	-	-	-	-	-	-	-
77	DairyNZ Schools	Active	Related	Ongoing		Attraction	Y	-	-	-	-	-	-	-	-	-
78	School Farm Visits	Active	Related	Ongoing		Attraction	Y	-	-	-	-	-	-	-	-	-
79	Primary schools - matching schools to farms	Active	Related	Unknown		Attraction	-	Y	-	-	-	-	-	-	-	-
80	Secondary school curriculum development	Active	Related	Unknown		Attraction	-	Y	-	-	-	-	-	-	-	-
81	TeenAg Club	Active	Related	Ongoing		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
82	Young Farmers Club	Active	Related	Ongoing		Combination	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
83	NZYF Alumni	Active	Related	Ongoing		Combination	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
84	Leadership Pathway Programme	Active	Related	Ongoing		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
85	Donald's Farm	Active	Related	Ongoing		Attraction	Y	-	-	-	-	-	-	-	-	-
86	FMG Young Farmer of the Year	Active	Related	Ongoing		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
87	FMG Junior Young Farmer of the Year	Active	Related	Ongoing		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
88	Agrikids Competition	Active	Related	Ongoing		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
89	Wonder Project - Plant Challenge	Active	Related	Ongoing		Attraction	-	-	-	-	Y	Y	-	-	-	-
90	GirlBoss Edge: Primary Industries	Active	Related	Fixed duration		Combination	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
91	Future Deer Farmers Experience	Active	Related	Ongoing		Attraction	-	-	-	Y	-	-	-	-	-	-
92	Next generation programme	Active	Related	Ongoing		Retention	-	-	-	Y	-	-	-	-	-	-
93	FREE Horticulture Apprenticeship Programme [Level 3 – 4]	Active	Related	Ongoing		Retention	-	-	-	-	-	-	Y	-	-	-
94	All-female forestry crew -Kaingaroa	Active	Related	Ongoing		Attraction	-	-	-	-	-	-	-	Y	-	-
95	Open Farms	Active	Related	Unknown		Attraction	Y	Y	Y	Y	-	-	Y	-	-	-
96	Advisory support for agricultural and horticultural science in schools	Active	Related	Fixed duration		Attraction	Y	Y	Y	Y	-	Y	Y	-	-	-
97	The Fairlight Foundation internship programme	Active	Related	Ongoing		Attraction	-	Y	-	Y	-	-	-	Y	-	-
98	Farmtune	Active	Related	Ongoing		Retention	Y	Y	-	-	-	-	-	-	-	-
99	Waste Hunt	Active	Related	Ongoing		Retention	Y	-	-	-	-	-	-	-	-	-
100	Workplace 360	Active	Related	Ongoing		Retention	Y	-	-	-	-	-	-	-	-	-
101	Agrication	Active	Related	Ongoing		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
102	Primary Industries Good Employer Awards	Active	Related	Ongoing		Retention	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
103	New Zealand Dairy Industry Awards	Active	Related	Ongoing		Combination	Y	-	-	-	-	-	-	-	-	-
104	Young Grower of the Year	Active	Related	Ongoing		Retention	-	-	-	-	-	-	Y	-	-	-
105	Fees-free	Active	Related	Unknown		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

ID	Title	Status	Core/related initiatives	Fixed duration/Ongoing	Est. spend relating to attraction and retention during 2022	Focus	Industry									
							Dairy	Sheep & beef	Pork	Deer	Fisheries	Arable	Horticulture	Forestry	Other	
106	NZ Apprenticeships	Active	Related	Ongoing		Attraction	Y	Y	Y	Y	Y	-	Y	-	Y	
107	MPI teacher resources	Active	Related	Ongoing		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	
108	Grow Me – school visits	Active	Related	Ongoing		Attraction	-	-	-	-	-	-	-	Y	-	
109	Grow Me – Class activities	Active	Related	Ongoing		Attraction	-	-	-	-	-	-	-	Y	-	
110	Aspiring to Lead	Active	Related	Ongoing		Retention	Y	Y	Y	Y	Y	Y	Y	Y	Y	
111	Next Level	Active	Related	Unknown		Retention	Y	Y	Y	Y	Y	Y	Y	Y	Y	
112	Hoof & Hook Competition	Active	Related	Ongoing		Combination	-	Y	-	-	-	-	-	-	-	
113	Inspiring the future	Active	Related	Unknown		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	
114	Wairarapa - Growing People from Good to Great	Active	Related	Unknown		Retention	Y	Y	Y	Y	Y	Y	Y	Y	Y	
115	Get Ahead website	Active	Related	Unknown		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	
116	He Māhuri Toa - Forest Career Video	Inactive	Related	Ongoing	\$20,000-\$30,000	Attraction	-	-	-	-	-	-	-	Y	-	
117	Teacher Day Out	Inactive	Related	Fixed duration		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	
118	Champions initiative - Growing Our Future	Inactive	Related	Fixed duration		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	
119	Northland: Kaikohe GROW	Inactive	Related	Fixed duration		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	
120	Rosie’s Education	Inactive	Related	Fixed duration		Attraction	Y	-	-	-	-	-	-	-	-	
121	Rosie’s Education Youtube Channel	Inactive	Related	Fixed duration		Attraction	Y	-	-	-	-	-	-	-	-	
122	Ag careers - Get Ahead Experience Days	Inactive	Related	Fixed duration		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	
123	Rabobank FX programme	Inactive	Related	Fixed duration		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	
124	GNZ Innovation Challenge	Inactive	Related	Fixed duration		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	
125	International Horticultural Immersion Program	Inactive	Related	Fixed duration		Attraction	-	-	-	-	-	-	Y	-	-	
126	AG Camp Holiday Programme	Inactive	Related	Fixed duration		Attraction	Y	Y	Y	Y	-	Y	-	-	-	
127	He Māhuri Toa - Te Aratika	Inactive	Related	Fixed duration		Attraction	-	-	-	-	-	-	-	Y	-	
128	He Māhuri Toa - He Awhina	Inactive	Related	Fixed duration		Attraction	-	-	-	-	-	-	-	Y	-	
129	Nuffield New Zealand Farming Scholarship	Active	Related	Ongoing		Combination	Y	Y	Y	Y	-	Y	-	-	-	
130	Southern North Island Wood Council Scholarship	Active	Related	Ongoing		Attraction	-	-	-	-	-	-	-	Y	-	
131	Coleridge Downs Cadetship	Active	Related	Ongoing		Attraction	Y	Y	-	-	-	-	-	-	-	
132	Mary Sutherland Scholarship	Active	Related	Ongoing		Attraction	-	-	-	-	-	-	-	Y	-	
133	Mazzetta Scholarship	Active	Related	Ongoing		Attraction	-	-	-	-	Y	-	-	-	-	
134	UC School of Forestry High Achievers Award (Māori / Pasifika)	Active	Related	Ongoing		Attraction	-	-	-	-	-	-	-	Y	-	
135	Ngā Karahipi Uru Rākau – Forestry Scholarships	Active	Related	Ongoing		Attraction	-	-	-	-	-	-	-	Y	-	
136	Lincoln University Ahuwhenua Scholarship	Active	Related	Ongoing		Attraction	Y	Y	Y	Y	-	Y	-	-	-	
137	UC School of Forestry High Achievers Award	Active	Related	Ongoing		Attraction	-	-	-	-	-	-	-	Y	-	
138	Colliers Rural and Agribusiness Valuation Scholarship	Active	Related	Ongoing		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	
139	FAR Summer Scholarship	Active	Related	Ongoing		Attraction	Y	Y	Y	Y	-	Y	Y	-	-	
140	OneFortyOne Scholarship Programme	Active	Related	Ongoing		Attraction	-	-	-	-	-	-	-	Y	-	

ID	Title	Status	Core/related initiatives	Fixed duration/Ongoing	Est. spend relating to attraction and retention during 2022	Focus	Industry									
							Dairy	Sheep & beef	Pork	Deer	Fisheries	Arable	Horticulture	Forestry	Other	
141	Hansol Scholarship	Active	Related	Ongoing		Attraction	-	-	-	-	-	-	-	-	Y	-
142	Forest Tertiary Scholarship	Active	Related	Ongoing		Attraction	-	-	-	-	-	-	-	-	Y	-
143	Jeff Farm Cadetship	Active	Related	Ongoing		Attraction	Y	Y	Y	Y	-	Y	-	-	-	-
144	Andrew Turnbull Scholarship	Active	Related	Ongoing		Attraction	Y	Y	Y	Y	-	Y	-	-	-	-
145	New Zealand Grain and Seed Trade Association Scholarship - Massey	Active	Related	Ongoing		Attraction	Y	Y	Y	Y	-	Y	-	-	-	-
146	New Zealand Grain and Seed Trade Association Scholarship - Lincoln	Active	Related	Ongoing		Attraction	Y	Y	Y	Y	-	Y	-	-	-	-
147	Whangarei Agricultural & Pastoral Society Scholarship	Active	Related	Ongoing		Attraction	Y	Y	Y	Y	-	Y	-	-	-	-
148	DairyNZ post-graduate scholarship	Active	Related	Ongoing		Attraction	Y	-	-	-	-	-	-	-	-	-
149	Safetree Toroawhi	Active	Related	Fixed duration		Retention	-	-	-	-	-	-	-	-	Y	-
150	GNZ Spotlight20	Inactive	Related	Fixed duration		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
151	Bridging the gap	Inactive	Related	Fixed duration		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
152	Arable Awards of New Zealand	Active	Related	Ongoing		Retention	-	-	-	-	-	Y	-	-	-	-
153	Beef + Lamb New Zealand International Beef Alliance Scholarship	Active	Related	Fixed duration		Combination	-	Y	-	-	-	-	-	-	-	-
154	ANZ graduate programme	Active	Related	Unknown		Combination	-	-	-	-	-	-	-	-	-	Y
155	ASB graduate programme	Active	Related	Unknown		Combination	-	-	-	-	-	-	-	-	-	Y
156	BNZ graduate programme	Active	Related	Unknown		Combination	-	-	-	-	-	-	-	-	-	Y
157	FMG graduate programme	Active	Related	Unknown		Combination	-	-	-	-	-	-	-	-	-	Y
158	FAR's Industry Graduate Programme	Active	Related	Unknown		Combination	-	-	-	-	-	Y	-	-	-	-
159	Massey University marketing activities	Active	Related	Unknown		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
160	Lincoln University marketing activities	Active	Related	Unknown		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
161	EIT marketing efforts	Active	Related	Unknown		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
162	WINTEC marketing efforts	Active	Related	Unknown		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
163	SIT marketing efforts	Active	Related	Unknown		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
164	Teacher Conferences	Active	Related	Ongoing		Combination	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
165	Tertiary Education Providers Open Days	Active	Related	Unknown		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
166	Field days	Active	Related	Unknown		Attraction	Y	Y	Y	Y	-	Y	Y	Y	Y	Y
167	Horticulture Days	Active	Related	Unknown		Attraction	-	-	-	-	-	-	Y	-	-	-
168	Agricultural & Pastoral shows	Active	Related	Unknown		Attraction	Y	Y	Y	Y	-	Y	-	-	-	-
169	Rural Games	Active	Related	Unknown		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
170	Wāhine Toa programme	Active	Related	Fixed duration		Attraction	-	-	-	-	-	-	-	-	Y	-
171	Release to work programme	Active	Related	Fixed duration		Attraction	-	-	-	-	-	-	-	-	Y	-
172	Food & Fibre Youth Network	Active	Related	Unknown		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
173	Constellation Cadet Programme	Active	Related	Unknown		Attraction	-	-	-	-	-	-	-	-	-	Y
174	Katikati Innovative Horticulture Project	Active	Related	Unknown		Attraction	-	-	-	-	-	-	Y	-	-	-
175	Here for the long game campaign	Active	Related	Unknown		Attraction	Y	-	-	-	-	-	-	-	-	-

ID	Title	Status	Core/related initiatives	Fixed duration/Ongoing	Est. spend relating to attraction and retention during 2022	Focus	Industry									
							Dairy	Sheep & beef	Pork	Deer	Fisheries	Arable	Horticulture	Forestry	Other	
176	Unleash the Māui: Agricultural Leadership Programme	Inactive	Related	Fixed duration		Retention	Y	Y	Y	Y	-	Y	-	-	-	
177	Ako program	Active	Related	Unknown		Attraction	Y	Y	Y	Y	-	Y	-	-	-	
178	Ngā Māhuri o Ngāti Hine Manuka Plantation Training Program	Inactive	Related	Fixed duration		Attraction	-	-	-	-	-	-	-	Y	-	
179	Te Arahnaga Primary Industries Awards	Active	Related	Unknown		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	
180	A new educational horticultural model	Active	Related	Unknown		Attraction	-	-	-	-	-	Y	-	-	-	
181	Science Learning Hub	Active	Related	Unknown		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	
182	Career days/ employer days	Active	Related	Unknown		Attraction	Y	Y	Y	Y	Y	Y	Y	Y	Y	
183	He Putea Matauranga - Tertiary Education Grants	Active	Related	Unknown		Attraction	-	-	-	-	-	-	-	Y	-	
184	Ngā Karahipi Uru Rākau - Forestry Scholarships	Active	Related	Unknown		Attraction	-	-	-	-	-	-	-	Y	-	

Appendix D: Source documents

The following table presents the source documents that have informed this work.

Attraction and retention issues affecting the food and fibre industry

The following source documents were used in this section of the report (refer to page 9).

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Evaluations of attraction and retention strategies and interventions

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