

Submission to the National Agriculture Workforce Strategy

INTRODUCTION

The Rural Jobs and Skills Alliance (RJSA) offers the following responses to questions from the National Agriculture Workforce Strategy discussion paper.

The RJSA developed from the agricultural sector's need to better engage with the education and training sectors, and the Queensland Government's commitment to create and support jobs across the state. Industry members of the Alliance are (in alphabetical order):

- AgForce;
- CANEGROWERS;
- Cotton Australia;
- Growcom;
- Irrigation Australia;
- Nursery & Garden Industry Queensland (NGIQ);
- Queensland Chicken Growers' Association;
- Queensland Farmers' Federation; and
- Timber and Building Materials Association;

and it is supported by the Queensland Department of Agriculture and Fisheries.

The RJSA's purpose is to address mutual goals for our member organisations that focus on the attraction and development of new entrants together with the retention of existing workers to underpin the prosperity of Queensland's agricultural sector now and into the future.

The RJSA provides advice to government, service providers and other organisations concerning employment, skills, industry training and workforce planning on behalf of Queensland's agriculture and related industries. Our responses to the inquiry relate to Queensland agriculture but we believe they would also reflect similar issues at the national level.

We have collated industry feedback on the Discussion Paper and summarised the responses, by theme, on the following pages.

Table of Contents

INTRODUCTION	1
RESPONSES TO THE DISCUSSION PAPER	4
EFFECTS OF CHANGES TO AGRICULTURE AND BROADER SOCIETY	4
During the next 10 years, what impact will the changes (technology, food production, etc) to agricultural production, processing and distribution have on the workforce?.....	4
What will be the effect if agriculture continues to trend towards supplying up-market, premium, and high-quality produce, with increasing value-adding manufacturing?	7
What impact will climate change and other environmental situations such as severe droughts, severe storms and long fire seasons have on the agricultural workforce?.....	9
What ways might changing social perceptions of different agricultural activities (for example, perceptions about sustainability, emissions, and animal welfare) affect the agricultural industry and its workforce?	10
What impact will societal changes, such as the ageing workforce, low unemployment, low immigration and relocation of regional population (and agricultural, health and education workers) to urban areas, have on the agricultural workforce?.....	12
AVAILABILITY OF WORKERS.....	14
What are key health and wellbeing considerations for the agricultural workforce?	14
How can health and wellbeing best be maintained and improved	15
What are the key drivers that will influence the size and skill needs of the agricultural workforce in the next decade?	17
What factors (e.g. status of the agricultural industry compared to other industries, competitive labour market, workplace conditions, public perceptions of agricultural jobs and industries) impact the pool of talent available to pursue agricultural careers?	18
How can agribusinesses and related industries better attract workers?.....	18
What are the implications if the supply of skilled agricultural workers is insufficient for your sector or business?.....	21
SKILLS AND KNOWLEDGE	23
What skills and knowledge does the agricultural workforce need in the foreseeable future to ensure the ongoing productivity of the agricultural industry given the changes the industry and Australia is experiencing?	23
Is the current education and training system for agricultural workers fit for purpose? Are the needs of the agribusiness workforce adequately served by current education and training systems (high school programs, vocational education and training, and higher education)?	
What is working? What is not?	24
There are some concerns about the availability of qualified instructors and the training requirements to properly service the agribusiness industry. In Queensland, this issue is increasingly a concern given the cessation of QATC's operations. Industry members of the Rural Jobs and Skills Alliance consider this has left an immediate gap in essential training	

delivery for the agricultural industry and training provision in some regional areas. The RJSA are particularly concerned about transitional arrangements associated with training for schools as well as the provision of specialised training.	26
Impact of Closure of Queensland Agricultural Training College (QATC)	26
How can these systems best meet the needs of the agricultural workforce?	27
What changes might be required to accommodate the different learning style of younger generations of people?	29
The Fourth Industrial Revolution: the implications of technological disruption for Australian VET states, several barriers prevent the VET sector from better developing the skills required for emerging, disruptive technologies (Seet, Jones, Spoehr, & Hordacre, 2018). These impediments include:	29
What skills and knowledge do business owners need and how can this be best achieved (formal education or informal education and different modes of delivery, for example micro-credentials, online learning, workplace learning)?	31
OPPORTUNITIES, BEST PRACTICE AND PRIORITIES	33
What initiatives have worked to raise the status of agribusiness, increase the supply of workers or increase the skills and knowledge of agricultural workers? What factors have contributed to the success of these initiatives?	33
Specifically, are you aware of examples of collaboration between employers, education providers and regional communities? Which intermediaries supported these collaborative arrangements?	33
How can existing government programs be improved to better support agribusinesses and related industries workforce needs?	35
How consistent across agriculture and horticulture is the need for more and targeted immigration to sustainably increase the national agriculture labour pool and support national capability and capacity building?	37
What should be done to improve the productivity and resilience of the agribusiness workforce? Of these actions, what are the top 3 priorities?	39
References	48

RESPONSES TO THE DISCUSSION PAPER

EFFECTS OF CHANGES TO AGRICULTURE AND BROADER SOCIETY

During the next 10 years, what impact will the changes (technology, food production, etc) to agricultural production, processing and distribution have on the workforce?

Agriculture remains the most diverse job market of any sector in the economy. It is well known that for various reasons, the expertise and labour supply needed in our industry is continuously challenged. Furthermore, the rapid pace of digitalisation, mechanisation and the Internet of Things (IoT) are changing current roles, education needs and training requirements. Overlaying all this is the global challenge of feeding, clothing and providing services for an estimated 9.8 billion people by 2050 in a changing climate, while maintaining quality products and nurturing the environment.

The agriculture sector recognises the need to further embrace the use of technology and the opportunities for advancement that these innovations offer. We know the sector will be highly influenced in the coming years by disruptive technologies that may increase efficiency, productivity and profitability. Improving capability to integrate the use of technologies, data, robotics and automation more efficiently is a challenge that can bring productivity benefits for all industries.

Realising the full potential of digital agriculture in Australia could boost the value of production by \$20.3 billion, according to the findings of the Accelerating Precision Agriculture to Decision Agriculture (P2D) research project. Producers across all agricultural industries would benefit from the estimated overall increase in production value of 25%, while also securing their global competitiveness (Leonard, et al., 2017).

The effects of technology on agriculture jobs have been discussed in our report submitted to Jobs Queensland (Queensland Farmers' Federation, 2018). The report highlights that jobs and skills are changing as technology advances. To be prepared for possible changes in the future, workers in the agriculture sector will need to acquire skills that complement and best utilise the technologies, rather than compete or prevent its uptake. These findings align with the conclusions of the Future Skills report (AlphaBeta, 2019).

Increased process automation has the potential to increase labour efficiency (Heath, 2018). The impact of digital technologies on labour efficiency is most likely to affect routine tasks that have a high degree of predictability and a need for high accuracy. In a sector where labour costs are high, labour efficiency and improved workplace health and safety are of great potential value for agriculture businesses.

Changes in the food and agribusiness sector will require investment in developing and acquiring skills in general business tasks. This includes skills in leadership, market research and data science. It will also require increased practical elements in tertiary education,

increased research capabilities, and an increase in the use of roles that facilitate and improve the connection between research, industry and markets.

A recent report indicated that the existing and future agricultural workforce would need to embrace change and develop new skills to ensure that industry seizes the opportunities presented by digital agriculture to remain competitive globally (KPMG, Skills Impact, 2019). The findings indicate that 41% of roles in Australian agriculture will be affected by technology in the next ten years, 30% through automation (e.g. robotics) and 11% through augmentation (e.g. Artificial Intelligence and wearable devices). Most concerning, however, was the finding that only around 85 units of competency out of a total of 1,880 units across all the relevant agricultural sector's industry training packages are designed to facilitate digital capabilities (less than five percent). This indicates that we are currently training for yesterday's skills and not those that the jobs of the future require.

The report recommends that further steps for the agricultural industry to consider in uplifting their digital maturity should include:

- Looking into the specifics of which agricultural sectors and which particular technologies present the greatest augmentation and automation opportunities, to prioritise capability development focus.
- Driving the development of curricula and training pathways for both future and existing workers to address the gaps in digital skills.
- Developing an online tool for individuals to assess future capability requirements based on current digital skills, and enabling company level and industry level views of the capability results to prioritise training solutions for our workforce; and
- Driving a campaign to develop benchmarks across the various sectors within the agricultural industry.

While shifts towards increased value-adding of products will create more urban-based food and agriculture jobs, the regional and rural location of many businesses is considered a disincentive to young graduates. Coupled with Australia's ageing workforce, this suggests the sector will become increasingly reliant on a flexible workforce and the adoption of sophisticated automation processes and mechanisation – both requiring specific education and training.

The future viability of the sector will depend highly on its ability to embrace innovation, technology and change, as well as to promote agriculture as an attractive career for young people (Wu, Dawson, Fleming-Muñoz, Schleiger, & Horton, 2019). This need has been one of the drivers of the RJSA, whose vision is to ensure a sustainable agriculture workforce for Queensland.

Agriculture and indeed the whole food supply chain is undergoing a revolution. The industry is being transformed with the emergence of new technology, including advances in sensors, robotics, mechatronics, big data, communication with handheld devices, and IoT. Innovation in food has also taken a new direction, for example, developing high protein products resembling meat but made from plant-based products. In addition, there is constant demand for continuous improvement along the food supply chain in terms of quality, efficiency and sustainability.

For those who are appropriately skilled, it is a time of unprecedented opportunities. For employers who are seeking to attract those with the skills for the future, it is a time to imagine the professions and occupations for the future, what skilling opportunities exist to support them, and how to attract and retain their workforce. Making agriculture the ‘sector of first choice’ for students, graduates and skilled personnel is an essential part of this.

The pace of change in the modern world demands that future workers, regardless of their core skill set, are technologically literate and adaptable to change. The increasing convergence of a wide range of technologies will require farmers, managers and workers to rely on the skills of others as well as their own to develop, market and support new products. As a result, there will be a high emphasis on the so called “soft skills” which include teamwork, problem solving, creativity and interpersonal skills.

There will be an increasing need for graduates that have STEM skills to undertake the more technical jobs and increase the adoption of innovation. The use of more STEM generalist graduates with general business skills, commerce and data analysis, which are subsequently trained in particular and relevant agriculture related skills sets ‘on the job’ could be a solution to address the need for technical skills shortages that are experienced.

THE POSSIBLE IMPACT OF COVID-19

Another factor of disruption currently taking place is the pandemic COVID-19. Changes in demand for products could potentially be affected by COVID-19. The effect of any contraction as a result of the pandemic will most likely be felt in the trade of higher value agriculture products and those products that feed into food services and non-related manufacturing. COVID-19 is unlikely to affect the long run settings of agricultural trade (Greenville, McGilvray, Cao, & Fell, 2020). For agriculture, the downturn is likely to be felt through lower prices rather than a significant reduction in demand. The duration of the pandemic and the rate of recovery in key export markets will influence the medium-term outcome for agriculture.

Food production and Agriculture will continue to participate in global chains, but the pandemic is producing effects in the trade, including the intensification of online shopping for food. To address the possible disruption there is a need for greater flexibility in supply chains to respond to evolving consumer demands (including the disruption to international trade), greater digitalisation in trade (including modern regulatory systems), greater demand for food safety, product transparency and traceability (Greenville, McGilvray, Cao, & Fell, 2020).

Governments, both federally and internationally, have put measures in place to suppress the spread of COVID-19, and these are having some effects on the functioning of food supply chains. Among them, the impact on labour availability is of particular concern. Many of Queensland’s fresh produce industries depend on the timely availability of skilled and semi-skilled seasonal workers, including Pacific Islanders and back-packers. COVID has highlighted the vulnerability of relying on a single class of worker.

In dealing with these labour supply concerns; governments have introduced new measures to help agribusiness and commercial fisheries access to seasonal workers. These measures have

included the Australian Government amending visa requirements for certain working visa classifications to ensure the agriculture sector retains access to sufficient temporary labour during peak times. While the Queensland Government has introduced job matching services through the Queensland Jobs Finder and Harvest Trail websites and portals. They provide important services to connect seasonal and local job seekers with agricultural work and also help restrict unnecessary travel.

However, given the uncertainty of the international environment and the ability of sourcing labour from overseas that would meet future requirements, both in a timely manner and with the numbers required, it is important to motivate and support opportunities to facilitate farmers' access to an alternative workforce, including attracting those workers who have lost their jobs in other industry sectors such as hospitality.

A recent survey conducted by QFF industry member Growcom, in collaboration with the Queensland Department of Agriculture and Fisheries (DAF), indicated that to harvest their crops, Queensland's horticulture industry has an average monthly workforce demand of approximately 10,000 skilled and unskilled workers over the six months from April to October 2020 (Department of Agriculture and Fisheries , 2020).

Most of these available opportunities will be located across many regional areas of Queensland with roles available for both skilled and unskilled workers. Addressing the challenge of delivering quality training to ensure that the intended workforce has the relevant skills needed is key to responding to the expected disruptions due to border and community restrictions.

What will be the effect if agriculture continues to trend towards supplying up-market, premium, and high-quality produce, with increasing value-adding manufacturing?

The sector's strategy for growth relies on anticipating, creating and responding to consumer demands, which have the potential to increase the competitiveness of the industry. It is also about diversification. For example, agri-processing through to agri-tourism. There is a risk that many farms will no longer be competitive and or profitable if they don't look at diversifying income from just in primary production. Value-adding is an opportunity to keeping enterprises profitable, particularly where productivity is falling or has not improved.

Historically, Australia has been able to respond to the needs of the consumer nationally and internationally creatively and quickly. Australia's Food and Agribusiness sector has the potential to strengthen its position as a small but significant exporter of sustainable, authentic, healthy, high quality and consistent products.

The Food and Agribusiness (F&A) report (CSIRO Futures, 2017) states the need for business to be more agile, take calculated risks and improve the application of Australian innovation resources. This Industry Roadmap report identifies a range of opportunities that could secure the future competitiveness and success of F&A in Australia. But more importantly, the report discusses the enablers for unlocking these opportunities which rely on a collaborative approach from the research, education, government, industry, and investor communities to

make what we have go further and to capture the value currently wasted at a household and industrial level.

What will be needed is better connections between educational institutions and research institutions and industry to support investment in target areas. Businesses will need to redefine their role, ensuring that strategy is supported by strong marketing, business, and technology. Businesses must focus on developing and marketing more unique offerings that leverage Australia's strengths while avoiding or addressing competitive disadvantages.

As food and beverage value chains become increasingly global, new market opportunities are created while at the same time introducing competition and supply resilience risks in a volatile world. Increasing demand for food, the use of big data and more sophisticated e-commerce platforms are driving the creation of leaner, faster, more agile, environmentally sustainable value chains.

F&A businesses with the desire for significant and sustainable growth acknowledged that this is most likely to arise from value-adding for export markets. In considering Australia's competitive position in the rapidly changing global market, three consumer-facing opportunity themes have been identified (CSIRO Futures, 2017). For example, products for health and wellbeing, Sustainable solutions and Premium interactions. The time to impact of these opportunities within each theme varies, but all are believed to position Australian F&A businesses for sustainable competitiveness over the next 20 years. Australia's increasing difficulty in competing on price because of our higher production costs (primarily the cost of labour, electricity and irrigation water) means that local businesses have little option but to target premium and high-quality global markets.

Within the opportunities presented in the report, capitalising in experiences and (agri)tourism can be a source of providing value to the industry. With younger generations prioritising experiences over material goods, demand is growing for new ways of interacting with food. These opportunities are not restricted to the retail end of the value chain, with growing interest from tourists and local consumers in combining the rural landscape of Australia's pre-farm-gate operations with local produce for enhanced dining experiences. Tourists often continue to eat the cuisines of their travel destinations long after they return home. Expanding into service offerings can add value to existing product lines through brand extension and open up demand in potential export regions.

As the sector continues to evolve, so too will the required skill sets. Increasingly, multidisciplinary skill sets will be required. For example, staff with combined deep technical knowledge complemented by an understanding of supply chains, relationship management skills and of experience with digital platforms. Researchers will need to have more on-farm and production experience to increase their understanding of the potential solutions that can be developed to address business needs.

Consumer education and personalised marketing is also key in realising the full potential of customer-driven investments in value-added products and enabling technologies. Independent and trusted sources must be capable of effectively communicating how these advances could provide value through validated health outcomes or improved safety to ensure appropriate consumer willingness to pay for these premium products.

Changes in demand for products could potentially be affected by COVID-19. The effect of any contraction as a result of COVID-19 will most likely be felt in the trade of higher value agriculture products and those products that feed into food services and non-related manufacturing.

In relation to the workforce needed to respond to these changes, the main issue to be addressed is the demand for the emergence of new roles in the sector – the need to attract agripreneurs (intrapreneurs and entrepreneurs), innovators, market analysts, researchers, food technologists, engineers, and others that can help the industry deliver the products needed. Improving the knowledge and skills of the industry workforce and management to capitalise on these opportunities will also be required.

What impact will climate change and other environmental situations such as severe droughts, severe storms and long fire seasons have on the agricultural workforce?

The current drought across much of eastern Australia has demonstrated the dramatic effects that climate variability can have on farm businesses and households (Hughes, Galeano, & Hatfield-Dodds, 2019). The drought has led to further discussions about the effects of climate change on agriculture.

Australian farmers are continuously exposed to climate variability and the effects that this has on their production. Much of eastern Australia experienced severe drought conditions during 2018-19. Current ABARES estimates show farms in drought-affected NSW recorded large falls in profit in 2018–19 (Hughes, Galeano, & Hatfield-Dodds, 2019). However, the effect of climate on farms is complex and can vary across farm types. Cropping farms can be more susceptible than non-intensive grazing to the effects of climate variability. Farmers limit the effects of climate and price risk through their active management and farming practices. Farmers increasingly use the improvements in the availability of weather forecast frequency and accuracy to continually assess their risk and can therefore put in place real-time risk mitigation measures.

Impacts will be first seen in the enterprises that are slow adopters or are inflexible to change. It may be considered that the current and future impacts of droughts, floods and fires, while having serious impacts in their own right, have a combined high-risk impact through wider climate change.

- Society, in general, is very concerned about the potential impact of climate change. They are demanding action through consumer choices, enterprise environmental management, and changing management practises to meet social expectations.
- Resource management, especially managing where energy is sourced and the potential legislation around vegetation, carbon pricing and water use.
- Government financial support may be harder to source in future. This support may also be tied to meeting improvements to management skill sets.

The level of skills required by the future agricultural workforce will need to be higher and across multiple disciplines, so it is expected that the greatest affect will be on enterprise owners, managers and other decision makers. They will have a greater requirement to manage risk and develop strategies that are integral for sustainable growth and prosperity.

The understanding and application of sound decision making will require higher skills in:

- The science of production, or the need to engage advisors with such knowledge,
- Analysis of financial documents and information,
- Resilience, adaptability and flexibility,
- Adoption of technology and automation,
- Increased use of best management practices, and
- Increased integration of farm data, together with weather and market information in decision making.
- New models and understanding pertaining to debt management mechanisms will also be required by farmers.
- Increase knowledge of management of pests and invasive species.
- Farmers will need to make advanced cropping decisions based on changing weather patterns and potentially lower water allocations.

Agriculture occupies over 88% of Queensland's land area, covering a total area of over 1.7 million square kilometres and its environmental performance is critical. The sector provides access to affordable and nutritious food and also provides social and cultural opportunities for communities to connect through food, fibre and foliage. Farmers are major custodians of the land and are playing their part in a range of land restoration, revegetation, biodiversity conservation and carbon abatement projects. These require an additional skills-set to recognise the opportunities and incorporate them into farming practice.

Also, workplace health and safety issues are arising. For example, outdoor workers exposed to increasing temperatures which also increases responsibilities and liabilities onto farmers.

What ways might changing social perceptions of different agricultural activities (for example, perceptions about sustainability, emissions, and animal welfare) affect the agricultural industry and its workforce?

The impact of an industry losing its social licence is immediate and potentially terminal for the farm businesses involved (Heath, 2018). The political future of animal agriculture, the future of glyphosate use regulation and the market's acceptance of corporate farming are all issues for which the unwritten social contract is under threat. While forced practice change in these issues will not lead to the end of agriculture, it could, however, have the potential to shape a very different agricultural sector to what we know today.

Social licence does, however, provide opportunities for the agriculture sector. Industries that anticipate social licence issues have the ability to position themselves as drivers of change for good rather than clinging to practices which have lost public support. Change always provides opportunity. Successfully anticipating new markets enabled by social licence induced change will provide opportunities for those willing to proactively embrace the concept, promote it and embed it within their practices.

In many F&A industries, maintaining high standards of environmental sustainability (e.g. more efficient water, energy, waste, and land footprint) and animal welfare have already transitioned from being potential differentiators to accepted costs of doing business. In some cases, market access is reliant on environmental certification against a growing number of standards. The remaining sources of differentiation typically fall within the social responsibility category, with premium prices still able to be charged for brands and

production processes that engage the community, prioritise worker well-being and ensure the ethical treatment of livestock.

Greater efficiency across inputs and outputs (waste) presents significant opportunities for reducing the cost of production; these environmental credentials are now considered a baseline requirement for many product categories. While this is reducing the potential for charging price premiums, these credentials are still important to consider in relation to the social licence to operate. The creation of new streams of revenue from waste and sustainable packaging are opportunities that are likely to become common value-adding practices across the sector within the next 20 years.

According a recent report winning the fight against food loss and waste can potentially save Australia \$20 billion per annum through increased industry profitability and reduced food insecurity, as well as enhancing Australia's reputation for sustainable food production (KPMG and Fight Food Waste CRC, 2020). Reducing food waste can have a positive benefit for both the environment and communities. Beyond this, by adopting a circular economy approach to reduce, reuse and recycle food waste, there is the opportunity for new business models to emerge and financial benefits to be captured from what was otherwise being needlessly wasted.

Farmers have been increasingly embracing the concept of regenerative organic agriculture and the gains it could potentially have in building more sustainable soils in the long term and also in their social license to operate. Regenerative organic agriculture adopts a holistic systems approach to agriculture that promotes new innovations for improving the long-term environmental sustainability of farms through practices that regenerate degraded soils (Wu, Dawson, Fleming-Muñoz, Schleiger, & Horton, 2019). An increasing need to adopt new farming practices for building resilience against droughts and floods while ensuring efficient production over the next decade may see a growing number of agricultural scientists further develop regenerative organic agricultural practice.

Maintaining the social licence is important because it is likely to lead to having permission to manage farming operations in a way that best suits farm management styles and the environment unconstrained by excessive government regulatory control. The industry must ensure that they communicate better with consumers and educate those that are not exposed to farm operations on their values and practices. Social perception can have an effect on consumer choice and therefore the demand for certain products, which in turn affects profits. The higher transparency and traceability of products help consumers relate to where the food is produced and to trust that the industry is doing its bit for the environment and society.

The perception of the industry also affects the branding of the industry that may not reflect or promote the innovative, diverse, forward thinking and socially responsible positive lifestyle factors that a career in farming offers. A commitment to challenging current images and perceptions, in conjunction with promotion of agriculture's viability, is needed to help attract workers to the industry.

Over the next decade, linking higher education to advances in agricultural technology, coupled with facilitating innovation across a diverse and evolving agricultural sector with a focus on agribusiness and entrepreneurship – together with an improved promotion of social responsibility which addresses issues of food security, food waste management and others – could potentially bring young Australians to regional towns or rural areas to pursue a career in agriculture.

What impact will societal changes, such as the ageing workforce, low unemployment, low immigration and relocation of regional population (and agricultural, health and education workers) to urban areas, have on the agricultural workforce?

As stated in the Growing for Queensland discussion paper (State of Queensland, 2019), the agriculture sector is a significant contributor to Queensland's economy, employment and communities, predominantly in rural and regional areas.

The agribusiness and food sector supports regional economies and communities around the state. In 2019–20, the total value of Queensland's primary industry commodities is forecast to be \$16.99 billion, 5 per cent less than the previous estimate and 11% less than the five-year average.

Just over 333,600 people were employed in agriculture and the food supply chain in 2017–18, accounting for 13% of all working Queenslanders (State of Queensland, 2020). Agriculture has been a significant source of economic growth and, despite the ongoing eastern Australia drought, represents the fastest-growing of all industries at 16.3% (ACIL Allen Consulting, 2019).

As a result of the COVID-19 pandemic, the forecast GVP for Queensland's primary industries at the farm gate has declined by \$275 million (about 2%). Fruit and vegetables, cut flowers, forestry and fisheries commodities were the most affected. Drought and seasonal conditions will, however, continue to have the greatest overall impact on Queensland's primary production (State of Queensland, 2020).

In Queensland, agriculture supports 77,400 are directly employed in agriculture, forestry and fishing (Australia Bureau of Statistics, 2020). The industry increased its level of employment by 17.4% in Queensland and, in particular, in the regions considered as "Rest of Qld" by 18.4%. The industries are important to all regions, but are particularly important in Darling Downs – Maranoa, Outback Queensland and Wide Bay, where they provide more than 10% of all direct employment. More than many other sectors of the economy, agriculture has outstanding growth opportunities. These growth and structural opportunities bring with them interesting future workforce opportunities and changes.

In June 2019, there were 41,054 businesses in the agriculture, forestry and fishing industry in Queensland. Farm numbers have been declining at a steady rate, whilst the average farm size has increased. Most businesses involved in agriculture, forestry and fishing are small businesses—a large percentage have no employees apart from the business owners themselves, or have fewer than 20 employees (Australian Bureau of Statistics, 2020). Agriculture is and will remain a key employer, particularly in Queensland's regional communities, so it is critical that the awareness, education and employment pathways for our sector are effective.

As expressed in QFF's report (Queensland Farmers' Federation, 2018), agriculture has the highest share of employed persons who are above retirement age, and its labour workers are aging with about 23 percent of the sector's workforce likely to retire over the next five years (Skills Impact, 2017). These upcoming retirements are likely to bring significant job vacancies across the sector, requiring effort from employers to refill these skills.

Improved succession planning tools are required to support the transition of the agriculture sector, with a key challenge being the need for new business structures to support a new

generation of farmers. This involves supporting industry education and extension programs to provide the tools and advice needed to adopt more efficient and effective business structures.

The sector is likely to find a tightening of labour supply, particularly for skilled farm managers as a consequence of the impending retirement wave. Agriculture needs quality leaders and an appropriately skilled workforce to adopt innovation. To encourage the uptake of new technologies and products, producers require an understanding of their background principles and the potential benefits and risks involved in their adoption. Producers with general, technical and business educations may be more willing and better at adopting innovation as a result.

The CSIRO report (Wu, Dawson, Fleming-Muñoz, Schleiger, & Horton, 2019) reviewed and examined the current and emerging trends driving workforce change and labour use across the agricultural sector and related services. On the one hand, urbanisation could continue, and lack of population growth in small cities and large towns of Australia may restrict infrastructure development needed to grow the agricultural workforce in regional areas. Alternatively, the increasing cost of housing and growing congestion in large cities, along with changing business and employment models that are supporting an increasingly mobile workforce, could see regional towns and centres transformed over the next decade. In addition, integrating new technologies across the sector could potentially present many benefits in the future, but uncertainty currently remains around the extent of technology advancement and adoption across the entire sector.

The sector has identified the following strategies to address some of the demographic and social changes affecting the various agricultural industries:

- Introduction of a dedicated agricultural visa designed to support people coming to Australia for employment in Agriculture (KPMG, 2018). The visa will provide legitimate incentive for international labour hire where domestic shortages exist.
- Implementing successful planning models to encourage new participants to replace the aging population.
- Increasing the attractiveness of rural communities. Ensuring that by 2030 all regions in Australia have access to improved levels of communications, health, education and childcare services.
- Finding innovative solutions for attracting and retaining workers. For example, better labour coordination to offset seasonal employers to address season-ability in demand and provide more attractive, stable terms of employment.
- Improve the workforce participation of women in agriculture. A recent completed report in this issue has been completed (Ressia, Strachan, Rogers, Ball, & McPhail, 2020). The report highlights that women's roles are complex and varied and this requires many women to adapt quickly to changing economic and environmental conditions. Women have a wide range of responsibilities related to the farm business, innovation and entrepreneurship, and family care. The findings presented indicate that there is considerable work (from research to sustained culture change) to be done in order for farm businesswomen to achieve the recognition they deserve (at industry, organisational and individual levels), to have the ability to develop leadership opportunities for themselves, and to access the necessary training and development provisions to support them in achieving their aspirations.

The effect of COVID-19 potentially means that low unemployment is likely to change. This might have an impact on the available workforce that could be employed in agriculture. However, other factors should be improved, such as connectivity, access to infrastructure and services.

Key to realising the opportunities for our sector is maintaining the supporting regional infrastructure, that includes:

- ✓ hard economic infrastructure such as access to mobile and internet telecommunications infrastructure, roads, reliable internet connectivity, railways and ports
- ✓ soft infrastructure such as a supportive legal and regulatory environment to deal with issues (example data ownership, reef regulations, etc)
- ✓ smart infrastructure such as research, development and extension, and an innovative culture more generally
- ✓ social infrastructure such as a supportive education and training system.

Agriculture is and will remain a critical employer, particularly in Queensland's regional communities, so it is critical that the awareness, education and employment pathways for our sector are effective. The sector needs to invest and prepare to continuously support its workforce for change by providing the opportunity to upskill. It will also need to ensure there is a close connection with the training and education sector to ensure that training meets their needs. For this to be possible, strategic alliances between industry, government and training providers at all levels (school level, universities, VET, and others) is needed.

AVAILABILITY OF WORKERS

What are key health and wellbeing considerations for the agricultural workforce?

Mental health concerns are a growing issue in the farming community. The devastating drought conditions in many parts of the country, coupled with fires and floods are events impacting farming. It is vital that farmers are supported with access to the right tools that empower the farming community to improve their health and well-being.

Workloads, business, and family responsibilities have compounded with internal and external pressures: the rising cost of living, lifestyle expectations, long work hours, long travel distances, combined with climatic events are placing strain on the work-life balance.

The mechanisation of farming, particularly broadacre cropping, can also mean that their work activities have changed and a result of too much sitting and lack of physical activity can have health effects.

Many rural areas also lack some health and medical services and it is often difficult to access recreational facilities such as heated swimming pools. The access and availability of healthy food options can also be challenging, making the healthy choice a difficult one in many remote areas.

Isolation for many people is common as many farmers are often working alone and may have limited opportunity for regular social interaction. There are also social norms and cultural

tendencies that can act as barriers to change, as are the aforementioned mental health concerns.

On top of these issues, there are health factors that accompany an aging demographic. 43% of the agriculture permanent and part-time workforce is over 55 years of age (Australia Bureau of Statistics, 2020), while casual and seasonal workers tend to be under 25 years of age. Due to the physical nature of the work and inherently higher work, health and safety (WHS) risks, these two groups carry the increased potential of poor outcomes in the workplace. In line with the older demographic of the industry, older workers account for the majority of worker fatalities, however, younger workers recorded the highest serious claim frequency rates (Safe Work Australia, 2018) .

Working in rural and remote environments does carry higher WHS risks and responsibilities. Vehicle incidents account for 25 per cent of worker fatalities, followed by rollover of non-road vehicles (16 per cent) (Safe Work Australia, 2018). On average there are ten quad related deaths on-farm each year. Ensuring that farmers are supported with resources and capabilities to be farm safe and reduce fatalities is key to protect the well-being and safety of their staff.

How can health and wellbeing best be maintained and improved

- Awareness campaigns on the importance of a healthy lifestyle,
- Self (staff) development – life skills,
- Learning and practising healthy lifestyle choices,
- Improving physical health and a healthy diet,
- Supporting social groups and sporting local groups in rural areas,
- Use of field day and farming groups amongst farming groups to improve social interaction,
- Improving soft skills such as working in teams, conflict resolutions, hard skills for financial planning and budgeting,
- Ensuring workplace health and risk procedures are in place, and staff are aware of the health and safety rules,
- Ensuring the proper induction and training of staff members on health and safety procedures,
- Ensuring awareness of what the on-farm risks are, how they can be mitigated or controlled and creating site-appropriate risk management processes and controls,
- Creating and supporting a work safety culture with systems and procedures that are easy to use and empower workers to make better decisions.

Such skills are about equipping individuals to manage life in the agriculture workforce. To not only improve their workforce experience but their ability to actively self-manage their health and well-being.

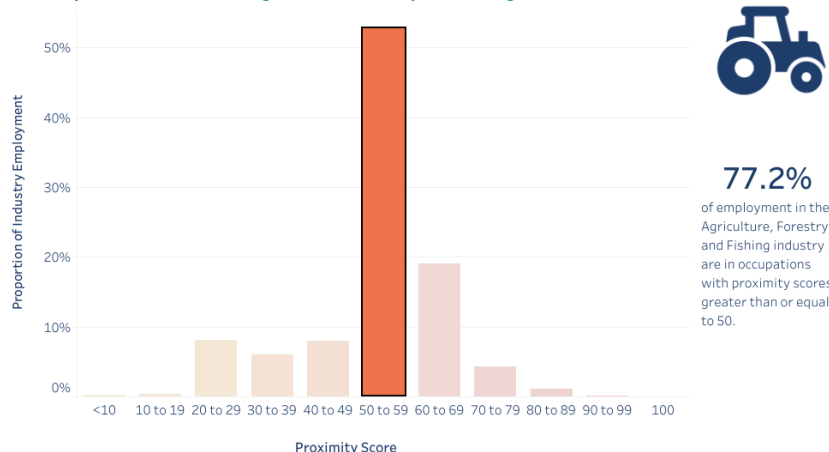
DEALING WITH COVID RISKS

The effects of COVID will require agriculture industries to adapt their practices to manage the risk of COVID-19 and maintain a covid-safe workplace and a healthy workforce.

The National Skills Commission has analysed data from the Australian Bureau of Statistics and the United States Department of Labour O*NET Database to produce insights into the potential risk from COVID-19 on different occupations in the labour market (National Skills Commission, 2020). The figure below shows the distribution of physical proximity scores. Occupations with higher proximity scores require closer proximity than other people to undertake their daily activities. Adapting work duties to comply with social distancing protocols may be difficult for some occupations with proximity scores greater than or equal to 50.

Agriculture, Forestry and Fishing

Proximity Score Distribution – Agriculture, Forestry and Fishing:



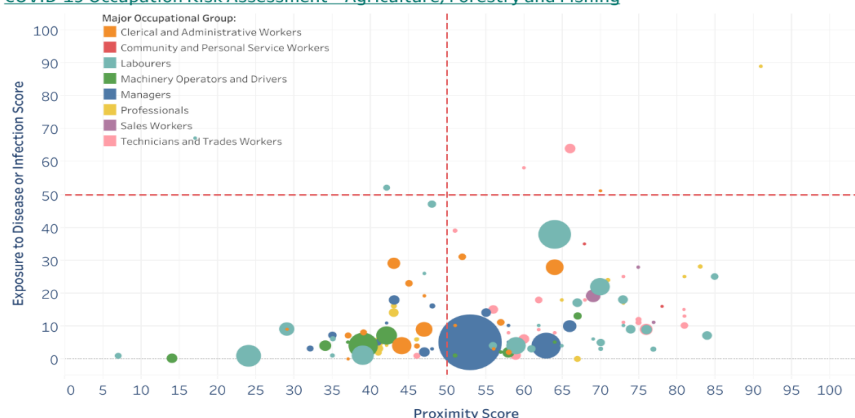
The graph below shows that most occupations in agriculture have a low exposure to the disease and only a low number of occupations have both a large exposure and are high risk. The occupations considered to be of high risk include veterinarians, farriers, inspectors and regulatory officers.

Industry Filter:

Agriculture, Forestry and Fishing



COVID-19 Occupation Risk Assessment – Agriculture, Forestry and Fishing



Explanatory Note:

This visualisation shows the 'Physical Proximity' and 'Exposure to Disease or Infection' Scores of the top 200 employing occupations (ANZSCO 6-digit) for each major industry (ANZSIC 1-digit). The analysis does not take into account changes to business practices that may have been implemented in response to the COVID-19 pandemic.

Governments, both nationally and internationally, have put measures in place to suppress the spread of COVID-19. At a state level, in Queensland, Safe Food Production Queensland, the state government through the Department of Agriculture and Fisheries, and the agriculture industry have jointly developed guidelines and a checklist to help business understand the risk

of COVID-19 to their workforce and describes the implementable measures recommended (Safe Food, 2020). A risk matrix has also been created to help businesses developing mitigation measures to manage the impact of COVID-19 on their workforce and to assist in meeting the key elements of Queensland Health's Workplace Health Management Plan. It is intended to be read and applied in conjunction with the WHS Guidelines and other industry documents.

To mitigate the risk of COVID-19, and/or work health and safety risk on the farm, RJSA has been working on the development of a standard agriculture 'work-ready' induction to ensure that new employees arriving at the farm gate are appropriately prepared to safely start work in a rural enterprise. Such an induction will help minimise the administrative burden from workforce changes due to the current COVID-19 situation. Support is needed for programs to pre-train new staff, including providing effective preparedness for working in a rural enterprise and a standard workplace health and safety induction will be an immensely beneficial and practical resource. RJSA has been working on this training solution that has the support of many industry organisations and is currently seeking funding from the state government for its implementation.

What are the key drivers that will influence the size and skill needs of the agricultural workforce in the next decade?

Drivers that will be likely to influence the size and the skills needs of agriculture include:

- Financial, economic and social factors of the farm business will obviously moderate the ability for a farm to contract people
- Farm businesses will increasingly rely on experts and advisors with specialist skills, so the number of contractors providing services to the farm is likely to grow in the next ten years.
- Development and adoption of technology and automation is a key driver. As mentioned previously, technology will continue to change the characteristics of the workforce, the tasks they perform, and the skills needed in agriculture. The findings of a recent report (KPMG, Skills Impact, 2019) indicate that 41% of roles in Australian agriculture will be affected by technology within the next ten years, 30% through automation (e.g. robotics) and 11% through augmentation (e.g. Artificial Intelligence and wearable devices).
- The ability of the sector as a whole to attract a workforce that has the skills needed, in particular to remote regions. This will include the ability to work with schools and educational institutions to ensure that the workforce has the required skills, as well as other available pools of workers such as immigrants and others.
- Environment and climate change. The ability to be sustainable, adopt good practices, be able to adapt to the challenges in the environment such as climate change, as well as having the resources needed to continue farming.
- Legal and regulatory requirements. Evolving regulations will likely place more cost pressures on the farming community.
- A continuous need to upskill and learn. The current workforce will need to engage in continuous learning to adapt to the evolving agriculture sector. It is increasingly likely that the workforce will require to be trained on the job and continuously update their levels of skills. But, as people with higher educational attainment start to dominate, they will influence/encourage more training and

upskilling, inculcating the benefits of a learning culture. This is the shift in the influence of the new way of learning versus the old way of learning that has traditionally dominated agriculture.

- The ability to provide good quality and flexible training will have an impact. Training that is seen to be relevant or of value, with modes of delivery that satisfies the agriculture sector's needs and expectations.
- Social license to farm and community expectations (balanced sustainability - social, economic and environmental)
- Market access and changes to the production mix (future consumer demands and trends)
- Supply chain security (including labour inputs, resource inputs, and transport)
- Redefining of gender roles in the rural landscape, including greater opportunity and resource support for women to develop their potential and assume leadership roles, both on-farm and at an industry representative level.

What factors (e.g. status of the agricultural industry compared to other industries, competitive labour market, workplace conditions, public perceptions of agricultural jobs and industries) impact the pool of talent available to pursue agricultural careers?

Agriculture remains the most diverse job market of any sector in the economy. The rapid pace of digitalisation, mechanisation and the Internet of Things are challenging current industry roles, education and training requirements. Labour challenges are a constant issue in agriculture. Often, the available labour supply does not meet agricultural needs due to the characteristics of the work, such as the remote locations, the casual nature of the job, the physically demanding roles and the need for flexibility in working hours. Despite this, agriculture remains a key employer, particularly in Queensland's regional communities.

An increasing challenge will be attracting and retaining an appropriate mix of skilled workers in rural towns (Korff., 2017). Large rural towns are sustaining their populations, while populations in smaller towns are decreasing suggesting that the ability to source and recruit people in remote regions will likely decrease in the near future (KPMG, 2018). However, rural communities that are able to provide a level of infrastructure required including telecommunications, health, education and childcare are likely to contribute to attracting skilled people to the industry. Agriculture is and will remain a key employer, particularly in Queensland's regional communities, so it is critical that the awareness, education and employment pathways for the agriculture sector are effective.

How can agribusinesses and related industries better attract workers?

Engaging the required labour force in regional communities is a challenge. Most agriculture sector employees live in the rural and regional areas of eastern Australia. In 2016, 82 per cent of them lived outside a capital city. This is less than the figure of 85 per cent in 2011, indicating relative growth of the agricultural workforce in greater capital cities (Binks, Stenekes, Kruger, & Kancans, 2018).

As mentioned previously, rural communities that can provide a level of infrastructure such as telecommunications, health, education and childcare are likely to contribute to attracting skilled people to the industry.

It is also critical that the awareness, education and employment pathways for the agriculture sector are effective. Promotion of the new career opportunities and pathways offered in the agricultural sector and a distancing from the stereotyping indicating that work is all about farm labour and manual work. There are many and varied roles that many students are unaware exist: areas such as protected cropping, logistics, biosecurity, automation, regenerative farming, recycling resource management (biofuels, green fertilisers and recycling) and data analysis.

Following the Queensland Government's decisions to cease funding for the Schools Industry Partnership Program (SIPP) and cease operation of the Queensland Agricultural Training Colleges (QATC), the sector is facing a significant initiative gap in pathway responses. These programs must be replaced by more responsive and flexible structures into the future, as outlined in the 'Queensland Agriculture to Schools Engagement Program' (QASEP) proposal.

There is a growing professionalisation of roles to support the changing nature of modern farming businesses. Expectations on what is required of those who wish to enter agriculture as a career and maintain their employment have shifted towards higher-skills and specialisation.

The state's agricultural workforce is undergoing a sizable shift in the required roles. Technological change will increase the demand for more professional and technical jobs in our industry (Queensland Farmers' Federation, 2018). Predicted future skill needs include those of other occupations not traditionally associated with agriculture including engineers, data analysts and business support services. Therefore, we need to attract new and different talent in the sector with these required skills.

It is important to note that while a lot of the potential technology can have an impact, much of agriculture involves continuous production processes, so disruption tends to occur incrementally, and it is planned. So, there is a need to sustain current practices until disruption occurs, creating the conundrum that industry needs to keep attracting people to its current roles that might change in the future.

Agriculture, as a sector, has traditionally been able to cater for a relatively larger than average contingent of low-skilled labour. Many current farm activities will likely continue to require various degrees of skills and labour. It is unlikely that new technology will perform all tasks that unskilled labour has performed. Therefore, agriculture will still require a mix of skill in its pool of resources (Korff., 2017). However, automation of harvesting and production processes could provide solutions to some of the labour supply issues in the horticulture industry by reducing the need for labour intensive tasks and thus helping create new higher-skill jobs. Training support will need to be provided to guide employees and employers to deal with the transition (Howe, Clibborn, Reilly, van den Broek, & Wright, 2019).

While technology capability in the workforce is increasingly needed in agriculture, there will still be requirements for qualified agronomists, soil experts, livestock and other specialists. These professionals need to build their problem-solving capabilities and systems-thinking so that integration with technologies is managed. ICT will need to become part of the process in many of the agriculture occupations (Pratley J. , 2017).

As mentioned by the Coldrake Review (Coldrake, 2018, p. 3), the themes emerging from various reports on the state of agricultural education and training have been similar: "the shortage of young people choosing careers in the agricultural sector, the gentrification of the agricultural workforce, the dissonance between the inability to attract as against the potential new job opportunities opening up in agribusiness, the imperative to mobilise industry

engagement strategies and the need for education and training providers to embrace flexible delivery”. The issue to be addressed is the need for a skilled and adaptable workforce that meets the sector’s future needs – one that is well resourced, fit-for-purpose and responsive to ever-changing technological advances.

The sector needs to better inform younger generations about the new and exciting job opportunities and careers available by creating a stronger link with schools. Increased support for initiatives that bring industry, schools and the training sector together to create awareness of the importance of agriculture, and the active promotion of its many and varied possible careers is now more necessary than ever before.

Within its own strategic plan, RJSA acknowledges the importance of attracting new entrants to our sector to ensure its sustainability. RJSA has reviewed literature and best management approaches and has developed an industry-led program to address the perceived state-level gaps in schools-industry engagement called the ‘Queensland Agriculture to Schools Engagement Program’ (QASEP). We believe the proposed program will improve the way schools and agricultural industries interact, provide mutually beneficial experience and learning opportunities for students, and deliver the career pathways promotion the sector needs.

The QASEP proposal responds to the Gonski 2.0 Review (Gonski, et al., 2018) that reiterated the need to strengthen partnerships across the system to achieve educational excellence in Australia. The subsequent Mitchell Institute report (Torii, 2018) identified school-industry partnerships as the means to deliver the value, quality and contextualisation sought through the Gonski Review’s many recommendations. This is where agriculture and rural industries can partner with the education system to offer real opportunities and generate real societal benefits for the state and its communities.

The Mitchell Institute report (Torii, 2018, p. 20) has provided a contemporary assessment of the way forward:

- ✓ School-industry partnerships need to be valued and measured at the system level
- ✓ School-industry partnerships need to be a priority in all schools
- ✓ Governments need to make it easier for all parties to engage in school-industry partnerships.

The program aims to build school-industry partnerships in Queensland to attract, inspire and provide informed career opportunities for young people to join the agriculture industries and help meet their future workforce needs. Program aims will: - provide real industry experiences that align with school curriculum and learning priorities - promote the industry and its career options to students, educators and careers advisors - help future generations to better understand their pathway options to careers in agriculture - provide experiential learning to career seekers to explore their potential to work in agricultural industries - provide individuals and groups with training and experiences to assist them to start a career in agriculture.

RJSA will build on its existing networked partnerships with industries, schools, vocational education and training and tertiary sectors to achieve the following objectives:

- A. Industry awareness and contextualized learning: To increase student awareness, engagement and participation in learning linked to agriculture

- B. Career awareness: To build students' awareness and enthusiasm for a broad range of new and emerging careers in the sector, including STEM careers
- C. Experiential pathways: To support students to transition from school to work and develop key employability and work-readiness skills needed in industries
- D. Experiential and continuous learning: To develop students' future work capabilities to current and emerging occupations in agriculture
- E. Increase schools' capability: To build the capability of school leaders and teachers to provide up-to-date industry-relevant learning
- F. Better education resources: To increase access to state-of-the-art, industry-standard technology and equipment to support teaching and learning activities.

Implementing these objectives, QASEP will also align with those recommendations from the Independent Review into Regional, Rural and Remote (RRR) Education by:

- ✓ Expanding the availability, affordability and accessibility of high-quality work experience placements, VET, dual VET/university options and two-year associate degree programs for RRR students
- ✓ Supporting RRR communities to implement innovative approaches to education delivery designed to improve education access and outcomes for students living in remote communities
- ✓ Ensuring RRR contexts, challenges and opportunities are explicitly included in the selection and pre-service education of teachers, initial appointment processes and their on-going professional support
- ✓ Ensuring RRR contexts, challenges and opportunities are explicitly included in the selection, preparation, appointment and on-going professional support of educational leaders.

To attract the next generation of workers, the agriculture sector needs to address the disconnect with schools and some of the misperceptions they currently hold. Using agriculture as a vehicle to deliver the curriculum including STEM subjects would help address this issue. The need for STEM skills in agriculture is only going to increase as a substantial portion of the future jobs created by the sector will need STEM training (Kahl, 2019). Therefore, agriculture is seen as a powerful learning ground for children and young adults and why this proposal integrates agriculture learnings to boost the effectiveness of STEM activities where it is feasible to do so.

Industry relationships can help schools align more fully to contemporary skills for work options. The support of school-based traineeships and apprenticeships and work placement opportunities to those inclined towards agriculture can also provide a starting point towards a career in the sector and subsequently, using the VET sector to continuously upskill its workforce to address lifelong learning.

What are the implications if the supply of skilled agricultural workers is insufficient for your sector or business?

Investing in attracting workers to the agricultural industry has sweeping benefits for the Australian economy, farm gate returns, national productivity and innovation, as well as our global investment and competitiveness (Watts & Harrison). Addressing the agricultural

workforce supply crisis is an essential requirement in positioning Australian agribusiness to realise the opportunities for future prosperity.

A significant shortage of skilled, semi-skilled and low-skilled workers during peak and non-peak seasons can result in significant productivity reduction and therefore financial losses. The need for agricultural labour can increase significantly during peak periods and labour concerns are always recorded amongst some of the top challenges that farmers continually face.

The ABARE demand for workers survey in 2018 identified that farmers report recruitment difficulties in the industries surveyed. In particular, farms had more difficulty recruiting higher-skilled positions. This highlights the importance of access to agriculture training and the need to offer competitive conditions. The more remote the company, the harder it is to recruit (ABARE, 2019).

The report *Towards a Durable Future: Tackling Labour Challenges in the Australian Horticulture Industry* identified that the industry has experienced labour shortages in vegetable growing seasons (Howe, Clibborn, Reilly, van den Broek, & Wright, 2019). The survey found *that 40% of those surveyed had not been able to recruit sufficient pickers, packers and graders at some point in the past five years. 63% of them reported leaving vegetables unpicked.*

SKILLS AND KNOWLEDGE

What skills and knowledge does the agricultural workforce need in the foreseeable future to ensure the ongoing productivity of the agricultural industry given the changes the industry and Australia is experiencing?

1. Greater emphasis in skilling people for life at work.

Preparation and understanding of the requirements for working in agriculture, including Language, Literacy and Numeracy (LLN) skills and keeping aware of risks to workplace safety. The agricultural sectors' constant and consistent feedback is that new employees are often ill-prepared for the transition from school to employment as they can lack the basic knowledge and understanding of work practices and culture.

The Evolution of Agricultural Education in Australia (Pratley & Archer, 2017), offers a history of agricultural education that has been based on learning on-the-job as the accepted career path. Many enterprises have little time to initiate entry-level work skills training and expect the new worker to already have an awareness level of basic work knowledge and skills.

While some technical skills are becoming obsolete in a changing job market impacted by automation and innovation, 'soft skills' are increasingly required of employees. In the last 25 years, Australia has seen a decline in jobs requiring manual or repetitive tasks but an increase in jobs that are people-focused or require problem solving and creative thinking. A teenager today will likely have 17 different employers and five different careers in their lifetime and will require a set of transferable skills that can be used across a range of jobs (National Centre for Vocational Education Research, 2019).

The greatest employability trait is the ability to gain and have work experience. There has been and still is a large gap in the ability to get a job due to lack of experience and the best employment/skills outcome pathways include a workplace learning component (Moschion, Polidano, & Castillo, 2019).

2. Life-long learning opportunities

In the RJSA response paper "Agricultural Skill Needs: Certificate III in Rural Operations), Industry was asked if there were any particular skills missing in their workforce: 22% of survey respondents reported some form of skills shortage. Machinery or mechanical skills (including maintenance, welding and fabrication), information technology, computer skills, truck/forklift/tractor driving skills and manager/supervisor skills were all on the top of the list. The top skill needs Queensland wide, other than *previous experience and a good work ethic* were:

- Machinery skills including maintenance / welding / fabricator
- IT / computer literacy
- Driving skills including truck / forklift / tractors
- Managerial / supervisory skills
- Appropriate licences

The National Industry Insights Report 2019/20 National Overview provides analysis of industry skills needs and the factors and trends affecting the demand for skills at a national

and cross-industry level (Department of Education, Skills and Employment, 2020). This report states, it is evident from the analysis that there is a huge industry demand for cross-sector skills such as adaptability, analytical, digital, and collaboration skills.

Given the ever-evolving challenges that industry faces due to factors such as structural change, economic cycles, changing markets, and emerging technology, these transferable cross-sector skills are critical for ensuring Australia's workforce can adapt to the ever-changing environment.

In addition, industry and occupational-specific skills remain a priority for all industries, with many IRC Skills Forecasts identifying key technical skills as in demand. Indeed, these specific skills for specific jobs remain an integral part of Australia's vocational education and training system.

The RJSA strongly supports its finding of future priority skills, especially at the higher levels of management and industry advisors. This group, as industry influencers, can have the greatest ability to disseminate skills and knowledge throughout the workforce.

Is the current education and training system for agricultural workers fit for purpose? Are the needs of the agribusiness workforce adequately served by current education and training systems (high school programs, vocational education and training, and higher education)? What is working? What is not?

The state and federal government needs to listen to industry and regional communities to better build investment in modern training methods to service the contemporary and future needs of a growing agribusiness sector. The sector must have a skilled and adaptable workforce to meet industry's current and future needs, one that is well resourced, fit for purpose and responsive to the ever-changing technological advances and potential disruption ahead. We must, therefore, focus on producing smarter outcomes, both in terms of the models we apply to deliver the necessary training and their financial viability.

What is working well:

In relation to the VET system, some RTOs actively engage with industry and look for alternative ways to improve service delivery for our industry. They are aware of the particular challenges we face and the need to change the way they do business in order to adapt to industry needs; strategic partnerships have been formed to deliver programs better suited to our industry's requirements and profile.

There has been an increased focus on the quality framework underpinning the provision of training. The model to improve the consistency and supply of quality training is an evolving one and allows more active involvement of industry in the process, of which we are supportive.

The VET system provides subsidies for those in need and provides support for fee-free training post- year 12. These benefit the economy in the long term by improving employment opportunities to those that need it.

A research report by the National Centre for Vocational Education and Research (NCVER) on the "Readiness to meet demand for skills: a study of five growth industries" (Beddie,

Creaser, Hargreaves, & Ong, 2014), confirmed the changing skills needs in agriculture, and has highlighted a range of challenges and opportunities including:

- The widening gap between the knowledge generated in the education and training systems and the skills demanded by employers.
- Industry collaboration with education and training providers is a key factor in ensuring greater industry input into the nature of education and training, and in anticipating the extent and nature of future demand. Providers also need to foster collaboration in order to keep abreast of contemporary industry requirements.

What is not working:

While the understanding that undertaking vocational training is beneficial to gaining employment and developing new skills, the uptake of accredited training continues to decline. As a thin, and geographically dispersed market, agriculture is not an attractive market for training organisations. Industry-specific funding for a predetermined period presents training providers with an incentive to engage in service provision and assurances to invest in new course development to meet industry needs. An industry-led model would facilitate connections between industry and training providers to ensure training leverages the latest in R&D and is contextualised to meet genuine industry need.

For the last two years, QFF has held an annual forum for Registered Training Organisations (RTOs), Vocational Education and Training (VET) stakeholders and government agencies. The last event held in November 2019, involved over 65 stakeholders across a range of organisations.

The participants were asked about barriers of engagement with the VET system, these included:

- Decline in language, literacy, and numeracy skills with no allowance to improve these prior to training commencement.
- Uptake of technology and new knowledge in training packages needs to be significantly improved.
- Industries lack of understanding of what qualifications are there and what they mean, the processes involved, delivery options, or career paths and terminology used.
- Access to reliable internet in both quality and volume (distance education).
- Distance to courses and cost of travel.
- Lack of quality trainers: there are skills shortages in the VET sector and a need to continuously upskill. Contract arrangements are complex and this needs to change in order to attract a better quality of trainers. The cost and time take to gain a TAE qualification is seen as onerous and difficult to undertake for those without experience or practice in the delivery of training.
- Lack of flexibility in training and delivery.
- Thin market and cost of training delivery (RTOs): to service the market, there needs to be a viable return on investment to be able to develop the resources necessary and to then deliver the training (often in rural and remote areas).
- Incentives for RTOs to deliver in schools and in remote locations.
- Stronger links between VET pathways and tertiary education pathways would allow people more flexible approaches to career development.

- ASQA process and red tape: compliance requirements versus real-world delivery
- Retention of students; there are instances where the training commencements may increase, but the issue is trying to get students to complete. The question is why. Do people want only what they need? Do they want short and relevant training that addresses their needs?
- The VET system needs to be easier to navigate for the employer and the employee. The complexity of the system gets in the way for people to participate. Information needs to be simple and digestible.
- Training needs to be targeting the business' needs, and training providers need to think about the impact on businesses. Training needs to be cost-effective for business and relevant to both employee and employer.
- Responding to future demands. We should concentrate on the areas where skill demands are to grow and change. For example, horticulture, how can we provide training that is relevant to support a growing industry.
- Ensure that there are transferable skills across sectors.
- Be able to use innovation in delivery. Digital methods can be effective, but the cost is too high.
- The way that RTOs get paid through subsidies by the completion of subjects.
- Training service providers (RTOs) and their trainers will be required to upskill to remain current and able to deliver up-to-date training that is relevant to the industry.

There are some concerns about the availability of qualified instructors and the training requirements to properly service the agribusiness industry. In Queensland, this issue is increasingly a concern given the cessation of QATC's operations. Industry members of the Rural Jobs and Skills Alliance consider this has left an immediate gap in essential training delivery for the agricultural industry and training provision in some regional areas. The RJSA are particularly concerned about transitional arrangements associated with training for schools as well as the provision of specialised training.

Impact of Closure of Queensland Agricultural Training College (QATC)

In December 2019 the QATC RTO closed the 2 remaining campuses at Longreach and Emerald as well as their training hubs in Toowoomba, Dalby, Walkamin and Ayr. This was done in response to the Coaldrake Review handed down in June 2018 (Coaldrake, 2018).

The Review of the future of vocational education, training and skilling in central-western Queensland by Emeritus Professor Peter Coaldrake contained 7 conclusions and recommendations.

While the review highlighted that the "residential-based model of historically-styled education and training is no longer fit for purpose", it did indicate that there was a continuing need for agricultural training across Queensland.

The Coaldrake review focused heavily on the college campuses at Longreach and Emerald and their location in the Central Western Queensland region. The training Hubs location in Toowoomba, Dalby, Walkamin and Ayr and the fact that they were the main generator of rural training across Queensland, failed to be considered in this review.

The closure of QATC in December 2019, effectively saw the baby thrown out with the bath water, and a large gap in Agricultural training was left in its wake. The QATC training hubs were building momentum servicing an increasing demand from schools with both VETiS and Traineeships and with a developing online and digital presence for a range of qualifications and training products, to service remote and regional Queensland in an affordable manner. While other Registered Training Organisations (RTO) are slowly filling the gap, they are still issue in regional and remote Queensland. The closure saw an exit of not only an RTO dedicated to delivering agriculture training, but also a loss of educators and assessor prepared to service rural and remote areas that make up a large portion of Queensland.

Regional schools and Australian Apprenticeship Support Networks are struggling to find RTOs and assessors to support VETiS and traineeships in Central Western Queensland. This is because there may be no local RTO plus trainers and assessor to service western regions. The cost to an RTO to bring in the people needed for a small cohort, is not covered by the income it will generate.

There is still an urgent need to take up the slack left by the closure of QATC and especially the loss of the training hubs dedicated to rural training. There is an opportunity to move into the digital age and further develop a blended learning and assessment model to deliver agricultural training both effectively to rural and remote locations.

How can these systems best meet the needs of the agricultural workforce?

The agriculture sector needs to lead collaborative efforts with training providers and government to support flexible programs that meet their needs. Industries play a fundamental role in providing information about the skills that they expect of their workforce, as technology continues to change job functions and tasking.

The agriculture sector recognises that we need to partner with government and the training sector to ensure that our industries have a sustainable and appropriately skilled workforce. Businesses are fundamental in providing insights about the skills required for their business. Real-life education will need to play a bigger role and therefore industry-based learning will need to be encouraged.

Agricultural businesses need training to be more specialised to their specific business requirements, rather than requiring completion of units unrelated to their operations, if they are to encourage employees to undertake training (Kahl, 2019).

Government will need to ensure that funding and accreditation systems provide appropriate incentives to increase learning flexibility. Increase of funding support for skills sets and micro-credentials should be a priority.

The modes of delivery will also need to change. Demand is expected to increase for more flexible, short-form courses that allow workers to acquire the required skills as and when needed (a just-in-time model). Training providers will therefore need to adjust their skills experience and their teaching methods. Demand for online courses is expected to increase (AlphaBeta, 2019), and training providers will need to adjust to a fit-for-purpose learning approach. The training system is not currently fully equipped to deliver the quality, and amount, of training required.

Participants at the QFF VET forum held in November 2019, mentioned the following priorities for changes in the system to meet the needs of the industry:

Training delivery and content needs to be:

- ✓ Relevant
- ✓ Contextualised to the rural workplace – written information. Work-based projects or include the use of research and analytics to improve decision making and problem-solving.
- ✓ Incorporate the real workplace – practical
- ✓ Incorporate industry placements
- ✓ Industry driven or led
- ✓ Trainers need to “know their stuff” and maintain their currency. Need for more qualified trainers or build a pool of trainers including experts or champions in the field.
- ✓ Funding of just in time training. This includes micro-credentialing and skills sets
- ✓ Flexible and agile
- ✓ Assessments need to be relevant to competency (current and future)
- ✓ Entrepreneurship embedded into training and marketing of pathways
- ✓ Marketing of non-traditional industry roles
- ✓ Improve industry, schools and perception of Agriculture careers and pathways.
- ✓ Employers want job-ready skills (including employability skills), which isn’t funded, but it is constantly raised.

The group discussed the opportunities available through partnerships with industry, and the value that training can create for industry.

Some of the opportunities mentioned (amongst others) include:

- Greater involvement of farmers, agribusiness experts, consultants and other industry experts in collaboration with RTOs (and technical experts) to design content requirements (their skills & knowledge, currency of practices), and to provide, where possible (especially in remote areas) their locations and equipment to assist training options and alternatives.
- Utilise industry as training providers, not just on the job training but also by providing short experiences, farmer specialists, mentoring. (Upskill employers to deliver training). Use area experts – agribusiness, product providers, researchers, extension, farm owners in delivery.
- Work with industry to offer work placements at for different cohort of students from high school, gap year placements, apprenticeships and traineeships, internships and graduate placements.
- Enhancements to the funding model that would provide employer incentives, not just incentives for training providers.
- Work with businesses to find skill knowledge gaps and train/contextualise training to add value to qualifications, skills sets and micro credentials that address business’s needs.

- Educating industry about the training environment and how they can make it work for them, as well as the role they need to play in the training space (employer education/engagement workshops).

What changes might be required to accommodate the different learning style of younger generations of people?

The question is not so much about the change in learning styles and more about the world we now live and work in. The youth of today are embedded in a digital society. So maybe the questions should be how we can help the youth of today apply the new technology within the learning styles?

The classrooms of yesterday look nothing like the training rooms of today. Pathways and post school transition into the workforce is now a lifelong journey of learning that may transect a number of occupations and jobs that may not currently exist. It requires the ability to transfer and apply skills and knowledge to new situations and environments.

The Fourth Industrial Revolution: the implications of technological disruption for Australian VET states, several barriers prevent the VET sector from better developing the skills required for emerging, disruptive technologies (Seet, Jones, Spoehr, & Hordacre, 2018). These impediments include:

- the lack of strong integration between the VET and higher education sectors. Stronger integration would assist in the development of both the theoretical knowledge and skills (technical and soft) that workers need
- resourcing constraints and frequent restructuring in the VET sector, hampering the sectors ability to plan and execute the changes required to prepare itself and students for disruptive technologies
- the limitations of training packages, impeding the flexibility of training to respond to rapidly changing disruptive technologies.

The challenge is therefore to restructure the learning system to meet the needs of the new learning environment.

An example of how to fit the current market needs is to promote an apprenticeship style as an opportunity for entry into the industry where here learning takes place in the workplace, with blended online and off-farm learning included.

Different approaches to promote and understand school based VET is presented in the Vocational pathways and post-school transitions from VET delivered to school students study that was undertaken for the Australian Government Department of Education and examines the long-term education and labour market outcomes of vocational education and training (VET) programs delivered to secondary school students (Moschion, Polidano, & Castillo, 2019)

The approach involved tracking students from the 2003, 2006 and 2009 LSAY (Long Survey Australian Youth) cohorts who did and did not participate in upper-secondary school VET for up to 7 years after school (Across all industry sectors).

Scope

- are there long-running benefits of school-based VET participation?
- whether participation and benefits vary within the school population, including across different levels of academic achievement, socio-economic background, indigenous status and gender
- what are the main factors that explain participation in VET delivered in schools?

Key findings.

1. Participation in upper-secondary VET programs is associated with an increased likelihood of a successful initial transition from school to the labour market, especially for participation in programs with workplace learning (including apprenticeship/traineeships), the positive employment outcomes, however, only result in higher reported levels of job satisfaction for participants in apprenticeships or traineeship programs).
2. On average, the initial post-secondary labour market benefits of participation in upper-secondary school VET shrinks over time and are statistically insignificant by the seventh year out from school. This is most likely due to non-participants, who are more likely to enrol in university, completing their studies and entering the workforce.
3. Long-run benefits from VET participation are found to depend on the initial post-secondary pathway. For those who transit to further study after school, the report finds that the labour market advantages for VET with workplace learning (including apprentices/trainees) persists to year seven. For those who transit to the labour market in the year after school, the labour market benefits are short-term only. This may be because the jobs they attain do not offer opportunities to accumulate skills and experiences that would enable them to build on their early advantage.
4. On average, the findings presented show no evidence that the long-run benefits of VET study differ by gender, city/rural locations, indigenous or socio-economic status. However, there is still a gender pay gap in “gender-based occupations”.
5. The most influential factors associated with school-based VET participation are post-secondary work/study intentions, the availability/quality of VET programs within the school, and academic achievement in the Program for International Study Assessment, (PISA).
6. There is no evidence that participation in school-based VET programs is directly associated with other factors such as the socio-economic status of students.

The report mentioned the following implications for policy and practice:

- ✓ VET programs in school help to smooth school-to-work transitions, but more can be done to improve outcomes by supporting student access to workplace learning.
- ✓ Outcomes could be improved by helping students select better programs through the provision of labour market information in school career counselling.

In summary, the paper outlines that the VET career pathway with the best outcomes, seven years (7) post school (Moschion, Polidano, & Castillo, 2019), will comprise;

- Schools that offer and support a good vocational education program.

- Where students receive good career advice and information on employment opportunities and trends.
- With VET study which includes work-place learning that also has real-world experiences and employer connections for students.
- Students who continue to study or undertake an apprenticeship/traineeship, and upgrade skills post school.

What skills and knowledge do business owners need and how can this be best achieved (formal education or informal education and different modes of delivery, for example micro-credentials, online learning, workplace learning)?

At the national level, statistics show that there has been a decrease in the number of owner managers, particularly those individual owner farm operators, without employees. The consolidation of farming operations means dealing with the needs of a larger business. This has resulted in an increase in demand for farm managers, specialists and technical advisors. Vacancies within the production management category have more than doubled since June 2015 (Jobs Index Data provided by Rimfire Resources).

When you couple this trend with the fact that 56 per cent of those employed as farm managers are aged over 55 (Australia Bureau of Statistics, 2020), a unique opportunity presents itself for the next generation. With a large percentage of these farm managers likely to leave the workforce in the next ten years, there has never been a more exciting time to enter a sector that is demanding higher skills and higher professionalism.

Farm managers are key influencers within the business. The capacity of an economy to innovate relies on their capacity to make proactive decisions and effectively manage their businesses. Innovation has been linked to educational attainment (OECD, 2015). Studies show that the education level of producers is directly related to productivity growth and influences their disposition towards adoption of new technologies and practices. Encouraging a more professional and capable sector will provide the capacity for the sector to be more responsive and forward-thinking and take advantage of market opportunities and adapt to change.

Farm businesses are increasingly having to deal with a changing environment in terms of legislation, new technology and work practices which will require farmers to handle a combination of managerial skills, technological and environmental skills. In relation to managerial skills, they will increasingly also require knowledge of regulation, markets, and the ability to lead and manage staff. Producers with general business, technical and business education may be more willing and better at adopting innovation and be more aware of the challenges and opportunities in their environment. Business decisions are less likely to be made solely by manager and more likely to be backed up by data-driven insights (Queensland Farmers' Federation, 2018).

This is aligned to the identified skills mentioned in the National Industry Insights Report findings (Department of Education, Skills and Employment, 2020), that highlight the need for the following managerial skills:

- Managing people,

- Financial skills, marketing and data management
- Organisational planning, (the standard up/down organisational structure may be obsolete)
- Managing yourself (preparing for leadership)
- Adaptability/ flexibility and resilience skills

Agricultural businesses are looking for workers that have experience, relevant skills sets and demonstrated capabilities rather than focusing on full qualifications. Training needs to promote re-skilling and continuous learning in the workplace with a preference for micro-credentialing and ‘stackable’ credentials that may over time lead to a completing a full qualification for individual workers.

Adopting lifelong learning strategies will be important because the ever-changing landscape requires stakeholders to be up to date with the latest knowledge and flexible to any change required, including the lead-times necessary to implement appropriate responses.

The challenge for the sector is to ensure we get the right policy settings, and education and training providers that allow us to build a workforce that sustains changes into the future. Upskilling should be a priority through the funding of Skill Sets, so our workforce is not left behind as technology advances at an ever-increasing rate.

OPPORTUNITIES, BEST PRACTICE AND PRIORITIES

What initiatives have worked to raise the status of agribusiness, increase the supply of workers or increase the skills and knowledge of agricultural workers? What factors have contributed to the success of these initiatives?

The greatest gains are made when the initiative is supported by direct industry involvement and local champions are used to promote them. It needs to be funded and financially supported, but not confined to the standard funding model that aims to fund off the shelf packages and accredited courses. Industries that actively represent, support and encourage the research, development change adoption of the enterprises in that industry.

Specifically, are you aware of examples of collaboration between employers, education providers and regional communities? Which intermediaries supported these collaborative arrangements?

Examples of collaboration between employers, education providers and communities include:

AgSkilled

AgSkilled is a vocational training program for the cotton and grains industry funded by the NSW Government, with industry partners Cotton Australia and the Grains Research and Development Corporation (GRDC). Commenced in July 2017 and ran for 3 years. A new and improved version of the program is likely to continue. The \$14.7 million AgSkilled program aims to upskill and better prepare the workforce for fast-moving change driven by industry, innovation, research and technology through the vocational education and training (VET) sector.

AgSkilled is an industry-led initiative administered under the NSW Government's Smart and Skilled program and can deliver flexible training from single units (partial qualifications or micro-credentials) up to Advanced Diploma qualifications. Delivery partners include TAFE NSW and Tocal College amongst several other registered training organisations.

The program has led to a significant increase in the uptake of accredited training by the cotton and grains sectors in a range of training areas from basic skills to advanced agronomy. As the training is accredited, successful completion is measured against national standards of competency, which means there has been an increase of skills and knowledge in the industry in key areas, including safety. It also contributes to providing a career pathway for these industries.

Rural Jobs and Skills Alliance

RJSA is a collaborative initiative across agriculture industry representative organisations to provide a united voice for agriculture to assist Queensland industries in attracting, training and retaining appropriately skilled agricultural workers – both now and in the future.

RJSA is an important mechanism for engaging Queensland's agricultural industries, government agencies and training providers to consider what actions and program initiatives are most useful in addressing rural workforce issues, especially those associated with the attraction, retention and development of appropriately skilled workers.

Through the success of RJSA, a degree of capacity in workforce planning that benefits the whole agriculture sector has been developed. RJSA now has strong links with state and

federal employment and training agencies and has established itself as a key source of the labour market and training intelligence for industry and government. Government funding is critical to the continuation of RJSA's progress and members have demonstrated their commitment for this industry-led initiative with a strategic plan for 2018-21 now in place to prioritise effort and help ensure a sustainable workforce for the sector (See appendix A, RJSA Annual report 2018-19).

The RJSA provides support and advice for workforce related initiatives, including:

Industry Skills Advisory

The new Industry Skills Advisory (ISA) role align with Skills for Queensland - Great training for quality jobs priorities, which include delivering an expanded focus inclusive of employment, small business and regional skills needs. RJSA delivers this role for the agriculture and horticulture sector.

Industry Skills Advisors (ISAs) engage with employers, small business and industry stakeholders to provide high quality, evidence-based industry advice and intelligence about current and emerging industry direction, regional skills needs and training solutions, jobs growth and employment opportunities. This advice will:

- ✓ inform and align our training and skills priorities and decision-making, including program design and investment settings
- ✓ support and connect with our industry engagement framework priorities including the work of departmental regional officers, Regional Jobs Committees, Jobs Queensland and the Ministerial Skills Roundtable
- ✓ support the ongoing implementation of our VET Quality Framework
- ✓ inform and contribute to national vocational education and training (VET) reform agendas and the review and development of training package product
- ✓ support employer, small business and industry's connection and engagement with VET and VET pathways and our programs, initiatives, and events.

Queensland Agriculture Workforce Network (QAWN)

A network of agriculture workforce officers across Queensland that works with farmers in all sectors to find labour solutions to help them grow their businesses. QAWN can assist any agriculture sector, whether it is by providing information on available employment options and wage subsidies or connecting employers with local training providers and providing an update on what funding opportunities are available to upskill their workers.

Gateway Schools

The Agribusiness Gateway to Industry Schools program (AGISP) was developed to combat skills shortages across agribusinesses and improve the attraction and retention of a skilled employees to ensure a sustainable workforce into the future. AGISP is funded by the Department of Employment, Small Business and Training (DESBT) and administered by the Department of Agriculture and Fisheries (DAF).

The program encourages students and school communities to engage in the diverse range of careers across the sector. Programs are designed to use modern agricultural examples and showcase the variety of work available in the sector from on-farm production through to consumer supply chain to build the student's appreciation of agribusiness.

The Agriculture Extension Work Placement Program

To date, 21 trainee extension officers have successfully graduated from the Agriculture Extension Work Placement Program ready to begin and progress their careers after a year working with various natural resource management and agricultural advisory groups assisting farmers to improve land management practices.

The Queensland Farmers' Federation (QFF) partnered with the Queensland Government, the Australian Government, and the Great Barrier Reef Foundation's Reef Trust Partnership to deliver the work placement program.

The work placement program has been successful at improving the capacity of 21 early career extension officers to perform their role by providing them with a year-long placement in suitable host organisations that includes mentoring from experienced advisors, relevant technical and extension training and access to networks to ensure that they can support landholders to achieve minimum practice standards.

Ongoing yearly support for work placement programs such as this is needed. This capacity building program provides a great pathway for new people coming into agriculture and it is another step towards a more holistic approach to helping deliver Reef water quality targets. Work placement programs can also contribute to maintaining viable regional communities as the project will provide a career path to jobs in regional areas.

The success of the program relied on the commitment from the host organisations, which were organisations providing advisory and extension services to growers, the mentors, the trainees, various training organisations, and the funding support of state and federal government. The training delivered was a mixture of accredited and unaccredited training. The training was selected to fit the role and the skills needs of the trainee. An example of the training provided was the university of Melbourne training modules, which are now provided as a micro-credential. The copy of the final evaluation report of the program is appended separate to this document.

How can existing government programs be improved to better support agribusinesses and related industries workforce needs?

The agriculture sector needs to lead collaborative efforts with training providers and governments to support flexible programs that meet their needs. Industries play a fundamental role in providing information about the skills that they expect of their workforce, as technology continues to change job functions and tasking.

Industries have the role to ensure they provide training opportunities in the workplace, make more of mentoring, apprenticeships and on the job learning opportunities available. For this to be possible, strategic alliances between industry, government and training providers at all levels (school level, universities, VET, and others) is essential.

Industries will also need to also encourage their workers to make acquiring new skills a priority and provide incentives and time to workers to do so. Over the next two decades, Australia will need to double its investment in education and training from a combined 300 billion hours to 600 billion hours (AlphaBeta, 2019).

Increased flexibility in funding would increase the engagement of all Queenslanders in training. Despite continued calls for the funding of more skill sets, government adoption of

this approach has been limited. Support of skills sets will benefit the current workforce by accessing training tailored to their needs. This will incentivise their use of the VET system as a method to update their knowledge and therefore increase their ability in the uptake of new knowledge and technology. Increasing the options for those already in the workforce that require upskilling to due changes in their industry would be highly beneficial.

To improve the process, we have to we identify and develop the new skills that are needed in agriculture, **there is a need for a more accurate picture of the agriculture workforce.** As expressed in a recent report (Queensland Farmers' Federation, 2018), predicting the agriculture jobs of the future is difficult due to the rate of change in agriculture work (Pratley J. , 2017). Currently, the data is insufficient in providing an accurate picture of the agriculture labour force. The most complete data source is provided by the Census, and between census data is based on the Labour Quarterly survey (which is based on a sample at a set time and doesn't allow the industry to get accurate and reliable detailed data). Neither of these sources takes peak labour periods, or seasonality, into consideration.

NFF has identified a vision for the industry (National Farmers Federation (NFF), KPMG, 2018). **To accomplish the vision, the industry needs to consider the workforce strategy and a plan for implementation to accomplish the visions for the industry.** To date, workforce planning in agriculture has taken a more industry-based approach and has been led by specific commodities. This has resulted in individual workforce development strategies and outputs for commodities such as dairy, horticulture and cotton. While commodity-based approaches focus on a single commodity across multiple regions, regional approaches offer a cross-industry workforce understanding for an area.

A regional approach can create a pool of labour for a region, thereby using skills across industries rather than creating competition between industries. Critical to the success is participation from industry representatives, key influencers, and local government. Industries such as construction have adopted a more regional approach to workforce planning. This has provided various benefits as it creates community-based solutions.

The need for succession planning strategies to mitigate against skills and labour shortages is a clear priority across all agricultural industries. There is a need to work with the next generation's agricultural workforce to ensure they have the skills to be sustainable in the future. It is important that a culture of continuous improvement is supported to enable the next generation to embrace innovation and changes in technology as part of everyday business (Queensland Farmers' Federation, 2018). RJSA identified a priority goal to guide and advise initiatives that aim to attract and inspire new workers for Queensland agriculture. The relations between schools and industry partnerships can deliver real opportunities to generate benefits to industry and communities.

The Queensland Agriculture to Schools Engagement Program (QASEP) supports a comprehensive industry led program to address the gaps in schools-industry engagement, allowing Queensland to achieve best practice. The proposal will improve the way schools and agricultural industries interact, provide mutually beneficial experience and learning and deliver the pathways the sector needs.

How consistent across agriculture and horticulture is the need for more and targeted immigration to sustainably increase the national agriculture labour pool and support national capability and capacity building?

Overseas workers contribute significantly to the workforce in some of the agriculture industries such as horticulture, intensive livestock, broadacre cropping and meat processing industries. Visa policy settings are important to meet the needs of Queensland's agricultural industry. The government has implemented several visa changes over the past 18-24 months that accommodate the needs of agriculture, particularly concerning access to workers. A suite of visa arrangements and programs do exist that allow for overseas immigrants to work in agriculture and fill short-term, low-skilled labour and long-term and higher-skilled positions, where locals are not able to fill these positions (Rural Jobs and Skills Alliance (RJSA), 2020).

Integration of overseas migrants into the workforce is both a challenge and an opportunity. People from culturally and linguistically diverse backgrounds represented approximately 11 per cent (25,205 people) of all agriculture sector employees in 2016. This was up from nine per cent (18,699 people) in 2011. Immigrant communities have played a central role in the development of Australia's agricultural sector, especially in horticulture – filling labour shortages, introducing new agricultural commodities and practices, innovation and knowledge transfer (Collins, Krivokapic-Skoko, & Monani, 2016).

Official statistics are likely to underestimate the contribution of some temporary agricultural workers such as Working Holiday Makers, skilled workers and seasonal workers such as Pacific Island Seasonal Workers (Binks, Stenekes, Kruger, & Kancans, 2018). Currently, skill shortages exist in some regional Australian industries such as agriculture, manufacturing and food/meat processing. Addressing skill shortages in regional industries can contribute strongly to the successful development of regional Australia, and subsequently the nation more broadly. Getting the right person with the right skills for a specific role is often challenging for regional Australian employers. Presently many of the skill shortages in regional industries are met by temporary overseas migrants on various visa arrangements (Samad, Teicher, Akbar, & Kinnear, 2018).

Changes to visa programs are dynamic and evolving to meet industry's demands. However, it takes time for the effect of the changes to be known. In relation to the Temporary Skills Shortage (TSS) visas, the industry had expressed concerns about the pathway to residency for the occupations under the Short-Term Skills Occupation Lists (STSOL). This is important to ensure that agriculture retain those immigrants that have worked in the industry and have the skills and experienced needed to fulfill the workforce gaps experienced by the industry.

The Australian agriculture industry has been experiencing labour and skill shortages for the past two decades, and the development of the industry on-farm has led to increased demand for skilled labour. The industry has a variety of demand requirements from short-term labour for crops harvested annually to 12 months of the year for crops which are harvested continually throughout the year. The recent ABARE Survey on Farm Workers reported that horticultural farms had the most use of workers on a visa to help meet seasonal needs (ABARE, 2019). The dependence on overseas workers in these industries exposes farms to changes in visa arrangements.

The seasonal and casual demand requirements, especially during peak harvest periods, vary significantly depending on climatic factors, the specific crops and the locations of the

businesses but have been largely satisfied by the Working Holiday Maker (WHM) program, the Seasonal Worker Program (SWP) and Pacific Labour Scheme (PLS).

In 2018-19, a total of 209,036 working holiday maker visas were granted (Department of Home Affairs, 2019). The number of SWP has also increased annually to 12,200 in 2018-19 (Dufty, Martin, & Zhao, 2019).

Even with these programs in place, there have been some continuing issues with adequate deployment to regions resulting in some cases of crops not being fully harvested. One of the concerns raised by the industry for the SWP has been the difficulty that smaller farm enterprises have in accessing the scheme. This is because of the difficulty in providing enough demand for the minimum hours required. In our recent submission on temporary migration, the RJSA mentioned that the following aspects need addressing:

- The appropriate and definitions of the ANZCO codes
- Appropriateness of the labour testing requirements
- The lack of a residence pathway for those that are in the Short-term Skilled Occupation Lists (STSOL)
- The increasing costs of the visa programs, including the imposed wage rates set by the Temporary Skilled Migration Income Threshold (TSMIT), the Skilling Australian Fund Levy impositions and other associated costs
- A system that recognized previous experience and skills is needed
- There is also a need to identify the actual skill-shortage depending on the emerging demands on agribusiness industries so that skill matching can occur more effectively. Understanding the requirements of the industry, where shortfalls exist and where migrants can add value is very important.
- The actual skills shortage in regional Queensland should be assessed in collaboration with the industry bodies and that training programs be developed to train or upskill people (including the migrants) and to facilitate clear career pathways
- Specific employment-focused training for the regional industries should be developed in collaboration with stakeholders, including employers, community groups, Registered Training Organisations (RTOs), higher education providers, and industry peak bodies.
- To maximise the benefits of attracting immigrants to regional areas, there is a need for infrastructure such as communication networks, transportation and government services (specifically health and education) as well as empowering local communities
- The need for a tailored solution for the agriculture sector to source temporary skilled workers to solve their labour shortages (such as the Ag visa previously suggested by NFF). A report led by University of South Australia associate law professor Dr Joanna Howe, Towards a Durable Future: Tackling Labour Challenges in the Australian Horticulture Industry, found there was a chronic shortage of legitimate, willing and capable workers within certain growing areas (Howe, Clibborn, Reilly, van den Broek, & Wright, 2019). A tailored solution would ensure workers have entered Australia via legal and legitimate means; are working in accordance with visa conditions, and that their presence in the Australian workforce is transparent. Importantly, it would protect against exploitation.

Another issue is the settlement of migrants in regions. In the past decade, the Australian Government has encouraged permanent and temporary migrants to settle and work in regional

Australia. A recent report on migrant employment in regional Australia (Samad, Teicher, Akbar, & Kinnear, 2018) states that there is also a common view among employers, industry peak bodies, government departments and other key stakeholders interviewed, that there are significant social and economic benefits of having permanent migrants in regional industries. Migrant workers often bring skill sets that are beneficial for agribusiness employers.

Despite this, the report found that there are barriers to migrants settling and working in regional areas. They include issues such as: language proficiency, overseas skills/qualification recognition, not having the right skills for the job, lack of knowledge about jobs in regional areas, lack of communication between employers and migrants, the lack of facilities and infrastructure (transport, access to quality education, network and communication infrastructure) to support their integration and willingness to work in regional or rural areas, and social isolation or lack of community with shared cultural, language and ethnic background in regional areas.

Skills recognition appears to be a barrier to employing migrants in the rural and regional industries (Queensland Treasury and Trade, 2013). The system of skills recognition apparently gives insufficient consideration to recognising and converting skills that are necessary in agriculture, manufacturing and food and meat processing industries.

In a recent report by Deloitte Access Economics (2018), there are approximately 6,240 under-utilised migrants and refugees equipped with skills aligned to areas of the current skills shortage.

The report makes the following recommendations:

- A system that recognized previous experience and skills is needed
- There is also a need to identify the actual skill shortage depending on the emerging demands on agribusiness industries so that skill matching can occur more effectively. Understanding the requirements of industry, where shortfalls exist and where migrants can add value is very important.
- That the actual skills shortage in regional Queensland may be assessed in collaboration with the industry bodies and that training programs be developed to train or upskill people (including the migrants) and to facilitate clear career pathways. Specific employment focused training for the regional industries could be developed in collaboration with stakeholders including employers, community groups, Registered Training Organisations (RTOs), higher education providers, and industry peak bodies.
- Government policy should facilitate the initial settlement of migrants (skilled, unskilled, family and humanitarian entrants) in regional areas based on the skill needs of the regional areas. It is further recommended that the humanitarian entrants may also be granted region-specific visas based on regional skill shortages.

What should be done to improve the productivity and resilience of the agribusiness workforce? Of these actions, what are the top 3 priorities?

- 1. Across the country, each state should have an established Workforce Planning and Development group led by the state-based industry organisations.**

Agriculture is not as structured and does not have the resources of other sectors. Therefore, state-based alliances that represent the workforce and training needs of the different state

industries do add value. This should be based on a model like the Rural Jobs and Skills Alliance (RJSA) in Queensland. The RJSA has a pivotal role in establishing, leading and overseeing a collective approach to the industry by providing strategic advice to the Queensland Government for workforce planning and development. It is led by a state-based organisation QFF and its members represent the interests of many different sectors.

Through the success of various projects (e.g. RJSA, the Industry Skills Advisory role and the Agriculture Extension Work Placement Program), QFF has developed a degree of capacity in workforce planning and development that benefits the whole sector and it's led by industry. Gains made to date in this critical area must continue to be built on.

State-based workforce groups should have the opportunity during the year to meet, share experiences and concerns, and learn from each other. This should happen every six months or quarterly.

2. A true industry-led approach to ensure the VET sector meets the needs of the industry. The improved model will need to be appropriately resourced and responsive to the industry.

The Joyce Review (Joyce, 2019) proposed a new vision for vocational education in Australia. As a result, the Australian Government committed to implementing building blocks for the reforms identified through the skills package 'Delivering Skills for Today and Tomorrow'.

The review recommended at p.48 that 'Industry-owned and government-registered Skills Organisations (SO) to be set up to take responsibility for the qualification development process for their industries and to control their training packages'. The review also recommends that the responsibilities of SOs be wider than that of qualification development and include roles in assessing skills needs for their industries, marketing their industry to prospective trainees and school students, managing apprenticeships support and endorsing RTOs to deliver their training packages.

Industry-owned organisations are best placed to control the pace of change of qualifications for their industries and develop their qualifications more quickly and cost-effectively. The review recommends a greatly simplified process for creating and approving qualifications.

Improvements to the model will include appropriately resourcing the representation of industry to participate in the Industry Reference Committees (IRC) and to provide input into reviews and development of National Training package relevant to the industry, and in the implementation of the Queensland VET Quality framework. Currently, industry representatives and advisors are volunteering their time to do these tasks, and this implies that it is difficult to get the best people to provide the advice needed. Additional funding for industry and expert advice is needed to provide advice to the work undertaken by the Skills Service Organisations (SSOs).

3. Increase the skills needed now and in the future through the support of industry lead training programs to provide relevant and flexible training that supports growth, innovation, and sustainability of the industry. Ensure national training system facilitates training at all levels for new employees including apprenticeships and upgrading skills of new and existing workers & managers (and owners).

While agriculture industries value full qualifications, they have a preference for incremental learning through a "bite-sized", life-long learning approach, acquiring skills and knowledge that will result in practice change in their business. A combination of both accredited and non-accredited training to best meet industry needs.

Short courses tailored to specific subjects and leveraging the latest in research and development are ideal for growers. Training needs to be delivered flexibly and locally. Leveraging industry expertise, and trusted subject matter experts to ensure training is relevant and needs driven.

Contextualised workforce development opportunities tailored to all levels of the workforce will be essential to attract new industry entrants and to facilitate meaningful career progression for those already in the industry.

The support of school-based traineeships and apprenticeships and work placement opportunities to those inclined towards agriculture can also provide a starting point towards a career in the sector.

By having industry-led programs that are delivered in partnership with training organisations, valuable training can be provided in areas of a priority this could include sustainable practices, digital technologies, entrepreneurship, e-commerce, farm business, etc. This will provide the skills that the industry needs to be sustainable, as well as innovate and grow.

To ensure that the training is relevant to the industry, the support for industry-led programs such as the AgSkilled program should be encouraged and promoted. This will help the training to be more relevant to industry requirements and to support the needs of the new and current workforce.

This is imperative in particular, given that our existing and future agricultural workforce would need to embrace change and develop new skills to ensure that industry seizes the opportunities presented. We need relevant training that meets the needs of the industry and prepares them to embrace technologies and innovation. In response, a Queensland Agriculture Digital Skills Working group has recently met to discuss how the group could lift the digital literacy of the sector.

A proposal has been put together that could be tested 'Building Digital Skills of the Queensland Agriculture Industry Digital'. Its aims are to:

- Improve the digital understanding and capability in the Agri-business sector by a quantifiable amount, and
- Drive the adoption of business-relevant technology that will accelerate the future sustainability and prosperity of all Australian agri-businesses.

The team comprised a diversity of individuals; government, technology providers, industry groups, training providers that have an interest in digital agriculture and have been dealing with the issue of digital skills at different levels.

4. Develop a state-based virtual hub for potential employers. Through this hub, a standard agriculture 'work-ready' pre-induction will be included to ensure new employees arrive at the farm gate correctly prepared for an agricultural job.

The industry is diverse, and many job applicants are underprepared. Many hold unrealistic expectations of working in the industry and have no prior experience. Complexities of the industry include some training areas that are common and applicable to all commodities and regions.

Currently, there are a lot of specific induction resources across industries, RJSA could have a central role and develop a virtual hub for potential workers seeking employment in a Queensland rural enterprise and provides an understanding of career paths in agriculture. The hub will provide an industry-endorsed entry point with links to all the industries and enterprises own workplace induction and employment programs.

The virtual hub can also be a point in which a pre-induction training is delivered for those interested in working in agriculture. This training and credential will be an industry 'standard': endorsed by industry bodies. The objective is to standardise the rural workplace health and safety process across all agricultural industry sectors to prepare the potential worker before they enter the workplace. But it could also be used as a refresher and updating tool when legislation changes. It is envisaged that a 'Farm Ready to Go' card will also be included to certify the training and will be able to carry additional information relevant to employment. The card would effectively be a skills passport that carries licence details, permits, letters of offer, and other qualification evidence.

5. Increase funding for programs to attract the next workforce in agriculture through the implementation of the Queensland Agriculture to Schools Engagement Program (QASEP) to connect agriculture, education and work

There is a need to work with the next generation's agricultural workforce to ensure they have the skills to be sustainable in the future. The QASEP proposal aims to improve the way schools and agricultural industries interact, provide mutually beneficial experience and learning and deliver the pathways the sector needs.

The program aims to build school-industry partnerships in Queensland to attract and deliver informed career opportunities for young people to join the agriculture industries and meet their future workforce needs, while also building awareness of agriculture's contribution to society. The proposal also aims to provide experiential and continuous learning to those entering the industry and those already in the industry to ensure they have the skills required by the industry now and in the future.

This initiative includes the following programs:

- Support and promote of industry-relevant learning initiatives and projects which aim at promoting Food and Fibre education within Queensland schools as an essential part of the Australian Curriculum delivery.
- An Agriculture community engagement and awareness program to engage with the general public at large scale events to create awareness of the importance of agriculture, showcase careers in agriculture and provide linkages to industry.
- An Industry Agriculture Education Futures Hub to provide expertise, facilities and access to up-to-date and innovative technology and equipment available and used by the industry. Schools will be able to use the hub to support innovative learning projects that aim at the increasing use of inquiry-based and real projects related to the industry. The hub will include industry business, and/or research and training facilities across different regions.
- An industry expert mentoring program that develops the skills of industry professionals to act as mentors to teachers and school students. Industry professionals will then be connected to teachers and students as mentors for the delivery of specific activities and projects.

- An Agriculture Try and Learn a program that enables people who are interested in agriculture to sample and test what it is like to work in the industry. Students will be placed in the industry for a short time.
- An Agriculture Y13 program that provides an industry gap year and encourages school leavers to take up employment on farms in their transition between school and university.
- Ag School-Industry Pathways provide work placements for these students, training resources and mentoring to support their learning.
- Agriculture professional development program for teachers and advisors to improve teachers and career advisors' awareness and understanding of industry-relevant knowledge to be able to provide guidance and industry-relevant learning.
- Improve the Agribusiness Gateway Schools to Industry program by providing industry connections and relevance to the program.

6. *Improve Agriculture workforce data and research to inform regional industry-wide workforce planning and development activities to ensure the industry has a reliable workforce now and in the future.*

The need for reliable and timely data to determine the scope and size of the workforce has been mentioned in various reports. The complete labour data source is provided by the Census, and between censuses data is based on the Labour Quarterly survey (which is based on a sample at a set time and doesn't allow the sector to get accurate and reliable detailed data) and neither of these sources takes peak periods into consideration.

In Australia, the classification of occupations is handled by the Australian Bureau of Statistics. ANZSCO is simply a statistical classification designed to aggregate and organise data collected about jobs or individuals. The classification definitions are based on the skill level and specialisation usually necessary to perform the tasks of the specific occupation, or of most occupations in the group. The definitions and skill level statements apply to the occupation and not persons working in the occupation.

RJSA shares the frustration expressed by our members and by the National Farmers' Federation (NFF) at the continued reliance on ANZSCO. The current ANZSCO Skilled Occupations List has continued to disadvantage, where roles listed on the ANZSCO either do not exist or do not match and represent industry needs.

The classification is not updated with industry consultation frequently enough to keep abreast of changes in roles and the impact of technological and scientific advancements. Given that agriculture is an incredibly dynamic industry with research and development frequently resulting in a significant evolution of business practices, the mechanisms which establish an agricultural workforce needs to be equally agile.

A paper by Nettle (2018) indicates that the dynamics of farm labour need to be considered.

Nettle suggests that much of the farm workforce demands may exist in employment categories outside of the captured statistics. This can also relate to family members and people employed casually, as migrant workers or as contractors (Nye, 2018). Nettle mentions the following roles as important in the current farm business:

- Investors (don't work on the farm – but can inject capital for labour replacing technologies)
- Farm owners/operators and family members paid and “unpaid”

- Farm managers (salaried, often categorized separately from employees in workforce statistics)
- Share farmers (a category sitting between ‘contractors’ and ‘employees’)
- Contractors (separate business owners servicing agriculture). An important category for farm work (e.g. 80% of Australian farmers use contractors and advisors for some aspect of their farming operations, and this has been noted as an increasing trend in Australia and the UK (Nye, 2018; Nettle, 2018))
- Employees: temporary, casual, permanent and migrant employees (e.g. working as calf-rearers; farm hands; or pasture and herd managers, etc.). This can involve work experience/youth workers through to older/semi-retired workers).

Each of these workforce categories represents different ‘labour and skill pools’ or segments that in combination, reflect the options for designing farm systems that suit and fit the people. Each segment reflects different skill categories and the people in each category will hold different expectations requiring different management.

Therefore, improving the workforce data for agriculture is needed. This can be achieved by working with industry organisations. ABS, ABARE and other relevant organisations such as Jobs Queensland to ensure that reliable data on the agriculture workforce is available to help industry and regions undertake workforce planning and development.

The data then should also support a regional approach to workforce planning. Workforce planning in agriculture has taken a specific industry-based approach and has been led by national commodity groups. This has resulted in individual workforce development strategies and outputs for commodities such as dairy, cotton, beef and horticulture. While commodity-based approaches focus on a single commodity across multiple regions, regional approaches offer cross-industry workforce understanding for an area. Regional approaches centre on the factors affecting workforce attraction and retention for that community, which better suits agriculture because it is predominantly located in rural and regional areas where the workforce is significantly influenced by local factors.

A regional approach can create a pool of labour services for a region, thereby using skills across industries rather than creating competition between industries. Critical to its success is participation from regional industry representatives, key influencers, and local government. In Queensland, industries such as construction have adopted a more regional approach to workforce planning. This has provided various benefits as it creates community-based solutions, and it is this model that RJSA members will continue to explore in the future.

A complete Queensland workforce planning program should include support for:

- Development of a Queensland Agriculture Workforce Plan
- Building Industry capability in Workforce planning
- Support for an annual event to discuss workforce issues and solutions for the Queensland Agriculture Workforce Summit

7. Support participation of a diverse agricultural workforce. This can be achieved by providing funding to support programs to improve the skills and confidence of various groups such as women, young people, migrants, etc.

Overseas workers contribute significantly to the workforce in some of the agriculture industries such as horticulture, intensive livestock, broadacre cropping and meat processing

industries. Visa policy settings are important to meet the needs of Queensland's agricultural industry.

Changes to visa programs are dynamic and evolving to meet the industry's demands. In particular, the government has made changes to visas to respond to COVID-19 and the need to maintain some of the seasonal agriculture workforces in Australia to cover workforce needs. In relation to the Temporary Skills Shortage (TSS) visas, the industry had expressed concerns about the pathway to residency for the occupations under the Short-Term Skills Occupation Lists (STSOL).

In the past decade, the Australian Government has encouraged permanent and temporary migrants to settle and work in regional Australia. A recent report on migrant employment in regional Australia (Samad, Teicher, Akbar, & Kinnear, 2018) state that there is also a common view among employers, industry peak bodies, government departments and other key stakeholders interviewed, that there are significant social and economic benefits of having permanent migrants in regional industries. Migrant workers often bring skill sets that are beneficial for agribusiness employers.

Despite this, the report found that there are barriers to migrants settling and working in regional areas. They include issues such as language proficiency, overseas skills/qualification recognition, not having the right skills for the job, lack of knowledge about jobs in regional areas, lack of communication between employers and migrants, the lack of facilities and infrastructure (transport, access to quality education, network and communication infrastructure) to support their integration and willingness to work in regional or rural areas, and social isolation or lack of community with shared cultural, language and ethnic background in regional areas.

Skills recognition appears to be a barrier to employing migrants in the rural and regional industries (Queensland Treasury and Trade, 2013). The system of skills recognition provides insufficient consideration to recognising and converting skills that are necessary for agriculture, manufacturing and food and meat processing industries.

The actual skills shortage in regional Queensland should be assessed in collaboration with the industry bodies and that training programs be developed to train or upskill people (including the migrants) and to facilitate clear career pathways. Specific employment-focused training for the regional industries should be developed in collaboration with stakeholders, including employers, community groups, Registered Training Organisations (RTOs), higher education providers, and industry peak bodies.

The increasing participation of women in agriculture should be supported and recognised. A study was undertaken by QFF "Cultivating the leadership potential of Queensland's farm businesswomen" (2018). The findings from this project suggest that, in order to better agricultural service enterprises, business programs need to focus on supporting the process of renewal for mature businesses and, in particular, supporting the women driving this process.

Building on the QFF findings, a more recent study Queensland Farm Businesswomen: The Long Road to Leadership (Ressia, Strachan, Rogers, Ball, & McPhail, 2020) suggest that 'there is considerable work to be done in order for farm businesswomen to achieve the recognition they deserve (at the industry, organisational and individual levels), to have the ability to develop leadership opportunities for themselves, and to access the necessary

training and development provisions to support them in achieving their aspirations’ (A copy of the report will be provided as a separated document).

The report mentions many recommendations from acknowledging the various roles they play, more information and data about the women’s participation in the industry, raising awareness about possible superannuation issues, mechanisms to support women in leadership appointments, and training and development.

There is an urgent need to provide a range of training and development opportunities tailored to the needs of farm businesswomen as required. There is an urgent need to improve accessibility and affordability of relevant training and skills development programs for farming women and tailored their needs and to remove barriers to their access to subsidized training courses. For example, subsidized training is often restricted to those who do not hold any qualifications. This excludes many female farm business managers who have a historical qualification in a trade or profession but now need to build knowledge and skills in new areas that enable them to plan and implement strategies that bring growth and renewal to their mature farm business. A customised training and farm business mentoring program would also add significant value to the agriculture and help business build resilience of the regional business.

Furthermore, as expressed in a recent report (Queensland Farmers' Federation, 2018), agriculture has the highest share of employed persons who are above retirement age, and its labour workers are aging. About 23 per cent of the sector’s workforce is likely to retire over the next five years (Skills Impact, 2017). Upcoming retirements are likely to bring significant job vacancies across the sector, requiring efforts from employers to refill these skills.

Improved succession planning tools are required to support the transition of the agriculture sector. The need for new business structures to support a new generation of farmers is also a key challenge. This involves supporting industry education and extension programs to provide the tools and advice needed to adopt more efficient and effective business structures.

8. Increase the level of an appropriately skilled workforce through the continued support for the delivery of the agriculture work placement programs.

The continuously changing environment creates challenges for the education and training system to ensure the workforce is equipped with the skills required for new and more sustainable ways of doing things. Providing the opportunity to deliver opportunities for the next generation of workers to undertake work placement training can bring great benefits.

Work placements can be delivered at different levels, including workplace learning for apprenticeships and traineeships. It can also be delivered at the graduate level through internships and graduate programs. All work placements are beneficial. Work placement programs should provide these students with training, work experience, exposure to different experiences and mentoring to support their learning. The programs will promote and facilitate activities to help young adults who would like to forge a path in agriculture and related industries.

An example of this is a program that has been delivered across the Great Barrier Reef (GBR) catchments, which has been described previously - The Agriculture Extension Work Placement Program”. In the example, the industry responded to an issue created

due to investment and regulation accelerating to produce the required water quality improvements, while at the same time there is a shortage of experienced extension personnel with the background and experience available to accept the responsibilities implicit in the extension activities being undertaken.

A recent evaluation of the program concluded that it was successful in attracting and delivering committed, knowledgeable and ‘work ready’ young extension personnel into the Reef regions that would, in many cases, not have foreseen a career in the Reef Extension System.

The cost-effectiveness analysis showed that the total cost of the Work Placement Program was likely to be recovered by the three immediate key beneficial outcomes of (1) reduced costs of recruitment to host organisations, (2) improved capacity of host organisations and (3) improved efficiency and effectiveness of Reef and extension projects. This is consistent with the results of the stakeholder interviews that the investment in the Work Placement Program was worthwhile and has provided a positive value proposition and a positive return on investment.

The need to continue the program is supported by the need of extension officer in the region. There is ongoing turnover among the approximately 400 people working in extension in the Reef regions, and there are new and ongoing Reef projects requiring extension capability to realise their potential. At an assumed rate of 5% turnover in extension personnel per annum, 20 new extension staff will be required on an annual basis to maintain current numbers.

The implementation of such a program can be an extended value proposition to other industries and regions across the agriculture sector. The process that was undertaken can be delivered across industries and across different levels of education. The program allowed participants to be trained on the job, mentored by industry experts, and have access to a broad range of accredited and non-accredited training opportunities. The program allowed flexibility for graduates to select the most appropriate training for their roles and levels of skills. The implementation of work placement programs supports the need for flexible, targeted and practical needed to address the skills gaps now and the future.

Although it is difficult to pick the priorities across the described strategies, the top three priorities:

- **Across the country, each state should have an established Workforce Planning and Development group led by the state-based industry organisations.**
- **Increase the skills needed now and in the future through the support of industry-led training programs to provide relevant and flexible training that supports growth, innovation, and sustainability of the industry. Ensure national training system facilitates training at all levels for new employees including apprenticeships and upgrading skills of new and existing workers & managers (and owners)**
- **Improve Agriculture workforce data and research to inform regional industry-wide workforce planning and development activities to ensure the industry has a reliable workforce now and in the future.**

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APPENDIX A

RURAL JOBS & SKILLS ALLIANCE (RJSA) – Annual report 2018-19



RURAL JOBS & SKILLS ALLIANCE (RJSA)

Funded by the Queensland Government, the RJSA is in its fourth year of operation and continues to provide recommendations and advice to government, service providers and other stakeholders about employment, skills, industry training and workforce planning on behalf of Queensland agriculture.

RJSA members developed and endorsed a Strategy and Action Plan (2018-21) that will guide the work of the Alliance for the next three years in its pursuit of helping rural industries ensure a sustainable workforce.

In the wake of the cessation of funding for the Schools Industry Partnership Program (SIPP), the Minister for Agricultural Industry Development and Fisheries invited the RJSA to submit a proposal addressing the gaps in schools-industry engagement. The 'Queensland Agriculture to Schools Engagement Proposal' (QASEP) aims to improve the way schools and agriculture industries interact providing real industry learning experiences and deliver pathways to attract people to agriculture to meet workforce needs. Alliance members continue to work with the responsible government departments to progress RJSA's comprehensive and holistic proposal to implementation.

In response to the planned closure of the Queensland Agriculture Training Colleges (QATC), RJSA has been recognised as the industry conduit best placed to provide feedback into the transition planning for QATC's regional satellite Hubs. RJSA met with QATC and the Project Management Office to discuss and address any potential training delivery gaps arising directly from the closure of those hubs. These interactions will continue throughout 2019.

RJSA provided ongoing feedback from industry and evidence-based commentary on training needs and industry expectations including:

- The Department of Employment, Small Business and Training Annual VET Investment Plan and the Department's review of the VET market performance of the Rural Operations qualifications;
- VET Quality Framework to inform about supplier issues and Registered Training Organisations (RTOs)/Pre-qualified Suppliers (PQS) monitoring via Training Market Health Check reporting;
- The Australian Industry Skills Council on national training package development and participation in Industry Reference Committees (IRCs);
- Skills Forecast and Schedule of Work (2019-22) by contributing to the relevant IRCs' training package project reviews;
- National VET Reform; and
- RTOs delivering to our sector.

To improve industry interactions with training providers and other interested stakeholders in the VET sector, RJSA conducted a forum in November 2018. The event was attended by 42 stakeholders across a range of organisations working in the sector, including RTOs and representatives from state government departments. Group discussions and sessions were designed to provoke thinking about the potential for increased co-operation between industry and training providers that would improve mutual outcomes for industry, its workforce and the training sector.

To inform the Skills for Queensland strategy – the Queensland Government's plan to secure our future prosperity through a skilled and adaptive workforce – RJSA represented the needs of Queensland agriculture and related industries through forum discussions and submissions to Jobs Queensland's Future of Work in Queensland to 2030 discussion paper to the Skills for Queensland discussion paper.

To improve development, attraction and retention of skilled workforces, RJSA:

- Produced the 'Your Career in Agriculture' video, which is a useful tool for teachers to communicate, and students and parents to discover the exciting and evolving roles available in the agriculture sector;
- Led the Agriculture Extension Work Placement Program – projects funded by the Australian and Queensland governments that place 14 new extension trainees with NRM and agricultural advisory groups across the Reef catchments;
- Developed and delivered five 'Embracing Digital Innovation in Agriculture' workshops in Townsville, Mackay, Emerald, Bundaberg and Dalby in partnership with TAFE Queensland; and
- Continued working with regional networks, especially the Queensland Agriculture Workforce Network (QAWN), to help industries engage with government programs that will boost workforce development for rural and related industries.

Alliance industry members during the period were: QFF, AgForce, CANEGROWERS, Cotton Australia, Growcom, Nursery and Garden Industry Queensland (NGIQ), Irrigation Australia, Timber and Building Materials Association (TABMA), and the Queensland Chicken Growers' Association.