

PRIMARY INDUSTRIES WORKFORCE SCAN

2018 - 2025



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INTRODUCTION

Growing New Zealand through growing people

So much of who we are, how we live and where we're heading is connected to the land. It's a central part of what it means to be us. Our land is the foundation of our primary sector, but this country's serious growth will come from its people - those who are guardians of the land, produce food from it, and innovate every conceivable connection to it. These are the people Primary ITO are here to grow.

It's about dialing up talent and attitude, knowledge and skills. The desire to ask what's next, then stepping up and creating it. It's about combining science and technology, hard work with smart thinking and growing a global view of our local ambition.

Primary ITO is on the ground working with individuals, businesses, communities and industry. In high-tech production facilities, on farms and orchards, in sheds and at kitchen tables around New Zealand, we're there. We're coaching, training and sharing the knowledge, building confidence, ambition and capability - and with a desire to do much more than turn the wheel. We want to power up the entire engine.

We develop and maintain national standards for the achievement of more than 290 industry qualifications and arrange training for delivery of these standards, often in partnership with the wider tertiary sector. We work with industry to develop training and qualifications that align with best practice and to meet current and future skill needs.

It's time for a step-change in the primary sector. We have so much in our favor, but the opportunities are even bigger and they sit here with people. We'll connect with those in our industry, as well as those outside the industry who are tempted but need more knowledge. We'll engage with students looking to start a career and see the primary sector as the place they want to be. New Zealand needs its primary industries to grow so New Zealand can grow and it starts here, now, growing smart, tech savvy, ambitious and innovative people.

Let's get on and grow New Zealand.

Message from our Chair

The Primary Industries Workforce Scan 2018 - 2025 represents a huge effort from our staff, stakeholders and partners. This document gives a big picture view of our industries, and is intended to help those industries develop a vision for their future based on a clear understanding of the landscape in which they operate. Our Workforce Scan enables us to focus on the things that really matter for our industries, and provide a collaborative and unified approach to attracting, engaging and retaining talent in the primary sector. We are keen to continue working with our industries to identify maintain and grow this pool of knowledge, as part of our joint pursuit to 'Growing New Zealand through growing people'.



Mark Darrow – Board Chair

A handwritten signature in blue ink, appearing to read 'Mark Darrow'.

Introduction from our Chief Executive

New Zealand needs its primary industries to grow in value, productivity and sustainability over the long term. This can only be achieved by acquiring more people with the right skills. Knowledge and experience.

Primary ITO has a big role in supporting this growth by helping deliver the human capabilities required. Our role is full of challenges - identifying the competency needs of the future, encouraging more people into primary industry careers, working in closer partnership with industry bodies, government agencies and training providers, and creating effective work-learning pathways. In 2017, Primary ITO is adopting a new industry-facing structure and taking new initiatives, all with a strategic focus on people, partnerships and pathways.



Linda Sissons – Chief Executive

A handwritten signature in blue ink, appearing to read 'Linda Sissons'.

OUR APPROACH

We have used qualitative and quantitative research (including labor market insights) to develop an evidence based Workforce Scan for the Primary Sector that addresses a range of questions about:

- Our future workforce requirements – attracting, engaging and retaining a qualified and professional workforce;
- Business management and resilience in the future to proactively drive competitive advantage, environmental sustainability and weather market volatility - having strong resilient businesses, with the skills to manage their people and to operate profitably and sustainably. These businesses will need to adapt and innovate;
- Future skill needs and capabilities and how these will need to be developed and that people value qualified primary industries staff.

We hope you find value in this piece of work, and we would love to hear your feedback. It's only through working together with industry that we can continue to build a strong, sustainable workforce that serves as the engine room for the New Zealand's Primary sector.

Methodology

To prepare this resource, Primary ITO commissioned research, carried out surveys of workplaces, and collated data from industry partners. These efforts encompassed both quantitative (surveyed data and statistics) and qualitative research (interviews and case studies), resulting in the findings outlined in this document. Statistical data in this report was sourced from Infometrics, unless otherwise specified, and was current as at 30 March 2017. All other sources for the data are footnoted throughout the document.

The document summarises the workforce trends, issues and risks that the primary industries are facing collectively. The primary sector consists of more than 30 distinct industries which will have their own unique challenges and opportunities. We have consolidated these sectors into nine broader industries; Dairy Farming, Dairy Processing, Meat and Fibre Production, Meat Processing, Horticulture Production, Horticulture Servicing, Seafood and Equine and have provided a snapshot of the workforce trends.

We will be working with stakeholders from each of these industries over the coming months to collaborate and co-develop our workforce action plans in response to workforce trends. The action plans will consider how we future proof our workforce through:

- Attraction and retention – ensuring that there is a pipeline of the right people into the sector and that they stay in their roles for a reasonable period;
- Using skills effectively – ensuring that businesses and the sector makes the best possible use of the skills people have;
- Developing skills and capabilities – ensuring that people have access to education and training that meets sector needs.

Primary sector challenges

Building workforce capability within the primary sector is more challenging than most other sectors because of four main challenges:

1

The rural-urban divide

We have a knowledge and understanding disconnect between urban and rural New Zealanders that creates friction and exclusion:

- Urban New Zealand acknowledges the value of primary industries and respects rural people.
- Urban New Zealand has no knowledge of primary industries other than what they receive from the media.
- Rural people feel they are not acknowledged or respected by urban New Zealand for their contribution to the economy.
- Rural people feel the primary sector is 'theirs' and no-one else's.

2

Diverse and segmented primary sector

The primary industries comprise more than 30 unique sectors, with a highly diverse customer base. While they have unique differences, they also share similar challenges - including:

- The way in which they embrace change and adapt to the speed of change.
- How they value their people.
- Their mindset to knowledge workers and their role in business growth.
- Their ability to attract a rural and urban millennial knowledge-based, skilled and trained workforce.
- Having a narrative that actively deters the people it needs most.
- We see significant differences between traditional farms, farming businesses and businesses in farming, particularly in the way in which they embrace and value knowledge workers.

3

No regulatory requirement to train drives low investment and undervaluing of a knowledge-based, skilled and trained workforce

The lack of regulatory requirement for the primary sector workforce suggests that there is no inherent value in training. And yet we know that business success comes from the adopting technology, connecting to customers and investing in the development of your people.

The primary sector has been slow to invest in their people because traditionally they viewed their workers as labourers, first and knowledge workers, second. This is an attitude that will ultimately affect the productivity of New Zealand farms, the primary sector and finally the country

In almost all other industry sectors in New Zealand a clear narrative exists around investing in people to give them the right capabilities and knowledge to create sustainable business growth and success. That narrative does not exist in the primary sector. Young school leavers, both urban and rural, see the primary sector as a low skill job - not a career. Therefore, they are not attracted to the sector in any way. Existing workers see training as a luxury or a way to expand their job knowledge - not to further their career. Often farmers and workers only want to upgrade skills, not expand their knowledge.

4

A narrative that actively deters attraction and retention of millennials

We need an innovative primary sector to grow New Zealand, powered by innovative people, powered by an innovative Primary ITO that grows these people. With 86.4% of New Zealanders living in urban areas, primary sector growth must come from urbanites.

Positioning the primary sector as an exciting career choice is our shared challenge. We need to attract and retain a diverse range of people who have the capabilities and ambition. People who can work with technology and deliver products and services to meet national and international consumer needs. This challenge is acute across the primary sector, and is exacerbated by regional imbalances between labor market demand and where many New Zealanders either do, or want to, live. We need to overcome the rural-urban divide. Primary ITO is working with government and our industries to achieve the ambitious target of doubling the value of our primary sector exports by 2025.

What is Primary ITO's role?

Government has recognised that, to achieve this, the primary industries need a skilled workforce that can drive innovation and market development, and create value-adding opportunities both nationally and internationally. While the primary industries have come a long way in their commitment to attracting and retaining competent and qualified staff, there is still some way to go. In many cases, jobs will be more specialised and require people with strong educational backgrounds.

Primary industry businesses will become larger, more productive, use more technology, and require more professional advice. This means a greater need for systems expertise, requiring more degree-qualified people in businesses and in business support roles. The Ministry for Primary Industries (MPI) have estimated that we need an extra 50,000 qualified workers in the sector in the next eight years. In addition, we also need to significantly:

- Increase the number of people completing apprenticeships (used as a proxy for ambitious and committed learners).
- Replace attrition of exiting workers.
- Upskill 42,700 existing workers who do not hold a post-school qualification.

A workforce with the right skills is crucial for the success of our primary sector in New Zealand. Competition is fierce for the best and brightest talent. Attracting the right people is a start, but not enough. Employers must ensure that these people are equipped with the right skills, and maintain and use those skills in the most effective way possible. As well, changes in the workforce, technology, customers and increasing environmental and sustainable farming practices are shaping the primary sector and leading to new career opportunities with accompanying greater skill needs.

Future changes in the makeup of the workforce, the increasing economic and sustainability complexities and the increasing divide between urban and rural New Zealand requires us to work together and agree priorities that will make the biggest difference.

SECTION 1

Our changing workforce



OUR CHANGING WORKFORCE

Employment growth in the sector

MPI's People Powered report stated that an increase of 50,000 new workers are needed to double the value of exports by 2025. This growth comprises of 2,940 new job openings and an additional 13,800 trained workers who will be replaced through natural attrition. In addition to this it is expected that we will need to upskill 14,300 existing workers.

Many of these job openings will be in Northland, Hawkes Bay and Canterbury and will need to be filled by urbanites, given that 86.4% of the NZ population reside in urban areas.

Employment growth forecasts also reveal there will be small-to-modest growth in the traditional jobs in the primary sector. This suggests that much of the forecast growth in the report will need to come from highly qualified professional services - including science, engineering, technology and management.

Diversity

We already have a changing workforce - both in its composition and its expectations. This crosses ethnic, gender, and generational boundaries. The sector will need to focus on supporting increasing labor market diversity to realise its goals.

Over the next 20 years the proportion of Māori, Pasifika and Asian population will increase from around 35% to 50%.

We also estimate that up to 10% of the workforce is presently being serviced by migrant workers. Overtime and with Government policy changes, the reliance on the migrant workforce is forecast to decline, resulting in an increased reliance on skill shortages being filled by the NZ population.

Women are currently under-represented in the primary industries workforce, comprising around 32%. This is untapped potential that needs recognition for current informal and future formal workforce participation.

The sector also has an ageing workforce - the average age for someone working in the sector is just over 44 years. Succession planning is critical for the primary industries, especially considering the high rate of self-employed owner-operators. At the same time, we expect people to retire later, resulting in a polarised age structure that could see a clash in values and drivers between the older ‘Baby Boomers’ and the ‘Millennials’ – expectations and drivers will need to be aligned and employment conditions need to be attractive. For many people this includes expectations that they will have around digital and social connectivity.

Attracting, engaging and retaining talent

To attract, engage and retain the people we need, the sector must develop and support employers to be able to offer exciting and innovative working and learning environments. The number of young people leaving school each year and entering formal workplace learning in primary industries has been steadily decreasing since 2009. Currently only 6% of school leavers enter the primary industries. New Zealand needs school leavers to opt for primary industry careers in greater numbers because the talent will need to come from the urban population, where 84% of the population reside.

Young people want careers that enable accelerated pathways to leadership – current industry structures may not support these aspirations and the geographic location of employment options means that there will need to be increased support for workers to become part of the ‘community’ will be a critical factor in attraction and retention.

Employers must consider how they recruit and hire future employees who will look different to them and expect different things. Employers in the primary sector anecdotally hire from within the community or through their own networks. This will limit the pool of available and diverse talent options, and a formalised process to better engage with urban New Zealand for attraction will be required. Many existing talent-attraction programmes adopt a one-size-fits-all approach nationally. The reality is that the messaging used to attract people from South Auckland into agri-food will need to be different from that used in the Waikato despite the regions being geographically adjacent. Highly tailored pathways are required to engage with target audiences, particularly in urban areas, if the industry is going to attract the most talented people to consider its career opportunities.

We need to engage school students in STEM (Science, Technology, Engineering and Mathematics) subjects that can be applied to a future primary industries career. We also need to make provision for career-changers who will bring their own experiences and aptitude to the sector. To attract the best and brightest, we need to offer attractive opportunities, with clear pathways that span technology, innovation and management. To attract good people, employment conditions including remuneration, hours of work, and the combination of lifestyle and recognition need to be appealing.

Over time businesses will become larger and more productive, use more technology, and require more professional advice, leading the way in terms of innovation. There will be a greater need to ensure that employers and businesses are integral part of the tertiary sector, and are seen and valued for their contribution to capability development. Employers could be supported to offer degree internships and deliver cutting-edge learning experiences using the latest technologies and innovations.

Takeouts

1. The primary sector is facing unprecedented demand.
2. 50,000 additional qualified workers are needed by 2025 - many of these will be degree qualified.
3. To attract, engage and retain the people we need, the sector must develop and support employers to be able to offer exciting and innovative working and learning environments.
4. Employers need to look wider than traditional sources to find new employees.
5. The primary industries need to become an employer of choice - good employment conditions including remuneration, hours of work, and the combination of lifestyle and recognition need to be appealing

SECTION 2

Better business capability



BETTER BUSINESS CAPABILITY

Building resilient businesses

Businesses need a resilient and dynamic workforce to adapt to external market factors to extract value at every step. New Zealand primary sector customers are now global, they have new needs and expectations, all of which influence what is produced and how it is produced. The primary production system has focused on volume as the key driver for value, resulting in constraints on innovation and a lack of focus on realising greater value. Business will need to invest in people who can drive greater innovation and entrepreneurship through value-added activity.

For many enterprises, there is an inherent bias in their business model that sustains focus on the existing business. Enterprises either lack the capability to secure value, or place greater importance on managing risk and compliance which means they don't seek to build value.

Business innovation is an effective way to increase profitability through the development of new or improved goods, services, processes, or methods. These will unlock new areas of competitive advantage and increase output and exports. Innovation requires a different mix of skills - including higher-level technical skills specific to an individual industry or employer.

We have a sector that is ambitious and motivated but divided by a mindset around change. Customer insights suggest that this division is best represented in the gap between traditional farms, farming businesses, and businesses in farming. This attitudinal difference is across a spectrum from resistant to change, those open to change, and those who embrace change. Those who embrace change are more likely to invest in knowledge workers because they realise that to get the most out of technology and innovation you need technologically savvy, innovative people who can drive these.

Technology and innovation have given businesses better access to their customers and reduced the number of people needed for manual tasks. Consumer requirements are also changing and are more interested in where their food comes from, sustainable practices that include employment conditions, environmental sustainability, food safety and health and safety.

Customers expect that businesses will respond to their needs and have transparent processes so that they can demonstrate that they are responsive to market demands. Understanding customer and consumer needs is vital to best leveraging value from the primary sector. This brings the need for staff who have the skills to utilise and adopt new technology. The ability to adapt and adopt will continue to be a key requirement for businesses.

Management Capability

Businesses with well qualified professional managers and owners are more profitable as they are equipped to proactively manage risk and uncertainties, but to also more quickly adapt to new technology where it presents business efficiencies. We know that those people, who are well qualified are more likely to value investing in either recruiting knowledge workers, or developing their employees. They are more likely to recruit great talent and provide innovative and flexible arrangement to suit their staffs' needs. Excellent business management capability is the key to success.

In many businesses, people become supervisors or managers because they are the best farm – hand or have been with the company the longest. However, these people do not always make the best managers as they do not necessarily have leadership or management qualities. Even those who do display these qualities are likely to struggle without professional development, and support as they take on leadership positions.

Identifying and selecting future leaders is a necessary skill that must be mastered in the future. Businesses will need to know how they attract, train and retain people who want leadership and management roles, and then acknowledge that their role will need to shift from operational day to day management to support, mentoring and professional guidance.

Developing future managers and leaders

To build strong primary industry businesses that meet customer expectations locally and globally, we need to develop our leaders and managers. Leadership relies on everyone's ability to self-manage and understand others. Understanding others is often termed EQ (emotional intelligence) and we believe that there is a bottom-line benefit to primary industry businesses developing the emotional intelligence of their managers and leaders and subsequently their workforce - from fruit pickers and dairy hands through to sales people and farmers.

Strengthening emotional intelligence in a workforce can result in significant productivity and performance improvements. 'Telling a story' that appeals to consumers - extracting value in everything that we do, understanding and responding to the needs of our customers and innovating at all levels - is one of the fundamental value-add initiatives the primary industries can focus on. Our future leaders need to be able to: innovate, be resilient, be ambitious, communicate and be culturally aware of customers. They need to be able to manage people in a way that harnesses potential in their workforce.

Takeouts

1. Businesses that are well run and have a mindset that embraces change will be sustainable in the long term.
2. Effective businesses need capable managers.
3. Developing management skills is critical and businesses need to identify and select future managers.
4. There is a bottom-line benefit to primary industry businesses developing the emotional intelligence of their workforce

SECTION 3

Developing skills and valuing qualifications



DEVELOPING SKILLS & QUALIFICATIONS

Training culture

For many years, the primary sector has prospered without formal learning requirements for dairy producers. Over the last few years we have seen a small increase in the uptake of higher level learning. But we have also seen a decline in the total number of people engaging in training and education.

The lack of a regulated industry is at odds with most of the other industries that demand formalised learning and ongoing certification and accreditation. Learning and development has been informal and optional. The farm of the future coupled with increasing consumer demands around ethical, environmental regulation will mean drive professional and regulated industry standards to ensure a continuous professional development system, like that used by other professions, covering themes like ecology and soil science, business, people management and animal welfare. It could also be used as a way of driving knowledge transfer enabling businesses to consistently seek to utilise the latest available thinking in operating their businesses.

In 2025, the changing nature of primary sector businesses will need people who have:

- Growth expected in processing and support service jobs (as primary production and processing becomes more sophisticated and greater value added beyond the farm gate)
- Professional degrees with specialisation in value chain, integrated farm systems
- Increased automation and robotics
- Marketing skills, language and culture, customer relationships
- Environmental sustainability, animal welfare and food safety
- Management and integrated farm system knowledge
- Production skills (whole farm systems, resource management and staff management).

Businesses that have a training culture and well trained and competent farms teams:

- Are more likely to be financially profitable in the long-term
- Are more attractive to potential workers and position the employer as an employer of choice;
- Continually evolve to meet changing customer needs
- Provides a social forum for younger farm workers and adds to community resilience through the networks formed at training and other industry events.

In businesses with a well-developed training culture, training is an ongoing return on investment. Modelled income data and shows that there is a positive benefit for people who are qualified¹. For example, a herd manager with a level four qualification should earn a \$10,000 premium per annum. The return on investment for a trainee can also relate to their progression along the pathway to farm ownership with training being a key enabler in working towards ownership.

Future skills to deliver growth and drive value

Growth and transformation are driving change in the mix of learning opportunities we must create. People need new forms and higher levels of technical and scientific knowledge to unlock the huge potential of new technologies and processes. Farmers will increasingly need new knowledge and tools to manage biological, physical and information systems that enable higher productivity, profitability and sustainability. Likewise, robotics and other technological innovations will continue to revolutionise the horticulture and viticulture sectors.

The future skill mix requirements are unlikely to significantly change over time for the core primary sector workforce, however the composition of skills within those levels will change. New technologies and farming practices mean that skills will need to have transferability at their core whilst being supplemented by specialised technical competencies. They include organisational leadership, communication, brand creation and stewardship - so-called 'soft skills' that draw heavily on emotional intelligence and their capacities to self-manage and to learn continuously as they work. Primary industries, like all others, require these competencies for success in today's complex, changing world. We must ensure our learning opportunities facilitate personal development and resilience, and promote non-traditional ways of thinking about issues in the workplace, supply chain and market.

¹ Consulting company Scarlatti conducted the research on behalf of DairyNZ and Primary ITO.

New job openings will continue to focus on medium skill levels and this will continue to refocus the workforce with the correct skill levels once employment numbers begin to grow after new job openings become positive in 2018.

Future apprenticeship programmes will need to deliver employees who can navigate and thrive in times of rapid change adapt more quickly, are more likely to innovate, and can undertake a wider range of tasks across a farm management system.

While the primary industries have come a long way in retaining and developing competent and qualified staff, there is still some way to go. We know that we need to generate demand for:

- The uptake of New Zealand qualifications, particularly for apprenticeships at Level 4 and above
- An increase in generic and transferrable capabilities and skill sets that drive entrepreneurship, innovation and sustainability.

We also need to focus on building business capability and commitment to better acquire, refine and utilise skills in the workplace, building their infrastructure and systems so that they can effectively and sustainably support the growth of their workforce.

To deliver real value to a business (and individuals), skill development must be viewed as an investment rather than a cost. Unlike other industries where there is a clear profession upon completion of an apprenticeship, there is a clear absence of a professional career in many of the apprenticeships programmes in the primary industries. We must therefore consider how skill development is linked to personal and business goals, be integral to business growth, and provide access to learning experiences that are personalised and flexible for individual businesses.

Takeouts

1. Employment growth is just part of the story - net replacement and demand creation are equally important
2. We need to increase the number of people earning industry qualifications each year from just over 10,000 in 2016 to 15,000. A similar step-change will be required through Student Achievement Component (SAC) funded providers from 6,500 learners last year to 10,000 learners enrolled by 2025.
3. More employers need to commit to train staff and there needs to be a clear value proposition for this.
4. Qualifications need to be valued by both businesses and customers/consumers.
5. Businesses with a strong training culture are more likely to have the right skill profiles.

SECTION 4

Workforce trends



DAIRY FARMING INDUSTRY OVERVIEW



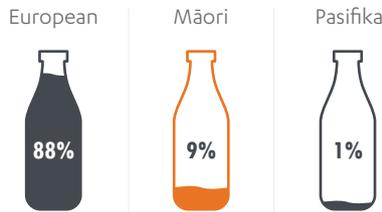
DEMOGRAPHICS

AGE & GENDER

DAIRY FARMING WORKFORCE		DAIRY FARMING TRAINEES
42	Average age	31
7%	School leavers	3%
33%	Female workers	19%

ETHNICITY

2013 dairy farming workforce:



MIGRANT WORKERS



42%

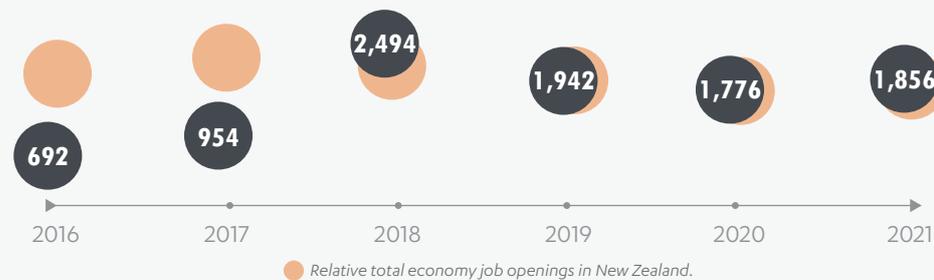
of dairy farming trainees in 2016 migrated to New Zealand.

Compared with **15%** of the dairy farming workforce in 2013.

EMPLOYMENT

NUMBER OF JOB OPENINGS

Total dairy farm job openings are forecasted to increase from **692** in 2016 to **1,856** in 2021. This contrasts with forecasted figures for the total economy.



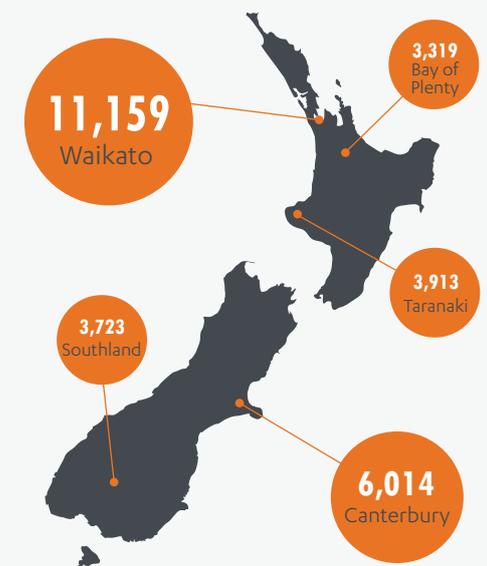
EMPLOYMENT GROWTH

The number of people employed on dairy farms is set to increase by **2.6%** in 2018, after a downturn in 2016 and 2017.



TOP EMPLOYMENT BY REGION

Dairy farms in Waikato and Canterbury had the highest amount of jobs filled in 2016.



Total number of people employed in dairy farming: **40,162**

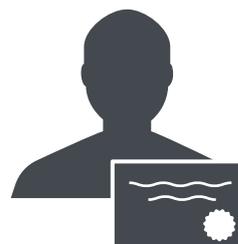
QUALIFICATIONS



66%

of dairy farmers are working in a role equivalent to a Level 4 qualification.

37% of the dairy farming workforce had a Level 4 qualification or above in 2013.



33%

of people employed in the dairy farming workforce hold qualifications in the 'Agriculture, Environmental and Related Studies' field.

FUTURE REQUIREMENTS AND CHALLENGES

The dairy farming industry aims to:

- Attract and retain the right staff.
- Implement policies in-line with current regulations regarding the immigrant workforce, water quality in New Zealand, and the whole milk powder price fluctuations of the overseas markets.
- Provide support, tools and training to meet changing needs as knowledge and viability of operational technology grows.

DAIRY PROCESSING INDUSTRY OVERVIEW



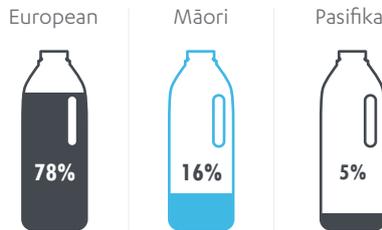
DEMOGRAPHICS

AGE & GENDER

DAIRY PROCESSING WORKFORCE		DAIRY PROCESSING TRAINEES	
43	Average age	42	
2%	School leavers	0%	
27%	Female workers	15%	

ETHNICITY

2013 dairy processing workforce:



MIGRANT WORKERS



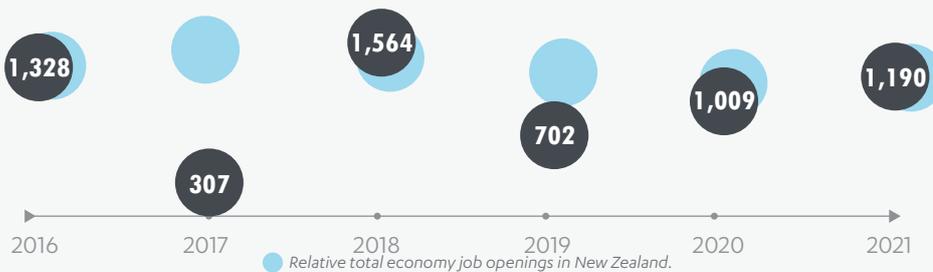
14%
of dairy processing trainees in 2016 migrated to New Zealand.

Compared with **19%** of the dairy processing workforce in 2013.

EMPLOYMENT

NUMBER OF JOB OPENINGS

Total dairy processing job openings are forecasted to decrease from **1,328** in 2016 to **1,190** in 2021. This is in line with forecasted figures for the total economy.



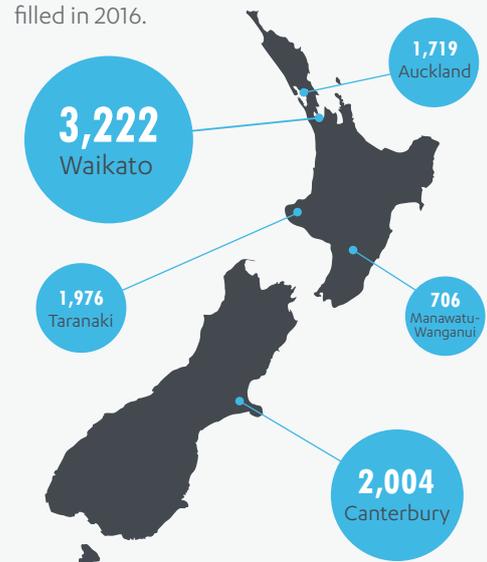
EMPLOYMENT GROWTH

The number of people employed in dairy processing plants is set to increase by **8.5%** in 2018, after a downturn in 2017.



TOP EMPLOYMENT BY REGION

Dairy processing plants in Waikato and Canterbury had the highest amount of jobs filled in 2016.



Total number of people employed in dairy processing: **12,606**

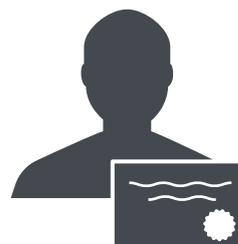
QUALIFICATIONS



60%

of dairy processing workers are working in a role equivalent to a Level 1-3 qualification.

49% of the dairy processing workforce had a Level 1-3 qualification or above in 2013.



34%

of people employed in the dairy processing workforce hold qualifications in the 'Engineering and Related Technologies' field.

FUTURE REQUIREMENTS AND CHALLENGES

The dairy processing industry aims to:

- Grow workforce capability to keep up with dynamic growth, high standards and consumer demand - as well as environmental best practice.
- Focus on capability development in the areas of technological improvements, productivity, innovation, and nutritious and safe products.
- Tackle the opportunities and challenges posed by globalisation through vocational education and training.

EQUINE & RACING INDUSTRY OVERVIEW



DEMOGRAPHICS

AGE & GENDER

EQUINE & RACING WORKFORCE		EQUINE & RACING TRAINEES	
45	Average age	30	
7%	School leavers	9%	
47%	Female workers	56%	

ETHNICITY

2013 equine & racing workforce:



MIGRANT WORKERS



26%
of the equine & racing trainees in 2016 migrated to New Zealand.

Compared with **16%** of the equine & racing workforce in 2013.

EMPLOYMENT

NUMBER OF JOB OPENINGS

Total equine & racing job openings are forecasted to increase from **129** in 2016 to **230** in 2021. This contrasts with forecasted figures for the total economy.



EMPLOYMENT GROWTH

The number of people employed in equine & racing businesses is set to increase by **4.5%** in 2018, up from 2016 and 2017.



TOP EMPLOYMENT BY REGION

Equine & racing businesses in Waikato and Canterbury had the highest amount of jobs filled in 2016.



Total number of people employed in equine and racing: **3,993**

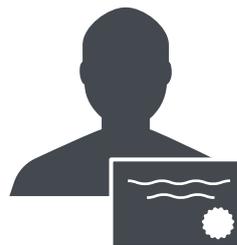
QUALIFICATIONS



63%

of equine & racing workers are working in a role equivalent to a Level 1-3 qualification.

35% of the equine & racing workforce had a Level 1-3 qualification or above in 2013.



19%

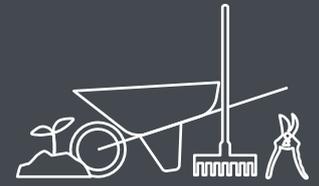
of people employed in the equine & racing workforce hold qualifications in either the 'Agriculture, Environmental and Related Studies' or 'Management and Commerce' fields.

FUTURE REQUIREMENTS AND CHALLENGES

The equine & racing sector aims to:

- Focus on recruitment - the recent drop in trainee numbers highlights an opportunity here.
- Discuss the career pathways available to students at school level (such as the existing Gateway and Switch programmes) to attract young people into the sector. This will ultimately help to balance the aging workforce that exists within the industry.
- Develop an equine diploma and qualifications above Level 3 for stable hands.

HORTICULTURE SERVICES INDUSTRY OVERVIEW



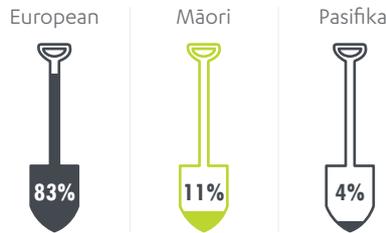
DEMOGRAPHICS

AGE & GENDER

HORTICULTURE SERVICES WORKFORCE		HORTICULTURE SERVICES TRAINEES	
44	Average age	37	
5%	School leavers	5%	
27%	Female workers	15%	

ETHNICITY

2013 horticulture services workforce:



MIGRANT WORKERS



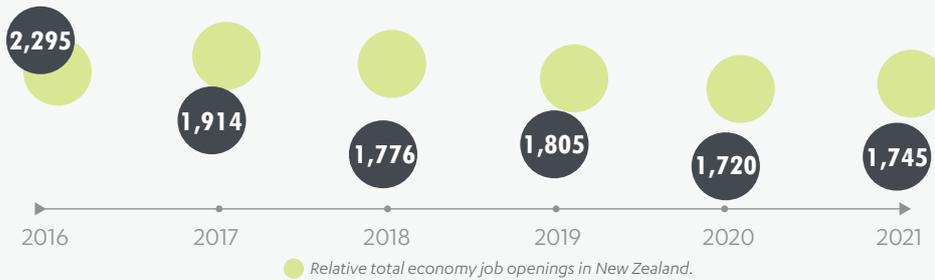
16% of horticulture services trainees in 2016 migrated to New Zealand.

Compared with **22%** of the horticulture services workforce in 2013.

EMPLOYMENT

NUMBER OF JOB OPENINGS

Total horticulture services job openings are forecasted to decrease from **2,295** in 2016 to **1,745** in 2021. This is in line with forecasted figures for the total economy.



EMPLOYMENT GROWTH

The number of people employed in horticulture services businesses is still set to increase by **2.8%** in 2018, however the growth is less than 2017.



TOP EMPLOYMENT BY REGION

Horticulture services businesses in Auckland and Canterbury had the highest amount of jobs filled in 2016.



Total number of people employed in horticulture services: **26,194**

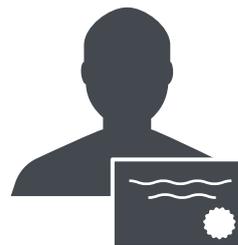
QUALIFICATIONS



66%

of horticulture services workers are working in a role equivalent to a Level 4 qualification.

46% of the horticulture services workforce had a Level 4 qualification or above in 2013.



28%

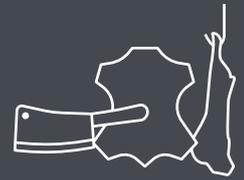
of people employed in the horticulture services workforce hold qualifications in the 'Agriculture, Environmental and Related Studies' field.

FUTURE REQUIREMENTS AND CHALLENGES

The horticulture services industry aims to:

- Roll out a Level 5 qualification for managers in 2019.
- Increase the requirements for Level 3 and Level 4 business qualifications for supervisors.
- Focus on increasing the participation of Māori and Pasifika workers.

MEAT & LEATHER INDUSTRY OVERVIEW



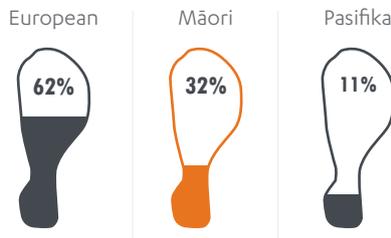
DEMOGRAPHICS

AGE & GENDER

MEAT & LEATHER WORKFORCE		MEAT & LEATHER TRAINEES	
43	Average age	34	
6%	School leavers	6%	
26%	Female workers	32%	

ETHNICITY

2013 meat & leather workforce:



MIGRANT WORKERS



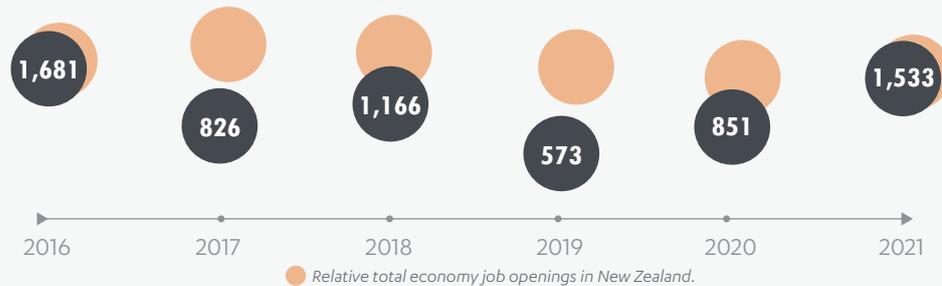
27% of meat & leather trainees in 2016 migrated to New Zealand.

Compared with **17%** of the meat & leather workforce in 2013.

EMPLOYMENT

NUMBER OF JOB OPENINGS

Total meat and leather job openings are forecasted to decrease from **1,681** in 2016 to **1,533** in 2021. This is in line with forecasted figures for the total economy.



EMPLOYMENT GROWTH

The number of people employed in meat & leather is set to increase by **0.3%** in 2018, after a downturn in 2017.



TOP EMPLOYMENT BY REGION

Meat & leather operations in Canterbury & Southland had the highest amount of jobs filled in 2016.



Total number of people employed in meat & leather: **21,393**

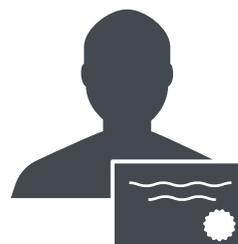
QUALIFICATIONS



79%

of meat & leather workers are working in a role equivalent to a Level 1-3 qualification.

29% of the meat and leather workforce had a Level 1-3 qualification or above in 2013.



24%

of people employed in the meat & leather workforce hold qualifications in the 'Engineering and Related Technologies' field.

FUTURE REQUIREMENTS AND CHALLENGES

The meat & leather sector aims to:

- Focus on training and education for an increasing percentage of their employees - to enhance meat quality meat quality and food safety.
- Develop their means to attract young talent and retain their typically transient skilled workforce.

PRODUCTION HORTICULTURE INDUSTRY OVERVIEW



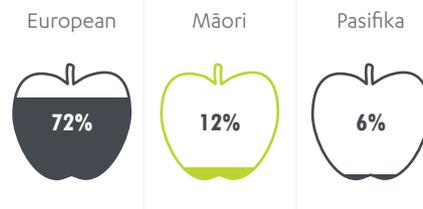
DEMOGRAPHICS

AGE & GENDER

PRODUCTION HORTICULTURE WORKFORCE		PRODUCTION HORTICULTURE TRAINEES	
46	Average age	36	
6%	School leavers	2%	
41%	Female workers	25%	

ETHNICITY

2013 production horticulture workforce:



MIGRANT WORKERS



64%

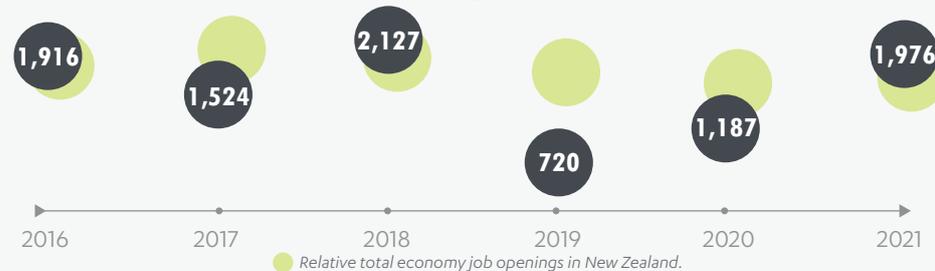
of production horticulture trainees in 2016 migrated to New Zealand.

Compared with **28%** of the production horticulture workforce in 2013.

EMPLOYMENT

NUMBER OF JOB OPENINGS

Total production horticulture job openings are forecasted to increase from **1,916** in 2016 to **1,976** in 2021. This contrasts with forecasted figures for the total economy.



EMPLOYMENT GROWTH

The number of people employed in production horticulture businesses is set to increase by **3.2%** in 2018, after decreased growth in 2017.



TOP EMPLOYMENT BY REGION

Production horticulture businesses in Hawke's Bay & Auckland had the highest amount of jobs filled in 2016.



Total number of people employed in production horticulture: **26,467**

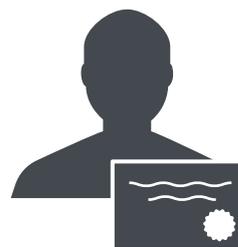
QUALIFICATIONS



53%

of production horticulture workers are working in a role equivalent to a Level 1-3 qualification.

42% of the production horticulture workforce had a Level 1-3 qualification or above in 2013.



21%

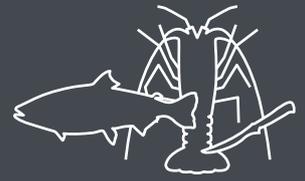
of people employed in the production horticulture workforce hold qualifications in the 'Agriculture, Environmental and Related Studies' field.

FUTURE REQUIREMENTS AND CHALLENGES

The production horticulture industry aims to:

- Develop business qualifications at Levels 3 and 4 for supervisors.
- Work with Primary ITO to offer Level 5 qualifications in postharvest and production horticulture from 2017 and 2020 onwards, respectively.
- Focus on increasing the participation of Māori and Pasifika workers.

SEAFOOD INDUSTRY OVERVIEW



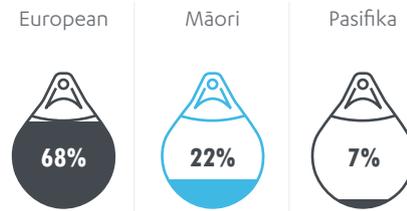
DEMOGRAPHICS

AGE & GENDER

SEAFOOD WORKFORCE		SEAFOOD TRAINEES	
43	Average age	38	
5%	School leavers	3%	
35%	Female workers	37%	

ETHNICITY

2013 seafood workforce:



MIGRANT WORKERS



33%

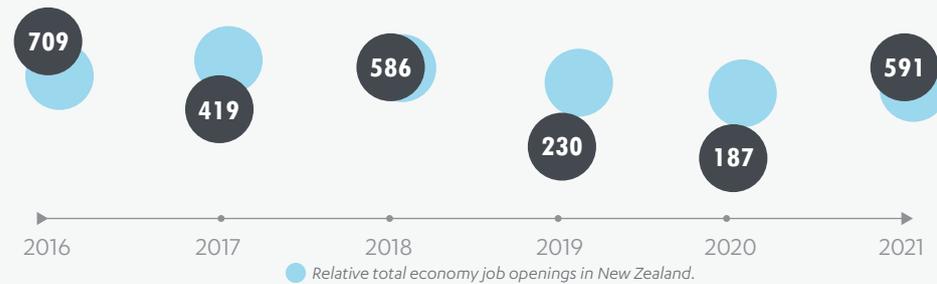
of seafood trainees in 2016 migrated to New Zealand.

Compared with **24%** of the seafood workforce in 2013.

EMPLOYMENT

NUMBER OF JOB OPENINGS

Total seafood job openings are forecasted to decrease from **709** in 2016 to **591** in 2021. This is in line with forecasted figures for the total economy.



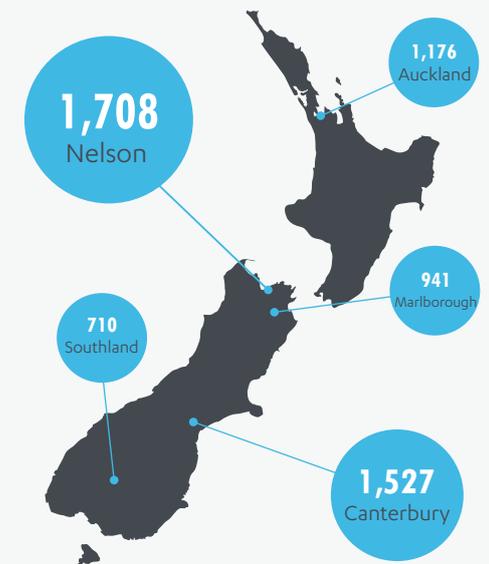
EMPLOYMENT GROWTH

The number of people employed in seafood companies is set to increase by **1.4%** in 2018, after a downturn in 2017.



TOP EMPLOYMENT BY REGION

Seafood companies in Nelson & Canterbury had the highest amount of jobs filled in 2016.



Total number of people employed in seafood: **9,875**

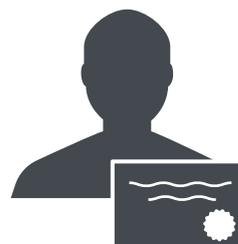
QUALIFICATIONS



65%

of seafood workers are working in a role equivalent to a Level 1-3 qualification.

39% of the seafood workforce had a Level 1-3 qualification or above in 2013.



29%

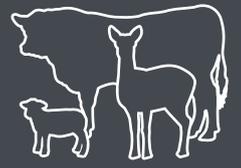
of people employed in the seafood workforce hold qualifications in the 'Engineering and Related Technologies' field.

FUTURE REQUIREMENTS AND CHALLENGES

The seafood industry aims to:

- Attract and retain a skilled workforce.
- Provide career pathways to recruit young talent to the sector. This will ultimately help to balance the aging workforce that exists within the industry.

SHEEP, BEEF & DEER INDUSTRY OVERVIEW



DEMOGRAPHICS

AGE & GENDER

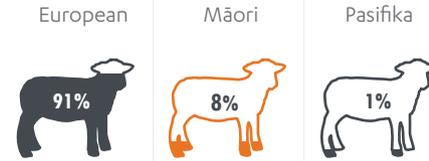
SHEEP, BEEF & DEER FARMING WORKFORCE

SHEEP, BEEF & DEER FARMING TRAINEES

51	Average age	33
4%	School leavers	1%
32%	Female workers	16%

ETHNICITY

2013 sheep, beef & deer farming workforce:



MIGRANT WORKERS



7%

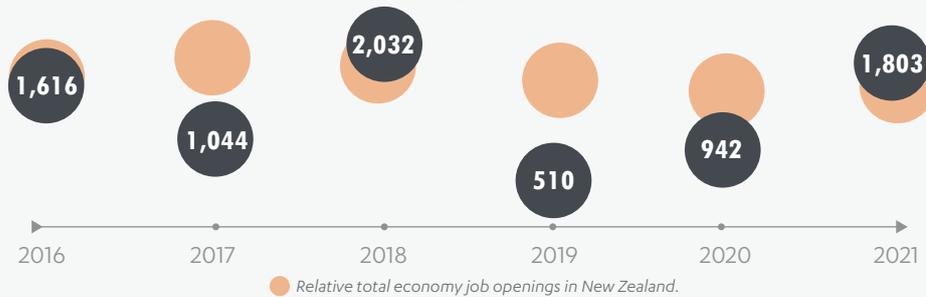
of sheep, beef & deer farming trainees in 2016 migrated to New Zealand.

Compared with **10%** of the sheep, beef & deer farming workforce in 2013.

EMPLOYMENT

NUMBER OF JOB OPENINGS

Total sheep, beef & deer farm job openings are forecasted to increase from **1,616** in 2016 to **1,803** in 2021. This contrasts with forecasted figures for the total economy.



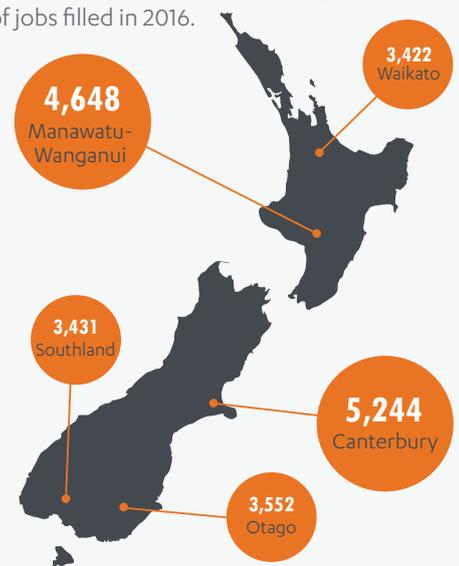
EMPLOYMENT GROWTH

The number of people employed on sheep, beef & deer farms is set to increase by **2%** in 2018, up from 2016 and 2017.



TOP EMPLOYMENT BY REGION

Sheep, beef & deer farms Canterbury & Manawatu-Wanganui had the highest amount of jobs filled in 2016.



Total number of people employed in sheep, beef & deer farming: **32,496**

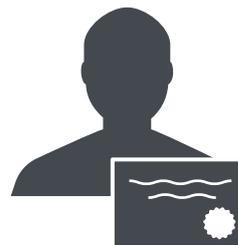
QUALIFICATIONS



60%

of sheep, beef & deer farmers are working in a role equivalent to a Level 4 qualification.

37% of the sheep, beef & deer farming workforce had a Level 4 qualification or above in 2013.



30%

of people employed in the sheep, beef & deer farming workforce hold qualifications in the 'Agriculture, Environmental and Related Studies' field.

FUTURE REQUIREMENTS AND CHALLENGES

The sheep, beef & deer industry aims to meet the significant challenges of:

- Ensuring both financial and environmental farm sustainability.
- Succession planning and hurdles to first-time farm management or ownership.
- Supporting farmers with issues such as upgrading to more advanced technology than is currently used on standard New Zealand farms.

WOOL HARVESTING INDUSTRY OVERVIEW



DEMOGRAPHICS

AGE & GENDER

WOOL HARVESTING WORKFORCE		WOOL HARVESTING TRAINEES	
37	Average age	30	
11%	School leavers	5%	
36%	Female workers	37%	

ETHNICITY

2013 wool harvesting workforce:



MIGRANT WORKERS



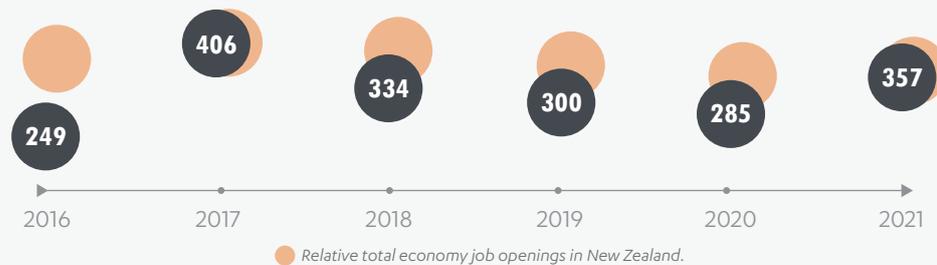
14%
of wool harvesting trainees in 2016 migrated to New Zealand.

Compared with **6%** of the wool harvesting workforce in 2013.

EMPLOYMENT

NUMBER OF JOB OPENINGS

Total wool harvesting job openings are forecasted to increase from **249** in 2016 to **357** in 2021. This contrasts with the forecasted figures for the total economy.



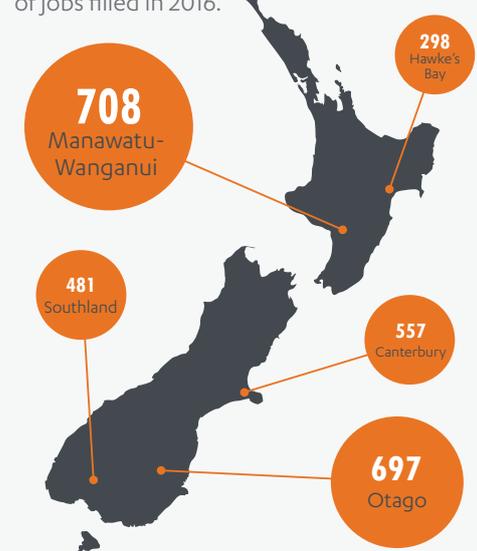
EMPLOYMENT GROWTH

The number of people employed in wool harvesting is set to increase by **2.6%** in 2018, down from 2017.



TOP EMPLOYMENT BY REGION

Wool harvesting businesses in Manawatu-Wanganui and Otago had the highest amount of jobs filled in 2016.



Total number of people employed in wool harvesting: **3,562**

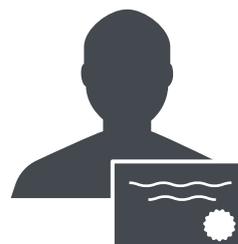
QUALIFICATIONS



82%

of wool harvesting workers are working in a role equivalent to a Level 1-3 qualification.

31% of the wool harvesting workforce had a Level 1-3 qualification or above in 2013.



41%

of people employed in the wool harvesting workforce hold qualifications in the 'Agriculture, Environmental and Related Studies' field.

FUTURE REQUIREMENTS AND CHALLENGES

The wool harvesting industry aims to:

- Attract young talent into the industry.
- Retain their typically transient skilled workforce.
- Both of these alongside the challenge of, due to the current profitability of the industry, a potentially uncertain long-term outlook for the sector.



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