



QUEENSLAND FARMERS' FEDERATION

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Submission

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Queensland Small Business Strategy
Department of Employment, Small Business and Training
PO Box 15033 City East
BRISBANE QLD 4002

Via email: smallbusinessstrategy@desbt.qld.gov.au

Dear Sir/Madam

Re: Queensland Small Business Strategy Discussion Paper

The Queensland Farmers' Federation (QFF) is the united voice of intensive, semi-intensive and irrigated agriculture in Queensland. It is a federation that represents the interests of peak state and national agriculture industry organisations which, in turn, collectively represent more than 13,000 farmers across the state. QFF engages in a broad range of economic, social, environmental and regional issues of strategic importance to the productivity, sustainability and growth of the agricultural sector. QFF's mission is to secure a strong and sustainable future for Queensland farmers by representing the common interests of our member organisations:

- CANEGROWERS
- Cotton Australia
- Growcom
- Nursery & Garden Industry Queensland (NGIQ)
- Queensland Chicken Growers Association (QCGA)
- Queensland Dairyfarmers' Organisation (QDO)
- Australian Cane Farmers Association (ACFA)
- Pork Queensland Inc.
- Queensland United Egg Producers (QUEP)
- Queensland Chicken Meat Council (QCMC)
- Bundaberg Regional Irrigators Group (BRIG)
- Burdekin River Irrigation Area Irrigators Ltd (BRIA)
- Central Downs Irrigators Ltd (CDIL)
- Fairbairn Irrigation Network Ltd
- Mallowa Irrigation Ltd
- Pioneer Valley Water Cooperative Ltd (PV Water)
- Theodore Water Pty Ltd.

QFF welcomes the opportunity to provide comment on the 'Queensland Small Business Strategy Discussion Paper'. We provide this submission without prejudice to any additional submission from our members or individual farmers.

The united voice of intensive, semi-intensive and irrigated agriculture



In 2016–17, Queensland’s primary industries directly contributed an estimated \$10.52 billion on a value-added basis to the state economy—this was 3.6 per cent of the gross state product¹. Queensland’s agricultural sector is strong and vibrant despite significant challenges. For 2019–20, the total value of Queensland’s primary industry commodities (combined gross value of production and first-stage processing) is forecast to be \$17.80 billion² (down from 18.54 billion in 2017-18³ due to the impact of climate challenges), and the gross value of production (GVP) of Queensland’s primary industry commodities at the ‘farm gate’ is forecast to be \$13.94 billion (down from 14.65 billion in 2017-18).

Queensland has over 426,000 small businesses (defined as those employing less than 20 people), representing over 97 per cent of businesses state-wide and employing approximately 44 per cent of all private sector workers. Small businesses are critical to many regional areas and vital to Queensland’s economy⁴. Agriculture, forestry and fishing companies are in the top five small of business industries in Queensland⁵.

QFF also notes that many small and micro businesses have low visibility in official data, particularly where they form a secondary source of income. Such micro-businesses are supplying critical services to other enterprises and are crucial to regional and agricultural economies.

QFF particularly wishes to acknowledge the rural retail initiatives such as ‘buy from the bush’ (@buyfromthebush) which is doing more than simply supporting regional families and business, particularly those impacted by drought and other climatic impacts. Their role is, and will continue to be, critical to the wellbeing, health and sustainability of regional Queensland.

1. Role for Women in Small Business and the Regions

Increasingly the regionally based micro-businesses are operated by women seeking a secondary source of income to support their families. The findings of the QFF project ‘Cultivating the leadership potential of Queensland’s farm businesswomen’ provided an opportunity to connect with over 200 women involved in farm business and wider roles that support the agriculture sector to build a deeper understanding of their current skills and responsibilities, the strengths they offer, and the aspirations they hold.

Women are strongly involved in rural and farm businesses and play multiple, diverse roles. Farm businesswomen tend to have highly diverse skill sets, but often have particular strengths in financial management (both operational and strategic). They are often the organizers in the business – but also bring new information and creative ideas to the business strategy.

Because of the roles they play in agricultural businesses, farming women are well positioned to see the weaknesses and strengths of the business, and opportunities for future directions. This project has clearly demonstrated that farming women are actively involved in managing farm businesses that are long-established and often in a renewal stage. In this context, many are a driving force to pursue diversification, transition, new areas of growth, new market opportunities (including export markets), and innovation.

The current emphasis of many programs on supporting entrepreneurialism and start-ups, therefore, is not well matched to the needs of many women in farm businesses. The findings from this project suggest that, in order to better service agricultural enterprises, business programs need to focus on supporting the process of renewal for mature businesses and, in particular, supporting the women driving this process.

¹ ABS 2017, Australian national accounts: state accounts, 2016–17, cat. no. 5220

² Queensland Government. Queensland AgTrends 2019-2020.

³ Queensland Government. Queensland AgTrends 2018-2019.

⁴ Queensland Government. (2018). Queensland State of Small Businesses. <https://publications.qld.gov.au/dataset/queensland-state-of-smallbusiness>

⁵ Australian Bureau of Statistics, 8165.0 Counts of Australian Businesses, including Entries and Exits, Jun 2013 to Jun 2017, released 20 February 2018. Definition of small business: businesses employing fewer than 20 people.

Another important insight from this project is that women involved in farm businesses often come to these roles from other backgrounds and other qualifications. Because of this, farming women are actively looking for ways to help them develop the skills and knowledge they need *now* and, in particular, to help them implement the kinds of business transitions outlined above. The project findings demonstrate farming women are highly interested in accessing business coaching, mentoring, training and gaining relevant qualifications. There is an urgent need to improve accessibility and affordability of relevant training and skills development programs for farming women 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 customized farm business mentoring program would also add significant value to the agriculture sector – and this project demonstrates that there is a strong pool of women willing to be mentors and many women who would highly value the opportunity to have a coach or mentor.

Participants articulated specific professional development needs for their roles within farm and rural businesses, in particular, women identified:

- Up-skilling and re-skilling for business growth or transition-
 - to build core farm business management skills
 - to develop skills and strategies in social media for business promotion
 - to build general management skills including negotiation, communication, conflict management and problem solving
 - business coaching to pursue business growth, diversification, transition and/or value adding
 - increased access to knowledge, skills and networks to enhance women’s capabilities in export market development.
- Financial skills and knowledge including-
 - traditional and alternative strategies for accessing business finance
 - attracting investment and/or investors to the business
 - understanding and preparing business plans, grant applications and other funding applications.
- Strategies for harnessing the benefits of social media and digital technology for business and also learning effective ways to filter information to find what is relevant or important.
- Confidence and strategies to implement improved and integrated succession arrangements. This was raised in multiple contexts but is particularly relevant in family businesses and community/industry organizations.
- Women indicated that they would see significant value in programs that provided more opportunities for farm and rural businesswomen to interact and communicate, including through face-to-face sessions, online (e.g. webinars) or via social media. There was a strong emphasis in discussions on the need for a well-designed and managed mentoring program that matched mentors to the needs of the mentee and involved women with a background in agribusiness. Workshop participants indicated that an ideal mentoring program would provide a mentor with whom to work through current priorities and needs, and a second mentor who could help them progress towards their longer-term goals and aspirations.

To optimize the accessibility of future programs for rural women, workshop participants suggested:

- offering a mix of on- and off-line learning and networking opportunities
- carefully considering the logistics of programs to make it as easy as possible for women to attend (e.g. location, venue and timing)
- looking for ways to more widely roll-out the model of locally self-sustaining leadership and capacity building/personal development programs (similar to the model used by the South Burnett Community Leadership Program).

QFF notes a deficit of funding in these areas and a suggests a targeted program of support which we are happy to discuss in more detail.

2. Infrastructure

More people than ever in regional Queensland depend on critical infrastructure systems that provide essential energy, water, transport and communications services. When these fail the consequences can be catastrophic. The Queensland Government, has a role to provide knowledge and tools for those responsible for planning, financing, designing, delivering, operating and maintaining critical infrastructure systems. Ultimately, this will enable systems to better withstand, adapt to, and recover quickly from whatever anticipated or unexpected shocks and stresses they may face, now and in the future.

QFF acknowledges the range of critical infrastructure servicing small business particularly in regional Queensland including but not limited to NBN and other communication networks; road, rail intermodal and freight; electricity and, most critically, water.

QFF supports long term commitment of \$15 million per year for mobile black spot funding and to provide collaborative leadership to realise equitable, reliable and affordable telecommunications services for farmers and other businesses in regional/rural Queensland.

QFF also requests that the Queensland Government to commit to strategic, long term investment in road and rail upgrades and associated infrastructure to lower freight costs for regional areas in order to support all businesses.

3. Challenges - Drought

As at 10 December 2019, 67 per cent of Queensland was officially drought-declared. Climatic impacts and other negative events such as the bush fires are significantly impacting small businesses, particularly across the agricultural sector and in the regions.

QFF is currently participating in the Queensland Industry Working Group (IWG) for Drought Program Reform, the Queensland Drought and Climate Adaptation Program (DCAP) Steering Committee and is a partner in the Queensland Climate Adaptation Strategy (Q-CAS) program.

QFF's long advocated position that drought policy should encourage farmers to adopt self-reliance and increase resilience whilst facilitating the maintenance and future protection of Australia's agricultural and environmental resources. To better assist farmers to do this and adapt to the climatic challenges that are part of farming in Australia, the principles of the Council of Australian Government's December 2018 National Drought Agreement (NDA) need to be adhered to across all jurisdictions.

Current drought policies and assistance measures do not fully appreciate the impacts of drought on intensive, semi-intensive and irrigated agriculture. Future state drought policy must better reflect the different business models that operate within the sector and government support arrangements must acknowledge and respond to the way drought impacts farm businesses within different industries and locations.

QFF recommends future drought policies, assistance measures and programs be underpinned by a consistent and measurable logic that:

1. encourages preparedness and resilience planning, based on accurate climate hazard assessments
2. incentivises and promotes best practice agriculture, that are adaptive to climate risks
3. builds profitable and revenue diverse businesses, that incorporate risk management plans
4. avoids input subsidies unless required for transitional or extreme event arrangements
5. balances practical and economically rational policy positions.

These five guiding principles should ensure that state programs are consistent with the NDA as state assistance measures move towards greater alignment with the national approach. The principles also provide a framework to monitor, assess and report the performance of and delivery towards the objectives of the NDA.

Any government support should have a legacy that empowers farmers to better prepare for and manage drought risk. Future drought policies and assistance measures must better understand and address the needs of intensive and semi-intensive animal industries and irrigated agriculture to ensure they are equitable across all agricultural industries and respond to the differing drought pressures.

QFF also supports further grant opportunities to assist regional businesses to diversify their operations. As an example, the UK's RDPE Growth Program⁶ provides grants for rural businesses to purchase equipment that will assist them to diversify their businesses, driving business growth and creating new jobs (through agri-tourism and food-processing opportunities etc.)

Insurance can be a useful risk transfer mechanism. QFF has led an industry push to help develop a nascent insurance market in Queensland. It is evident that the development of a holistic agricultural insurance market has stalled in Australia. To overcome this, two key elements need attention; more products need to be available for proactive farmers to self-insure income (e.g. crops) against severe weather events, and the cost of available products (price) is a major inhibitor for take-up.

QFF has been calling on the Queensland Government to help address 'price' for some time by removing the 9 per cent state tax on agricultural insurance. This inefficient tax, which has now been removed in NSW and Victoria, discourages Queensland farmers from taking up insurance that can help their businesses become more resilient and drought prepared.

4. Assistance for Small Businesses Experiencing Financial Hardship

Vulnerability is not a binary condition, that is a customer is not simply 'vulnerable' or 'not vulnerable'; rather, vulnerability is more accurately a continuum, where the degree of vulnerability increases with the financial stress which is caused by changes in energy costs, water costs or other⁷.

A customer is vulnerable when they are at risk of experiencing significant financial stress due to a moderate increase in their energy bills, due to their own personal financial circumstances. A customer's personal financial circumstances are likely to change over time, and so any individual customer may move in and out of our concept of vulnerability over their life. The same is true for businesses.

QFF believes that both vulnerability and hardship apply both to householders and businesses of all sizes, particularly to the farming sector where external climate pressures/events, exposure to fluctuations in the international commodity markets and the increasing variability experienced across growing-seasons all directly impact cash flow. However, there are insufficient safeguards for small businesses experiencing financial hardship.

As an example, the National Energy Retail Law specifies that the requirements around hardship relate to residential customers only and, as such, the AER cannot extend the application of hardship requirements to Small to Medium Enterprises (SMEs) until there is a change in the Retail Law.

QFF recommends that this change needs to be enacted with haste and will also be prosecuting this requirement in the current review of the National Energy Regulation Law (Qld)⁸. QFF also recommends that until there is a change in the Retail Law, energy retailers should be strongly encouraged to go

⁶ Department for Environmental, Food and Rural Affairs. (2019). RDPE Growth Program. Business Development Handbook. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/844048/Business_Development_Handbook_v3.0_Nov_2019.pdf

⁷ HoustonKemp Economists. (2015). Supporting Vulnerable Energy Customers. An Options Paper for the Energy Networks Association. 2015

⁸ See <https://www.dnrme.qld.gov.au/energy/initiatives/review-energy-legislation>. Submissions close 31 January 2020.

beyond the minimum requirements in developing and implementing hardship policies for businesses. Where customer hardship policies are extended to SMEs it will enable SMEs to better manage their payments and, importantly, enable continuation of operation.

For electricity prices, QFF notes there are indications that pressure from network price increases is easing slightly for some tariff groups^{9,10}. There are a number of changes underway in energy markets in Australia that are resulting in higher energy bills for some consumers. Namely, the structure of electricity distribution network tariffs faced by households and small to medium businesses are changing to better signal the costs of the use of the network at times of greatest demand. These 'blunt' signals are not appropriate for many farming enterprises who cannot respond to demand charges due to water licence constraints, climatic conditions, food storage and safety requirements and animal welfare management amongst other factors

Specific Disadvantages to Small Businesses using Electricity in Regions - There are a range of protections afforded exclusively to 'small customers' (businesses consuming under 100MWh per annum) under the *National Energy Retail Law (Queensland) Regulation 2014* and *National Energy Retail Law (Cth)*. There are also 'threshold' issues relating to the removal of the non-reversion policy in Queensland which again only applies to and benefits small (business) customers.

QFF has long advocated that the Queensland Government increases the small business customer threshold from 100 MWh per year to 160 MWh per year. QFF challenges the proposition that a small business¹¹ (outside the professional and service industries) only consumes 100MWh per annum. Certainly, under all definitions of a small business⁸ for the intensive agricultural sector, electricity consumption will be in excess of 100MWh.

QFF has been verbally advised by Energy Queensland (EQ) that the Ergon Retail area has around 2,000 NMIs (or sites) which fall into the 100-160MWh threshold. Apparently, there is no visibility by EQ of businesses within the 100-160MWh range for South East Queensland.

QFF understands that 'small customer thresholds are 160 MW in South Australia and 150 MW in Tasmania. With the ACT, New South Wales and Queensland setting 100MWh. Although New South Wales did utilise the 160MWh threshold when it introduced the National Energy Retail Law in 2011, but later changed the threshold to 100MWh under their NERL.

Increasing the utilisation of the Ergon Energy Network above the current level of 39 per cent will alleviate the need for Ergon Energy Network to continue to rely on excessive fixed charges. This requires tariff reform to ensure that small business customers consuming between 100 MWh per year and 160 MWh per year are not subjected to \$/KW demand charges (sites classified as small are subject to more cost-effective charging structures than those classified as large). QFF understands that it is common practice in many businesses to simply install a new NMI and shift demand as businesses approach the 100MWh threshold. This is an unintended consequence of this arbitrary limit, increasing administrative burden and metering charges onto Queensland's small businesses and the Queensland-owned networks.

⁹ QCA Draft Price Determination: 2019-20 Regulated electricity prices for regional Queensland <http://www.qca.org.au/Electricity/Regional-consumers/Reg-Electricity-Prices/In-Progress/2019-20-Regulated-electricity-prices-for-regional>

¹⁰ Energy Queensland. Regulatory Proposal 2020-2025. <https://www.aer.gov.au/networks-pipelines/determinations-accessarrangements/ergon-energy-determination-2020-25/proposal>

¹¹ 'Small business' is defined differently by regulators in Australia depending on the laws they administer. For example, ASIC regulates many businesses that are 'small proprietary companies', which means a company with two out of these three characteristics:

- an annual revenue of less than \$25 million
- fewer than 50 employees at the end of the financial year, and
- consolidated gross assets of less than \$12.5 million at the end of the financial year.

The Australian Taxation Office defines a small business as one that has annual revenue turnover (excluding GST) of less than \$2 million. Fair Work Australia defines a small business as one that has less than 15 employees.

Despite these differences, many regulators have informally adopted the definition of 'small business' used by the Australian Bureau of Statistics (ABS), which is a business that employs fewer than 20 people.

QFF understands that by amending the small customer threshold to 160MW the total revenue requirement across both small and large customers will not change, just the number of customers allocated to each of the small and large categories, so there may be price changes for each group of customers too (all other things being equal). However, the real issue is the significant ‘step-up’ in bills when small business customers move from the small to large customer category. If the step was smoother, customers may not be so concerned (unless their metering is also an issue). Increasing the small customer threshold to 160MW is the only solution to ensure small businesses are not disadvantaged either in the design and cost of electricity tariffs but also with regards to offering freedom to switch electricity retailers in regional Queensland (which is currently governed under energy retail monopoly, Ergon Retail).

5. Regions and Innovation

In 2017, the Queensland Government released the findings of a study to understand the public’s current perceptions and attitudes towards innovation including a set of regional breakdowns¹². Specifically, the objectives of the research were to establish an understanding of how the Queensland public define innovation, their views on the positive and negative impacts of innovation, their overall level of enthusiasm and interest, and measure their perceptions on how well Queensland is performing as an innovative state; understanding the barriers and enablers to achieving an innovative culture. The research also aimed to identify differences across eight designated regions of the state, and between different demographic segments. The insights from the survey were interesting if not, in many cases, unsurprising.

Firstly, the term ‘innovation’ is often felt to be very vague – people find themselves confused by the broad nature of its meaning. It means many things to many people and it can be attributed to a whole range of changes from small tweaks to huge ground-breaking advancements. Another common confusion arises from invention versus innovation – not surprising either, when you consider the confusion of companies and entrepreneurs within the role of innovation patents and the establishment of an ‘inventive step’ as opposed to an ‘innovation step’.

A handful of regional differences exist in the use of other terms, the most noteworthy being Toowoomba and Darling Downs residents who were more likely to mention ‘creativity’ (63 per cent) or ‘invention’ (49 per cent).

Secondly, innovation impacts can be both positive and negative but overall people think of innovation positively. There are a number of drivers to accepting innovation, particularly when it shows a clear link to lifestyle improvements. The extent to which people agree that innovation has a positive impact varies between the regions, ranging from 91 per cent in the Darling Downs Region to 67 per cent in the Rockhampton Region.

Other notable results included Rockhampton Region residents were more likely to mention ‘improving our lifestyles’ (64 per cent), and Townsville Region residents were more likely to refer to innovation as ‘making things easier’ (46 per cent).

While the large majority (88 per cent) of people agreed that innovation is important for Queensland’s future, only 58 per cent agreed that Queensland is currently an innovative state; clearly highlighting the difference between innovation importance and innovation performance.

Queenslanders are ready to embrace innovation, with 65 per cent stating they want to be actively involved but most not knowing how to be involved. The residents of Outback and Far North Queensland expressed a greater desire to be actively involved in innovation compared to the Queensland average

¹² Queensland Government. (2017). [Queenslanders’ perceptions and attitudes to innovation report](#). Department of Science, Information Technology and Innovation.

(61 per cent strongly agree vs 37 per cent) and believed that anyone can be an innovator (52 per cent strongly agree). Other regional differences included those in the Outback and Far North Queensland Region being most interested in innovation, followed by those in the Cairns Region and the Mackay and Fitzroy Region. The regions with the highest levels of innovation are also strong agricultural communities.

Frustratingly, the research identified that half of Queenslanders have had an idea they thought had potential, but two thirds of those did not progress it; mainly because of financial constraints with the second highest answer being *'not knowing where to start'*. Clearly this shows the direction for support mechanisms to truly facilitate and support innovation by individuals as well as business. ***There needs to be support hubs (physical and virtual) across regional Queensland to harness these ideas. To date, Innovate Queensland and other initiatives have strongly favoured SEQ at the expense of regions.***

Australia is slipping (number 19) in Bloomberg's Innovation Index 2019¹³ particularly in terms of the number of patents and value-add manufacturing. Interestingly, countries low in the list correlate to slumps and/or poor performance in the post-secondary, or tertiary, education-efficiency category, which includes the share of new science and engineering graduates in the labour force and a decline in value-added manufacturing. This highlights the criticality of education, training and skilling at all levels for Queensland.

6. Skilling, Training and Education

What are the skills small business owners need most to remain sustainable, grow and innovate?

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 sector is constantly challenged. Further, the rapid pace of digitalisation, mechanisation and the Internet of Things (IoT) are changing current roles, education needs and training requirements.

Innovation is changing the future of agriculture workforce. Innovation in agriculture, including high tech protected greenhouses, vertical farming, precision agriculture, drone technology, and robotics have the potential to change how Australians produce food and fibre. Integrating these technologies into existing farm practices will likely increase future demand for a range of technology-related skills.

The agriculture sector recognises the need to embrace the use of technology and the opportunities for advancement that these innovations offer. 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 per cent, whilst also securing their global competitiveness¹⁴. The P2D research has also highlighted issues around digital literacy, grower trust, and the availability of appropriate data and decision support tools. It has also confirmed that a lack of access to mobile and internet telecommunications infrastructure is a major barrier to adoption. Improving the capability to use technologies, data, robotics and automation more efficiently is a challenge that can bring production benefits for all industries.

Increased process automation has the potential to increase labour efficiency. The impact of digital technologies on labour efficiency is 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 significant, labour efficiency and improved workplace health and safety are of great potential value for agriculture businesses.

¹³ Bloomberg. Global Innovation Index 2019. <https://www.bloomberg.com/graphics/2019-innovative-countries/>

¹⁴ Leonard, E., Rainbow, R., Trindall, J., Baker, I., Barry, S., Darragh, L., Zhang, A. (2017). *Accelerating precision agriculture to decision agriculture: Enabling digital agriculture in Australia*. Cotton Research and Development.

Technological change will increase the demand for more professional and technical jobs in our industry¹⁵. 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 into the sector with these required skills.

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 occupations¹⁶.

Adoption of new technologies across industries will require learning new skills, particularly technological skills, environmental skills and managerial skills. To uptake the available opportunities, farm managers need a combination of skills in decision making, analysis of data, marketing, while also being aware of the potential of technology. They will in need to be technologically literate and capable, familiar with e-commerce and social media, and have advanced managerial skills, etc.

In addition to these roles, there will be a growth in specialist ICT companies and businesses that service technologies. Occupations in the service sector will tend to grow, including marketing, value-adding process, packing, logistics, distribution, fencing, harvesting, spraying, picking, farm business advising, data analysis and others. New career paths are also available in the environment sector, land management in conservation, climate change, irrigation and water management, and biosecurity¹⁷.

Our interactions with industries have reported a need for the following skills to equip our current workforce:

- Use of sensor, robotics, spatial and other technology e.g. use of drones for forestry mapping and fire surveillance. Estimating and harvesting and haulage.
- Digital skills and technology, greater use of drones and skilled agronomists that can effectively interpret data and help farmers make decisions
- Increased need for computer programming ICT skills
- Product innovation, marketing, e-commerce, negotiation and contract management
- Export and negotiations skills for new markets
- Increased used of traceability technologies
- Data collation and management is an area where all industries saw benefits in order to better interpret data to inform decision-making
- Increased need for business management skills as well as the ability to analyse data to make decisions
- Increased need for specialist skills to drive the sector forward such as biotechnologist, genetic specialist, food technicians, soil conservation, entomologists and others
- Increased ability of advisors and extension sector to act as knowledge and innovation brokers.
- Advisors will need to provide up-to-date advice based on up-to-date knowledge. Advisors with precision agriculture skills will be required.
- Succession planning and use of improved business structures
- Leadership skills for upcoming generations: since there is a new generation of farmers there is a need to build their skills to drive the future of agriculture.

What challenges do small business face in upskilling their workforce?

¹⁵ Queensland Farmers' Federation. (2018). *Ag Futures and Training Needs - Research report*. Jobs Queensland

¹⁶ Pratley, J. (2017). The Technology Paradigm Driving Agricultural Workforce Change. *Farm Policy Journal*, 14(1), 19-27.

¹⁷ Burrow, T. (2017). Agribusiness is a Cornerstone of Australia's Future Prosperity. *Farm Policy Journal*, 14(1), 29-35.

As outlined by the Coldrake Review¹⁸ (see 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 industry’s future needs – one that is well resourced, fit-for-purpose and responsive to ever-changing technological advances.

Agriculture and food businesses require a wide range of skills. Nationally, agriculture, forestry and fishing business mentioned skill shortages as a barrier to business growth (12 per cent compared with 11 per cent of all business). Human resource availability will be a significant factor for the future of Australian agriculture. The present trend in Australian agriculture is an ageing and declining workforce. The median age of farm workers in Australia is currently 48 and there is no indication of where a younger generation of farm workers will come from.

Furthermore, jobs and skills are changing as technology and innovation evolve. The effects of technology on agriculture jobs in a previous Queensland Farmer’s report to the government highlights that to be prepared for the possible changes in the future, workers in the agriculture sector will need to acquire skills that complement and utilise the technologies, new and emerging products rather than compete or prevent technology uptake Queensland¹⁴. These findings align to the findings of the Future Skills report¹⁹.

With the expected pace of technological development, life-long learning will need to be supported by appropriate training and re-skilling opportunities. To remain relevant and continuously adapt to the advancement that technology and innovation bring, government, industry, training providers and those responsible for developing training packages must embrace the concept of life-long learning. This will be important because the everchanging landscape requires these stakeholders to be up to date with the latest knowledge and be flexible to any changes required, including the lead-times necessary to implement appropriate responses.

To respond to current challenges, 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. Industries have the duty to ensure they provide training opportunities in the workplace, make more of mentoring, apprenticeships and make 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 needed.

Industries will also need to encourage their workers to make acquiring new skills a priority and provide incentives and time to workers. 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 hours¹⁸.

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.

¹⁸ Coaldrake, P. (2018). *Review of the future of vocational education, training and skilling in central-western Queensland*.

¹⁹ AlphaBeta. (2019). *Future Skills: To adapt to the future of work, Australians will undertake a third more education and training and change what, when and how we learn*. Google Australia

A recent report²⁰ states that the education system currently does not train enough people to enter the sector, as the industry identifies 800 agricultural graduates leaving tertiary institutions to meet an estimated annual demand of 2,000 people. Although it is acknowledged that is not the unique pathway for people to join the agricultural workforce (e.g. marketing and communication, engineering, business and finance), specific agricultural training programs were the focus of this study. Meanwhile, the future and existing agricultural workforce will have to embrace change and develop new skills to ensure the industry seize the opportunities presented by digital agriculture and remains competitive globally. The findings indicate that 41 per cent of roles in Australian agriculture will be impacted by technology in the next 10 years, 30 per cent through automation (eg robotics) and 11 per cent through augmentation (eg Artificial Intelligence and wearable devices). Perhaps most concerning however was the finding that The Agriculture, Horticulture and Conservation and Land Management (AHC), Seafood Industry (SFI), Australian Meat Processing (AMP), and Forest and Wood Products (FWP) training packages comprise 1,880 units of competency, of which around 85 (five per cent) are designed to facilitate digital capabilities. Put simply, we are training for yesterday's skills, not those the jobs of the future require.

An example of the potential partnerships between industry, training providers and government that aims to address the continuous learning requirements of the industry is the AgSkilled program in NSW. AgSkilled is a direct partnership between Cotton Australia, the Grains Research and Development Corporation and the NSW Government (which is investing \$14.7 million over three years for vocational training for the cotton and grains industries). The program is successful because it is industry-led, relevant and flexible, and the training is designed to suit business needs and learners with a range of skills and experience. RJSA is seeking support for a similar program to be established in Queensland.

Government will need to ensure that funding and accreditation systems provide appropriate incentives to increase learning flexibility. To be more relevant to industry requirements and support the current workforce to constantly update their knowledge, the need for new skill sets should be investigated with a higher priority. Adopting more flexible course structures that allow students to train in areas that might not be conventional agricultural subjects but be of significant value to their career in agriculture should be encouraged – for example, combining courses of agriculture and engineering.

Agriculture will follow the same pattern of other industries but it is also expected that its workforce, instead of accumulating additional qualifications, will learn through short courses and on-the-job-training which focuses directly on specific skills they require. To navigate rapid job and tasking changes in the future¹⁸ the sector will need to foster opportunities to improve their skills while at work.

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 increase¹⁸ 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.

Support for more skills sets. The workforce will need to update a combination of skills or skill sets to complete the new tasking. These skills sets will evolve as technology is implemented, and therefore increased support for more skills sets is imperative. The increased adoption of skills-sets and micro-credentials may increasingly be used as part of an employer's formal training requirements.

By 2040, 41 per cent of the average worker's total education will need to occur after the age of 21 – up from 19 per cent today¹⁹. This implies that the future workforce will need to acquire the skills while on the job or online rather than in the classroom.

²⁰ KPMG. (2018). *Growing agriculture into a \$100 billion industry*. National Farmers Federation.

The agriculture sector recognizes 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 training²¹.

The VET sector should be equipping students with skills that improve their prospects of employment across various agriculture industries. To achieve this, strong industry links are essential. It is recommended that VET funding investment shifts from the traditionally narrow focus on full qualifications to those 'streams' of broader skills (skill sets) that apply across industries. This shift in focus would better align investment to current and emergent industry priorities and would also produce better student outcomes, for rural and regional employability (job-readiness)¹⁵.

Cost, time commitments and accessibility continue to be the significant reported barriers to accessing training across all agricultural industries and regions. Most RTOs currently only deliver full qualifications (demand led as full qualifications are generally subsidised), whereas providing training in skill sets (generally FFS) should assist to address these issues. In addition, employees would have greater motivation to complete a few units rather than an entire qualification, or build up to a qualification, especially if the opportunity existed to do a tailored accredited skill set in blocks of training.

More accessible and achievable programs of short courses to upskill the existing workforce enables them to build on their career; and better connection from school to roles in the agriculture sector can improve the sector's image thereby helping to attract the future workforce required²⁰. The sector will increasingly need to provide opportunity for self-development and career improvement to ensure the appropriately skilled workforce.

Workers in agriculture are considered particularly exposed to the effects of automation, emphasising the importance of increased investment in lifelong learning and re-training. Boosting education and skills levels helps people adjust to new technologies or methods of better practices. Less skilled workers will generally bear more of the costs of increased automation, so improving their adaptability and transferable skills is crucial to enabling workers to more easily navigate disruptive or structural changes within or across industries over time. This is particularly relevant in regional and remote rural areas and has implications for the health of local communities and the state economy.

More flexible course structures should be encouraged that allow students to train in areas that might not be conventional agricultural subjects but of significant value to their career in agriculture.

This will help training to be more relevant to industry requirements and support the current workforce to constantly update their knowledge. We need to be able to support business with the desire to develop the confidence to acquire the capabilities and capacity necessary to transition from the business of today into the business of tomorrow. In very practical terms therefore, 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. It is essential that trainers are kept up to date with the latest innovations and best practice.

Students benefit from training that includes more generic competencies that can be used across a wide range of occupations, delivering skills that can be used in multiple roles. The training system must support generic competencies and skills sets and allow the individual the flexibility to incorporate their training specific units of competency.

²¹ KPMG. (2018). *Growing agriculture into a \$100 billion industry*. National Farmers Federation.

Government has the responsibility to provide the framework for skills changes to take place. Public funding models and financial incentives are important tools to motivate business and workers to take up training opportunities and embrace continuous, life-long learning. Existing eligibility criteria to access funding should be made less restrictive in order to reduce barriers to participation, as imposing restrictions on the type of skills or qualifications to be pursued is a disincentive to re-train or up-skill and also reduces movement of labour between occupations. The funding frameworks need to encourage partnerships between industry and training providers. Funding should also encourage training and education providers to introduce flexible and up to date training. Establishing a certification framework that supports flexible structures is also an important role of government.

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 with accessible training tailored to their needs. This will normalise workers' 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. It would be highly beneficial to increase options for those already in the workforce that require upskilling due to changes in their industry.

Some barriers identified at our recent Vocational Training in Agriculture forum include:

- Language, literacy and numeracy is in decline
- Industries lack understanding of a qualification's structure, contents, packaging and delivery options, or career paths
- Access to reliable internet
- Distance and cost of travel
- Lack of quality trainers. There are skills shortages and a need to upskill. However, contract arrangements are complex and need to change to attract quality trainers
- Cost and time taken to gain a training and assessment qualification is seen as onerous and difficult to undertake without prior experience or exposure to teaching practice
- Lack of flexibility in training and delivery
- Thin market and cost of training delivery (RTOs). To service the market there needs to be a return on investment to be able to develop resources, upskill trainers and provide training
- Ineffective funding models other than Cert III guarantee to do skill sets. Need funding for skills sets and micro-credentials
- Lack of RTOs delivering in schools
- Industry lack of knowledge regarding ASQA requirements and processes. Compliance requirements verses real world delivery
- Retention of students. There are instances where the training commencements 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?
- Ensure that there are transferable skills across sectors
- Employer incentives- create value for the employer
- The way that RTOs get paid through subsidies by the completion of subjects. Where retention of students is such an issue, then the delivery becomes untenable.

The current fee for service (FFS) for skills assessment is prohibitively expensive particularly for regional small business thus further investigation into subsidised skills assessments and tailored skill sets for regional areas will be beneficial.

What are the key issues affecting the resilience and growth of small businesses in Queensland's regional communities?

More than any other sector of the economy, agriculture has outstanding growth opportunities with the emergence of a food culture and an increasingly prosperous global market that values safe, ethical and sustainable produce.

To meet these market demands the mix and diversity of industries that already exists within Queensland agriculture will change and intensification will be required. New products and entirely new industries can emerge to meet demand in areas of Queensland with suitable growing conditions; the necessary capital, skills and infrastructure; and where it is possible to compete with other producers in Australia or overseas. There is potential for products currently grown in limited quantities to develop into significant industries based on increased consumer demand—for example, avocados were a niche product 30 years ago²².

All of these megatrends represent both challenges and opportunities for Queensland businesses. Opportunities include²³:

- increased exports of protein-rich products (e.g. beef, seafood, some crops like chickpeas)
- exports of healthy food products
- increased exports of a variety of horticultural products (including exotic fruits), using the advantage of Queensland's counter-seasonality to northern hemisphere producers
- value-adding to higher quality, more convenient and better packaged products across all industries
- increased exports deriving from increasing recognition of Queensland's clean and green record and status.

Of course, reaping these opportunities will depend on meeting challenges, such as maintaining market access in an increasingly competitive international environment. Queensland is well placed to meet the challenges and take advantage of the opportunities due to certain factors, such as the reputation of the sector with a recognised clean and green status. Australia produces some of the highest quality foods in the world.

Key to realising the opportunities for our sector is maintaining the supporting regional infrastructure including:

- hard economic infrastructure such as access to mobile and internet telecommunications infrastructure, roads, connectivity, railways and ports
- soft infrastructure such as a supportive legal and regulatory environment
- smart infrastructure such as research, development and by extension an innovative culture
- social infrastructure such as a supportive education and training system

Engaging the required labour force in regional communities is a challenge. Most agriculture sector employees live in 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 cities²⁴.

An increasing challenge will be attracting and retaining an appropriate mix of skilled workers in rural towns²⁵. 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. However, rural communities that are able to provide a level of infrastructure such as telecommunications, health, education and childcare are likely to contribute to attracting skilled people to the industry. Agriculture is, and will remain, a key employer in Queensland's regional communities; it is critical that the awareness, education and employment pathways for the agriculture sector are effective.

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

²² State of Queensland. (2019). *Growing for Queensland*.

²³ Queensland Department of Agriculture and Fisheries. (2018). *Queensland Agriculture Snapshot*. Retrieved from https://www.daf.qld.gov.au/__data/assets/pdf_file/0007/1383928/State-of-Agriculture-Report.pdf

²⁴ Binks, B., Stenekes, N., Kruger, H., & Kancans, R. (2018). Snapshot of Australia's Agricultural Workforce. *ABARE Insights*(3).

²⁵ Korff., D. (2017). The Changing Agricultural Workforce- How Can it be Sustained and Developed? *Farm Policy Journal*, 14(1), 11-17.

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.

There is an almost universal concern about the long-term trend of the declining number of young people with interest and experience in farming, and likely skills migration when the mining sector has its next upturn. Many employers point to their limited capacity to use contractors for any shortfalls, especially in new entrant and semi-skilled positions.

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 is 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 transfer²⁶.

The sector is likely to find a tightening of labour supply, particularly for skilled farm managers. Agriculture needs quality leaders and an appropriately skilled workforce to adopt innovation. Producers with general, technical and business educations may be more willing, and better at adopting 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.

The industry needs to inform young generations about new and exciting job opportunities and careers in the sector by creating a stronger link with schools. Increased support for initiatives that bring industry and schools and the training sector together to create awareness of the importance of agriculture, and the possible careers is needed.

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 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 the sector needs. QASEP responds to the Gonski 2.0 Review that reiterated the need to strengthen partnerships across the system to achieve educational excellence in Australia. The subsequent Mitchell Institute report²⁷ identified school-industry partnerships as the means to deliver the value, quality and contextualisation sought through David Gonski's many recommendations. This is where agriculture and rural industries can partner with the education system to offer real opportunities and generate real benefits for the state and its communities.

To attract the next generation of workers, the agriculture sector needs to address the disconnect and misperceptions held by schools. 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. 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 traineeship and apprenticeship and work placement opportunities to those inclined towards agriculture can also provide a starting point towards a career in the sector. Furthermore, using the VET sector to upskill its workforce to facilitate lifelong learning.

²⁶ Collins, J., Krivokapic-Skoko, B., & Monani, D. (2016). *Attraction and retention of new immigrants in regional and rural Australia*. Canberra: Agrifutures.

²⁷ Torii, K. (2018). *Connecting the worlds of learning and work: Prioritising school-industry partnerships in Australia's education*. Mitchell Institute

The RJSA has identified a lack of ‘contact information’ amongst the relevant stakeholders which is limiting opportunities and the efficient utilisation of resources. As such, we propose the urgent need for a virtual platform which will form a ‘Hub’ facilitated by a permanent position (a connections manager). We look forward to discussing this option in more detail with the Department.

If you have any queries about this submission, please do not hesitate to contact me directly at georgina@qff.org.au.

Yours sincerely

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