RMCG

People Development Strategy – Potatoes, Onions, Vegetables and Bananas

Final Report

Hort Innovation

Table of Contents

1   Introduction

1.1   BACKGROUND

The Federal Government held a Jobs and Skills summit in 2022 which highlighted critical challenges that most industry sectors in Australia face with attracting, developing and retaining skilled workers as well as addressing significant labour shortages. Specifically for agriculture, these challenges have been previously captured in the National Agricultural Workforce Strategy: Learning to excel[1].

The horticulture sector, including vegetable, potato, onion and banana (VPOB) industries, have been tackling these issues for some time and have invested levy funds via a range of Hort Innovation based programs targeting skill development, career pathways, attracting new entrants, leadership (including women in horticulture) and innovation. While these activities have addressed specific industry needs, they have been delivered in the absence of an overarching People Development Strategy and therefore have often been reactive to a particular issue or problem.

To remain competitive for 'talent' the VPOB industries have recognised the need to take a strategic approach to people development. Several sectors and other agricultural industries (e.g. Dairy Industry Leadership Strategy, People in Dairy, Wine Australia, FRDC - Capability and Capacity Plan) have leadership and/or people strategies to guide the future direction in both attracting people and building capability of their respective sectors. Having a future focused People Development Strategy will be critical given the current and future changes expecting to impact workplaces, including horticultural industries and the type of skills they will need.

McKinsey Global Institute have undertaken research about the future world of work, which has shown that demand for manual skills will decline, while demand for technological, social and higher cognitive skills will increase[2]. Their research has identified 56 'foundational skills' that will be needed for people to thrive in future workplaces. These skills cover 13 skills groups and four main categories of Cognitive, Inter-personal, Self-Leadership and Digital.

Skills Impact also note "we are amidst the 'fourth industrial revolution', with the rise of digitisation, automation, biotechnology and robotics changing the way work is done. The industries we support are familiar to change and the need to adapt. Many of them work in unpredictable and changing industries, affected by changes in the environment, legislation, technology, products and consumer demands."[3] This is particularly true for horticultural industries, with the COVID-19 pandemic further accelerating transformation in certain areas.

1.2   THIS PROJECT

Like many industries across Australia and particularly for the horticulture sector, the vegetable, potato, onion and banana industries are facing challenges in attracting, developing and retaining labour, skilled and specialist workers. While there has been investment into training and leadership initiatives, this has often been opportunistic and reactive. A coordinated, clear and well-thought through People Development Strategy (Strategy) will focus both efforts and funds and ensure industries are able to respond to present challenges and establish future skills for a high functioning and innovative horticulture industry.

The development of a Strategy to guide investment in people aligns with the Strategic Investment Plans for the five levied industries of vegetables, fresh potatoes, processed potatoes, onions and bananas. The outcome

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[1]   Azarias, J, Nettle, R & Williams, J 2020, *National Agricultural Workforce Strategy: Learning to excel*, National Agricultural Labour Advisory Committee, Canberra, December. CC BY 4.0.

[2]   Dondi, M, Klier, J. Panier, F and Schubert, J (2021). Defining the skills citizens will need in the future world of work. McKinsey Global Institute. https://www.mckinsey.com/industries/public-and-social-sector/our-insights/defining-the-skills-citizens-will-need-in-the-future-world-of-work.

[3]   https://www.skillsimpact.com.au/about/

desired is: *Improved capability and an innovative culture in the …(industries)… maximises investments in productivity and demand.* Building capacity for the industry through investment in programs which facilitate ongoing leadership development is a core element of achieving this outcome.

1.3   PURPOSE

The objective of this project was to develop a contemporary and fit-for-purpose People Development Strategy and Implementation Plan for the target industries building on previous research and projects and incorporating best practice from other industries.

1.4   PROJECT APPROACH

The approach for developing the Strategy is outlined in Figure 1-1. Stakeholder consultation included interviews with the Project Advisory Group (PAG) and representatives with broad experience across primary industry and leadership programs and initiatives. See Appendix 1 for the PAG membership and consultation list.

The project also drew on specific expertise and experience from other agriculture industries through the support of Gayle Hardie from Global Leadership Foundation.

Project Advisory Group	• 3 x meetings • See Appendix 1 for membership
Desktop review	• Review of available national and international reports, documents, and programs
Stakeholder consultation	• 31 interviews with producers, young/new employees, agronomists, researchers, academics, grower groups • See Appendix 1 for consultation list
Strategy development	• Strategy developed • Implementation plan • Testing with PAG • Final report

Figure 1-1: Approach for Strategy development

The framework used to guide the development of the Strategy and associated implementation plan is outlined in Figure 1-2. Noting that the inner circle with the four quadrants outlines the strategic process and the outer circles provide the context for the Strategy, with the enabling factors being critical for the Strategy's success.
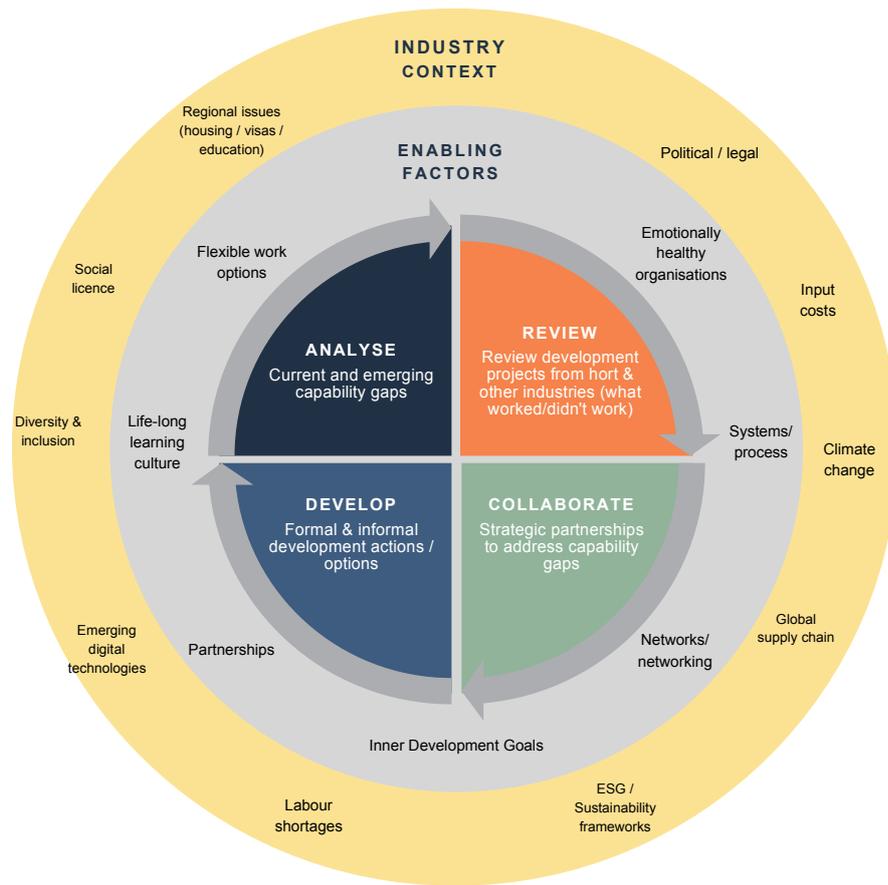
Figure 1-2: Framework for Strategy development

1.5 OUTLINE OF REPORT

This report provides the process of the Strategy development and is structured as follows:

- Introduction (this section)
- Industry context
- Analysis of workforce development programs (findings from desktop review and consultation)
- Strategy Development
- Conclusion.

2 Industry Context

2.1 BACKGROUND

Australia's 9,763 horticultural production businesses provide the Australian population with fresh fruit and vegetables, contribute $15 billion/annum to the economy[4], and employ approximately 112,000 people[5]. Horticulture is the third largest agriculture sector in Australia behind livestock and grains, and significant business acumen including supply chain management, technology, product innovation and export competitiveness is required to participate in the sector. Horticultural operations of today operate at levels of complexity that did not exist 30 years ago.

Horticultural businesses are faced with a range of compliance responsibilities in the areas of biosecurity, workplace health and safety, ethical employment, pesticide management, food safety, customer relationships (including ACCC Horticulture Code of Conduct) and environmental sustainability. Managing carbon emissions due to increasing concern over climate change is a further responsibility that may become compulsory.

In addition, marketing of products and processes is increasingly a core function of horticultural businesses that covers quality assurance, accreditation, logistics and supply chain relationships. To remain viable, horticulture businesses must be technologically adept and remain 'cutting edge', that may include adoption of automated processes across the production system, a range of precision agriculture applications as well as data monitoring and management systems.

However, small to medium enterprises cannot afford to employ several specialists; subsequently they require multi-skilled staff in management positions. There is broad recognition that to remain internationally competitive and equipped to capitalise on opportunities, the horticulture industry needs to attract the best educated people. There is also a need to secure a constant pipeline of well-trained experts to support the capacity of the industry into the future. Presently, horticultural businesses are struggling to attract and retain the necessary skilled workforce with significant consequences and loss in profits.

Beyond this increasing complexity in the horticulture sector, the majority of horticultural businesses still rely on a seasonal workforce which has an impact on the Australian contract workforce. Approximately 35,000 people are employed in contract jobs during low season months (September, October, May) rising to approximately 50,000 employed in contract jobs during high season (December to March)[6].

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[4] https://www.horticulture.com.au/hort-innovation/news-events/Australian-horticulture-grows-by-$6.15B-within-a-decade/#msdynttrid=wfKedA7AgS5BTSMrSKRwOSwA1NJrYzEwgbyWKn4Uks0

[5] https://www.agriculture.gov.au/abares/research-topics/labour

[6] https://www.agriculture.gov.au/abares/research-topics/labour

2.1.1 NATIONAL WORKFORCE TRENDS

For the first time in history there will soon be five different generations working together in the workplace. These generations will think differently, have different needs and expectations and varying contributions to make[7]. At present many of these generations, and the demographics within them, are underutilised. A snapshot of a few of these demographics include:

- Young Australians (noting that one in three are underemployed or unemployed at the cost of $4.5 billion to the nation's economy[8])
- Mature age workers
- People from culturally and linguistically diverse (CaLD) backgrounds
- People with disabilities
- Indigenous people.

Other trends exacerbating these issues include a decline in the number of apprenticeships and traineeships in Australia and a need for greater choice for those who would like to go straight to work after high school instead of undertaking further study.

Notably is the fact that there are skills and capability gaps across many industries, not just in the agriculture and horticulture sector, in regional Australia. Rural Australia Institute research on *The Future Regional Jobs*[9] identifies that "local and regional scale interventions are critical" and that "aligning skill supply with skill demand requires proactive and innovative education and training practices that involve a wide range of participants such as employers, young people, educators, trainers, older job seekers and even families and communities more broadly."

2.2 VEGETABLE INDUSTRY

For the purposes of this Strategy, the vegetable industry includes all vegetable products, except for onions, mushrooms, potatoes and sweet potatoes which are each covered by their own industry levy, and tomatoes, garlic and asparagus which are not covered under the National Vegetable levy. In 2020-21, 3.8 million tonnes of leviable vegetables were produced with a production value of $4.91 billion. Vegetables are produced throughout Australia year-round depending on the variety, with most production occurring in Victoria and Queensland.

Hort Innovation's VegNET project supports the employment of Regional Development Officers (RDO) in 10 Australian regions. RDOs deliver extension activity for growers, and also survey growers to identify the main challenges they face. The most mentioned challenges identified through recent VegNET consultations were[10]:

- Availability, cost and quality of water;
- Labour availability, awards, HR and skills;
- Input costs (other than labour);
- Managing biosecurity threats and requirements;
- Pest management;
- Post-harvest handling and marketing;
- Market development (including export);
- Urban encroachment on arable land;
- Maintaining social license (environmental impact and chemical (mis)usage); and

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7   Hope is not a Strategy – Our shared responsibility for the future of work and workers, Senate Select committee on the Future of Work and Workers, Commonwealth of Australia, 2018.
8   Foundation for Young Australians Framework 2030.
9   The Future of Regional Jobs, Regional Australia Institute, April 2019.
10   https://ausveg.com.au/resources/development-extension/vegnet/

- Business management for farm viability, sustainability or growth.

2.3   POTATOES

Potatoes are Australia's highest value vegetable crop at $830 million for the 2021-2022 year[11]. Australian growers produce approximately 1.5 m tonnes of potatoes annually[12], including seed potatoes, potatoes for processing, and around 370,000 tonnes that are sold fresh through retail outlets ('ware' potatoes). In 2021-22, approximately 983,000 tonnes (67% of the harvest) were processed into frozen goods and snacks by five Potato Processing Association of Australia (PPAA) member factories: Simplot, McCain, LambWeston, Pepsico/Smiths, Snackbrands. French fry and frozen potato products account for 75% of processed volume, and 25% goes into crisping and snacking products. Some French fry processing companies rely on their factories overseas (particularly New Zealand) to meet shortfalls in Australian production. These companies also bring a small volume of speciality frozen products that are not currently able to be manufactured in Australia. Importation of frozen and snack potato products varies with the value of the Australian dollar, and is influenced by relative availability and cost of potato supply overseas.

The ABS estimates that there were about 870 potato producers in 2016-17. Three states, South Australia, Tasmania and Victoria combined account for 79% of total production in 2021-22, with Tasmania (31%) and South Australia (30%) growing most of the national crop, and Victoria 18%[13]. South Australia grows the majority of ware potatoes, Tasmania is the major producer of processing potatoes. Fresh and processed potatoes are mainly delivered to domestic but also international markets. Seed potatoes are grown and exported from Victoria and Western Australia. Between regions, there are substantial differences in climate, soils, growing seasons and practices. In the three predominant growing states (South Australia, Tasmania, Victoria), potato production is somewhat seasonal, with November – January being the lowest production months. Many business-to-business relationships and several industry associations or interest groups exist in the complex potato industry. Depending on seasonality and markets, competition exists between production regions for ware potatoes and may occur for seed potatoes.

In 2014, Potatoes South Australia recognised the sector was facing serious labour challenges. They initiated a Workforce Development project based on the following concerns[14]:

- An ageing and dispersed workforce with increasing recruitment difficulties
- Virtually no strategies to promote the industry to young people
- Most businesses operated in a very reactive way to recruitment and skilling
- Higher skills were needed to service more sophisticated management and quality systems
- Higher skilled positions were increasingly needing to be filled by skilled migrants
- Difficulties establishing and supporting a more robust training culture in the industry.

2.4   ONIONS

The Australian onion crop, grown on about 5,150 hectares, was estimated to be worth $249 million (gross value) for 2021-22 from an overall production of 266,429 tonnes[15]. Australian onion production is relatively small in the global context, but they are important in Australia as the sixth largest vegetable crop by value, behind potatoes, tomatoes, mushrooms, carrots and lettuces[16]. South Australia accounts for about half of

[11] https://www.horticulture.com.au/globalassets/hort-innovation/australian-horticulture-statistics-handbook/ahsh-2021-22-vegetables.pdf
[12] Ibid
[13] https://www.horticulture.com.au/globalassets/hort-innovation/australian-horticulture-statistics-handbook/ahsh-2021-22-vegetables.pdf
[14] https://www.voced.edu.au/content/ngv:77347
[15] https://www.horticulture.com.au/globalassets/hort-innovation/australian-horticulture-statistics-handbook/ahsh-2021-22-vegetables.pdf
[16] https://www.abs.gov.au/statistics/industry/agriculture/value-agricultural-commodities-produced-australia/2019-20

production and Tasmania is the second largest producer (22%)[17]. Queensland and Western Australia are also important producers of onions with 12% and 10% of total production respectively.

The ABS estimated that there were about 243 businesses in Australia producing onions in 2017-18. South Australia has a relatively small number of larger-scale and/or more specialised onion producing businesses compared to other states. These growers have scale to justify uptake of more advanced growing methods and technologies. Tasmania has the largest number of onion businesses (61 businesses or 25%) by State. In Tasmania, onions are commonly grown in farms with diverse horticultural rotations which means growers and their workers are often generalists. The onion SIP 2017-2021 (Ref) identified several RD&E priorities for the onion sector, including workforce-related challenges like:

- Improvement in business and production skills to reduce costs and improve returns (upskilling)
- More robust market intelligence and greater ability to respond to market shifts (knowledge and agility)
- More consistent best practice agronomic advice (knowledge).

2.5   BANANAS

Australian growers produced 374,000 tonnes of bananas in 2021-22, with a gross value of $500 m[18]. Production is year-round with 94% of the national crop grown in Queensland. Most bananas supply the domestic retail market (90%), with approximately 10% sold into food services sector, and minimal quantities going to processing or export[19].

The need for casual labour represents a challenge for banana producers. Bananas were identified as Queensland's horticultural commodity crop with the second highest demand for seasonal labour, behind strawberries and ahead of capsicum[20]. Much of this demand for labour was centred around Cairns. Combining banana, avocado and mango producer needs, the Cairns region experiences an annualised casual labour demand of 10,000-15,000 horticultural workers[21]. The COVID19 pandemic highlighted the banana sector's reliance on seasonal, casual and international workers[22].

As a tropical fruit, banana growers are impacted by cyclone events (e.g. Cyclone Niran 2021, Cyclone Yasi 2011, Cyclone Larry 2006). Climate change modelling predicts greater impact from cyclones in future; crop insurance may be unavailable in some banana growing regions, and the premiums for other insurances are rising rapidly. AgriFutures identified specific skills and knowledge banana farmers need to withstand these events: disaster preparedness, farm practices for risk mitigation, and financial risk management[23].

In addition to these 'banana specific' challenges, growers are reporting stress associated with sharp increases in the cost of inputs (fuel, chemicals, fertilisers) and freight to market[24], and the impacts of recent extreme weather events (heatwaves, localised flooding).

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[17] https://www.horticulture.com.au/globalassets/hort-innovation/australian-horticulture-statistics-handbook/ahsh-2021-22-vegetables.pdf
[18] https://www.horticulture.com.au/globalassets/hort-innovation/australian-horticulture-statistics-handbook/ahsh-2021-22-fruit.pdf
[19] Ibid
[20] https://www.horticulture.com.au/globalassets/laserfiche/assets/project-reports/st19040/seasonal-horticulture-workforce-study_2020.pdf
[21] Ibid
[22] https://abgc.org.au/2021/08/24/the-reality-of-worker-shortages/
[23] https://agrifutures.com.au/wp-content/uploads/publications/13-122.pdf
[24] https://abgc.org.au/2022/04/22/challenges-facing-banana-industry/

2.6 INDUSTRY OPPORTUNITIES AND CHALLENGES

The COVID-19 pandemic presented a range of challenges for the Australian horticultural sector, many of which are now diminishing. However, there are several overarching challenges, but also possible opportunities, currently facing the Australian horticulture sector, including:

- Changing political/regulatory setting
- Rising input costs of labour, insurance and raw materials versus low consumer value
- Climate change events such as floods, fires and cyclones
- Global supply chain disruptions both upstream and downstream
- Labour availability, awards, unions, wage competitiveness, skills and capabilities
- Biosecurity threats and requirements
- Availability and cost of water
- Emerging digital technologies
- Diversity and inclusion
- Mental health issues
- Aging and dispersed workforce
- Corporatisation of farms
- Media pressure
- Social licence to operate (environmental, social)
- Regional issues such as isolation, accommodation, education and visas
- Introduction and expectation of alignment with ESG/Sustainability frameworks.

Some of these key challenges are further outlined below.

2.6.1 RISING INPUT COSTS

The combined effects of the Ukrainian conflict, international COVID-19 impacts, and possibility of a global recession have put upwards pressure on fuel and fertiliser prices. Some growers with lock-in contracts are currently absorbing increased costs of production.

2.6.2 CLIMATE CHANGE IMPACTS

The impacts of climate change are many and varied such as: extreme events causing direct damage to crops, infrastructure and soils (e.g. hail, flooding, heatwave); southward/altitude expansion of range for some biological pests, weeds and diseases; heat stress and pollination impacts on productivity. This has led to the need to adapt, including: how crops are grown, management of irrigation sources; development of farm processes for new, more stress/heat tolerant crops; and incorporation of the cost of carbon in farm budgeting. Adaptability and resilience are key skills for this challenge.

2.6.3   GLOBAL SUPPLY CHAIN DISRUPTIONS

Global supply shocks in the agricultural sector have been experienced and intensified with extreme weather events, the COVID-19 pandemic and political uncertainty[25]. The COVID-19 pandemic highlighted Australia's reliance on labour-dependent global supply chains for inputs (e.g. fertiliser products) and for exports, including food processing and transportation. The Ukrainian conflict and extreme weather events continue to disrupt global supply chains. Australian horticultural producers need greater capacity to source and adapt to using alternate inputs, and greater agility in sales and distribution strategies.

2.6.4   LABOUR SHORTAGES

Agriculture and horticulture businesses struggle to attract and retain workers due to a range of factors but strongly influenced by Australia's continuing low unemployment rate, aging population (particularly aging farm workforce), and demographic shifts which mean most Australians now live in coastal cities. Farm work may also be viewed as unattractive (outdoors manual labour, unskilled, poorly paid (i.e. the National Minimum Wage in Australia is now higher than the Horticulture Award[26]) and unreliable (seasonal, weather dependent) by potential workers with a range of employment options.

2.6.5   EMERGING DIGITAL TECHNOLOGIES

In 2022 the Commonwealth Government highlighted that "digital technologies are the foundation to the next wave of agricultural productivity" in their *Digital Foundations for Agriculture Strategy.* Some examples of digital technologies and trends include: use of remote sensing, drone and edge-of-field monitoring with decision support to optimise inputs, harvesting and environmental management; consumer expectation of connecting directly with producers; traceability technologies and digital logistics for product tracking and provenance (paddock to plate); sensors, analytics and automation for a range of farm activities (e.g. farm machinery automation, carbon accounting)[27]. The digital landscape requires workers who can work with digital equipment, and decision-makers familiar with data-driven models for real-time farm management[28].

2.6.6   DIVERSITY AND INCLUSION

Australia's aging on-farm workforce, labour shortages, anti-discrimination legislation, and increasing automation of labour-intensive work mean the horticultural workforce is diversifying. This requires employers to establish work practices and cultures that are safe and inclusive for diverse people including, women, people with diverse gender identities and sexual orientations (LGBTIQA+), Indigenous Australians, and people who are culturally and linguistically diverse (CaLD). It also requires employers to think about and address the unconscious biases in themselves and their systems in order to benefit from the diverse skills and capabilities non-traditional agricultural workers can bring.

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25   https://www.mckinsey.com/industries/agriculture/our-insights/how-advanced-analytics-can-address-agricultural-supply-chain-shocks
26   Navigating the New Workplace Panel – Steve Ronson – Executive Director Enforcement, Fiar Work Ombudsman, presentation at Hort Connections 2023
27   https://www.agriculture.gov.au/sites/default/files/documents/digital-foundations-agriculture-strategy.pdf
28   https://www.mckinsey.com/industries/agriculture/our-insights/how-advanced-analytics-can-address-agricultural-supply-chain-shocks

2.7 ENABLING FACTORS

Enabling factors are activities or other aspects that businesses or industries can implement to make it easier (or more difficult) to develop employees and empower them to reach their full potential in the workplace, for them and their careers and, for the benefit of the businesses.

For young people, women and people with disabilities in particular, systems such as flexible work, effective environmental management and procedural fairness play a large role in attracting and retaining people. For the growing market of Culturally and Linguistically Diverse (CaLD) workers, thinking beyond the individual in the workplace to include actions to smooth the transition to a regional/rural area and to working in an Australian environment are key to retaining this cohort.

Significant enabling factors include:

- Flexible work options – part time/split shifts/ different hours/cultural time off/job share/5 days in 4
- Life-long learning culture – valuing learning and development in business planning and actions
- Partnerships – partnering with similar or complementary organisations on staff development or support
- Networks/networking – highly valued for women and young people. Allowing and valuing the time to network is key
- Systems/process – ensuring existing systems and processes don't get in the way of innovative or productive new ways of working
- Emotionally healthy organisations – psychologically safe, open and honest, feedback is taken on board, learning is valued, interpersonal skills are valued and Inner Development Goals embraced (See dot point below), an employer of choice
- Inner Development Goals[29] - aim to provide a blueprint of the capabilities, qualities and skills needed to achieve the Sustainable Development Goals.

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[29] https://www.innerdevelopmentgoals.org/framework

3   Analysis of workforce development programs

A desktop review of a range of workforce development programs and related initiatives relevant to the vegetable, potato, onion and banana industries was undertaken to inform the creation of the Strategy. Consideration to key skills and aptitudes needed for the future, including technical aspects but also those programs and reports highlighting leadership, career pathways and increasing participation of Cultural and Linguistic Diverse (CaLD) people and other demographics often underrepresented in the workforce, especially in agriculture and horticulture, have been reviewed.

Building on this desktop review, a range of key industry stakeholders were consulted to test concepts identified in the review and to confirm current and future expectations regarding workforce development programs. The following section presents an analysis of the information gathered through the desktop review and stakeholder interviews that has been used to inform the development of the Strategy.

3.1   CAPABILITY NEEDS ACROSS HORTICULTURE

As horticulture in Australia constantly evolves, there are four specific domains of skill and capability development required. These include:

- **Core technical** - which underpin the capacity of the workforce to execute current day-to-day responsibilities with appropriate skills, capabilities and knowledge;
- **Digital** - for the routine use of digital technologies and also taking up new digital technologies that Australian horticulture needs to improve productivity and remain globally competitive;
- **Leadership and interpersonal** - for workers to become their most successful selves, and also contribute or lead within highly effective teams; and
- **Business strategy and risk** - enabling those people managing horticulture businesses to adapt and thrive within an increasingly unpredictable business context.

A gap analysis of these four skill domains was completed to inform the development of the Strategy based on the desktop review, stakeholder interviews and input from the PAG. Refer to Appendix 2 for the skills and capability gap analysis.

Importantly, these skill domains, other than the core technical skills, align with McKinsey's 56 foundational skills (i.e. 'Distinct Elements of Talent') that they consider as essential for employees to 'thrive' in the future of work[30]. McKinsey states that these foundational skill sets will help employees fulfil the following three criteria regardless of the industry sector in which they work or their occupation:

- Add value beyond what can be done by automated systems and intelligent machines
- Operate in a digital environment
- Continually adapt to new ways of working and new occupations.

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[30]   https://www.mckinsey.com/industries/public-sector/our-insights/defining-the-skills-citizens-will-need-in-the-future-world-of-work

3.1.1   CORE SKILLS AND CAPABILITIES

A uniting theme across the vegetable, onion, potato and banana industries is the need for workers who can efficiently and effectively undertake day-to-day activities on-farm. There are specific areas which underpin that capacity, and represent current priorities for Australian horticulture which include the following:

Working on farm

The COVID-19 pandemic brought new focus on labour shortages on farms, particularly for the large number of unskilled or semi-skilled workers that service highly seasonal horticulture production (e.g bananas, field tomato, grapes and oranges). The entry-level skills required for this work are generally limited to farm induction and on-the-job training in basic tasks (e.g. pick, weed, prune, pack). Beyond those skills, there is need for casual/seasonal workforce upskilling in: hazard identification and duty of care, packing shed operations, safe manual handling, working at heights, working around machinery, ChemCert, record keeping and documentation, and labour rights and grievance procedures [31],[32],[33].

Safe use of machinery

Work Safe Australia states that agriculture is one of the most dangerous industries to work in because of its combination of hazards (e.g. chemicals, vehicles, remote or solo work, outdoors, manual handling)[34]. These risks can be exacerbated with a transient workforce (e.g. large numbers of workers, high turn-over, unskilled, semiskilled) which places greater onus on team leaders and farm managers to establish safe practices. Farm practices associated with WHS can be highly variable between enterprises, and a culture of on-the-job learning in the use of farm equipment contributes to variable (and sometimes hazardous) practices in the horticulture sector. Vehicles (including tractors, aircraft, quad bikes) are associated with 75% of deaths on farms and so skills in the safe use of vehicles and equipment are a priority for horticulture[35]. As is upskilling team leaders and farm managers to entrench safe use of machinery as a routine part of farm operation and culture.

Mechanical skills

There are many mechanically skilled jobs on farm – vehicle/equipment maintenance, fitters and turners, electricians together with fork lift, tractor and harvester drivers. Competition with other industries such as trades and mining make it difficult to attract people with these skills. Many are attracted to other sectors that may be closer to main towns or include higher wages.

Pest, disease and biosecurity management

Beyond the capacity to grow and harvest crops, the horticultural workforce require expertise in observing crops for signs of pest and disease, and greater capacity to follow structured processes to minimise on-farm biosecurity risks. For example, onion and potato growers described the importance of being able to observe crops for signs of soil borne disease and the capacity to scout crops for insect pests[36],[37]. Beyond identifying insect pests, a valued skill was recognising pest lifecycles, cultural control methods and thresholds that indicated the need for intervention during an insect pest outbreak[38]. The AUSVEG Farm Biosecurity Project, initiated in 2018, highlighted the need to improve management of and preparedness for biosecurity risks in the vegetable and potato industries, including awareness of priority biosecurity pest threats and active improvement of on-farm biosecurity practices[39].

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[31] https://www.uq.edu.au/news/article/2003/08/farm-skills-training-program-shows-promise-industry-model
[32] https://agriculture.vic.gov.au/crops-and-horticulture/Workforce-and-Harvest/harvest-work-training
[33] https://www.accr.org.au/news/modern-slavery-and-horticulture-supply-chains/
[34] https://www.safeworkaustralia.gov.au/safety-topic/industry-and-business/agriculture
[35] https://www.safeworkaustralia.gov.au/safety-topic/industry-and-business/agriculture/managing-risks
[36] https://www.horticulture.com.au/growers/help-your-business-grow/research-reports-publications-fact-sheets-and-more/supporting-potato-growers-in-adopting-improved-practices-on-farm/
[37] https://www.horticulture.com.au/globalassets/hort-innovation/resource-assets/vn18003-onion-magazine_december-2019.pdf
[38] Ibid
[39] https://ausveg.com.au/biosecurity-agrichemical/biosecurity/farm-biosecurity-project-2018-2021/

Water and environmental management

The importance of maintaining irrigation skills and expertise in the horticulture sector has been highlighted consistently in a range of reports[40] and also through stakeholder interviews.

The Agriculture and Production Horticulture Industry Skills project reviewed core qualifications that apply to numerous job roles across the agriculture, horticulture, conservation and land management industry. The qualifications were revised to strengthen careers pathways; reflect current technology, systems and regulations; and support skills in biosecurity, environmental sustainability, quality assurance and work health and safety.

Documenting procedures

In 2022, the Fair Work Commission made changes to the Horticulture Award to include a minimum hourly wage guarantee and a requirement to record hours worked by pieceworkers (e.g. pickers and packers). These changes meant horticulture supervisors needed additional skills to manage employee performance and meet reporting requirements related to work health and safety, and compliance with industry quality assurance standards. For example, employees need to know how to fill in, store and compile information on the Fair Work Ombudsman's 'piecework record template'. Reporting workplace WHS incidents and near misses, completing emergency planning, recognising and responding to labour rights/modern slavery issues on-farm and developing and using standard operating procedures for farm activities (e.g. equipment, chemicals) are also priority skills for day-to-day farm operation.

Agronomy Skills

Agronomists are part of an aging cohort that will require strong succession planning in many areas. The skills and capabilities involved (soil health, plant physiology, nutrition, irrigation, pest and disease management, interpersonal and communication skills, application of knowledge for decision making) may be able to be sourced from qualifications other than horticulture. Succession planning and mentoring of new/young people will also be critical to pass on knowledge, skills and capabilities.

Research and plant science skills

Similar to agronomy skills, research skills are critical to ensure that the industries remain relevant and can overcome challenges with the latest science and information. Complex challenges require researchers and agronomists to work with business owners to solve them within the context of different farms, climates and micro-climates. Some larger businesses will need to resource and support researchers in house, while others will need to partner with universities or research bodies to implement trials and encourage and support pathways into industry either individually or together.

Working with diverse cultures and employees with English as an alternative language (EAL)

Australia is becoming more and more culturally and linguistically diverse (CaLD) as immigration increases and horticulture businesses employ large numbers of CaLD employees who are temporary residents, Pacific Australia Labour Mobility (PALM) scheme or working holiday makers. Many temporary residents from CaLD communities who came from farming backgrounds in their home country are interested in, and have skills in horticulture[41]. To reap the benefits of this diversity and inclusion, businesses need to upskill their staff in cultural awareness and need to work with CaLD support organisations to create opportunities for learning workplace English (EAL) in work time.

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[40] E.g. https://www.qff.org.au/wp-content/uploads/2019/12/19-00351_DATA61_REPORT_AgricultureWorkforce_WEB_191031.pdf;
Horticulture Skills Capacity Framework to Build Resilience and Skills Retention– Final report for Mallee Regional Innovation Centre (2022)

[41] *Skills Gaps in Agriculture and Skills of Culturally and linguistically Diverse People*, RMCG Final Report for Agriculture Victoria, 2022

Support and facilitation for CaLD employees to gain basic licences such as chemical certification, fork lift and drivers licences or having overseas qualifications recognised will also be required to enable careers pathways for this cohort. Foundational requirements (housing, visas, family and community) for CaLD employees (and any other employees from cities) moving to regional areas will also need to be thought through as part of the attraction and retention package.

3.1.2 DIGITAL SKILLS AND CAPABILITIES

There is a general understanding that digital and artificial intelligence (AI) technologies are transforming the world of work and that today's workforce will need to learn new skills and learn to continually adapt, regardless of the industry.

Skills Impact, KPMG, Faethm and The University of Queensland produced the *Agricultural Workforce Digital Capability Framework* report[42] with support from all the Research and Development Corporations. According to studies underpinning the report, the agriculture sector was found to have low-levels of digital maturity and although this varied across the supply chain, it was found that there is a consistent lack of proficiency in operating technologies and digital devices applicable to business activities and processes[43].

To assist the agriculture industry in moving forward, the Agricultural Workforce Digital Capability framework (Framework) was developed. The Framework has identified a set of six digital capabilities and five enabling capabilities for agriculture sector to thrive. The digital capabilities include digital literacy, technology operation, data management, data monitoring analysis and interpretation, digital communication and incident management. While enabling capabilities include process improvement, personal learning and mastery, collaboration, business transformation, critical thinking.

The Framework provides practical guidance for future work needs and upskilling opportunities for industries to meet technological challenges in a rapidly changing environment. Complementing this Framework are a training and curricula handbook for education and training providers and a questionnaire and self-assessment approach[44].

In addition to this Framework, the Federal Government released its *Digital Foundations for Agriculture Strategy* in March 2022 which included a funding commitment to place Digital Officers (including a Digital Strategist) in each of the eight existing regional Innovation Hubs. Digital Officers will be expected to provide extension activities to support uptake of digital technologies by farmers, and will also feedback a 'grass-roots perspective' on digital needs to inform the activity and priorities of a new $30 million National Centre for Digital Agriculture[45].

3.1.3 LEADERSHIP AND INTERPERSONAL SKILLS AND CAPABILITIES

Several existing frameworks and initiatives address the development of personal attributes needed in the contemporary workforce, with the most clearly structured programs focused on 'leadership development'. These programs and frameworks describe a range of 'leadership attributes' such as the capacity to influence others through clear and empathic communication, the capacity for critical self-appraisal and self-regulation, and a curious and analytical mind-set to achieve effective problem solving[46].

Relevant leadership frameworks and programs have been funded, developed and/or delivered by a range of Research and Development Corporations including Hort Innovation, Fisheries Research and Development Corporation (FRDC), Dairy Australia and other organisations (e.g. Australian Rural Leadership Foundation, Regional Leadership Australia) and government agencies (e.g. Regional Development Victoria – Regional Community Leadership Program). Some relevant RDC examples are outlined below to highlight key insights from these initiatives.

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[42] https://www.crdc.com.au/sites/default/files/Agricultural%20workforce%20digital%20capability%20framework_Report_Final%20deliverable.pdf
[43] https://www.voced.edu.au/content/ngv%3A87300
[44] https://www.skillsimpact.com.au/vetinsights/digital-skills/
[45] https://www.agriculture.gov.au/sites/default/files/documents/digital-foundations-agriculture-strategy.pdf
[46] https://www.mckinsey.com/industries/public-sector/our-insights/defining-the-skills-citizens-will-need-in-the-future-world-of-work

Hort Innovation

Hort Innovation have long supported provision of initiatives to support professional development and leadership across the horticulture sector (i.e. through Hort Frontiers Leadership Fund) and specifically for the vegetable industry (e.g. Growing Leaders program, 2019). A review of the Hort Frontiers Leadership Fund programs along with consideration of other leadership programs highlighted aspects that should be considered in the design and delivery of such initiatives, such as:

- Contemporary leadership need to include horizontal (technical competency) and vertical (behavioural change and emotional health) capabilities and can occur at all levels of an industry or business
- A portfolio of activities is needed to tailor activities to the target audience and consider previous education, stage of career, under-represented groups, barriers to participation and blending with technical skill concepts
- Ongoing support for individuals to test and develop their leadership skills (e.g. through shadowing of more experienced/senior staff and opportunities and support to participate in industry committees or other new challenges).

Fisheries Research and Development Corporation

FRDC's strategic planning over the past 20 years has consistently identified leadership development as a priority. Their National Seafood Industry Leadership Program (NSILP) commenced in 2000 and has delivered 300 graduates to-date. The NSILP purposefully targets diverse participants for leadership development, including diversity with respect to age, gender identity, type of role, and sector within industry.

The format of the program involves guest speakers, networking events, small group work focused on an industry relevant project and an alumni program. The group work involves presenting to industry and government where they can seek assistance to complete them, with projects covering promotion of industry to schools, school leavers and community and digital learning.

Identified benefits of the program include collaboration across sectors and roles, increased skills, knowledge, and industry networks to initiate leadership experience and an understanding of teamwork.

Forestry and Wood Products Australia

Forest and Wood Products (FWPA) contracted the Australian Rural Leadership Foundation (ARLF) to develop and deliver their two year Regional Collaborative Leadership Program in 2019. The program was aimed to develop mid-level managers to increase their capacity to take national leadership roles. The program featured facilitated sessions (covering adaptive leadership, behavioural leadership skills, social licence and storytelling and collaboration skills), external consultants, alumni and panel presentations and project work. Learnings from the delivery of the program noted that for participants to maximise the opportunities of the leadership program, there is a need for:

- FWPA to formally communicate with participants' employers to ensure understanding and relevance to the industry and value in investing in their staff
- Formalised follow up of program graduates at three, six and 12 months to provide development support.

Dairy Australia and Australian Dairy Farmers

In August 2021, Australian Dairy Farmers launched their Dairy Industry Leadership Strategy. The Strategy set out a vision of leadership that encompassed all workers. A key principle is "that everyone is or can become a leader through leading self, leading with others or leading the community and industry"[47]. This positioning represented a shift away from the more traditional view of leaders as senior employees with specific role titles including 'leader', 'manager' or 'supervisor'.

The Dairy Australia Capability Framework which comes with the Strategy provided a series of 'I' statements associated with a 'leadership mindset', which they designated as applicable across the full spectrum of roles in the dairy industry, from dairy hand to managing director.

Dairy Australia delivers the People in Dairy program which provides a range of resources to support dairy producers to be 'an employer of choice'. Resources cover recruitment, employment processes and management of staff that can help underpin business success. These resources are available through the DA website[48] and include webinars as well as face to face training delivered through DA regional groups

3.1.4 BUSINESS STRATEGY AND RISK SKILLS AND CAPABILITIES

Australian horticultural producers have always needed to adapt and respond to changing circumstances but the combined pressures of extreme weather events, global supply chain disruptions, labour shortages, the trend toward farm consolidation and sharp increases in input costs mean producers increasingly need advanced skills in business management and strategy development. Some examples of key factors driving the need for advanced business skills are outlined in Table 3-1.

Table 3-1: Examples of factors driving business skills

FACTOR/DRIVER	SKILLS
Increasing size and/or complexity of business	Strategy, financial management, business planning/management, cost of production, record keeping, investment decisions, commercialisation, managing growth, compliance (legislative / regulatory), quality systems, managing risks
Increase in competition and need for marketing or products / brand to differentiate and maintain market share	Understanding markets and consumers, marketing / promotion / selling, exporting, product development, supply chain management, product development
Free trade agreements have opened opportunities for market access to Australian farmers.	Skills and capabilities required in how to export food to emerging markets and global logistics.
Online shopping and ordering has increased the sales footprint of many organisations leading to an expansion in the delivery and sourcing of products from longer distances. Logistics management is a growing skill need for small to medium enterprises.	Higher level supply chain and logistics skills required to support lean, fast, reliable, transparent and collaborative relationships with key suppliers and customers and with other companies, including competition and research organisations
Investment in integrated technology, such as robotics and digital and wireless technology to monitor farm operations and detect crop issues. Also, requirements for quality standards in operations, and industry databases (including commodity-specific production platforms and other technology platforms)	Need for skills in strategic planning, risk management, mergers and acquisitions, online marketing business development and financial planning to respond to the dynamic and changing operating environment, with increased competition and opportunities to reach global markets.
Impact of carbon emissions (including policy framework to mitigate)	Scanning and understanding impact of global supply chain scrutiny on carbon emissions Preparing for implications of carbon trading (e.g. carbon sequestration).

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[47] https://australiandairyfarmers.com.au/purpose-of-strategy/

[48] https://thepeopleindairy.org.au

3.2 APPROACHES TO PEOPLE DEVELOPMENT

There are several strategies that are often deployed in people development programs across the agriculture, horticulture and allied sectors, which include:

- **Technical training** - identification and provision of specific training (often within the VET system) aimed at developing the participant's hands-on skill. These courses are usually delivered and completed over a short timeframe, and result in assessment and certification of competence as evidence of successful completion.

- **Coursework** - including courses delivered by universities and proprietary providers (e.g. BSM Global; Carbon Farmers Australia; IPM Technologies), aimed at higher level knowledge including background theory relevant to production. These can be short-courses, self-paced learning, residential or over longer timeframe (e.g. Diploma, Graduate Certificate).

- **Leadership training** - usually over a long timeframe and engaging the participant in group learning with other participants. Sometimes training is delivered online. Leadership training with a face-to-face component is usually designed to simultaneously develop participants' professional network or increase access to peer support.

- **Structured mentoring** – these are designed and offered by member associations or government agencies. Mentees who apply to participate are matched with experienced farmers, leaders, or extension specialists who have volunteered to mentor. Programs generally run over several months to a year, and usually involve some face-to-face interaction between mentor and mentee.

- **Study tour** - short, highly specific, often international. These usually involve one or a small number of people investigating specific topics. They often have the objective of supporting and fast-tracking uptake of new technologies or practices ('international best practice') for greater productivity or improved global competitiveness.

- **Individual research project** - long-form investigation of a self-nominated topic, often including funded travel and a requirement to report back for the wider benefit of the funding sector or community (e.g. Nuffield and Churchill scholarships). They also include industry-embedded Masters or Doctoral research.

- **Networks and networking** - include formal alumni groups, ongoing support for employees in their leadership journey and career pathway development.

- **Specific programs -** for CaLD employees (or potential employees) and other under-represented groups including workplace English.

Each of these people development strategies have slightly different aims, for example, increased skills, networks, resilience, or subject knowledge. They also require different levels of personal commitment on the part of the participant, different degrees of independent thinking and action, and there are a range of expectations around self-management and motivation. Flexibility for participants is a key theme of many successful people development programs. Offering participants a range of strategies ensures participants are well supported in their career/leadership development.

Other relevant strategies from a range of other industries, include, for example[49]:

- Job shadowing
- Pairing employees for peer coaching
- Knowledge sharing activities
- Industry training days
- Competency frameworks and skills passports
- Advanced apprenticeships

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[49] https://www.togetherplatform.com/blog/people-development

- Graduate programs
- Career pathway programs
- Work integrated programs.

Some of these strategies and examples of current and/or successful programs are further detailed in the following sections 3.3.2 - 3.3.6.

3.3 ATTRACTION AND RETENTION OF STAFF

There are numerous strategies in which businesses, industries and government can support the attraction and retention of people to particular roles, sector and regions. Many of these strategies are currently being implemented across the agriculture and horticulture sectors. Those of relevance to the vegetable, potato, onion and banana industries are briefly outlined below.

3.3.1 GOVERNMENT POLICIES, PROGRAMS AND FUNDING

Government policies, programs and funding play an important role in helping industries and regional areas both attract and retain workers, for example:

- The Commonwealth Government has supported Higher Apprenticeships as an option for careers pathway programs to attract high achieving students in areas of industry need. They are beginning to broaden the program to include sectors other than trades. Refer to 'Apprenticeships and Traineeships'
- Australian Government's Destination Australia Program allows regional universities and vocational education providers to apply to offer scholarships of up to $15,000 a student per year in a drive to boost student numbers in regional Australia.
- Work Integrated Learning (WIL) by the Australian Collaborative Education Network supports employers and universities in programs with $1500 scholarships available to students who do their WIL component in regional areas. Equity scholarships are also available for other under-represented groups.
- The National Centre for Vocational Education Research (NCVER) has relevant data on Vocational Education and training including an interactive infographic showing the different school to work pathways for 16-25 year old's[50]. It highlights that there is an appetite for different pathways other than the 'school-uni-work' pathway.
- My Skills/Your Career[51] is the Australia Government's one-stop-shop connecting job-seekers with courses, employers and funding opportunities
- AgCAREERSTART[52] is a gap year program targeting 17 – 25 year old's that features full time paid farm job and training and development activities, including a $4,500 training bursary. The program is funded by the Department of Agriculture, Fisheries and Forestry with support from the National Farmers Federation

3.3.2 CAREER PATHWAYS PROGRAMS

Career pathway programs designed for a business or industry provide employees with an ongoing mechanism to enhance their skills and knowledge that can lead to mastery of their current jobs, promotions and transfers to new or different positions. Such programs benefit an organisation through improving morale, career satisfaction, motivation and productivity. Employees are generally more engaged when they believe that their employer is concerned about their growth and responsiveness in meeting departmental and organizational objectives.

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[50] https://www.ncver.edu.au/research-and-statistics/infographics/visualising-school-to-work-pathways-using-lsay
[51] https://www.myskills.gov.au/.
[52] https://agcareerstart.com.au

Career pathways designed with students offer a range of educational and work-based learning opportunities that allow students to explore their interests, build their skills, and gain practical experience. Such programs should ensure that students are well-prepared for the challenges of the 21st-century workforce and are equipped with the tools they need to achieve their career goals. Importantly offering a variety of pathway programs provides more equitable opportunities for students with different interests, strengths, and needs to succeed.

A review of highly valued and successful career pathway programs from overseas and Australia have several key features in common, as outlined in Table 3-2.

Table 3-2: Features of successful career pathways programs

FEATURE	DESCRIPTION
Working together	Industry, chambers of commerce, employers, educational bodies (schools and higher education), careers counsellors all working together rather than in silos. If they can be co-located even better.
Long term vocational orientation	Long term vocational orientation begins as young as 13 (Switzerland and Germany) but preferably from primary school, with work experience and support programs continuing until the workers were settled into full time work.
Fostering life-long learning	Career skill development, work integrated learning and apprenticeships are crucial to the success of life-long learning and empowering individuals to manage their own careers and provide clear pathways into the workforce.
Use of support staff and mentors	The importance of apprentice/trainee and training support staff and mentors within companies or for companies to ensure training benefits all parties and trainees are properly embedded in the organisation. In other words, new staff are doing work that adds to the business and are mentored to ensure they are working at their best and feel part of the team.
Providing a one-stop shop	A one-stop shop approach with a common touch point for diverse users of different ages. This can have multiple access channels including face-to-face and online options. Finland has One-Stop Guidance centres and an e-guidance service which connects educational institutions, social and health services, voluntary organisations and other bodies that work with young people in one location[53].
Providing a variety of options	A variety of options including apprenticeships, traineeships, graduate programs and internship programs. Various pathways according to the interest and stage of life of applicants and needs of organisations. Some include a generic pathway program i.e. new staff get to work across the organisation to experience e.g. accounts, legal, frontline, specialist areas. If the organisation is big enough to support this, it can be valuable for retaining staff, as they can see which area they are most suited to working in. Or, as in the case in the United Kingdom (UK), Local Government system, a program where new staff work across several different Local Government Areas to be exposed to a broader suite of contexts. To consolidate their approach to recruitment and retaining staff, the UK has a Management Trainee Program (two years) for graduates.
Clear governance	Essential to support the collaboration of many stakeholders from industry and education and training sectors to work together for success.
Conduits and partnership brokers	Use of conduits and partnership brokers between industry and education/training and job seekers and jobs can make it easier for organisations to efficiently make connections and set up governance arrangements.
Localised Support	Localised support to improve success. The best practice example of this is in Switzerland where the local support organisation provides marketing, facilitation of industry connections and mentoring for apprenticeships, improving the success of apprenticeships[54].

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[53]   International Centre for Career Development and Public Policy, 'Finland: One-Stop Guidance Centres and e-Guidance services', [website] http://iccdpp.org/portfolio/finland-one-stop-guidance-centres/, (accessed May 2017).

[54]   P Forbes and P Norris, 'Understanding student expectations and national and international best practice', AGCAS Conference, 2011.

3.3.3   APPRENTICESHIPS AND TRAINEESHIPS

Apprenticeships and traineeships provide a structured and paid pathway to employment and can offer a way to develop current and potential staff in specific skills. If well supported by a Group Training Organisation, TAFE or similar, the benefits include:

- Allowing new people to learn on the job and in the classroom whilst being paid
- Reducing risks around human resources, industrial relations and WHS
- Providing a clear career pathway and recognised qualifications
- Supported introduction to the workplace
- Students gaining on-the-job experience and can test whether this is their career option of choice
- Ability to support achieving diversity targets within employee cohort with specific incentives for mature age workers and people with disabilities
- Additional support in the workplace with attraction, recruitment and retention of apprentices and trainees through the combined efforts of the Australian Apprenticeship Support Network, Group Training Organisations (GTO) and Registered Training Organisations (RTOs).

For people from CaLD backgrounds these additional benefits include:

- More opportunities to engage with the broader workforce providing more opportunities to improve their English skills
- Provision of better and more secure career pathways than casual work which can "pigeon hole" some workers into low-skilled work
- If designed well, they will learn across several areas of the business or potentially across several farms increasing both skills and experience.

According to NCVER research in 2019, utilising a GTO to employ apprentices can ensure a higher rate of completion for non-trade apprentices/trainees when compared to direct employment[55]. For small and medium employers, this is substantially higher.

However, barriers to enabling apprenticeships and traineeships have been reported as:

- Lack of suitable staff on farm to supervise apprentices/trainees either with subject matter skills or supervisory skills
- Low wages compete with other sectors or casual work that would pay more
- Young people may not have transport to get to farms or fuel costs may be prohibitive on low wages.

3.3.4   HIGHER APPRENTICESHIPS

Higher or Degree Apprenticeships are an emerging area of apprenticeships aimed at meeting the future needs of industry and offering more challenging options for high achievers instead of just the 'school to university to work' option. It also aims to appeal to a more diverse group of people.

Initial trials have been conducted in engineering, project planning and social services extension. They are closely tied to industry needs and include targeted promotion to parents and students so they can see the ultimate goal was to get a good job.

Early indicators show that Higher Apprenticeships offer an opportunity for an alternative approach, where industry demand, due to the changing economy, meets the benefits found in the combination of on-the-job and off-the job (VET or Higher Education) training through an apprenticeship/traineeship type arrangement.

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[55]   https://www.ncver.edu.au/__data/assets/pdf_file/0043/9659536/Research-messages-2019_A5_Digital.pdf.

3.3.5   GRADUATE PROGRAMS

Graduate programs are structured professional development opportunities specifically designed for new or recent graduates and have been shown to be an effective way to attract and retain skilled staff. They are often offered by government departments and large organisations. A recent example of importance to the agriculture and horticulture sector is the Queensland Farmers Federation's (QFF) Agricultural Extension Work Placement Program, funded through the Queensland Government's Reef Water Quality Program. Organisations where graduates have been working under this Program include Australian Banana Growers' Council and Mackay Area Productivity Services.

The program showed a high level of retention of graduates, opportunities for professional development for mentors and managers and a decrease in staff turnover overall due to the positive culture, enthusiasm and ongoing shared learnings that the graduates brought to the organisations.

Some of the positive features of the program have included strong project management and communication by QFF, a fully funded program, facilitated networking, structured mentoring and commitment by senior leaders.

3.3.6   INTERNSHIPS AND WORK INTEGRATED LEARNING

Desktop review and stakeholder engagement identified that experience in the workplace was highly valued but often lacking in job applicants. The Foundation for Young Australians, after following the journeys of 14,000 young people over ten years from ages 15-25 had several recommendations for what was required to support young people in equipping and empowering them with the skills, mindset and confidence to navigate work. The recommendations included:

"A commitment to work integrated models of learning to ensure opportunities to gain critical relevant work experience" (Foundation for Young Australians, The New work reality, 2018).

A review of international research from NCVER in 2020 strengthens the case further and links work related learning with better employment outcomes for VET students and productivity gains and strong return on investment for employers in the form of job-ready workers. It points to the following best practice:

- For employers - invest in training for workplace mentors, establish clear expectations, create environments conducive to learning, provide appropriately challenging work, investigate how work-based education programs operate in other organisations
- For training providers - define responsibilities, provide support and guidance for students, match students with employers, make workplace expectations clear, prepare students for difficult experiences, encourage employers to offer paid placements
- For policy-makers - create environments more conducive for employers and students to participate in work-based education programs by setting quality standards and incentivising effective work-based education programs[56].

Some university courses organise internships or have incorporated Work Integrated Learning (WIL) programs into their courses. These vary in length with some paid and some not. Most of them are for final year students only, although with the changes in higher education this year, there appears to be an appetite to extend this to commence from first year. A website is available to support employers and universities enable WIL[57]. It showcases a deep partnership between Victoria's Brimbank City Council and RMIT university[58], which has enhanced student's work preparedness, provided opportunities for young people to provide benefits to give

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56   Work-based education in VET, Kristen Osborne, Maree Ackenhurst, Leesha Chan and Rose-Anne Polvere, National Centre for Vocational Education Research
57   https://wil-innovation.acen.edu.au
58   http://acen.edu.au/innovative-models/project/the-lasting-impacts-of-deep-partnerships/.

back to their local community and provided council with new ideas, extra research and potential talent for recruitment.

Engineering students often need to complete a 12-week placement in their final year in order to be accredited and this may be an opportunity for horticultural industries to consider given the increasing need for digital, mechanical and other technical skills as productions systems and supply chains become larger and/or more complex. These placements help industry to have a direct role in graduate preparation and universities receive feedback on the relevance of their programs.

3.4 ATTRACTION AND RETENTION OF YOUNGER PEOPLE

The average transition time from education to work is 4.7 years as compared to 1 year in 1986[59]. According to the Foundation for Young Australians there are four factors which can accelerate the transition from full time study to full time work. Three out of the four factors can be influenced as part of a careers pathways program. These include:

- **An education that builds enterprise skills** - working with higher education providers on any type of work related learning will benefit young people's skills and confidence and provide a much needed pipeline of new workers.
- **Being able to undertake relevant paid work experience** - providing paid apprenticeships, traineeships or cadetships to young people will be an incentive for them choose the business / sector over other organisations.
- **Finding employment in a sector which is growing** - skills in growing and producing food, across the whole supply chain, will always be in demand.

3.4.1 WHAT YOUNGER PEOPLE ARE SEEKING

Research on what younger people are seeking from jobs and their careers has shown it to be generally values based. They are looking for work that allows them to contribute to their 'wider purpose'. Having a positive impact and embracing a sense of purpose are "mandatory" for attracting younger workers[60].

In a recent webinar by Farmers for Climate Action, called "Harvesting Hope: the power of young people in Agriculture", the younger presenters spoke about several factors that attracted them to agriculture and kept them motivated. Aside from well-known workplace practices (e.g. flexibility in location and/hours and a positive workplace culture), the speakers referred to the following related to development needs:

- Language around staff – the importance of talking about staff as humans rather than commodities
- Value of sharing positive stories from the land (e.g. from the agriculture sector)
- Inspiring curiosity can be hugely powerful to cultivating engagement
- Broaden learning beyond technical requirements of a job – young people are looking at the whole so wish to build liveable communities around agriculture, link their work to food security which is a fundamental human right
- Human connection is a natural state so encourage membership of larger support groups (e.g. community leadership programs, Future Farmers Network, RRR women, Young Farmers Advisory Council).

For this last point, these groups provide informal learning about technical aspects around whose doing what well or what went wrong and why? The young presenters noted the networking and motivational benefits of being part of these groups.

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59 https://www.fya.org.au/wp-content/uploads/2018/06/FYA_TheNewWorkReality_sml.pdf.
60 https://time.com/6176169/what-young-workers-want-in-jobs/

4   Strategy development

This People Development Strategy has been developed with input from:

- Small, medium and large horticulture businesses
- Educational experts
- Leadership experts
- Technical specialists such as agronomists and
- Researchers
- Young and/or staff new to horticulture.

Importantly, the Project Advisory Group guided the engagement and development of the final Strategy and implementation plan. The Strategy also includes information from the desktop review of examples of people development and experiences from horticulture and other sectors presented as case studies.

This is the first Strategy for the vegetable, potato, onion and banana industries, although previous work has been undertaken and is referred to in this version. The expectation for this Strategy, is for it to be a live document that can be reviewed frequently in line with changing industry needs. This will require:

- Regular reviews of the industry context to update the most relevant issues that may impact the implementation of the Strategy
- Updating of key skills and capability gaps as industry needs change
- Evaluations of the actions in the implementation plan against the desired outcomes.

Refer to Appendix 3 and 4 for the Strategy and Implementation plan.

5 Conclusion and recommendations

The People Development Strategy provides a guide for the investment in people in the five levied industries of vegetables, fresh potatoes, processed potatoes, onions and bananas. The Strategy aligns with the Strategic Investment Plans (SIPs) for each of these industries, with the desired outcome being: *Improved capability and an innovative culture in the …(industries)… maximises investments in productivity and demand.*

The aspirational outcomes for this Strategy are:

- Vegetable, potato, onion and banana industries to be strong, resilient and able to meet changing needs
- The industries are positioned to provide well-rounded and supportive development opportunities.

For these outcomes to be fully realised, investment by individual business, industry organisations and Hort Innovation in programs and activities aligned to the Strategy will be needed. Each entity has a key role to play both individually and in partnership across the sectors to ensure people development is recognised as core to ensure resilient industries.

Given the complex and evolving context of horticultural businesses, workforce trends, economic uncertainty and climate change, it's important that the Strategy and implementation plan are not considered fixed and are reviewed regularly. There is also an opportunity for Hort Innovation to consider this Strategy as a framework for other horticulture industries who see the value in developing a people capacity building/leadership strategy.

Appendix 2: Interview guide

RMCG

People Development Strategy – Interview & Workshop guide

Hort Innovation (Potatoes, Onions, Vegetables and Bananas)
May, 2023

Introduction

The aim of the interviews and focus groups is to have a facilitated discussion about the key skills and capability gaps the industries face. Therefore, all of the questions listed below are open-ended. The facilitator may not need to ask each of these questions, but just ensure that each of them is discussed and answers to them are collected.

This is why the interview/workshop will start with the broad question about what the key people development issues are. The facilitator can then jump between questions as necessary, depending on the response to this first broad question, i.e. deal with those issues which are most important to the individual or group. The idea is to gain clarity and insight about what the issues are and then seek their views on the potential solutions.

Note to interviewee that the information they provide is confidential and will be de-identified in the report/strategy.

Brief background of project

Like many industries across Australia and particularly within the horticulture sector, the vegetable, potato, onion and banana industries are facing challenges in attracting, developing and retaining labour, skilled and specialist workers. While there has been investment into training and leadership initiatives, this has often been opportunistic and reactive. A coordinated, clear and well-thought through people development strategy

(Strategy) will **focus both efforts and funds** and ensure industries are **able to respond to present challenges** and **establish future skills** for a high-functioning and innovative horticulture industry.

The development of a Strategy to guide investment in people aligns with the Strategic Investment Plans for the five levied industries of vegetables, fresh potatoes, processed potatoes, onions and bananas.

Although this project is not about attracting staff in a promotional sense, staff development opportunities rate highly as what potential employees are looking for when job searching. Staff development can be one element of the "psychological contract" or expectations of the organisation and its employees and can add to the organisation's brand in the job marketplace.

1   Broad people development issues

1. What are your current main issues related to people development?

2. What do you see as your emerging people development needs in the medium to long term?

2   Skills and capability requirements

3. What key skills and/or capability gaps do you a. currently have or b. do you think you will have in the future (include long-term 10-15 years)? These are skills that are critical to your business/industry.

   a. Note: Is this a labour gap or a skills gap? Make sure they focus on skills gaps.
   b. How are you looking to fill these gaps/upskill people?
   c. If prompting is required – ask about core skills, digital literacy skills, interpersonal and leadership skills and business, strategy, risk and resilience skills (see Appendix 1 for notes)

4. What has worked/not worked before in developing your staff? What has been your biggest success in developing staff? (ask if it's okay to use it as a case study)

   e.g. see Appendix 2 for suggestions. We could see which ones from the list they have used – especially the more innovative ones.

5. Do you believe there are any barriers to developing your present or future staff?

   a. If so, what? Is this due to competition from other industries in your area? E.g. mining or other ag
   b. What would make it easier to develop your staff?
   c. What are staff interested in? i.e. Has there been great take-up?

3   Enabling factors

6. Enabling factors are things that your organisation or industry can offer to make it easier/more difficult to develop staff. Examples are:

   - **Flexible work options** – part-time/split shifts/ different hours/cultural time off/job share/5 days in 4
   - **Life-long learning culture**/Organisation values People Development/they match what they are saying with enabling actions (e.g. there is no point in saying that staff should go and do a professional development course or hook up with a mentor if they are already working 50 hours/week)
   - **Partnerships** – do you/your organisation partner with either similar organisations or complementary organisations to develop your staff, e.g. each send a few staff to the same course/partner with an RTO/TAFE/Uni to deliver short courses/partner with a settlement agency to onboard CaLD staff/share staff across organisations
   - **Networks/networking** (sharing info and hearing from other businesses or sectors (e.g. Women's leadership evaluation showed this was highly valued, as did young people in Ag seminar). Issues might be competition?
   - **Systems/process,** e.g. does their system accommodate flexible work/split shifts/assist with onboarding – maybe online/allow for mentoring time/allow for PD time/remote input of data
   - **Emotionally healthy organisations** – safe, open and honest; feedback is taken on board, its okay to make mistakes; learning is valued; purpose and goals; continuous improvement, (employers of choice e.g. Dairy industry)
   - level of autonomy/feeling of empowerment

Does your organisation/industry have any of those? If you had to pick the most important one(s) in helping staff develop and ultimately retaining them – which one(s) would you pick?

Note any case studies

7. Diversity and inclusion
    a. Do you currently employ people from CaLD backgrounds/people with disabilities?
    b. What challenges and opportunities have you seen through this experience?
    c. Are there any challenges or opportunities in developing staff members from CaLD backgrounds?
    d. Are you aware of any support in your region for CaLD groups? E.g. settlement support, housing, visas, cultural/pastoral care
    e. What possible options have you seen to overcome any barriers? Is there anything that industry could do to help?

Note any case studies

4   Industry Context issues

We already have a strong list of industry context issues but note any that are raised.

5   Suggestions for staff or agronomists to be part of a workshop

Do they have any suggestions for frontline staff who have recently been upskilled or have improved their skills? We will run a workshop with them to tease out further what worked/didn't work for them.

Agronomists are required by many horticultural businesses. Do you have any contacts of agronomists you work with either from your organisation or other organisation? We wish to tease out how they developed their skills and what organisations/industries can do to develop them further.

Appendix 1: Key skills areas

1. Core Skills
   - Working on farm
   - safe use of machinery
   - pests, disease and biosecurity
   - Documenting work and work practice/industry QA/WHS
   - managing environment, water and run-off/irrigation
   - Kinds of things you will find a list of in Skills Impact

2. Digital Literacy Skills
   - **Digital capabilities -** technology operation, data management, data monitoring analysis and interpretation, digital communication, incident management
   - **Enabling capabilities** - process improvement, personal learning and mastery, collaboration, business transformation, critical thinking

3. Interpersonal and leadership skills

   Vertical capabilities -
   - **Leading self** - taking personal responsibility, lead by example, open open-minded
   - **Leading with others** - engage, support, develop, empower, collaborate, build resilience, embrace diversity and inclusion
   - **Leading in our businesses, communities and industries** - holistic and strategic thinking, innovative and adaptable, embrace and lead change, manage ambiguity and uncertainty, advocate and communicate with influence

4. Business strategy, risk and resilience skills
   - Financial management
   - Business and Strategic planning
   - Investment decisions, commercialisation
   - Managing growth, compliance (legislative and regulatory, quality systems
   - Risk management
   - Resilience knowledge and management

Appendix 2: What has been tried before?

From Hort

- Technical training
- Coursework
- Leadership training
- Structured mentoring
- Study tours
- Individual research projects
- Specific programs for CaLD employees/potential employees

From other industries

- Job shadowing
- Pairing employees for peer coaching
- Knowledge sharing activities
- Industry training days
- Competency frameworks and skills passports
- Advanced apprenticeships (Industry 4.0)
- Graduate programs
- Careers pathway programs
- Work integrated learning

Appendix 3: Skills gap analysis

Table A3-1: Skills and capabilities gap analysis

SKILLS AREA	SKILLS	CAPABILITIES
Core skills and capabilities	▪ Induction (pre and post commencement) ▪ Basic tickets and licences (tractor, truck, forklift, chemical handling, WHS) ▪ Spray operators ▪ Mechanical skills ▪ Maintenance skills ▪ First aid (remote first aid and mental health first aid) ▪ Basic agronomy (soil health, plant physiology, nutrition, irrigation, pest and disease management, understanding cropping system) ▪ Diversity and inclusion awareness ▪ English as an Alternative Language (EAL) skills (workplace and certificate specific) ▪ Capacity to supervise and mentor apprentices and trainees	▪ Appreciation of critical nature of WHS ▪ Experience around machinery and packing sheds ▪ Understanding off label use of chemicals and risks ▪ Willingness to understand and engage in first aid ▪ Agronomy – application of knowledge of the markets and different varieties to make sound decisions ▪ Agronomy – interpersonal and communication skills ▪ Working with a diverse workforce ▪ Ability to supervise and mentor apprentices and trainees
Digital skills and capabilities	▪ Data creation in field ▪ Technology operation ▪ Data management and monitoring ▪ Incident management ▪ Digital marketing and communication ▪ Digital security ▪ Data visualisation ▪ IT skills to maintain equipment	▪ Understanding how systems interact ▪ Understanding big data, analysis and communication of data ▪ Sufficient knowledge to hire competent digital consultants ▪ Data analysis and interpretation for decision making ▪ Process improvement ▪ Personal learning and mastery ▪ Collaboration with technology suppliers and services ▪ Business transformation ▪ Analysis of new technology (AI, GPS, robotics, VR) ▪ Digital strategist
Interpersonal and	▪ Communication and engagement principles ▪ Leading self – taking personal responsibility	▪ Strong work ethic (turning up) ▪ Problem solving and networking to solve problems ▪ Understanding self - strengths and weaknesses, skills and motivations

SKILLS AREA	SKILLS	CAPABILITIES
leadership skills	▪ Leading others – engage, support, develop, empower, collaborate, build resilience, embrace diversity and inclusion	▪ Communication and engagement practice ▪ Working with and as a team ▪ Critical thinking ▪ Managing conflict ▪ Managing change and innovation ▪ Negotiation skills ▪ Translating business strategy into action ▪ Empowering others – teaching and instructional skills ▪ Confidence and independence to step in *Agronomists* ▪ Building trust with growers ▪ Liaising between growers and researchers ▪ Tailoring agronomic communication and solutions ▪ Capacity building/mentoring of young agronomists
Business strategy and risk skills and capabilities	▪ Biosecurity skills ▪ Higher level knowledge of QA, WHS and ethical/environmental and social considerations ▪ HR/people and culture skills ▪ Financial management and efficiencies ▪ Risk management ▪ Incident management (media, management, review and implementing change) ▪ Finding and applying for grants ▪ Compliance skills and knowledge ▪ Skills in navigating visa and migration system ▪ Working with employees with EAL ▪ Working with PALM workers (including out of hours) ▪ Resilience knowledge	▪ Leading in businesses, communities and industries – holistic and strategic thinking, innovative and adaptable, embrace and lead change, manage ambiguity and uncertainty, advocate and communicate with influence ▪ Holistic understanding of the industry, supply chain, and markets ▪ Understanding of customers, retailers and how to provide a higher quality product ▪ Ability to upskill professionals from other industries (HR, finance, QA, lawyers) ▪ Knowledge and understanding of diverse groups and support networks ▪ Developing and maintaining emotionally healthy organisations ▪ Resilience management and collaboration ▪ Succession planning

Appendix 4: People Development Strategy and Implementation Plan

RMCG

People Development Strategy

SEPTEMBER 2023

Hort Innovation

Acknowledgement of Country

We acknowledge the Traditional Owners of the Country that we work on throughout Australia and recognise their continuing connection to land, waters and culture. We pay our respects to their Elders past and present, and we acknowledge emerging leaders. Moreover, we express gratitude for the knowledge and insight that Traditional Owners and other Aboriginal and Torres Strait Islander people contribute to our shared work in Australia.

We pay respects to all Aboriginal and Torres Strait Islander communities. We recognise that Australia was founded on the genocide and dispossession of First Nations people and acknowledge that sovereignty was not ceded in this country. We embrace the spirit of reconciliation, working towards self-determination, equity of outcomes, and an equal voice for Australia's First People

Contents

People Development Strategy

HOW WE ARRIVED AT THIS STRATEGY

As an important Australian industry, the horticulture sector had a farm gate value of production of $15.2 billion in 2020-2021. The industry is growing and employs about 64,650 full-time equivalent persons (69,700 including processing of horticulture products) with a value add of $9.6 billion (10.2 billion including processing)[1].

Like many industries across Australia and particularly within the horticulture sector, the vegetable, potato, onion and banana industries are facing challenges in attracting, developing and retaining labour and skilled and specialist workers. While there has been investment into training and leadership initiatives, this has often been opportunistic and reactive.

A coordinated, clear and well-thought through people development strategy (Strategy) will focus both efforts and funds and ensure industries are able to respond to present challenges and establish future skills for a high functioning and innovative horticulture industry.

A Snapshot of the Horticulture Sector (2020/21)[1]

$15.2bn
production
farm gate value

$9.6bn
value add

64,650
full time
employees
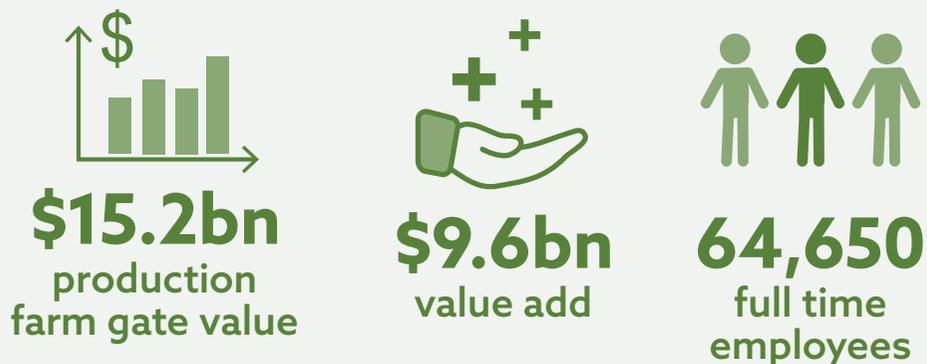
[1] Contribution of Australian horticulture industry, a general equilibrium analysis, The Centre for international economics, July 2023

ALIGNMENT WITH STRATEGIC INVESTMENT PLANS

The development of a Strategy to guide investment in people aligns with the Strategic Investment Plans (SIPs) for the five levied industries of vegetables, fresh potatoes, processed potatoes, onions and bananas.

The outcome desired in these SIPs is:

> Improved capability and an innovative culture in the …(industries)… maximises investments in productivity and demand.

Building capacity for the industry through investment in programs which facilitate ongoing leadership development is a core element of achieving this outcome.

The aspirational outcomes for this Strategy are:

- Vegetable, potato, onion and banana industries to be strong, resilient and able to meet changing needs
- The industries are positioned to provide well-rounded and supportive development opportunities.

WHAT SUCCESS LOOKS LIKE FOR THE PEOPLE DEVELOPMENT STRATEGY

The People Development Strategy aims to contribute to the development of strong and resilient industries that are able to respond to changing needs. How this strategy will facilitate this achievement is described in Figure 1 below.
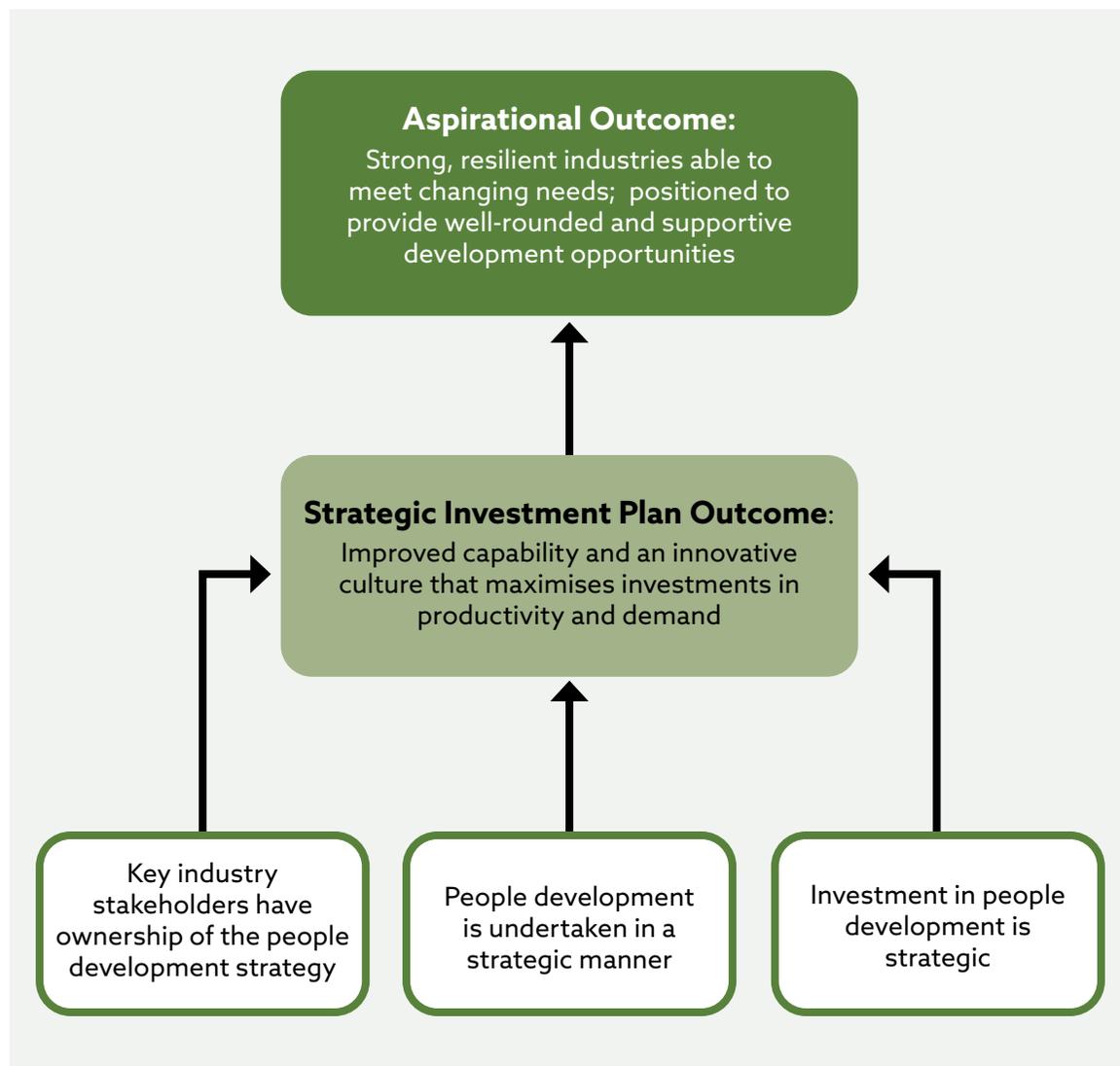
Figure 1 Success of the Strategy leading to long-term aspirational outcome and SIP outcome

ABOUT THE STRATEGY

This Strategy has been developed with input from:

- Small, medium and large horticulture businesses
- Educational experts
- Leadership experts
- Technical specialists such as agronomists and researchers
- Young and/or staff new to horticulture.

A Project Advisory Group guided the engagement and development of the final Strategy and implementation plans. The Strategy also includes information from a desktop review of national and international examples of people development and experiences from horticulture and other sectors.

We acknowledge and appreciate the time from all members of the Project Advisory Group and interviewees who have provided input into this Strategy so that it can better reflect the needs of the industries involved.

This is the first Strategy for the vegetable, potato, onion and banana industries, although previous work has been undertaken and is referred to in this version. The vision for this Strategy, is for it to be a live document that can be reviewed frequently in line with changing industry needs. This will require:

- Regular reviews of the industry context to update the most relevant issues that may impact the implementation of the Strategy
- Updating of key skills and capability gaps as industry needs change
- Evaluations of the actions in the **implementation plan** (page 16) against the desired outcomes.

Strategy Framework

Resources to intervene in workforce are limited and need to be used strategically. We recognise that each business and sector operates within a broader context with many factors influencing how they operate. In addition there are numerous enabling factors which will impact on how the strategy is implemented.

A framework (Figure 2, right) was developed to describe the current environment within which the industry operates and what needs to be considered when developing a People Development Strategy.

The framework provides:

1. **STRATEGIC PROCESS** - the inner circle with four quadrants

2. **ENABLING FACTORS** necessary for the Strategy to be successful - inner white circle

3. **INDUSTRY CONTEXT** providing both challenges and opportunities - outer yellow circle.
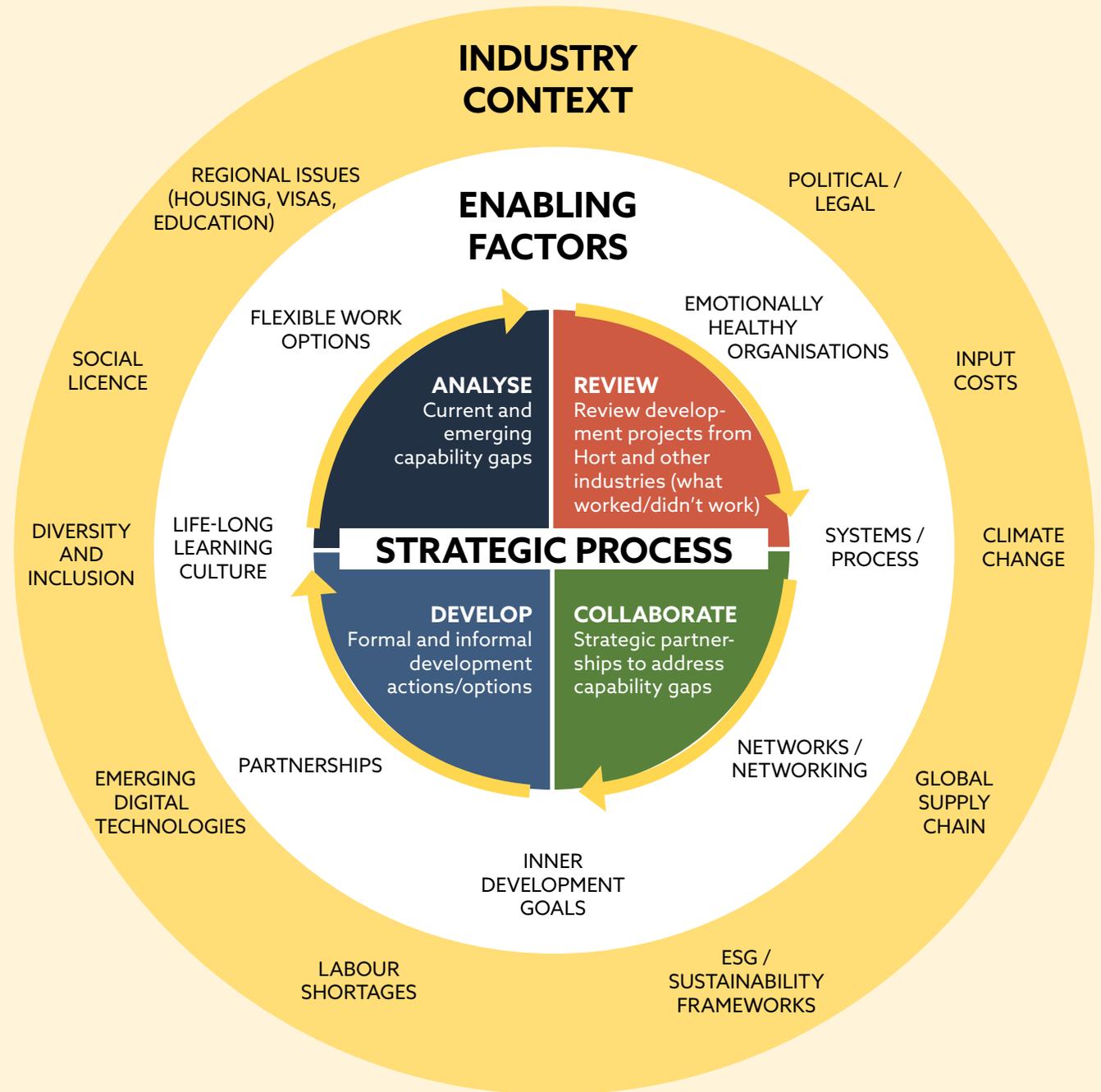
Figure 2 People Development Strategy Diagram

INDUSTRY CONTEXT

ENABLING FACTORS

REGIONAL ISSUES (HOUSING, VISAS, EDUCATION)

POLITICAL / LEGAL

SOCIAL LICENCE

FLEXIBLE WORK OPTIONS

EMOTIONALLY HEALTHY ORGANISATIONS

INPUT COSTS

ANALYSE Current and emerging capability gaps

REVIEW Review development projects from Hort and other industries (what worked/didn't work)

DIVERSITY AND INCLUSION

LIFE-LONG LEARNING CULTURE

STRATEGIC PROCESS

SYSTEMS / PROCESS

CLIMATE CHANGE

DEVELOP Formal and informal development actions/options

COLLABORATE Strategic partnerships to address capability gaps

PARTNERSHIPS

NETWORKS / NETWORKING

EMERGING DIGITAL TECHNOLOGIES

INNER DEVELOPMENT GOALS

GLOBAL SUPPLY CHAIN

LABOUR SHORTAGES

ESG / SUSTAINABILITY FRAMEWORKS

INDUSTRY CONTEXT

The Strategy needs to be viewed in the context of a range of pressures and changes. This will affect how the specific strategies are implemented. The key issues impacting industries include:

- Political/legal setting
- Rising input costs of labour and raw materials
- Climate change events such as floods, fires and cyclones
- Global supply chain disruptions both upstream and downstream
- Labour availability, awards, skills and capabilities
- Biosecurity threats and requirements
- Emerging digital technologies
- Diversity and inclusion
- Social licence
- Regional issues such as accommodation, education and visas
- Environmental, Social and Governance (ESG)/sustainability

Figure 3 Inner Development Goals

1 Collaborating	2 Thinking	3 Relating	4 Collaborating	5 Acting
RELATIONSHIP TO SELF	COGNITIVE SKILLS	CARING FOR OTHERS AND THE WORLD	SOCIAL SKILLS	ENABLING CHANGE
Inner Compass	Critical Thinking	Appreciation	Communication skills	Courage
Integrity and Authenticity	Complexity Awareness	Connectedness	Co-Creation Skills	Creativity
Openness and Learning Mindset	Perspective Skills	Humility	Inclusive Mindset and Intercultural Competence	Optimism
Self-awareness	Sense-making	Empathy and Compassion	Trust	Perseverance
Presence	Long-term Orientation and Visioning		Mobilisation Skills	

[2] https://www.innerdevelopmentgoals.org/framework

ENABLING FACTORS

Enabling factors are things that businesses or industries can do to make it easier or more difficult to develop staff and empower them to reach their full capacity and capability. For young people, women and people with disabilities in particular, systems such as flexible work, effective environmental management and procedural fairness play a large role in attracting and retaining people. For the growing market of Culturally and Linguistically Diverse (CaLD) workers, thinking beyond the individual in the workplace to include actions to smooth the transition to a regional/rural area and working in an Australian environment are key to retaining this cohort. Significant enabling factors include:

- Flexible work options – part time, split shifts, different hours, cultural time off, job share, 5 days in 4
- Life-long learning culture – valuing learning and development in business planning and actions
- Partnerships – partnering with similar or complementary organisations on staff development or support
- Networks/networking – highly valued for women and young people. Allowing and valuing the time to network
- Systems/process – ensuring existing systems and processes don't get in the way of innovative or productive new ways of working
- Emotionally healthy organisations – safe, open and honest, feedback is taken on board, learning is valued, continuous improvement, employers of choice
- Inner Development Goals[2] - aim to provide a blueprint of the capabilities, qualities and skills needed to achieve the Sustainable Development Goals.

PRINCIPLES

To have the greatest success, two principles underpin implementation of this Strategy:

1. Wherever possible solutions to be developed and delivered locally to participants
2. Ensure every development strategy and action includes the Inner Development Goals of being, thinking, relating, collaborating and acting.

Organisational and Industry Strategies

SKILLS AND CAPABILITY GAPS

A number of skills and capability gaps were identified during the analysis and engagement with industry. These are described in Table 1 and are categorised as:

- Core skills and capabilities
- Digital skills and capabilities
- Interpersonal and leadership skills and capabilities
- Business strategy and risk skills and capabilities

Table 1 Skills and capability gap analysis (right and following page)

	SKILLS	CAPABILITIES
Core	• Induction (pre and post commencement) • Basic tickets and licences (tractor, truck, forklift, chemical handling, WHS) • Spray operators • Mechanical skills • Maintenance skills • First aid (remote first aid and mental health first aid) • Basic agronomy (soil health, plant physiology, nutrition, irrigation, pest and disease management, understanding cropping system) • Diversity and inclusion awareness • English as an Alternative Language (EAL) skills (workplace and certificate specific) • Capacity to supervise and mentor apprentices and trainees	• Appreciation of critical nature of WHS • Experience around machinery and packing sheds • Understanding off label use of chemicals and risks • Willingness to understand and engage in first aid • Agronomy – application of knowledge of the markets and different varieties to make sound decisions • Working with a diverse workforce • Ability to supervise and mentor apprentices and trainees
Digital	• Data creation in field • Technology operation • Data management and monitoring • Incident management • Digital marketing and communication • Digital security • Data visualisation • IT skills to maintain equipment	• Understanding how systems interact • Understanding big data, analysis and communication of data • Sufficient knowledge to hire competent digital consultants • Data analysis and interpretation for decision making • Process improvement • Personal learning and mastery • Collaboration with technology suppliers and services • Business transformation • Analysis of new technology (AI, GPS, robotics, VR) • Digital strategist

	SKILLS	CAPABILITIES
Interpersonal and leadership	• Communication and engagement principles • Leading self – taking personal responsibility • Leading others – engage, support, develop, empower, collaborate, build resilience, embrace diversity and inclusion	• Strong work ethic (turning up) • Problem solving and networking to solve problems • Understanding self - strengths and weaknesses, skills and motivations • Communication and engagement practice • Working with and as a team • Critical thinking • Managing conflict • Managing change and innovation • Negotiation skills • Translating business strategy into action • Empowering others – teaching and instructional skills • Confidence and independence to step in • Agronomists • Building trust with growers • Liaising between growers and researchers • Tailoring agronomic communication and solutions • Capacity building/mentoring of young agronomists
Business strategy and risk	• Biosecurity skills • Higher level knowledge of QA, WHS and ethical/environmental and social considerations • HR/people and culture skills • Financial management and efficiencies • Risk management • Incident management (media, management, review and implementing change) • Finding and applying for grants • Compliance skills and knowledge • Skills in navigating visa and migration system • Working with employees with EAL • Working with PALM workers (including out of hours) • Resilience knowledge	• Leading in businesses, communities and industries – holistic and strategic thinking, innovative and adaptable, embrace and lead change, manage ambiguity and uncertainty, advocate and communicate with influence • Holistic understanding of the industry, supply chain, and markets • Understanding of customers, retailers and how to provide a higher quality product • Ability to upskill professionals from other industries (HR, finance, QA, lawyers) • Knowledge and understanding of diverse groups and support networks • Developing and maintaining emotionally healthy organisations • Resilience management and collaboration • Succession planning

STRATEGIES

High-level strategies to fill the gaps in skills and capabilities have been identified. These strategies have been considered for the four key areas previously described:

SKILLS AND CAPABILITY GAP AREA	STRATEGY
Core	1. Maximise opportunities to develop and retain a diverse and collaborative workforce
Digital	2. Leverage information, technology and intelligence systems that enhance productivity and connectivity
Interpersonal and leadership	3. Recognise and develop emotionally healthy people and leaders at every level of industry
Business strategy and risk	4. Collaborate and partner with people at local, regional and national levels to ensure business continuity and success

For each of these four strategies we consider the:

- **Initiative** – area requiring focus
- **Why** – this initiative has been identified as a priority
- **Business actions** – that individual organisations need to implement
- **Industry actions** – that industry as a whole can implement

STRATEGY 1 MAXIMISE OPPORTUNITIES TO DEVELOP AND RETAIN A DIVERSE AND COLLABORATIVE WORKFORCE

INITIATIVE	WHY	BUSINESS ACTIONS	INDUSTRY ACTIONS
1. Workplace induction and basic certificates	Pre and post farm **workplace induction and basic certificates** are mandatory requirements for employing new staff. These activities are usually delivered on farm and often with employees with English as an Alternative Language (EAL)	• Explore competency type programs for your region • Support employees with time and funding to complete necessary training • Identify and create connections with local CaLD support services to better understand working with people with EAL. Investigate options to work with these organisations to deliver workplace English courses on farm	• Review existing induction video/resources **(Case study – SuniTAFE)** • Collaborate with Registered Training Organisation (RTOs) to build on existing products or develop fit-for-purpose video or interactive pre-farm induction resources for small/medium/large farms and farm induction resources for small/medium farms • Investigate options for funding training support for staff on Pacific Australia Labour Mobility (PALM) programs • Collaborate with RTOs and/or technology companies to develop EAL friendly ways of completing basic certificates and licences
2. Mechanical skills	Attracting and retaining **mechanical skills** and experience including equipment/vehicle maintenance, fitters and turners, electricians, irrigation and chemical spraying skills is difficult due to competition with other industries and geographical distance	• Explore competency type programs for your region **(Case study - Competency Frameworks)** • Provide incentives to compensate for potential travel costs from regional centres and promote to mechanics/fitters and turners	• Investigate traineeships, apprenticeships and integrated learning opportunities with relevant RTOs to encourage connection of mechanically-skilled students to the sector • Work with RTOs to streamline processes for recognition of prior learning to enable more CaLD employees to update their qualifications
3. Working with diverse cultures/ EAL	Working with employees from **diverse cultures** and/or with **EAL** can have specific challenges and opportunities. Putting in place strategies to build on the opportunities will ensure benefits to employers and employees	• Identify benefits of employing diverse groups to maximise potential skills available in the community – consider innovative and different ways of doing things	• Collaborate with RTOs to deliver diversity/cultural awareness webinars • Collaborate with visa/migration specialists to run series of webinars on how to support workers to transition to more permanent visas
4. Agronomy skills	**Agronomy skills** and capacity are shrinking across the sector, yet they are critical to all aspects of horticulture	• Support younger/new agronomists to develop a range of experience across the business, region or industry • Consider the specific skills that traditional agronomists deliver and explore whether these are available from other university faculties	• Work with lead agronomist networks such as the Australian Agronomy Association to advocate for horticulture • Work with relevant universities to incorporate the "people skills" (e.g. communication, confidence) and on farm experience into courses • Partner or connect with local Regional Development Australia (RDAs), councils or peak bodies to link learning opportunities on horticulture topics into local programs
5. Research and plant science skills	**Research and plant science skills** underpin the resilience of industries and ability to respond to future challenges and opportunities	• Encourage partnerships with scientists to conduct demonstration trials **(Case study - Soil Wealth ICP)**	• Retain and build capacity in the research sector to support industry's growth • Collaborate with universities and departments of agriculture to connect theory with practice • Partner with universities to develop micro-credentials and horticulture specific case studies

LEVERAGE INFORMATION, TECHNOLOGY AND INTELLIGENCE SYSTEMS THAT ENHANCE PRODUCTIVITY AND CONNECTIVITY

INITIATIVE	WHY	BUSINESS ACTIONS	INDUSTRY ACTIONS
1. Digital capabilities	**Digital capabilities** such as data management and monitoring, technology operation, data creation, digital security, visualisation, communication and incident management are important areas providing support for businesses. Improving these capabilities assist with productivity, lessening the need for employees undertaking repetitive tasks, timeliness and business and human resource planning	• Encourage a culture of life-long learning and innovation • Investigate partnerships in local areas (or online) to build knowledge and skills in digital • Recognise employee's strengths and interest in digital solutions and build on these capabilities • Use existing or hire new employees who understand how systems interact (technology as well as human systems) • Develop IT skills to maintain equipment	• Promote the Australian Agricultural Workforce Digital Framework questionnaire and self-assessment and partner with RTOs on training and curricula • Work with Skills Insight on cross sector projects to create flexible and transferable units of competency in digital **(Case study – Skills Impact)** • Investigate Advanced or Higher Apprenticeships to create pathways into horticulture for technology students **(Case study - Apprenticeships)** • Collaborate and share information about technology trials • Collaborate with universities to access the latest research and enable on farm application **(Case study - CVAM)**
2. Enabling capabilities	More important than the digital literacy skills above are **Enabling capabilities** such as: process improvement, personal learning and mastery, collaboration, business transformation and critical thinking	• Identify existing or new employees able to be a conduit between technology companies and production • Create a culture of innovation to allow for suggestions around process improvements • Support employees who have the "enabling capabilities" to connect with others through networks • Promote an understanding that new systems rarely succeed first time around • Think critically about problem definition prior to going to researchers or technology companies for solutions	• Work with Skills Insight on cross sector projects to create flexible and transferable units of competency in digital • Partner with RTOs utilising the training and curricula handbook from the Australian Agricultural Workforce Digital Framework • Collaborate across industries to share information about technology trials

STRATEGY 3 RECOGNISE AND DEVELOP EMOTIONALLY HEALTHY PEOPLE AND LEADERS AT EVERY LEVEL OF INDUSTRY

INITIATIVE	WHY	BUSINESS ACTIONS	INDUSTRY ACTIONS
1. Frontline or middle managers	**Frontline or middle managers** are important in delivering the strategies of organisations. Their management can mean the difference between retaining and losing staff who are expensive to replace. Attracting and retaining frontline/middle managers and increasing their capacity in leadership and interpersonal skills and capabilities is critical to organisations and industries	• Discuss and imbed the *Inner Development Goals* (see **PRINCIPLES** section above) as a way of understanding and implementing emotionally healthy organisations • Understand what *leading self* means and how it assists in *leading others* **(Case Study - Dairy)** • Consciously and formally value the time spent developing employees to encourage a life-long learning culture • Share problem solving with employees and create a culture of valuing employee input • Understand what flexible work options attract staff and how they can work for businesses • Explore and promote networking options available in a region, within industry, nationally and internationally	• Explore support programs for frontline or middle managers to increase their leadership and interpersonal capabilities **(Case study - Growing Leaders)** • Promote networking groups through resourcing and encouraging staff to be actively involved • Develop case studies of emotionally healthy organisations
2. Senior leaders	A lot of the capacity and capability building within businesses is done inhouse by the **senior leaders** – particularly for small to medium businesses but also for larger farms. Continuing to encourage these leaders to improve their leadership and interpersonal skills and capabilities will make it easier for them to pass on skills and develop emotionally healthy workplaces	• Consciously and formally value the time spent developing senior leaders in business plans • Explore and promote networking options available in a region, within industry, nationally and internationally • Conduct internal toolbox sessions to share leadership and interpersonal challenges and ideas with middle managers and other interested employees • Share problem solving with employees and create a culture of valuing employee input • Embrace flexible work for attraction and retention – particularly for younger staff **(Case study - Mackays bananas - 5 days in 4)**	• Develop accessible seminars at local pubs/venues which include a meal and drink **(Case study - Winter Warmers)** • Provide a short list of recommended courses and learning opportunities for senior leaders • Design a region/geographic based farm tour (both within horticulture and other sectors) to share knowledge and create networks • Source and promote unconscious bias courses to enable industry leaders to broaden the recruitment pool
3. Younger people	Parts of horticulture have an aging workforce. There is strong competition between industry sectors for people, and **younger people** are unaware and/or not interested in the range of careers available in horticulture. Enabling factors play a big role when young people are considering jobs	• Assess enabling factors in organisations and work towards improving them to attract new employees • Consciously and formally value the time spent developing employees in business plans • Make plans to encourage and acknowledge when staff have learnt or developed • Encourage and value the time of younger staff in joining or forming networks to provide support, confidence and idea sharing	• Ensure industry values and supports networking groups • Work with group training organisations to explore school-based apprenticeships for mechanical skills

STRATEGY 4 COLLABORATE AND PARTNER WITH PEOPLE AT LOCAL, REGIONAL AND NATIONAL LEVELS TO ENSURE BUSINESS CONTINUITY AND SUCCESS

INITIATIVE	WHY	BUSINESS ACTIONS	INDUSTRY ACTIONS
1. Attraction and retention	**Attraction and retention** of people in horticulture is a key issue for the sector due to: • Aging workforce • Lack of succession planning • Strong competition for skills and labour with • Younger people (and their parents/ families) are unaware and/or not interested in range of careers available in horticulture	• Identify what jobs/roles could be performed 'offsite' to increase the recruitment pool for transferable skilled jobs (e.g. finance, HR, QA) • Investigate partnerships with local schools to enable cadetships and holiday work programs with scholarships • Consider partnering with organisations already implementing activities and programs to encourage young people into agriculture • Continue to connect with universities and RTOs to deliver careers days and on farm tours • Explore partnerships with labour hire companies or group training organisations to enable employee sharing programs	• Collaborate across sectors to develop graduate programs to strengthen pathways into horticulture **(Case study - Queensland Farmers Federation)** • Develop industry level "value proposition" to attract and retain skilled staff and promote the horticulture industry **(Case study - Horticulture Value Proposition)** • Work with Australian Human Resource Institute (AHRI) (or similar) to develop a workforce strategic planning course tailored to horticulture for strategic attraction, retention and development of staff • Collaborate with (and pay services of) key young social media influencers to promote horticulture as a career • Investigate a cross-industry (horticulture) careers pathway program for new people **(Case study - Nursery Industry)**
2. Succession planning	**Succession planning** is often lacking in businesses and is essential for identifying and building critical skills for future	• Develop business succession plans to identify who needs to be "upskilled" in what areas and specific roles and capabilities	• Partner with relevant education providers to increase the training opportunities and adapt the Diploma of Business Management tailored to the horticulture industry. • Include people development indicators in benchmarking activities to raise importance to industry
3. Workplace Health and Safety (WHS)	Agriculture and horticulture have some of the highest **Workplace Health and Safety (WHS)** claims. In addition to strategies under "core skills" there is a need to address WHS risks through cross sector partnerships and sharing of information. This may have the added benefit of promoting horticulture to a wider audience	• Consider partnerships with local medical centres and hospitals to ensure better return to work programs and encourage cross sharing of WHS issues for prevention of injuries	
4. Assurance and certification	Meeting the range of **assurance and certification** requirements can be time consuming, costly and complex for business managers/producers to navigate	• For the banana industry: consider reviewing relevant training, tools and support for streamlining compliance requirements from other horticulture industries	• Ensure alignment with quality and environmental assurance schemes and Horticulture Sustainability Framework

Case Studies

STRATEGY 1: MAXIMISE OPPORTUNITIES TO DEVELOP AND RETAIN A DIVERSE AND COLLABORATIVE WORKFORCE

CASE STUDY 1-1:
Culturally and Linguistically Diverse (CaLD) specific training and education for induction and beyond

Education and training for CaLD workers can often underwrite their success regionally. Language is one of the most common barriers for CaLD workers in both meaningful settlement and effective workplace performance – meaning demand for accessible English as an Alternate Language (EAL) courses in regional hubs is critical together with pathways for enrolment. Providers need CaLD-specific supportive learning environments – with trained staff and support programs. In Victoria, Wodonga, South West and Suni TAFE, have all worked to enhance their services for CaLD communities, including by engaging CaLD staff in teaching and support roles. They are also enabling easier pathways for learners – with more students moving from EAL to other courses to support employment opportunities. Training through community groups such as the Country Fire Authority (CFA) or State Emergency Services (SES) in Victoria has also been seen to promote skills-based learning and enhanced community connections.

Other essential ingredients for reaping the benefits of employing a diverse workforce are: employers supporting study with time, resources and connections and a culture of inclusion, support and opportunity within workplaces and learning institutions. Examples of CaLD specific training resources are:
https://www.sunitafe.edu.au/courses/essential-farm-worker-training/
https://www.cfa.vic.gov.au/schools/english-as-additional-language/understanding-cfa

CASE STUDY 1-2:
Competency frameworks and skills passports

For core technical skills, such as mechanical skills, in an industry or group of industries, developing a competency framework can assist with sourcing staff from other industries or sharing staff within industries. Although the competencies will not be identical across industries, some skills will be similar enough to be transferable.

The Mallee Regional Innovation Centre, regional horticultural peak bodies and education providers mapped key skills gaps across technical and behavioural skills and looked at current frameworks and passports as options. The focus of the 'passports' was mainly on technical skills and compliance – a central way to capture the qualifications and skills staff had in order to do their jobs safely and legally. Examples such as the Australian Archaeology Skills Passport, however, included behavioural capabilities and qualitative ways of validating information. The features of a recommended competency framework were:

- **Induction:** including direct link to accredited or non-accredited induction courses, preparation for working on a farm
- **Competencies:** record of licences, qualifications, competencies, links to training and training providers, automated messages when updates are due
- **Hub:** promotional information about industries, regional and housing information, support information, job advertisements

Examples considered included Dairy Passport, Farm Ready (QLD), Tasmanian Ag Card, National Disability Services Passport, Australian Archaeology Skills Passport.

The Dairy passport was noted by CaLD support providers as having the extra benefit of being a way of validating and promoting the skills of people from CaLD backgrounds who may not have the same networks or connections to employers as mainstream Australians.

CASE STUDY 1-3:
Soil Wealth Integrated Crop Protection (SWICP) – Partnerships with scientists to integrate research and development

The Soil Wealth and Integrated Crop Protection (SWICP) project has been successful in helping growers integrate technical research and development (R&D) information on soil management and crop health into the production systems of Australian vegetable farms. The flagship project has serviced the vegetable industry since 2014 with a focus on:

- Demonstration sites to provide the know-how to apply innovative new technologies and practices.
- Highly experienced and trusted technical experts able to broker knowledge from research to farming communities.
- Targeted resources and communication methods allowing growers to apply knowledge and problem solve issues for their business.

The project team work closely with research scientists, industry service providers and growers to ensure that the latest research is considered in developing solutions to current problems. Features of the program include: using demonstration sites to test the latest knowledge, undertaking Masterclasses to explore theory into practice and developing resources to assist on-farm decision making. A fundamental premise of the program is collaboration and learning from each other.

STRATEGY 2: LEVERAGE INFORMATION, TECHNOLOGY AND INTELLIGENCE SYSTEMS THAT ENHANCE PRODUCTIVITY AND CONNECTIVITY

CASE STUDY 2-1:

Cross Sector projects for transferability of skills and greater labour mobility

With pressures on horticulture industries to attract and retain workers, there comes opportunities to explore what skills could be drawn from people working in other related sectors such as agriculture and conservation and land management. Skills Impact and partners looked at nine cross-sector projects and a case for change where they will modify the existing training packages to accommodate more than one sector.

The core qualifications were reviewed and revised to strengthen careers pathways, reflect current technology, systems and regulations and support skills in biosecurity, environmental sustainability, quality assurance and worker health and safety.

The nine initial projects included: environmental sustainability, automation, big data, coding, consumer engagement through social and online media, cyber security, supply chain, team work and communication. Subsequent projects include: green skills and automation skills.

CASE STUDY 2-2:

Higher/degree Apprenticeships to create pathways into horticulture for technical and science students

Higher or Degree Apprenticeships are an emerging area of apprenticeships aimed at meeting the future needs of industry and offering more challenging options for high achievers instead of just the 'school to university to work' option. It also aims to appeal to a more diverse group of people.

Initial trials have been in engineering, project planning and social services extension. They are closely tied to industry needs and include targeted promotion to parents and students so they can see the ultimate goal is to get a good job.

Early indicators show that Higher Apprenticeships offer an opportunity for an alternative approach, where industry demand, due to the changing economy, meets the benefits found in the combination of on-the-job and off-the job (VET or Higher Education) training through an apprenticeship/traineeship type arrangement.

CASE STUDY 2-3:

Central Victoria Advanced Manufacturing (CVAM) – facilitating digital innovation and transformation

Latrobe University, City of Greater Bendigo and Bendigo Manufacturing Group set up CVAM to connect the latest science and technology expertise found in universities with manufacturing businesses in regional Central Victoria. With capital from the Commonwealth Government's Strategic University Reform Fund, the businesses were able to work closer with the university to source contemporary technology and have access to specialised expertise and PhD students from the university. Digital solutions were designed to meet the challenges raised by the businesses.

The project provided new careers pathways for PhD students and science students into manufacturing. The participating businesses reported the following benefits: improved efficiencies, increased product sales, expansion of markets and new networking opportunities with each other and university employees. One business reported that having the extra expertise brought their business forward by 5 years.

STRATEGY 3: RECOGNISE AND DEVELOP EMOTIONALLY HEALTHY PEOPLE AND LEADERS AT EVERY LEVEL OF INDUSTRY

CASE STUDY 3-1: Dairy Industry Leadership Strategy – leading self and leading others

In August 2021, Dairy Australia launched their Dairy Industry Leadership Strategy. The Strategy set out a vision of leadership that encompassed all workers. They held 'that everyone is or can become a leader through leading self, leading with others or leading the community and industry' (Australian Dairy Farmers (ADF) 2021). This positioning represented a shift away from the more traditional view of leaders as senior employees with specific role titles including 'leader', 'manager' or 'supervisor'.

"Today the key task of experienced leaders is to support and encourage others to grow as leaders, whatever their position, in much the same way as a coach guides and directs a team." (ADF 2021)

The Dairy Australia Capability Framework which comes with the Strategy provides a series of 'I' statements associated with a 'leadership mindset', which they designate as applicable across the full spectrum of roles in the dairy industry, from Dairyhand to Managing Director.

Further details of the strategy can be found here: https://australiandairyfarmers.com.au/purpose-of-strategy/

CASE STUDY 3-2: Growing Leaders Program

The Growing Leaders Program was a highly regarded program designed in consultation with vegetable industry people with their specific needs in mind. Funded by the National Vegetable Levy and the Australian Government, it ran for about 10 years with 16-18 graduates per year. It attracted participants from all areas of the horticulture industry with many alumni going on to receive awards. The program helped develop personal, business and industry skills and included a small group industry based leadership project, guest speakers, tours, industry functions and an alumni group.

Participants of the program report that it was a key step in their careers, providing confidence, expertise and importantly networks across horticulture that they continue to utilise years after the course. Graduates have applied their skills to a variety of related areas including regional network development, industry association boards, reference committees and effective business and workplace management.

"You are challenged to step outside your comfort zone and be the best version of yourself. You are also given opportunities to develop and practice new skills and to share your strengths with your team."
Participant 2018

CASE STUDY 3-3: Flexible work for attraction and retention

Mackays (bananas and other agriculture) in Queensland trialled a 5 days in 4 work week in one of their more remote locations to enable their employees to get to and from major centres for shopping, family and recreation. Although there was some initial resistance, employees adjusted and found it worked for them. It was then rolled out to their other locations which also, after an adjustment period, was a success.

Keys to its success was further flexibility in how it was rolled out for different cohorts and locations. For example, slightly different flexibility was required depending on whether you worked in the office or on farm and/or for employees with child drop off responsibilities.

CASE STUDY 3-4: Accessible seminars to increase capacity and capabilities of senior leaders

In Gippsland, Victoria AUSVEG's VegNET Program delivered regionally by Emily Scott from Food & Fibre Gippsland, has found success in attracting growers to a 'Winter Warmers' seminar series on topics such as Cultural Diversity, Lean Principles in Agriculture and Leveraging your People.

The sessions were held at local venues during the quieter winter period to allow busy vegetable growers to attend and included food and networking opportunities. The sessions were targeted at anyone wanting to learn, with the most popular course being Lean Principles in Agriculture, which included information relevant for anyone from spray operators to general managers and CEOs.

Similarly, in South Australia, Regional Development Australia have taken the lead on providing local, in person, informal learning opportunities. Local councils and Murraylands Food Alliance are partners. It has attracted people from different councils and businesses across the region.

STRATEGY 4: COLLABORATE AND PARTNER WITH PEOPLE AT LOCAL, REGIONAL AND NATIONAL LEVELS TO ENSURE BUSINESS CONTINUITY AND SUCCESS

CASE STUDY 4-1:
Graduate program success

Graduate programs have been shown to be an effective way to attract and retain skilled staff. A great example of a well-rounded program that is highly valued by the graduates, mentors and organisations alike is the Queensland Farmers Federation's (QFF) Agricultural Extension Work Placement Program.

This quote sums up the enthusiasm for the program:

"If they were to roll out another program tomorrow, we would sign up for it" (mentor)

The program showed a high level of retention of graduates, opportunities for professional development for mentors and managers and a decrease in staff turnover overall due to the positive culture, enthusiasm and ongoing shared learnings that the graduates brought to the organisations.

Positive features reported were: strong project management and communication by QFF, funded program, facilitated networking, structured mentoring and commitment by senior leaders.

CASE STUDY 4-2:
"Value proposition offer" for the horticulture industry

For horticulture to have a value proposition is vitally important for attraction and retention of employees, particularly when competing with other sectors in a tight labour market.

Two organisations have made steps into this area of promotion to the community in general but especially to the potential future employees. Anthony De Ieso, from Thorndon Park Produce in South Australia, established the "Feed the Need" program which helps university students get their foot in the door of industry. Conducted on his farm, the students get their hands dirty and find out about the varied opportunities in horticulture by being introduced to industry representatives and networking opportunities. All crops grown under the program are donated to the charity Foodbank. He complements this work with mentoring of young people.

Velisha Farms in Werribee, Victoria has gone about it in several ways. Linking food and cooking to growing including on cooking shows, linking growing to food security, also with donations to Foodbank, and with schools programs that show kids where their food comes from.

CASE STUDY 4-3:
Career pathway program – nursery industry

Careers pathway programs are a way of structuring employee development that is transparent to employees, potential employees and businesses. It can support work to fill persistent skills and capability gaps and can be tailored to attract specialist skills or for diverse groups such as people from Indigenous backgrounds, CaLD backgrounds or people with disabilities.

The nursery industry, through Greenlife Industry Australia, developed career pathways programs which include: formal and informal pathway information, jobs board, induction course, train the trainer course and promotional information for the industry to jointly use.

Details can be found on their website: https://www.greenlifeindustry.com.au/greenlife-careers-hub/greenlife-careers

Implementation Plan

PRIORITIES	SHORT TERM (1-2 YRS)	LONG TERM (3-5 YRS)
Strategy 1 - Maximise opportunities to develop and retain a diverse and collaborative workforce		
a. Review and develop pre-farm and on-farm induction resources	■	
b. Provide training support for PALM and EAL/CaLD	■	
c. Build cultural awareness capacity	■	
d. Explore and develop an agronomy program		■
e. Build plant science capacity (attraction and retention)		■
Strategy 2 - Leverage information, technology and intelligence systems that enhance productivity and connectivity		
f. Develop digital learning program for horticulture	■	
g. Deliver digital and technology-based programs		■
Strategy 3 - Recognise and develop emotionally healthy people and leaders at every level of industry		
h. Develop appropriate programs for senior leaders, middle managers and young people including a "Growing Leaders" type course	■	
i. Support and encourage networking groups	■	
j. Promote inclusion of systems and cultures that enable people to thrive	■	
k. Provide locally based learning opportunities	■	
l. Develop case studies	■	
m. Review and promote recommended courses	■	
Strategy 4 - Collaborate and partner with people at local, regional and national levels to ensure business continuity and success		
n. Develop and promote a value proposition for a career in horticulture	■	
o. Develop and/or promote graduate and cross-industry (horticulture) careers pathways programs	■	
p. Develop a workforce planning culture and promote inclusion of people indicators		■

This report has been prepared by:

RM Consulting Group Pty Ltd trading as RMCG

Level 1 East, 1100-1102 Toorak Road, Camberwell Victoria 3124

(03) 9882 2670 — rmcg.com.au — ABN 73 613 135 247

Offices in Victoria, Tasmania and NSW

Key RMCG contact

Deborah Prentice

0412 215 328 — deborahp@rmcg.com.au

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1.0	Final	06/09/2023	E. Tee D. Prentice	A.M. Boland	B. Gravenor	A.M. Boland	Hort Innovation