



KELLOGG

RURAL LEADERSHIP
PROGRAMME

FUTURE PEOPLE CAPABILITY REQUIREMENTS – A POST FARM GATE PERSPECTIVE

Kellogg Rural Leadership Programme

Course 38 2018

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I wish to thank the Kellogg Programme Investing Partners for their continued support:



ACKNOWLEDGEMENTS

Wow – what an amazing experience the Kellogg Rural Leadership Programme has been. I feel incredibly fortunate to have been a part of it and to be involved in an exciting industry. One thing that makes this programme so special is the access to such a variety of people in the primary industries. Everyone has been very approachable and willing to share their knowledge, experience and insights.

- I would like to acknowledge and thank my family and friends for their support and encouragement to do this. It has been a big undertaking and their unwavering support has allowed me to pursue my interests.
- I'd also like to thank and acknowledge the John Daniell Memorial Trust for their financial contribution.
- Having an incredible group of people to do the programme with – my Cohort 38 – has been a highlight. The support and learning from this group is extremely special that has helped me achieve more than I thought I could.
- Thank you to the Kellogg Rural Leadership Programme team of Lisa Rogers, Anne Hindson, Patrick Aldwell and Facilitator Scott Champion for their organisation, direction and guidance over the period of the course.
- Lastly I'd like to acknowledge and thank all of those who I have interviewed, spoke to or provided information throughout the process of my project. It has very much appreciated.

A BIT ABOUT THE AUTHOR

Agri-food value chains is an area of interest of mine - adding value to the products we produce in New Zealand in order to gain a premium from customers. Another area of interest is people capability - the skills needed in this space in order to innovate and deliver returns throughout the value chain. This was one of the reasons for completing the Kellogg Rural Leadership Programme as it gave me the opportunity and structure to further look into this.

With a Bachelor of Commerce in Marketing and a Postgraduate Diploma in AgriCommerce, my experience is mainly in marketing within the finance industry working in branding and communications and on projects targeted at the agricultural sector. Deciding to further pursue a career in agribusiness I became a student again in 2011 and completed a Postgraduate Diploma in Agribusiness. This is where I grew an interest in agribusiness and in particular value chains.

More recently my time has been taken up with family, farming and community. I live in the sunny Wairarapa on a 600ha sheep and beef hill country farm in Tinui with my husband Tom and two young children, Lockie (5) and Pippa (3).

EXECUTIVE SUMMARY

Major global agri-food trends and changes to the workforce in the future are expected to have an impact on people capability needed in the New Zealand primary industries. With New Zealand's reliance on exports and competing in international markets, it is recognised that the skills and knowledge will need to keep pace with the evolving demands of society, advances in technology and changing consumer preferences across the global agri-food industry. These are expected to transform the way business is done and in particular how individuals and society interact.

In addition the current government's focus on sustainability and the environment has also meant there has been a greater emphasis for the primary industries to transition from commodity based agricultural products to high value. People capability, in particular skills that are required post farm gate, is a core asset that will underpin the success of gaining more value out of the products produced and adapting to the accelerating pace of change.

Focussing on the primary industries people capability requirements post farm gate, in particular concentrating on those that add value to agriculture commodities and/or creating high quality premium products and services, the aim of this research project was to:

1. Gain an understanding of international agribusiness and workforce trends to identify how these may impact on New Zealand primary industries and the people capability required in future.
2. Discuss the people capability requirements in relation to the primary industries post farm gate and identify core people capability themes and skill sets required by those adding value to agriculture commodities and/or creating high quality premium products and services
3. Discuss people capability initiatives currently being undertaken by organisations/sectors in the primary industries in relation to post farm gate requirements.
4. Identify ways to attract and build talent at a post farm gate level.

Key findings from this research project:

- It is expected by that there will be many changes to business and within the primary industries in the next 10 years, more so than that has occurred historically. Much of this will be driven by consumer demands and technology advancements. Adapting to these while transitioning to value added export will require different skill sets and capabilities to those needed today.
- While it is expected that by 2025 around 230,000 people out of a workforce of 369,700 will be required post farm gate, many of the current industry initiatives tend to focus on attracting and building people capability within the farm gate and at a production level rather than having a view to what skills are needed in order to gain more value out of the products produced at other levels along the value chain.
- Many of the technical skills and qualifications that were thought to be needed post farm gate for those that add value and/or create high quality products/services were customer and market focussed. The importance of the capabilities required to develop markets internationally came through strongly given New Zealand relies on exporting the majority of what is produced by the primary industries. A review of industry people capability initiatives indicates that there is currently only a small focus on this.

- Although a qualification and/or background in food production or the primary industries is useful, transferable 'soft' skills are recognised as being most important given the pace change businesses are experiencing. Agility and adaptability, attitude, communication, empathy and understanding, building relationships were rated as the top skills needed now and in future.
- There has been a big effort to incorporate agriculture in education and engage youth with the primary industries. However there does not seem to be a supporting or coordinated industry wide approach that captures or connects the pool of potential talent that has been previously building, potentially undoing the work of these initiatives. This occurs in particular at the post farm gate level.
- People capabilities post farm gate require a range of skills and qualifications not specific to the primary industries and can be gained through a number of institutions. Currently sectors seem to limit post farm gate talent pool with many focusing on qualifications or specific degrees in relation to agricultural subjects received from a select few institutions.
- Overwhelmingly the perception of the primary industries is seen as one of the biggest challenges with attracting and building people capability not just at post farm gate, but also within the farm gate. In order to attract the people capability required for the future, it was identified that a consistent overarching story/message that is exciting, relevant, inspiring, that resonates and connects the industry to food rather than the term 'primary industries' is fundamental.

The following recommendations are points that warrant further investigation:

1. Determine and develop an overarching industry wide story to create a consistent message that links sectors and the industry to food more clearly.
2. Provide increased focus on attracting and developing the skills required post farm gate at differing levels. In particular initiatives to help build international and in-market experience.
3. Create a central platform to capture and connect the talent that is being built by current initiatives engaging with youth.
4. Target a wider skill base than the narrow group that is currently being targeted and promoted to by current initiatives.
5. Further investigate future workforce design and apply this to the post farm gate businesses as a way of attracting, developing and retaining talent in the industry.

There are broader aspects to this subject that have been explored but not elaborated on. Overall it is hoped that this research project will offer insights and provide discussion points to what is needed in terms of attracting and building people capability post farm gate going forward.

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1. INTRODUCTION

The primary industries are a main driver for economic growth and exports in New Zealand. Worth \$42.6 Billion (year ending June 2018) and accounting for 79% of exports, New Zealand's reliance on exports and competing in international markets requires certain skills and capabilities (Ministry of Primary Industries 2018). With the current government's emphasis on the environment and position toward a strong vision for sustainable value-based growth for the primary industries, there has been a focus to accelerate the transition from commodity to high-value products and shift production systems away from volume (Ministry of Primary Industries 2018).

In addition to this, unprecedented changes to the global agri-food industry are providing many challenges for organisations and sectors in the primary industries. Driven by modern technologies and rapid changes in consumer demands, the development of new skills, changes in relationships and working patterns throughout the value chain are needed across all sectors in the primary industries to create value, develop, survive and compete internationally. People capability is a core asset that is seen to underpin the success of gaining more value out of the products produced and how the industry adapts to this pace of change (Ministry of Primary Industries 2014).

Many of the core people capabilities required within the primary industries going forward will not be in production but post farm gate roles. Traditionally much of the focus on developing people capability has been behind the farm gate. While it is important to make continual improvements in this area and attract more people in primary production, it is estimated that by 2025 there will be 230,000 people needed for post farm gate roles. This is compared to around 140,000 people required on-farm (Ministry of Primary Industries 2014).

Additionally the primary industries rely on selling the products it grows to consumers across the world. Placing greater focus on what people capability requirements are needed post farm gate is essential in order to attract, develop and retain talent tasked with adding value and creating high quality premium products and services to deliver greater export returns and compete competitively in international markets.

What is people capability?

People capability, also known as people or human capital, refers to a collection of traits – knowledge, talents, skills, abilities, experience, intelligence, training, judgment, and wisdom - held individually and collectively. Associated with the study of human resources management, at a macroeconomic level these capabilities held by the individual or group of people represent the resources available to perform work of an economic value (Wikipedia 2018). Luthans and Youssef (2004, p.5) hold a similar view writing that “Human capital is usually equated with knowledge, skills, abilities or competencies derived from education, experience and specific identifiable skills”. Wright and McMahan (2011) note that while the economic view defines human capital in terms of knowledge, skill set, ideas and health of an individual as assets that yield income or as a productive unit of output, the uniqueness of human capital (compared with that of financial and physical assets) cannot be separated from the individual. They also point to the approach by Psychologists to the concept of human capital which has tended to associate it with knowledge, skills abilities and other characteristics of individuals. However it was

acknowledged that the economic approach, although begins with individuals, it does not limit itself to individuals (Wright and McMahan 2011).

The importance of people capability

People capability is known to be an important asset that is crucial to an organisations success. It has been demonstrated that people capability is likely to bring some level of competitive advantage and has shown to link to higher performance (Luthans and Youssef 2004, Chartered Accountants Australia and New Zealand 2017). Although technology is like to have a significant impact on the workforce in the next 10 years (Chartered Accountants Australia and New Zealand 2017) it is important to recognise that people capability will still play an important role but in a different form.

The importance of people capability is realised through a diverse workforce. Having a diverse workforce makes for better decision making and in turn achieving better performance through capitalising on diverse talent pools. It has been shown that when people have a mix of capability and a diverse set of skills, they offer different ways of working leading to improved decision making and better financial performance (Chartered Accountants Australia and New Zealand 2017). It has also been shown that those companies that have a diverse set of people capabilities are better able to win top talent. Customer orientation, employee satisfaction and decision making are also at a higher level ultimately leading to increased returns (Chartered Accountants Australia and New Zealand 2017).

2. APPROACH & METHODOLOGY

With a need for the primary industries to transition from commodity based agricultural products to high value, does there need to be more of a focus around attracting and developing people capability post farm gate¹? What are the skills required in order to add value to agriculture commodities and/or create high quality premium products and how can the primary industries attract the people capability required to do this?

Objectives

1. Gain an understanding of international agribusiness and workforce trends to identify how these may impact on New Zealand primary industries and the people capability required in future.
2. Discuss the people capability requirements in relation to the primary industries post farm gate and identify core people capability themes and skill sets required by those adding value to agriculture commodities and/or creating high quality premium products and services.
3. Discuss people capability initiatives currently being undertaken by organisations/sectors in the primary industries in relation to post farm gate requirements.
4. Identify ways to attract and build talent at a post farm gate level.

Methodology

¹ Refer to Appendix 1 for an example of an agrifood value chain illustrating the difference between on farm vs post farm gate

A combination of desktop research, literature review and interviews have been undertaken for this research project.

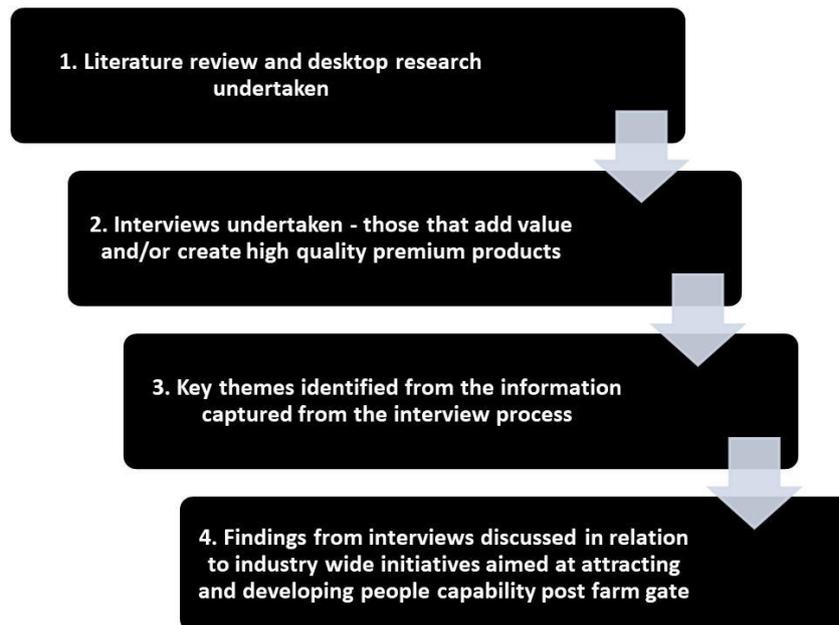


Figure 1: Approach used for research project

With a focus on post farm gate people capability requirements, it was decided that the research would concentrate on businesses that add value to agriculture commodities and/or create high quality premium products and services (in particular those that export but not limited to). Those that were interviewed held senior positions and represented a cross section of sectors, businesses and industry involvement and/or had experience competing in international markets.

Industry Leaders involved in value add and/or high value: (n=3)

Organisations interviewed: (n=16)

- Allflex
- Appleby Farms
- Carr Group
- Duncan Venison
- Fonterra
- Lewis Farms – Tendertips Asparagus
- Miraka Milk
- NZ Merino
- Oha Honey (previously Watson & Son)
- Pamu (previously Landcorp)
- Silver Fern Farms
- Spring Sheep NZ
- Taylor Pass Honey
- The New Zealand Luxury Group
- Waikato Milking Systems

- Zespri

A total of 19 interviews were undertaken as part of this project. Open interview questions (see Appendix 2) were chosen to provide flexibility in the answers generated and reduce the interviewer bias of expected responses. A semi structured interview method also allowed for the interview questions to be refined throughout the process and the discussion to develop organically.

Key themes were then identified from the information collected through the interview process. With a focus on post farm gate, the findings were then discussed in relation with current industry initiatives that are aiming to attract and build people capability in the primary industries. A high level review of these initiatives was undertaken as a base for comparison.

Limitations of research – while a larger sample size of interviewees would have provided a greater level of validity from the data and information collected, the research has included a range of businesses across a number of sectors within the primary industries. The information that has been collected has generated high level themes that can be explored in detail at a later date. It is also acknowledged that the cost of and investment required to attract and build people capability has not been taken into consideration as part of this research project.

3. LITERATURE REVIEW

While much has been written about attracting and developing people capability in the primary industries, there appears to be limited amount focussing on people capability required post farm gate. This however may be due to the large number of roles and functions undertaken between the food producer and the final customer and the cross over between major New Zealand industries with number of businesses associated with other industries in addition to the primary industries – for example the Manufacturing Industry, Technology Industry, Food and Beverage (Ministry of Business, Innovation and Employment 2018, NZTech website 2018 & Ministry of Business, Innovation and Employment website 2018).

One of the most recent and comprehensive reports undertaken to identify the people capability requirements for all sectors in the primary industries from within the farm gate and post farm gate right to the end consumer is 'The future capability needs for the primary industries in New Zealand' report commissioned by the Ministry for Primary Industries (2014). This has provided the majority of the background information for this literature review and research overall.

Similarly there have been a number of reports written on the value chain in relation to New Zealand's primary industries and sectors. Many have written about the need to further add value to the agricultural products New Zealand produces. While many touch on what is required, the people capability part to the equation is often overlooked. The bulk of this literature review has been driven by themes and global trends in the international market environment and workforce in general to provide an outward perspective of impacts on future people capability requirements for New Zealand's primary industries.

People capability and the primary industries

Made up of horticulture, red meat and wool, arable, dairy, seafood, forestry, and other primary exports (Ministry for Primary Industries, 2014, 2018) New Zealand's primary industries requires a diverse range of people capability across the value chain from primary production, processing and support services. To ensure New Zealand's primary sector continues to be internationally competitive, it is important to attract and build on the people capabilities required to adapt to new technologies, regulations and consumer demands emerging in the global agri-food system (KPMG 2018) in particular skilled and capable trained people in multiple disciplines throughout the value chain if the New Zealand primary industries are going to grow (Ministry of Primary Industries 2014, 2018).

Being highly innovative throughout the value chain has been emphasised as a must (Ministry of Primary Industries 2014). A report released by the World Economic Forum (2018) indicated that it is critical for countries to build readiness and develop unique capabilities within global agri-food value chains. If countries cannot build capabilities and connectedness quickly, then they may lose out.

Traditionally New Zealand has developed a knowledge base around pastoral based farming. Industry initiatives underpinned by people capability have previously helped with delivering productivity improvements, improved inputs, extension systems and technology which have contributed to New Zealand's competitiveness in agriculture internationally (Bensemann 2016). New Zealand's agriculture revenue growth has historically been dominated by increased volume and commodity prices shifts however increasing exports by doubling production is no longer an option (KPMG 2015). A change in Government at the end of 2017 has meant focus has shifted from doubling exports by 2025 to an emphasis on the environment and sustainability by gaining more value out of the products the primary industry produces (KPMG 2018). To accelerate the transition from commodity to high-value there is a focus to diversify New Zealand production systems and shifting them from that of volume towards value (Ministry for Primary Industries 2018). In order to do this, attracting, building and retaining the right capability to aid this direction is critical.

The 2018 KPMG Agribusiness Agenda suggests that to successfully grow, transform, export and market New Zealand's premium food and fibre products to the world it involves mastering many moving parts. The report also highlights that New Zealand agriculture exports are not competing in the primary producers sector and place importance on the fact that they are competing against highly sophisticated, consumer packaged goods companies (KPMG 2018). These point to the importance of future capability needs throughout the value chain and more significantly post farm gate.

Bensemann (2016) suggests a new paradigm of pivoting the focus from behind the farm gate to what's going on globally is needed to take New Zealand agriculture to the next level of development. The accelerating pace of change makes the strategic decisions around people capability increasingly important. Sectors in the primary industries in traditional commodity based supply chains risk becoming irrelevant. To create value, compete and survive in a global market, organisations are required to effectively interact with multiple stakeholders within and outside their supply chain. Therefore investment in people capability alongside the adoption of new technologies is necessary to meet the evolving demands of international consumer markets (Bensemann 2016).

Future people capability requirements – a focus on post farm gate

The future capability needs for the primary industries in New Zealand report commissioned by the Ministry for Primary Industries (2014) is one of the most recent and comprehensive reports undertaken to identify the skill needs for all sectors in the primary industries from within the farm gate and post farm gate right to the end consumer. Completed by the previous Government, the reports goal was to provide analysis of sector trends and employment information to develop an understanding of the skills and capabilities required at production, processing and service level in order to meet the strategy of doubling exports by 2025.

Although doubling exports by 2025 is no longer the strategy of the current government, the report still warrants consideration as both strategies are underpinned by improving export earnings through increasing the amount of value added to primary commodity production. The numbers established by the report are reported at two levels – ‘strategy’ and ‘business as usual’. For the purpose of this literature review and research project, the ‘business as usual’ figures have been used to provide a baseline.

Given the need to add more value to the products the primary industries produces it is not surprising that the report highlights the need for new workers in sales and marketing, management and transport occupations, have trained in engineering, business and agriculture. It suggests more of the following skills will be required in order for the primary industries to be successful in the future:

- Production (whole farm systems, resource management, staff management)
- Science skills to develop new products and processes
- Marketing skills into new markets
- Engineering skills to develop new processes and products
- Technical and management support.

Of these skills suggested above, it has been noted that four out of the five are post farm gate. It was identified that there is a need to maintain and add value especially in areas of processing, packaging and logistics. The importance of scientific, engineering and information technology skills were highlighted as a result of continued innovation being essential in the future. Marketing skills (coupled with language and cultural skills) technical expertise and in-depth knowledge of the product attributes have also been emphasised as necessary to develop and maintain strong customer relationships in premium international markets. Fundamentally these are the types of skills foreseen to be needed to accelerate the transition from that of volume towards value (Ministry of Primary Industries 2014).

The report projected growth in people capability requirements for the industry overall was expected to come from post farm gate, while it is estimated that there will be little change to levels required in primary production. Not taking into account natural attrition, of the 27,080 extra people required by 2025 it is expected that 23,014 will be needed in post farm gate roles (Ministry of Primary Industries 2014). This increase has been attributed to the increasing need of support services. It is also attributed to the expectation that as primary production and processing becomes more sophisticated and greater value is added beyond the farm gate all the way to the consumer, demand for qualifications in fields of specialisation aligned with the value chain will rise. Access to a wider skill base will be required due to a greater demand for engineering and construction, management and commerce, social sciences, agriculture and environmental qualifications was identified (Ministry of Primary Industries 2014).

Working with the Primary Industries Capability Alliance (PICA), Dairy NZ, Ministry of Primary Industries, Primary ITO, Tertiary Education Commission, Ministry of Education and Ministry of Business, Innovation and Employment, Scarlatti (2016) undertook a programme of research in relation to the capability in New Zealand's primary sector. The paper published, 'Perspectives on research into human capability in New Zealand's primary sector'. While the in-depth analysis concentrated on three sectors (dairy, sheep and beef and forestry), it acknowledges that many of the findings could also apply to other production sectors in particular horticulture and arable.

Scarlatti (2016) notes that there is still a need for initiatives to attract those on-farm with replacement demand warranting as much attention as that of growth demand given the size of the primary sector workforce. Even though primary production workforce is expected to remain unchanged at 140,000, the net replacement demand for farm workers and farm managers is one that is at the more extreme end of the scale. For example, for farmer and farm manager numbers to remain at around 60,500 over a 13 year period, it was estimated that there will need to be approximately 26,800 new recruits (over 2000 per year) to replace those retiring or moving to another occupations (Ministry of Primary Industries 2014).

The paper also indicated there is a potential opportunity at workforce level that is currently being untapped by the primary industries overall. It was found that around 50 percent of the new recruits to dairying, beef and sheep and forestry are 25 years of age or more implying more people are coming into the primary industries from other jobs than directly from secondary school or tertiary institutions. Targeting people 25 and older and directing recruitment toward other industries may be of greater value (Scarlatti 2016).

The impact of global trends

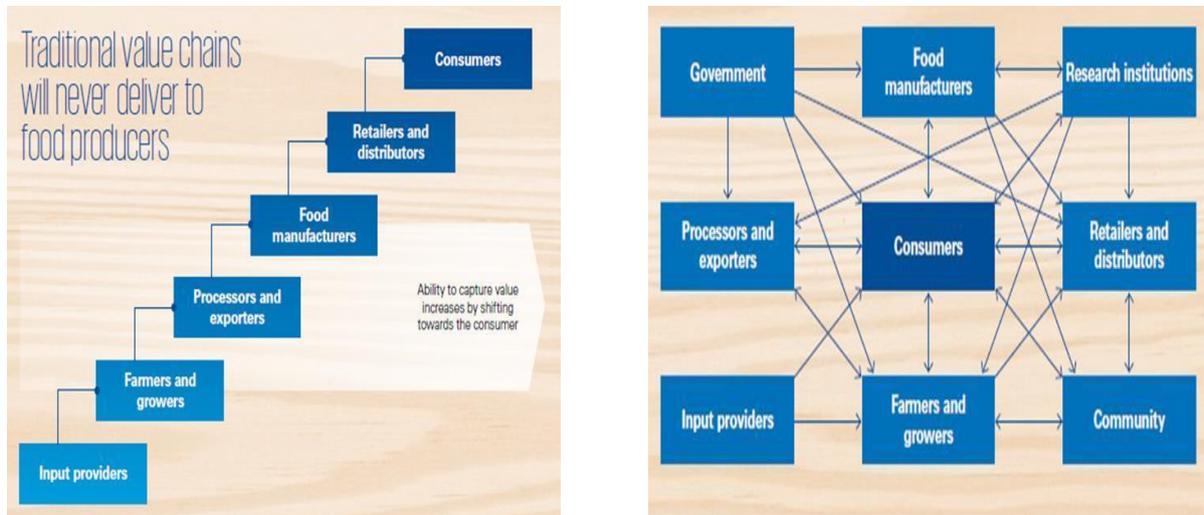
Major global agri-food trends and changes to the future workforce make-up will transform the way business is done and in particular how individuals and society interact. It is recognised that the skills and knowledge will need to keep pace with disruptive technologies, the changing demands of society and evolving consumer preferences. This will be against a backdrop of agriculture being at the centre of many pressing issues worldwide like the environment and climate change alongside surging populations and changing economic landscapes in developed nations (International Food and Agribusiness Management Review 2012).

The Consumer

The complexity of consumer expectations are transforming business models forcing companies to adapt the way they design, market and deliver products and services. The customer continues to increase their dominance in the role of global agriculture. Ultimately to be successful the consumer must be central to everything. Without the customer being the main focus for agricultural based products, the competitiveness of low-cost manufactured exports/commodities as a means for growth and development will be at risk (World Economic Forum 2018).

KPMG (2018) suggests that that traditional concept the lineal value chain is being replaced with a complex 'value web' that is built around satisfying the needs of a consumer. The ability to capture

value from agri-food and fibre products is shifting towards the consumer. There are opportunities to capture more value from markets with many of these opportunities taking place further up the value chain and closer to the consumer. Furthermore the result of technology allowing customers to be connected 24/7, production activities are being increasing linked more closely to the final consumer customers making market selection even more critical than ever (KPMG 2018).



Source: KPMG 2018

Figure 2: Traditional Agri-food Value Chain vs Future Consumer-Centric Value Web

KPMG (2017) identified that consumers want to hear stories that verify product attributes and attach them to the way it is grown, processed, exported and distributed. If everyone involved understands the consumers expectations for a product, this will enable all parties in the web to maximise their contribution to delivering a high-value product and in turn, be rewarded (KPMG 2018).

It has been reported that countries make around \$250 billion out of New Zealand’s food exports (KPMG 2016; Farmers Weekly 2018) when as a country \$42.6 billion is made from the agricultural products produced and processed (Ministry of Primary Industries 2018). With consumers increasingly demanding transparency, every stage of the value chain has the potential to add attributes to create a product that consumers may find more valuable. Increasing the value and appeal of the product leads to the consumers’ willingness to pay a premium (KPMG 2017).

Other significant trends have seen consumers are continuing to look for new innovative product. Replicating the eating experience of traditionally grown food has given rise to alternative protein products. Research has shown that a group of consumers are choosing to make what they feel is an ideological decision to eat alternative protein which in part is linked to broken food systems, the perceived negative environment and animal welfare impact and concerns for health and wellness. This has boosted the acceptance and mainstream availability of these food products and has seen a large investment from wealthy and well-known international company’s experienced in creating and marketing consumer brands (Beef & Lamb NZ 2018).

On top of this evolving consumer lifestyles are also driving the change in the formats in which food will be presented. Many consumers seeking easy food solutions that are nutritious and fit in with their life has seen health and wellness. This is playing a central role in shaping large food company

strategies for example from low health products to nutritional scientifically advanced functional foods (KPMG 2017).

Technology

Technological advancements are responsible for having a significant influence on the consumer becoming the central focus. On top of this the impact is being, and will be, felt on the workforce configuration and the people capability required adapting to the unprecedented changes taking place. AI, robotics, and automation have dramatically accelerated in the last year, transforming in-demand roles and skills inside and outside organisations (Deloitte 2018). The advancement in this technology combined with the Internet of Things, has meant the world is hyper-connected. This has brought about a shift in power to the individual and people can now track information about companies and their products, express their opinions to a wide audience, and sign onto social movements, globally and in real time (Deloitte 2018).

Emerging technologies such as Blockchain will potentially provide consumers with transparent information on provenance addressing the demand and interest for food safety and sustainability. The significance of Blockchain technology to drive new and more connected value chains has resulted in a consortium of leading food brands including Nestle, Walmart and Unilever to join with IBM to investigate areas of the food supply chain that would benefit from this technology (KPMG 2018).

Developments in technology have also enabled distribution direct to customer sales channels providing alternative routes to markets outside the traditional food retail channels. An example of this with meal kits where growth has been driven by technology and consumer demands. Carving out a profitable niche market in the US, spending on meal kits is growing three times faster than other channel. This is the result of consumer desires for fast and fresh pre-portioned ingredients for complete meal prep at home. Customer insights have shown that one fourth of US households which equates to more than 30 million say they would consider trying a meal kit in the next six months (Nielson 2018).

To be able to maximize the potential value of these technologies, it will be essential that people are at the forefront minimise the potential adverse impacts on the workforce in the future through retraining people and new business models (Schwab 2016). It is expected that creativity will become one of the top skills needed to deal with and benefit from the expected technological changes driven by the Fourth Industrial Revolution. It was noted that negotiation and flexibility will begin to reduce in importance as it is predicted machines using data may begin to influence decisions more. It was also identified that Emotional Intelligence will become one of the top skills required in the future (Gray 2016).

in 2020

1. Complex Problem Solving
2. Critical Thinking
3. Creativity
4. People Management
5. Coordinating with Others
6. Emotional Intelligence
7. Judgment and Decision Making
8. Service Orientation
9. Negotiation
10. Cognitive Flexibility

in 2015

1. Complex Problem Solving
2. Coordinating with Others
3. People Management
4. Critical Thinking
5. Negotiation
6. Quality Control
7. Service Orientation
8. Judgment and Decision Making
9. Active Listening
10. Creativity

Source: World Economic Forum 2016

Figure 3: The 10 skills needed to thrive in the Fourth Industrial Revolution

The future business environment is expected to look very different to that of today. Not limited to any one industry, the survey of 1,207 business leaders from Australia and New Zealand predicted that more than one third of the desired skill sets of most jobs will comprise of skill sets not yet considered as crucial today (Chartered Accountants Australia and New Zealand 2017). With businesses needing to ensure productivity and profitability in a fast changing global business environment, attracting and retaining talent with the right skills will be a key focus. The most important skills identified for the future across sectors and across jobs were problem solving and communication, the importance highlighted with almost three quarters of Australian and New Zealand businesses rating these skills as very important to the future of their business. This was followed by adaptability and agility. Resilience, collaboration and the ability to build relationships quickly was also highly rated. Skills like collaboration and problem solving are more difficult for technology to replicate while adaptability, resilience and agility are core capabilities essential to navigate constant change and uncertainty in a global business environment (Chartered Accountants Australia and New Zealand 2017).

Millennials

Millennials, those that were born between January 1983 and December 1994 (Deloitte 2018) are at the forefront of many changes at a technological, customer and workforce level. Millennials are driven by their social values, holistic wellness goals and prioritisation of experience over the product. Their new eating patterns and sheer size are driving change and are starting to reshape the food industry (Beef and Lamb NZ 2018).

The future workforce and business models will also be part of the millennial impact. Described as a new type of employee, they are less loyal and seeking a deeper connection with their employer. Much of the research suggests millennials are motivated by more than just the pay cheque - they want a purpose (Chartered Accountants Australia and New Zealand 2017, Gallup 2016). Research conducted by Deloitte (2018) of 10,455 millennials across 36 countries showed that social conscience plays a role in where Millennials work and what they buy. Furthermore they think that business success should be measured in terms of more than just financial performance. With Millennials making up the majority of the workforce in many countries, their sheer size means that their influence will likely grow over time (Chartered Accountants Australia and New Zealand 2017).

Research has also shown that millennials are the generation that are least loyal, least engaged and most likely to switch jobs. For example in the US millennials are three times more likely to change jobs than non-millennials with millennial turnover costing the U.S. economy approximately \$30.5 billion annually (Gallup 2016).

Global trends in relation to people capability in the agri-food industry

The above trends will require the development of new skills, and changes in working patterns and relationships at all levels of an organisation and industries (International Food and Agribusiness Management Review 2012). Companies that put people on the ground to understand and respond to the subtle changes occurring as a market develops will be the ones that have the best opportunity to edge out competition (KPMG 2018).

In preparing for a future influenced by international trends like these, a report undertaken by the Australian Government (2015) identified only two viable strategies for the Australian Agri-food sectors – niche producer of highly-differentiated goods and services or large scale volume producer with preference toward niche producer. It suggests ‘anything in the middle’ will struggle and will come under increasing pressure. With advances in technology, they also expect that agri-food supply chains will transform away from being a labour intensive industry with the introduction of new and improved levels of mechanisation, automation, robotics and remote sensing. As a result they foresee that the “industry will be dominated by a new breed of technicians and technologists, astute marketers and innovative product developers, meanwhile any job or function that can be converted into an algorithm will be replaced by technology” (Australia Government Department of Education and Training, 2015. p2).

Highlighting the importance on building a future skill base for Australia’s agri-food sector, five key priorities were identified as:

1. Attracting motivated, smart and adaptive workers
2. Building world-class business capability and risk management expertise
3. Increasing enterprises capability to adopt new technologies and research outcomes
4. Building higher levels skills and knowledge within the existing workforce
5. Retaining the best and brightest workers

This is supported by an overarching industry wide vision for their agri-food industry of “A globally competitive, profitable and sustainable agri-food industry built on world class skills, business excellence, technology and innovation” (Australia Government Department of Education and Training 2015. p.22).

Attracting, motivated, smart and adaptive workers is one priority to address the fast pace changes occurring in their agri-food industry. It was recommended that they develop a national brand and common, contemporary narrative for agri-food careers for customisation by each sector with the recommendation National brand and single national portal for agri-food careers. Another suggestion was to establish and pilot a contemporary, flexible model for agri-food technician/para-professional cadetships in new and emerging job roles (Australia Government Department of Education and Training 2015).

In order to retain the best and brightest workers it was identified there was a need to establish and promote skill based career pathways for existing workers within and across agri-food sectors to improve attraction and retention in the industry (Australia Government Department of Education and Training 2015). It was also noted that due to commodity groups, sectors and occupations working in silos there was little connection or recognition of career pathways into other parts of the industry (Australia Government Department of Education and Training 2015). Research has indicated that future work will see industries move beyond jobs to skills with the transferability between different roles and projects (Chartered Accountants Australia and New Zealand 2017).

Globally the agri-food industry is grappling with attracting those capable of driving the agricultural value chain. As the sophistication of agribusiness grows, this requires investing in science, technology, engineering and math and then attracting the best and brightest to become the next generation of agri-food innovators and industry champions. It has been suggested that those that do not invest in people capital will not reach their full potential (International Food and Agribusiness Management Review 2012).

Case Study – Building people capability to compete in international markets: the case of Ireland

Bord Bia (Irish Food Board) is the industry good body that represents all food and beverage, farming and processing sectors for Ireland. Driven by an overarching industry vision and strategy, the organisation is heavily market focused and invests significantly in understanding consumer insights and behaviour. All activities undertaken domestically by Bord Bia are orientated towards that market focus.

With a focus on enhancing the talent of people involved in the agri-food industry in Ireland, Bord Bia's Talent Development Programme is key to providing education, development and placement programmes to ensure the continual delivery of high-quality talent. The programme was developed to introduce new talent and ideas with its overall purpose of creating new lines of recruitment for the industry.

Partnering with some of Ireland's top business schools and universities, the majority of the programmes they attract people who have 3-4 years commercial/work experience already, regardless of industry background. Experience in food and drink is an advantage, but overall they focus on attitude and carry out rigorous assessment centres. Some placements will require fluency in a second language (for example French, German, Spanish, Italian, Dutch, Russian, Polish, Japanese or Chinese). A programme run with younger students who have a degree are placed with Bord Bia itself. With 75 places available across these all-expenses paid programmes, many involve a short period attending university lectures and the rest working with Bord Bia's client companies on projects or being placed in customers of client companies. On average the programmes are 18 months in duration.

On completion Bord Bia focuses on placement of programme participants in business/commercial and marketing roles. While an actual figure has not been put on the value of the Talent Development initiatives, a survey conducted on one of the programmes found that \$200 million in sales had been generated over the time it has been running. Retaining a high number of people for the industry is also of value - to date there has been an 80% retention rate.

Example of the programmes available as part of the Bord Bia's Talent Development initiative:

The Origin Green Ambassador Programme takes 10 people who are committed to the better management of the planet's resources on a 23-month journey towards an MSc in Business Sustainability. Placed with global businesses that are playing leading roles in sustainability development, Origin Green Ambassadors quickly

become trusted partners and take leadership roles in the development of important initiatives. In doing so, their engagement provides an invaluable opportunity to share the vision of Origin Green, and the commitment of Irish food and drink companies to it.

Global Graduate Programme/Food Marketing Programme places graduates attracted by an international career on paid work placements with Bord Bia's network of overseas offices. Likewise the Food Marketing Programme places graduates with Irish Food and Drink Companies. A large part of this placement takes place in an overseas market. Offering invaluable market experience which can act as a foundation for a successful career in the food sector, the programmes combines on-the-job experiential learning and an academic qualification.

Fellowship Programme offers graduates with a minimum of two years' work experience, the opportunity to work overseas with an Irish food company and to gain masters qualification. The programme now in its 7th year has had more than 150 professionals participated. A key element of the programme sees an in-market placement.

Design Insight & Innovation Programme, a new initiative designed to support and promote consumer-focussed innovation and new product development in the Irish Food and Drink Sector, based on the principles of Design Thinking.

Information sources: Tully (2018), Bensemann (2016) & Bord Bia Website (2018)

4. FINDINGS & DISCUSSION

What does success look like for the New Zealand primary industries in the future? It will not be what has already been done! This has come through consistently with much of the literature research and the responses received through the interview process. With a reliance on exporting the majority of what is produced in New Zealand, strong importance has been placed on attracting and developing people capability in the primary industries in particular post farm gate and at an international market level.

With a focus on post gate capability requirements, the findings in this section are the results of interviewing businesses that add value to agriculture commodities and/or create high quality premium products. These findings have then been discussed in relation to the literature review that was completed and people capability initiatives that are currently being undertaken by the primary industries in New Zealand (see appendix 3 for a high level overview of industry initiatives).

Those that the information was collected from represented a cross section of sectors including dairy, red meat, wool, agri-tech, apiculture, arable and horticulture. The majority competed in a number of international markets, or had the intention to in the future. Many of them were also involved, or touched, every aspect of the value chain and there were a number of businesses involved in more than one sector. Although they sold to customers, or had customer brands, the majority had business to business customer relationships and did not sell directly to the final consumer. It was also interesting to note that a number of businesses are also associated with other industries such as manufacturing, technology and food and beverage.

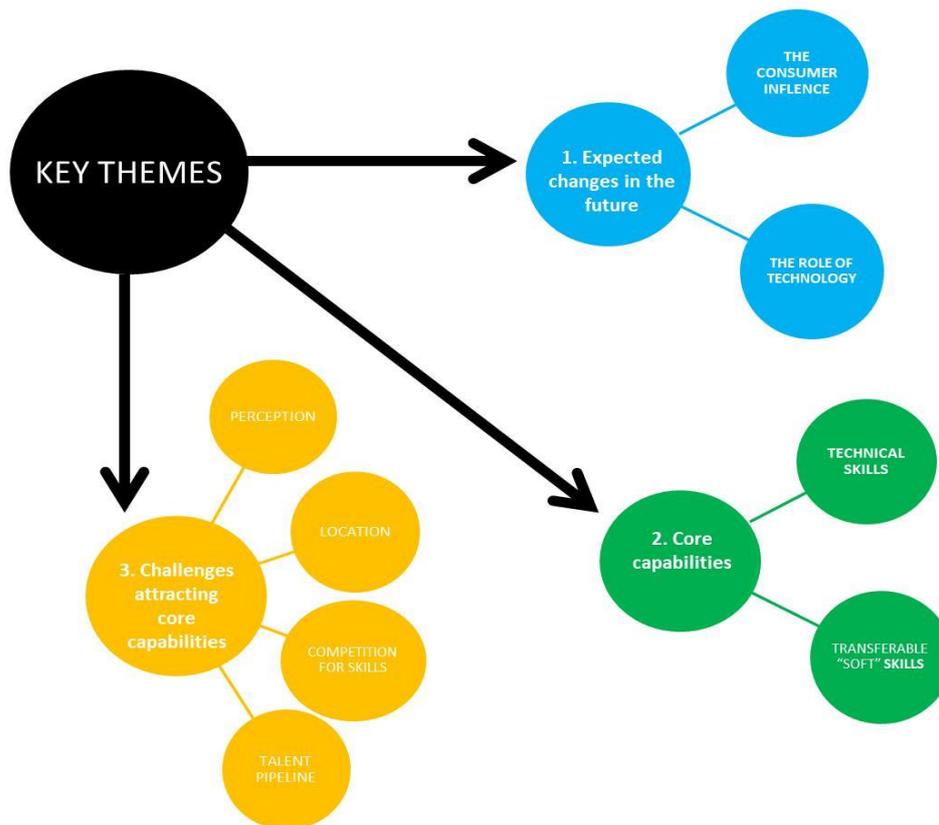


Figure 4: Key themes identified from interviewing those add value to agriculture commodities and/or create high quality premium products

4.1 Expected changes in the future

It is expected that there will be many changes to business and within the primary industries in the next 10 years, more so than that has occurred historically. Two main themes were identified here – the consumer influence and the role of technology. The rapidly changing nature of consumer demands was regarded to have a major influence on change and the way international markets are developed in the future. This is followed closely by the rapid development and disruptive nature of technology that is expected to occur and in particular how these will likely influence businesses decisions in a global market place in the future.

The Consumer Influence

Customer driven products and market development, and the rise of the conscious customer with access to more information through the advances of technology was felt to drive change in the future with customer demands shaping the products businesses produce. Many of the respondents thought that businesses will need to become more “nimble and agile”, move and develop products quicker due to changes in customer preferences globally. An example of this was the rate of category disruption that is already taking place and it is foreseen that the pace of this will likely speed up. “Even good products are having a shorter timeframe in market”.

Responses show that there will be a greater need for more “customer centric” business models with some acknowledging they will have to adjust their businesses to meet the needs of customers in the future. It was highlighted that businesses must understand the future customer and the channels they will be influenced by. It was thought that technology will play an increasing part in influencing and connecting with the final consumer. “Design thinking” – where products are designed around customers – was raised a number of times indicating the importance placed on market insights. A number suggested that more people will be needed off-shore and that a greater amount of time spent in-market is essential to fully understand the international customers they serve.

Development of markets was consistently a consideration for the future. In particular it was highlighted on a number of occasions that they compete in international market place therefore taking a global perspective is extremely important for businesses and the industry. In the future many had a focus on developing those markets that would return greater value which was dependent on the customer. For example one business foresaw that in the future 95% of their business would be offshore and 5% the NZ market when currently it was only a domestic brand.

While some looked to get closer to the end consumer others looked to partner with high-end businesses. Again it was emphasised the importance of being located in-market to develop these markets. The New Zealand Primary Collaboration was given as an example of the huge potential opportunity for much more ‘in-market’ collaboration to minimise cost and build capability.

A number of the respondents also acknowledged the rising influence of the “conscious customer” – a large group of consumers where social elements (like environmental footprint, how well the people in the business are looked after and animal welfare) are important considerations when purchasing a product. It is foreseen that these social elements will be an important part of telling the story as customers are increasingly interested in where their food comes from. In particular a wave of pressure domestically and globally around environmental and animal welfare is expected to increase traceability, drive change in diversifying farming systems and packing solutions. These impacts are expected to be felt by the entire value chain.

The role of technology

Technology is seen a big disrupter of change, if not one of the biggest in the next 10 years. Connection with customers and a drive in alternative sales channels are expected to impact businesses and industry. Although technology impacts are different for all the respondents depending on the business they are involved in, the role and pace of technology is seen to have an influence at many levels from making it easier for brands to launch, automation within businesses to the progression of digitalisation in the way businesses procure and sell products. New technologies are expected to offer channels into sophisticated and targeted markets to ensure different financial rewards.

It is also expected that digital platforms will transform the supply chain in terms of the speed to coordinate but also to validate farm based attributes. While there are many opportunities it was suggested that the capability needed to deal with this will be different and there will be certain skills required to effectively manage how new technologies are employed. For example a mix of people and technology will need to be employed. AI machine learning and automation means that the skill set will change to building algorithms will still need people to input information. Although it can reduce the reliance of people in other cases, some roles it will be hard to do this with.

While some mentioned workforce design (in particular as a way of competing for the skills required in their business and providing a flexible culture to retain key people) and the challenges foreseen around managing millennials in their business (given their needs are quite different and have grown up with more technology than any other generation in the workforce), the focus has been more on the changes and impacts that customers and disruptive technologies will bring in the future.

4.2 Core capabilities required in the future

A wide range of capabilities are required post farm gate given the numerous roles that are required throughout the supply chain. Broken down into two themes – technical skills (which includes qualifications) and transferrable ‘soft’ skills - it was strongly recognised that while a qualification and/or background in food production or the primary industries is useful, soft skills such as attitude, communication, agility and adaptability rated more important given the fast pace nature of change.

It is thought that the technical/qualifications and transferable ‘soft’ skills that were highlighted during the interview process will still be relevant in the future but in a slightly different form due to being shaped significantly by technology.

Technical Skills

Post farm gate capabilities cover a wide range of roles so it was not unexpected that there would be many different technical skills required depending on the type of business, the sector they were in, and which part of the supply chain they were positioned. The specialist roles mentioned ranged from Vets, Agronomists, Quality Assurance and Procurement to Fabricators, Designers, Engineers and Software Developers.

Some were also moving away from generalists to specialist representatives as the need for products and services become more sophisticated. This was the case where products supported food production servicing customers within the farm gate. For example as technology drives preventative animal health detection there will be the need the likes of more vets within these businesses.

While it is acknowledged that there are many more specialist skills employed and required in the primary industries, many of the technical skills that were required by businesses that add value to agriculture commodities and/or create high quality premium products were customer and market focussed. Capabilities required ranged from Market Insights, Consumer Behaviour, Market Development, Marketing, Sales, FMCG and Supply Chain Management to

Product Development, Food Technology and Food Science. All identifying with the final consumer, many of the interviewees emphasised the importance of time and experience in market and being able to develop markets in an international environment. The need for these capabilities on a global scale was highlighted a number of times. In particular the need for people to understand and connect with the customer and attain market insights e.g. what drives their decision making and turning these into commercialised value propositions. There is a need for design thinking – developing the product from the market back in order to be able to capture more value and convincing consumers that it is worth a premium. Execution of this and developing a mechanism to capture the value requires a very different skill set from that of being historically wired to sell commodities.

The skills acknowledged above align with those identified by the research undertaken by the Ministry of Primary Industries (2014). It is expected a mixture of these technical skills and qualifications identified will all be influenced by a great technological component in the future though. For example with more channels to sell products through in particular online, Sales and Marketing will need to have more expertise in digital marketing and the ability to convert sales through tech type platforms. Of interest was the consideration on how to structure these capabilities within the business. It was commented on that there will still be a need for core base skills but whether they are employed in house or outsourced/partnering was being considered due to everything moving so fast.

Transferable 'soft' skills

Many recognise that these softer skills will be required more in the future in order to respond to the rapid pace of change which is also foreseen to include another wave of technology. It was suggested that traditional qualifications may not be able to futureproof capability as it is expected that so much will evolve in 10 years' time.

Aligning with the findings by the Chartered Accountants Australia and New Zealand (2017), the core key transferable 'soft' skills that came through most strongly from the responses and thought to be the most important are:

1. Agility and adaptability
2. Attitude
3. Communication
4. Empathy and understanding
5. Building relationships.

Agility and adaptability was seen by many as one of the most important skills given the amount of change expected. The need to adapt and manage change through problem solving and being a quick inquisitive learner in particular with adopting new technologies provides resilience in order to respond to this change. Associated with this, it was also suggested a 'can do' attitude is more important than having right qualifications. People with right attitude were thought to that think differently and have a genuine interest to build trust relationship. Passion was something that was also considered when referring to attitude. It was thought getting the people who have a passion for the industry and want to grow and be part of the business is an important component of attitude. It was noted that people don't necessarily

have to come from the primary industries but it was important that they have the “desire to learn” and they “seek to understand”.

Communication was another skill that came through strongly. On one side communication was thought to be an important component in building the narrative around the offering in order to build an emotional connection with the customer. In particular there is a need to get product messages across to consumers with limited attention spans and competing demands.

Given the nature of these businesses competing in an international environment communication and building relationships played an important role due to the diversity of cultures they are dealing with in market. For example building partnerships within the distribution chain requires strong communication skills in order to be clear on what needs to be delivered – “you can’t make assumptions”. It was noted that “people do business with people” and that trust is key. Strong relationships and networks are important to build emotional connections. Even with technology relationships will still play a key part of business.

Communication is also important for building empathy and understanding and in building relationships which were highlighted as important skill sets. Building empathy and understanding was recognised as a core component of customer centricity which all of the responses have identified in one way or another. Many suggested the customer needs to lead the idea to ensure the product is fit for market (design thinking). How products fit into other cultures is thought to be fundamental to create premium and capture more value. The value of being in market was also raised again at this point as being integral to build empathy and understanding. This also extended to building relationships as well.

It was also noted that “people are your greatest resource” and that companies will have to think about developing their own people for the future. Interestingly businesses with smaller teams looked to bring in skills that were needed into their business by outsourcing functions rather than employing them full time. It was noted by one that “smaller companies don't seem to spend enough time developing people”. This tended to be due to limited resources or fast growth. In contrast many of the large organisations had greater resources to develop people capability within the business. For example Fonterra recently launched a programme called Amplify (AMP for short) where employees can apply to work on projects outside their day jobs in an effort to build capabilities and prepare for the ever-evolving nature of work. With a big focus on experience based and on job learning employees can spend up to a third of their time on a project (Fonterra website 2018).

4.3 Challenges attracting core capabilities post farm gate

While there are numerous challenges for businesses and the primary industries when it comes to attracting and developing future people capability post farm gate, four main themes strongly emerged. These have been identified as perception, location, competition for skills and talent pipeline.

Perception

Overwhelmingly perception was named by all of those interviewed as one to the biggest challenges for their business and the primary industries. Not seen as being a “sexy” career option and the perception that agriculture is not for the best and brightest continues to still be a challenge when trying to attract the people capability required. Compounded by negative news stories, regulation and disconnect with food production has added to this.

It was widely recognised that “we need to tell our story better” and connect from an early age by building agriculture into education. The need “to tell a unique story” and one that is relevant, inspiring and that resonates is deemed to be important in order to have an industry that people want to be part of - “a lot of people really care about where their food comes from”. It is also seen to not be helped by the term “Primary Industry”. For example it was widely thought that this is not exciting, does not connect with the wider public and is a term not clearly understood especially by those outside the primary industries. There is a need to connect the industry more with the final product for example referring to the industry as Agri-food and Fibre, the Food industry etc. It is believed the term food rather than primary industries changes the mind-set and starts to make a connection. It was highlighted that the industry is “delivering trusted food to global customers” and this does not come across strongly enough.

It was suggested that the narrative across sectors needs to be better connected. This is seen as a weakness at the moment due to inconsistencies. It was mentioned on a number of occasions that the biggest and best jobs are related to primary industries and a whole range of jobs beyond just farming. Young people are looking for exciting careers and opportunities and there are many other industries that promote themselves more effectively and have greater visibility. Also it was noted that more needed to be done to promote the opportunities and breadth of career options increasing the visibility and association of the primary industries with successful well-known brands and progressive international New Zealand food brands from the industry to better connect.

Location

This challenge tended to be business specific. There were a number of businesses based regionally who found it challenging to find the right skill sets, in particular for more senior level positions and for example with FMCG Marketing and Sales experience where these types of skills are more typical in the city. There were a number of reasons for this. This included a limited pool of applicants with the right experience and those that were willing to move regionally had to consider their partners employment which tended to be a challenge for them then to get the work they wanted as well. There were some that found where location was a challenge they were exploring other options in terms of using technology more effectively so those that they employ in future do not need to be based at the regional headquarters and can support remote employees to ensure they get the required people capability for their business.

Competition for skills

Finding the right people with the international expertise came through as being a challenge given the nature that these businesses are competing globally. It was felt that there a number of people with skills but not enough in New Zealand with international experience at a senior level. There is a need for “enough people that have spent time in-market with consumers”. While some are looking to “grow local people to be globally competitive” others are hiring in overseas markets meaning that they are competing with multinationals and other well-known brands which is acknowledged to be an expensive exercise. Closer to home competition for people capability is dependent on sector and business type.

In some businesses and sectors it was noted that getting sufficiently skilled specialist labour at the processing stage was a challenge due to seasonal work. This had impacts on being able to extend or add more value to product lines. For example a lean labour pool makes it harder to do smaller but high value as labour has to be taken away from main ‘business as usual’ product lines. As a result niche added value becomes limited.

Talent pipeline

There was a strong preference for the primary industries to connect at an early age and it was felt that in order to tell the story better it needs to start with schools. There was a number that suggested this be done by building agriculture into education. A better job demonstrating a clear career pathway, sophistication of the industry and scope of opportunities was also highlighted by a number of the respondents. It was suggested that there is a need to think about the way people develop through their life time career and that of re-education and/or coming from other workforces.

It was also acknowledged that to move up the value chain costs money and takes a lot more and different skills – “at the moment the mind-set is far to production focussed”. Noting that it takes time to build up capability, currently the industry is too fragmented across sectors limiting the cross pollination of ideas in this area.

4.4 Review of people capability industry initiatives with post farm gate requirements

This part of the discussion takes into consideration the skills and capabilities identified as important to those that add value to agriculture commodities and/or create high quality premium products and considers these in relation to people capability initiatives currently being undertaken by the primary industries. With a focus on post farm gate, a high level review of industry wide initiatives was completed (see appendix 3 for an overview of industry initiatives).

Industry Focus

After reviewing a range of initiatives that aim to attract and build people capability in the primary industries, it was noted that overall many of these initiatives are sector and internally focussed on immediate skills required primarily at a production level rather than having a view to what is required for the international market and further up the value chain. With projected growth of at least an extra 27,000 people required by the primary industries by 2025, the majority are expected to come mostly in post farm gate workforce roles (Ministry of Primary Industries 2014), it raises the question of the importance of initiatives to ensure the primary industries attract core capability to fill this growth.

This is not to say that initiatives for attracting and developing core capability within the farm gate are not essential for the primary industries. There are currently many challenges occurring around attracting good people for roles in primary production in particular addressing immediate workforce shortfalls. It has been acknowledged that replacement on-farm demand warrants just as much attention (Scarlati 2016). An example of this is the extreme net replacement demand for farmers and farm managers (26,800 new recruits are required as replacements over a 13 year period) (Ministry of Primary Industries 2014).

Perception and industry messaging

It is interesting to note that the perception of the primary industries was identified as one of the biggest challenges that businesses and the primary industries face especially with attracting and developing the people capability required in the future. This is not just a post farm gate challenge but also on-farm making it an industry wide challenge. Frequently it was recognised that there was a need for the industry tell a story that is exciting, relevant, inspiring and resonates. Food was one thing that came through as being able to connect with audiences.

With each sector undertaking their own strategy to attract and build people capability (Ministry of Primary Industries 2014), part of the perception challenge may be contributed to there being no overall industry approach that tells a clear and consistent message. For example the way the industry is referred to is different for different initiatives and sectors. This was evident for initiatives at school level where the Get Ahead programme refers to the Agriculture Industry; Growing New Zealand (Primary Capability Alliance) refers to the Primary Industry; and Agrication (Education in Agriculture) references to Agri and Agriculture. An inconsistent message potentially dilutes the impact of this industry promotion and engagement.

Skill sets and capabilities

Findings from the interviews of business that add value to agriculture commodities and/or create high quality premium products and the people capabilities identified by Ministry of Primary Industries (2014) suggests similar skill sets are required in the future including those with science skills to develop new products and processes, marketing skills into new markets, engineering skills to develop new processes and products and technical and management support. Also those skills that are deemed to be the most important for the future workforce are transferable 'soft' skills, the skills that are vital to adapt to the rapid pace of change driven by technology and market influences.

Yet the majority of sectors that offer scholarships that restrict attracting skills in these areas as many of the initiatives and organisations have a focus on attracting people with qualifications or specific degrees in relation to agricultural subjects which is not necessarily a requirement with many post farm gate roles. Furthermore this talent pool is restricted due to many of the initiatives limiting the qualification to Lincoln, Massey or Waikato Universities when by comparison the capabilities required post farm gate can be gained through a wider number of institutions.

The importance of skills and capabilities required to develop markets internationally came through strongly for those that add value to agriculture commodities and/or create high quality premium products given New Zealand relies on exporting the majority of what is produced by the primary

industries. However there seem to be very few industry wide initiatives that attract or build people capability in this space. It was suggested there is a need to plug into world leaders in particular those from Silicon Valley, Stanford University Professors and where possible. Initiatives such as Te Hono, the Silicon Valley Agritech Immersion Programme Kiwi delegation led by Agritech New Zealand and Nuffield Scholarships are in place aiming to build capability in this area but at a leadership level and while they build international and in-market experience, the time spent in market with customers is time limited (Te Hono website 2018, Callaghan Innovation website 2018 & Rural Leaders website 2018). Greater opportunities for much more collaboration in international markets was something that was suggested to further build capability in this area with the Primary Collaboration New Zealand in Shanghai given as an example. Providing opportunities to move between primary industries sectors to gain greater experience and ultimately add value across sectors is essential if the industry is to grow (Ministry for the Primary Industries 2014, 2018).

Starting with education in schools

Changing the perception of the primary industries as a career and building food production into education at school level was noted as being important. KMPG (2018) also noted that the industry needs to do more to attract school leavers and that the delivery and development of programmes in areas of equipping the next generation with the critical thinking and entrepreneurial talent is needed if the industry is to deliver on its potential.

Although many of the people capability initiatives within the primary industries seem to be more sector specific, there are collaborative approaches taking place across sectors to promote and attract young people to the industries including the Primary Industry Capability Alliance (PICA) Growing NZ initiative (growingnz.org.nz), Get Ahead programme (getahead.co.nz) and Agrication Education in Schools (agrivation.co.nz). These initiatives give young people opportunities to explore a range of careers spanning across the sciences, technology, engineering, and business aspects of the primary industries and also provide teachers with support material.

Most notably is the Education in Agriculture, or Agrication, an initiative focussed on getting agriculture into the main stream education system. Through the Red Meat Profit Partnership, the New Zealand Young Farmers organisation has developed resources aligned to the New Zealand curriculum in the subjects of maths, science and economics. In its fourth year they now have 214 schools registered and are headed towards reaching a 50/50 split of urban versus rural students. They also organise industry speakers for schools and are making in-roads connecting with their audience through telling food stories and though increasing visibility of the opportunities through well-known brands that students do not necessarily associate the primary industries with (Morgan 2018).

Building and developing an industry talent pipeline

Attracting and developing people capability by building a pipeline of talent was something that was referred to on a number of occasions by those that were interviewed. While there has been a big effort to incorporate agriculture in education and engage youth with the primary industries, there does not seem to be a supporting or coordinated industry wide approach that captures or connects the pool of potential talent that has been developed, potentially undoing the work of these initiatives. This occurs in particular at the post farm gate level.

For example it was found that the websites that supported school initiatives, while having good information and promoting the breath of opportunities do not appear to follow through with providing a clear pathway to roles that potential talent can apply for. People are directed to generic recruitment platforms where it seems roles then have no association to the primary industries and to other industries. As a result potential talent is not captured by the industry and the association with the primary industries and food production is lost.

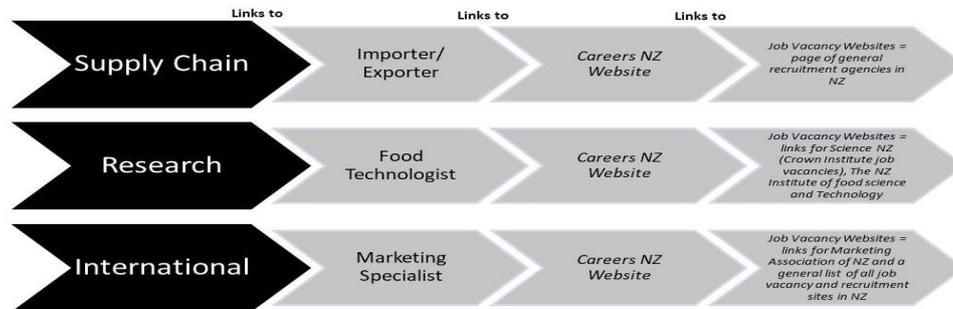


Figure 5: Flow chart demonstrating the process that the Growing NZ initiative directs people on their web platform to careers in the industry. This focusses on post farm gate roles.

This raises the question of the effectiveness to the talent pipeline being built. On reviewing initiatives focussing on attracting and building the people capability required post farm gate show that further on in the pipeline all the work that these initiatives engaging youth with the primary industries is potentially wasted. While they are followed on by a number of sector based initiatives for school leavers and at tertiary level, there does not seem to be a supporting or coordinated approach that captures or connects the pool of talent industry wide in a collaborative way that had been building at earlier stage.

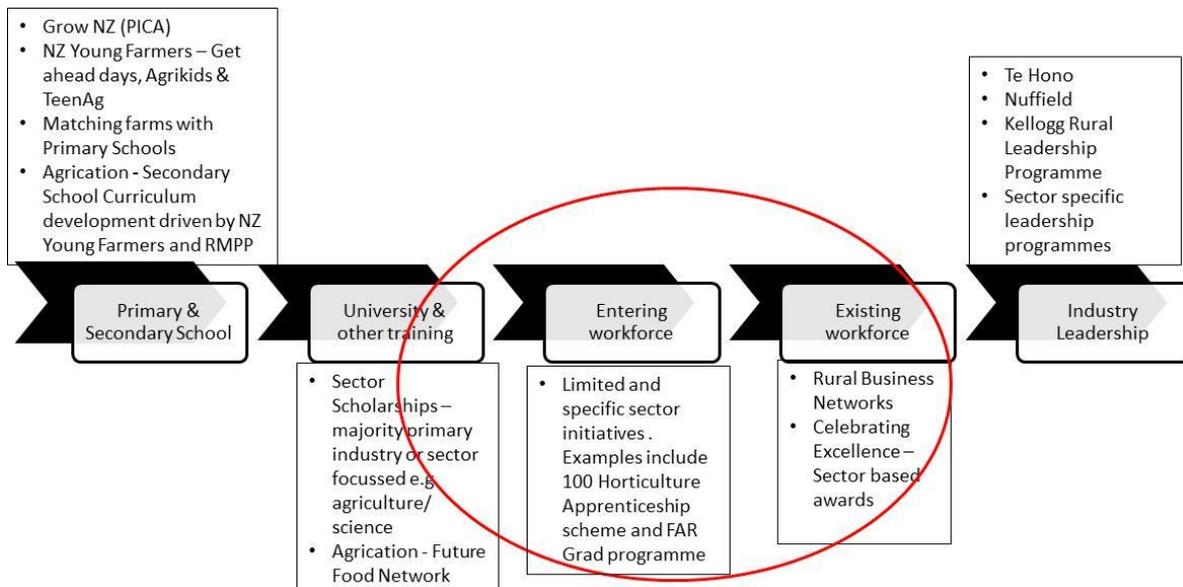


Figure 6: Talent pipeline focussing on post farm gate

There is however a few sectors connecting talent at the workforce level and targeting school leavers. More recently the horticulture sector in association with PrimaryITO has partnered with the Ministry of Business, Innovation and Employment and Ministry of Social Development to offer 100 apprenticeships in to get people into the horticulture and viticulture sectors. Connecting businesses

and potential talent the 100 Horticulture Apprenticeship scheme are linking those entering the workforce and helping to fill the skill shortage at all levels of the value chain (lets grow website 2018).

On a smaller scale, the arable industry through FAR's (Foundation for Arable Research) Industry Graduate Programme, hires graduates on a one year contract to spend a year with FAR gaining a solid introduction to the New Zealand cropping industry. They get to work on a range of research, extension and communication projects at research sites across New Zealand and Australia to get exposure and build experienced capability for the sector. The initiative is open to recent graduates and final year students of agriculture, science and agricultural commerce (Lawrie 2018).

Research has suggested that an effective way to attract the people capabilities needed would be to look toward recruiting from other industries that might already have the skills needed post farm gate (Scarlati 2016). With the competition for skills especially those experienced internationally, and with many of the post farm gate capabilities required for the future not necessarily needing to be primary industry or sector specific, the workforce is one area to potentially explore and provides a greater opportunity to build and connect people capability.

5. CONCLUSION

After reviewing major global agri-food and workforce trends, interviewing those post farm gate that add value to agriculture commodities and/or creating high quality premium products and services and reviewing current industry people capability initiatives at a high level, it was found that there needs to be a greater emphasis by the primary industries on attracting and building people capability at a post farm gate level. This however should not be at the expense of initiatives for attracting and developing core capability within the farm gate.

Overall many of the initiatives to attract and build people capability seem to be sector and internally focussed on immediate skills required primarily at a production level rather than having a view to what skills are needed in order to gain more value out of the products produced at other levels along the value chain. It is expected that out of a workforce of 369,700 there will be around 230,000 people required post farm gate by 2025. Given the expected amount of people required at a post farm gate level and that New Zealand relies on exporting the majority of what is produced by the primary industries, more thought needs to be given as to how the industry attracts and builds future people capabilities throughout different stages of the talent pipeline.

Fundamentally the types of skills previously identified by research as needed to accelerate the transition from that of volume towards value are similar to those identified as important by businesses. With much of the emphasis on skills that were customer and market focussed, the importance of the capabilities required to develop markets internationally came through strongly. While a qualification and/or background in food production or the primary industries is useful, transferable 'soft' skills are recognised as being most important given the pace change businesses are experiencing and are expecting in the future. Agility and adaptability, attitude, communication, empathy and understanding, and building relationships were rated as the top skills needed now and in future.

Although there has been a big effort to incorporate agriculture in education and engage youth with the primary industries, there seems to be a gap at an industry level at the workforce stage. There does not seem to be a supporting or coordinated industry wide approach that captures or connects the pool of potential talent that has been created by other initiatives. This occurs in particular at the post farm gate level. Furthermore the industry limits its talent pool with many sectors focusing on qualifications or specific degrees in relation to agricultural subjects received from a select number of institutions. People capabilities post farm gate require a range of skills and qualifications not just specific to the primary industries and can be gained through a wider number of institutions.

The primary industries face a number of challenges attracting and building people capability. This is not just at the post farm gate level but also on farm. In order to attract the people capability required post farm gate but also throughout the entire value chain, a unique story that is exciting, relevant, inspiring and that resonates, and has a connection with food rather than the term ‘primary industries’ is needed along with a consistent overarching industry wide approach to gain traction in attracting and potential talent but also to change the perception of the industry. As an industry, competition for people capability is against other industries, not with each other.

6. NEXT STEPS

There are broader aspects to this subject that have been explored but not elaborated on. Overall it is hoped that this research project will offer insights and provide discussion points to what is needed in terms of attracting and building people capability post farm gate going forward. The following recommendations are points that warrant further investigation:

1. **More focus is needed on post farm gate people capability requirements.** While it is currently being done at a leadership level, it is recommended that there be more emphasis on industry wide people capability initiatives that focus on attracting and developing skills required post farm gate at different levels. In particular those that build international and in-market experience. This is something that requires further work to address the most effective way to do this.
2. **A consistent industry wide story and messaging is favoured.** It is recommended that an overarching industry wide story be determined and developed to create a consistent message and one that links the industry to food more clearly rather than the terms ‘primary industries’ or ‘agriculture’ in order to connect and engage better.
3. **Develop a platform to capture and connect talent.** It is recommended an industry wide platform be developed to capture and connect the talent that is being built by current initiatives. Currently there is a missed opportunity to capture and connect the talent that is being engaged at youth level before they enter the workforce. Those wanting to enter the post farm gate workforce are directed away from the primary industries. This is also a way to establish and promote skill based career pathways for existing workers within and across primary industry sectors to improve attraction into the industry and further build a greater pool of people capability required in the future.
4. **Target wider skill sets and capabilities.** With the competition for skills especially those experienced internationally, many of the post farm gate capabilities required for the future do not necessarily need to be primary industry or sector specific. There are opportunities at

tertiary and workforce stages to widen the target group through increasing the subjects and institutions targeted.

5. **Further investigate the impact of expected workforce changes on people capability in the industry.** Explore the future workforce changes and design further and apply this to the post farm gate businesses as a way of attracting, developing and retaining talent in the industry. The changes in the workforce driven by the likes of technology and millennials are going to have implications for businesses to acquire the skills and capabilities they will need in the future.

7. APPENDIX

Appendix 1: Diagram of an agri-food value chain to illustrate on-farm vs post farm gate roles



Source: Agrifood Skills Australia 2015

Appendix 2: Interview Questions

A bit about the business you are in:

1. Sector:
2. What is your position in the business?
3. Number of employees:
4. a.) What is the main driver of the business i.e. adding value to agriculture commodities, creating premium food products?
b.) Which part of the value chain is your business involved in?
5. How do you see the nature of work in your business changing over the next ten years?

People capability in relation to the business

1. a.) What are the main technical skills/qualifications you think are required to add value to agriculture commodities and/or create high quality premium products?
b.) What are your reasons for this?
2. a.) What are the main technical skills/qualifications you think will be required in the **future** to add value to agriculture commodities and/or create high quality premium products?
b.) What are your reasons for this?

3. a.) What are the key transferable skills ('soft skills') you think are required to add value to agriculture commodities and/or create high quality premium products?
b.) What are your reasons for this?
4. a.) What are the key transferable skills ('soft skills') you think will be required in the **future** to add value to agriculture commodities and/or create high quality premium products?
b.) What are your reasons for this?
5. How does your business currently attract and/or recruit people? (i.e. strategies, platforms, done internally or outsourced to a recruitment company etc.)
6. What are the main challenges/barriers for the business when attracting and recruiting people?
7. a) What do you see being the main challenges in the **future** for attracting and developing people capability for your business?
b.) Do you see there being any opportunities in the **future** for attracting and developing people capability for your business?
8. Do you have initiatives in place to attract and develop people capability for your business? If yes please elaborate.

People capability in relation to New Zealand's Primary Industry/Agri-food Sector

1. Is your business involved in any industry initiatives to attract and develop people capability? If yes please elaborate.
2. With the value chain in mind -
 - a) What do you see being the main challenges for attracting and developing people capability post farm gate for the Primary Industry in the future?
 - b) What do you think needs to happen for the Industry to attract the best people/skills that will be required in the future?

Appendix 3: Primary Industries – Initiatives to attract and build people capability

DAIRY	
ORGANISATION	Dairy NZ
PEOPLE CAPABILITY STRATEGY/ MAIN PRIORITIES	<ul style="list-style-type: none"> - Attracting people in dairying in particular on farm. Clear dairy farming career pathway promoted: Dairy Assistant → Herd Manager → Assistant Manager or 2IC → Manager → Operations Manager → Own business - Building and developing on farm capability through supporting dairy farm businesses - Nurturing the growth of the dairy industry bright future through Primary Growth Partnership programme - Transforming the Dairy Value Chain to build capability within the farm gate (to boost on-farm productivity without increasing the dairying environmental footprint and beyond the farm gate with developing research capability focused on human nutrition, food structure and processing and food quality management.
PRIMARY & SECONDARY SCHOOL INITIATIVES	<ul style="list-style-type: none"> • Get Ahead programme in schools • Growing New Zealand (Primary Industries Capability Alliance) • Developing more influence around farm programmes run in Schools in particular with their gateway programmes

TRAINING INSTITUTION/ UNIVERSITY INITIATIVES	<ul style="list-style-type: none"> - DairyNZ Undergraduate Scholarship (awarded to outstanding students with a particular interest in dairying, who are undertaking an agriculture or agricultural-related degree at Lincoln, Massey or Waikato Universities. Covers tuition fees). Mentored and supported through university and can expect to gain employment in a variety of positions, either on-farm or in the support areas in dairying. (\$300,000 worth of scholarships) - DairyNZ Masters Scholarship (awarded to outstanding graduates with a strong career motivation for dairy research and development. On completion of a Master's degree in farm systems, it is expected that scholars will apply for employment opportunities at DairyNZ as either Doctoral Students studying specialist dairy science fields, or as graduate developers. - 60 students and researchers right along the dairy value chain who's Masters, PhDs and post-doctoral research is supported by the PGP programme. Focus = future industry leaders are delivering science and knowledge that will enable new high-value products, build better farms and realise vital environmental goals in the industry.
WORKFORCE INITIATIVES	<ul style="list-style-type: none"> - www.godairy.co.nz – promote career opportunities to the dairy sector and the innovation required to take it forward. Aim to attract people into areas across the sector - dairy farming, agri-business and agri-science careers.
COLLABORATION WITH OTHER SECTORS/ Organisations	<ul style="list-style-type: none"> - Collaborates on a wide variety of initiatives across sectors, government and business - Primary Growth Partnership with Fonterra (PEOPLE POWER – FROM GATE TO PLATE)
INDUSTRY REFERENCE i.e. Primary Industries, Agriculture	Agriculture Primary Industries
FUNDED BY	Farmers/Producers

Source: www.dairynz.co.nz

RED MEAT	
ORGANISATION	Beef & Lamb NZ
PEOPLE CAPABILITY STRATEGY/ MAIN PRIORITIES	<ul style="list-style-type: none"> - Attracting people into the primary industries in particular to the red meat sector - Promoting agriculture to primary and secondary school children - On-farm needs of sector
PRIMARY & SECONDARY SCHOOL INITIATIVES	<ul style="list-style-type: none"> - Get Ahead programme in Schools - Growing New Zealand (Primary Industries Capability Alliance) - Developing more influence around farm programmes run in Schools in particular with their gateway programmes - Involvement with St Pauls Hamilton – first school in NZ to create Agribusiness curriculum for secondary school students - RMPP with NZYF – Agrication = getting agriculture into mainstream curriculum
TRAINING INSTITUTION/ UNIVERSITY INITIATIVES	<ul style="list-style-type: none"> - University Scholarships (Undergraduate - four years full annual tuition fees, up to \$5,000 a year are paid for. The scholarship can be used towards study at Massey, Lincoln and Waikato universities – in agriculture, science (including food technology), business and social science disciplines that lead to careers in the livestock, meat and related agribusiness sectors. (Consideration may be given to other degrees for scholarships if applicants can make a convincing case.) - A Generic Agricultural Scholarship is also offered one year for any relevant programme of study within agriculture; at a university, polytech, cadet farm or agricultural training institution. Depending on the institution, the scholarship is available for people coming straight from school or current

	<p>employment, as well as those who are part-way through or have completed a tertiary qualification.</p> <ul style="list-style-type: none"> - Support for cadet farms and on farm industry training organisations
WORKFORCE INITIATIVES	<p>Involved in programmes such as:</p> <ul style="list-style-type: none"> - Primary ITO Vocational Training and Farm Management - International Beef Alliance, Young Leaders Programme, Tri Lamb Young Leaders Programme - Ahuwhenua Maori Farming Excellence -Young Maori Farmer of the Year - Support Ag Women’s Development Trust - Escalator Programme - Cadet Farms - Nuffield Scholarship, Kelloggs Rural Leadership
COLLABERATION WITH OTHER SECTORS/ Organisations	<p>Collaborates on a wide variety of initiatives across sectors, government and business in particular through the Red Meat Profit Partnership.</p>
INDUSTRY REFERENCE i.e. Primary Industries, Agriculture	<p>Agriculture Primary Industries</p>
FUNDED BY	<p>Farmers/Producers</p>

Source: www.beeflambnz.com , Doug Macredie – Sector Capability Manager Beef&Lamb NZ

FORESTRY	
ORGANISATION	<p>NZ Forest Owners Association</p>
PEOPLE CAPABILITY STRATEGY/ MAIN PRIORITIES	<ul style="list-style-type: none"> - Seasonal workers for silviculture & planting is becoming increasingly difficult - Developing a co-ordinated view on qualifications and training needs in sector - Promote forestry careers, both directly and by working with and through other agencies.
PRIMARY & SECONDARY SCHOOL INITIATIVES	<ul style="list-style-type: none"> - Promote forestry as a career option – involved with the Primary Industry Capability Alliance (PICA) and an initiative with Mount Albert Grammar School Project (MAGS) - ManaiaSAFE Logging School Pilot - The Pilot proposal involves a 30-week programme for 11 students which will deliver ‘work-ready’ employees with the relevant level 2-4 NZQA unit standards required for hauler logging. - NZIF Future Forestry Programme - recent graduate members of the NZ Institute of Forestry are in the process of setting up a special interest group within the NZIF to (a) support recent graduates and (b) promote careers in forestry. A number of these graduates are already taking part in school careers activities promoting forestry through Future-In-Tech and other programmes.
TRAINING INSTITUTION/ UNIVERSITY INITIATIVES	<p>Training & Careers Committee – currently consulting on and in process of developing a co-ordinated view on qualifications and training needs.</p>
WORKFORCE INITIATIVES	<p>National Forestry Career Portal – developing a single on-line portal (platform) to house all forestry-related careers and training information spanning all pre-employment, on-job and tertiary training options.</p>
COLLABERATION WITH OTHER SECTORS/ Organisations	<p>MPI, PICA, The NZ Institute of Forestry (NZIF), Competenz, GoAhead, University of Canterbury School of Forestry and Waiariki Polytechnic</p>

INDUSTRY REFERENCE i.e. Primary Industries, Agriculture	Very sector specific – limited reference to overall industry
FUNDED BY	Growers

Information sources: www.nzfoa.org.nz

HORTICULTURE

ORGANISATION	HortNZ
PEOPLE CAPABILITY STRATEGY/ MAIN PRIORITIES	<ul style="list-style-type: none"> Fill seasonality gaps Get young people into the sector at work age Increase number of Women involved in leadership roles Create pipelines of future leaders
PRIMARY & SECONDARY SCHOOL INITIATIVES	Promoting horticulture as a career option - involved with the Primary Industry Capability Alliance
TRAINING INSTITUTION/ UNIVERSITY INITIATIVES	<ul style="list-style-type: none"> - Working hard to get Horticultural programmes back into tertiary education - Industry Training Scholarships - a number of \$500 scholarships available to industry trainees active in the Horticulture Industry who are studying towards a certificate or diploma. - 100 Apprenticeships in association with PrimaryITO to get people into the horticulture and viticulture sectors
WORKFORCE INITIATIVES	<ul style="list-style-type: none"> - HortNZ Leadership Programme 2018 with Lincoln University to develop strong pool of high-performing leaders, leaders that have the confidence and skills to take the industry into the future. - Women in Horticulture initiative - pathways to leadership for women in the horticulture industry. - Recognised Seasonal Employer (RSE) programme - attracting workers from pacific countries to address seasonality challenges. - Young Grower of the year.
COLLABERATION WITH OTHER SECTORS/ Organisations	Primary ITO, Lincoln University, MBIE, MSD
INDUSTRY REFERENCE i.e. Primary Industries, Agriculture	Primary Sector
FUNDED BY	Growers

Information sources: www.hortnz.co.nz

ARABLE

ORGANISATION	Foundation for Arable Research (FAR)
PEOPLE CAPABILITY STRATEGY/ MAIN PRIORITIES	<ul style="list-style-type: none"> Develop great people across the arable industry Graduates with a degree in science, agriculture or agricultural commerce.
PRIMARY & SECONDARY SCHOOL INITIATIVES	Promote as a career option - involved with the Primary Industry Capability Alliance
TRAINING INSTITUTION/ UNIVERSITY INITIATIVES	FAR Postgraduate Scholarships available to Honours, Masters or PhD Students at Lincoln or Massey Universities. The objective of this scholarship is to encourage research activities which will add value to the New Zealand arable farming sector.

WORKFORCE INITIATIVES	FAR's Industry Graduate Programme is open to recent graduates and final year students of agriculture, science and agricultural commerce. Successful applicants spend a year with FAR gaining a solid introduction to the New Zealand cropping industry. They get to work on research, extension and communication projects at our research sites across New Zealand and Australia.
COLLABERATION WITH OTHER SECTORS/ Organisations	Collaborate with FAR Australia, PICA, Lincoln University and Canterbury University Engineering Department.
INDUSTRY REFERENCE i.e. Primary Industries, Agriculture	Very sector specific – limited reference to overall industry
FUNDED BY:	Levy funded organisation – 2700 growers

Information sources: www.far.org.nz

SEAFOOD	
ORGANISATION	Seafood NZ
PEOPLE CAPABILITY STRATEGY	Promote jobs within the sector
MAIN PRIORITIES	
PRIMARY & SECONDARY SCHOOL INITIATIVES	Seafood New Zealand has created a series of fact sheets. These are used as part of their education programme in schools
TRAINING INSTITUTION/ UNIVERSITY INITIATIVES	Promote qualifications through Primary ITO in the following areas: <ul style="list-style-type: none"> • Aquaculture • Seafood processing • Vessel operations • Wholesale and retail
WORKFORCE INITIATIVES	
COLLABERATION WITH OTHER SECTORS/ Organisations	Primary ITO, Seafood Innovations Ltd.
INDUSTRY REFERENCE i.e. Primary Industries, Agriculture	Very sector specific – limited reference to overall industry
FUNDED BY:	Marine Farmers

Information sources: www.seafoodnewzealand.org.nz

OTHER INITIATIVES

The Primary Industry Capability Alliance (PICA)	
WHAT IS THE INITIATIVE?	<p>An industry, education and government alliance providing information, activities and resources to support career opportunities in New Zealand's innovative primary sectors.</p> <p>Through their website - www.growingnz.org.nz – they promote the diverse roles in the Primary Industry. Videos of people already in different roles are used, and direct to websites such as the CareersNZ website and FutureInTech website. It</p>

	<p>also provides a directory for students and teachers interested in finding out more about the primary industries.</p> <p>Other programmes: GrowingNZ Innovation Challenge: Mashing Technology, Science and Business. The programme is designed to introduce year 10 science, technology and commerce students to the primary sectors and to apply their skills and talents to solve real-life challenges faced by our sector. Working in teams of four with industry experts on hand to give advice, students plan and create a prototype which is judged by a panel of experts. (Young Enterprise Trust, on behalf of GrowingNZ, sponsored by DairyNZ & Beef + Lamb New Zealand)</p> <p>The establishment of the Primary Industries Capability Alliance and launch of 'GrowingNZ', to promote careers in the primary sector, reaching more than 60% of secondary schools and 38,000 students.</p>
MAIN PEOPLE CAPABILITY PRIORITIES	<p>Promotes breadth of roles and career option in the primary industries:</p> <ul style="list-style-type: none"> - Supply Chain - Research - International - Production - Garden - Food - Teams (Production manager, Health and safety adviser, Human resources adviser) - Marine - Animals - Advisers - Harvesting - Future (Design/Product development engineer, entrepreneurs)
COLLABERATION WITH OTHERS	<p>Current members include: DairyNZ, Beef+Lamb NZ, Ministry for Primary Industries, NZ Young Farmers, Primary ITO, Lincoln University, Taratahi Agricultural Training Centre, Ara Institute of Canterbury, Foundation for Arable Research, Forest Owners Association and the National Council of New Zealand Wool Interests.</p>
INDUSTRY REFERENCE	<p>Primary Industries</p>
FUNDED BY:	<p>Organisations listed above – a mix of farmers, growers, government, and training institutions</p>

Information sources: www.growingnz.org.nz,

100 HORTICULTURE APPRENTICESHIPS

WHAT IS THE INITIATIVE?	<p>Primary ITO has partnered with industry to offer 100 apprenticeship positions to smart, motivated kiwis looking for something more than just a job.</p> <p>A web based platform www.letsgrow.co.nz provides a career path into the sector. Businesses in horticulture and viticulture can find apprenticeships in the industry and those after a career in the sector can apply for apprenticeships.</p>
MAIN PEOPLE CAPABILITY PRIORITIES	<p>They are promoting a range of options from being in an orchard to high tech process plants or production facilities.</p> <p>Course from ITO tend to be primarily on farm and or production focussed.</p>
COLLABERATION WITH OTHERS	<p>Horticulture and Viticulture industries, along with Primary ITO, Ministry of Business Innovation and Employment (MBIE) and Ministry of Social Development (MSD)</p>
INDUSTRY REFERENCE	<p>Primary Industries</p>
FUNDED BY:	<p>Sector and Government</p>

Information sources: www.letsgrow.co.nz

Get Ahead - www.getahead.co.nz

WHAT IS THE INITIATIVE?	<p>Introducing young people to a range of career opportunities across the value chain in the Agriculture Industry.</p> <p>Get Ahead Experiences Days</p> <ul style="list-style-type: none"> - Days provide year 12 students with the opportunity to explore a range of careers spanning across the sciences, technology, engineering, and business aspects of an industry that has a career for everyone. - Programme oversees the running of the Teachers Day Out events which provide a professional development opportunity for secondary school teachers, giving them an opportunity to engage with the industry and see how it connects with the subjects they are teaching. <p>Also promotes and links to</p> <ul style="list-style-type: none"> - Scholarships from DairyNZ and Beef & Lamb NZ for further study - Training providers (Lincoln University, Massey University) - Primary ITO, Taratahi Agricultural Training Centre and Telford (a Division of Lincoln University)
MAIN PEOPLE CAPABILITY PRIORITIES	Getting people involved in the Primary Industries from a young age
COLLABORATION WITH OTHERS	NZ Young Farmers, DairyNZ and Beef & Lamb NZ in collaboration with Growing NZ (PICA), MPI, CareersNZ, Taratahi, CLAAS Harvest Centre, ANZ, Ballance, Pipfruit NZ, Horticulture NZ, FAR, Gallagher, PGG Wrightson, Primary ITO
INDUSTRY REFERENCE	Agriculture Industry
FUNDED BY:	DairyNZ, Beef & Lamb NZ

Information sources: www.getahead.co.nz

Red Meat Profit Partnership

WHAT IS THE INITIATIVE?	<p>Red Meat Profit Partnership (RMPP) is a Primary Growth Partnership aiming to increase productivity and profitability in the Red Meat Sector.</p> <p>RMPP – People Programmes</p> <ul style="list-style-type: none"> • Ag In Education Primary Schools Resources • Ag In Education Primary Schools to Farms • Ag In Education High School Ag Resources for English, Maths and Science • Agrigation Website—National Ag Resources Library • Leadership Pathways NZ Young Farmers- TeenAg Clubs • Red Meat Network—Speakers at Tertiary Institutes • NZ Young Farmers TeenAg Club Expansion • Rural Business Professional Speakers Programme • Understanding Your Farming Business (AgriWomen’s Development Trust) • Computer Skills for Farmers (ASL) • Facilitation Skills • Pathways to Farm Ownership • Future Food Network
MAIN PEOPLE CAPABILITY PRIORITIES	Developing and attracting people in the Red Meat Sector
COLLABORATION WITH OTHERS	Collaboration between the Red Meat Sector and Government partners involved include MPI, B&L NZ, ANZ, Alliance, ANZCO, Blue Sky Meats, Greenlea Premier Meats, Progressive Meats, Rabobank and Silver Fern Farms.
INDUSTRY REFERENCE	Primary Sectors

FUNDED BY:	Industry and Government
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Information sources: www.rmpp.co.nz

Education in Agriculture - agrication.co.nz	
WHAT IS THE INITIATIVE?	NZ Young Farmers have developed a platform to support teachers and students to learn more about the primary industries and have also developed teaching and learning resources for primary and secondary students all aligned to the New Zealand Curriculum. As well as this there is information on a range of related events to support classroom learning opportunities.
MAIN PEOPLE CAPABILITY PRIORITIES	Build agriculture into main stream education at primary and secondary school. At Tertiary level there is the Future Food Network where guest speakers are organised giving students valuable insights into career opportunities and career paths within the industry.
COLLABORATION WITH OTHERS	CORE Education, Schools, Red Meat Profit Partnership organisations
INDUSTRY REFERENCE	Agriculture Primary Industries Land based industries
FUNDED BY:	Red Meat Profit Partnership

Information sources: www.agrication.co.nz

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- Bord Bia website - www.bordbia.ie/corporate/careers/talentdevelopment/pages/default.aspx
- Callaghan Innovation - www.callaghaninnovation.govt.nz/news-and-events/silicon-valley-agritech-2018
- Dairy NZ website - www.dairynz.co.nz
- Fonterra - www.fonterra.com/nz/en/our-stories/media/fonterra-matchmaking-service-set-to-transform-work-at-the-co-op.html
- Get Ahead website - www.getahead.co.nz
- Go Dairy website- www.godairy.co.nz
- Growing NZ website (Primary Industry Capability Alliance (PICA) **Growing NZ** initiative) - growingnz.org.nz
- Horticulture NZ website- www.hortnz.co.nz
- Lets Grow NZ website (100 Horticulture Apprenticeships) - www.letsgrow.co.nz
- Ministry of Business, Innovation and Employment website - www.mbie.govt.nz/info-services/sectors-industries/food-beverage
- Nielsen Insights - www.nielsen.com/us/en/insights/news/2018/meal-kit-mania-innovation-for-foodies.html
- NZ Forest Owners Association website - www.nzfoa.org.nz
- NZTech website - nztech.org.nz
- Te Hono - www.tehono.co.nz
- Red Meat Profit Partnership - www.rmpp.co.nz
- Rural Leaders - ruralleaders.co.nz/nuffield-home/
- Wikipedia - en.wikipedia.org/wiki/Human_capital
- World Economic Forum - www.weforum.org