JOBS FOR THE FUTURE IN REGIONAL AREAS

INTRODUCTION

The Rural Jobs and Skills Alliance (RJSA) offers the following responses to the inquiry into Jobs for the Future in Regional Areas.

RJSA developed from the agricultural sector's need to engage more with the education and training sectors, and the Queensland Government's commitment to create and support jobs across the state.

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

RJSA provides advice to government, service providers and other organisations with respect to employment, skills, industry training and workforce planning on behalf of Queensland's agriculture and related industries. Given our scope of work, our responses to the inquiry relate to Queensland Agriculture, but believe they may reflect similar regional issues from the national perspective.

We have collated industry response to the inquiry into Jobs for the Future in Regional Areas and summarised the responses, by theme, as follows:

IMPORTANCE OF AGRICULTURE THE JOBS FOR THE FUTURE IN REGIONAL AREAS

For regional economies, the importance of agriculture should be considered and not be overlooked in terms of 'traditional' vs 'new' industry, but in the context of its new opportunities. 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 are changing current roles, educational needs and training requirements. Overlaying all this is the global challenge of feeding, clothing and growing amenity for 9.8 billion people by 2050 in a changing climate, while maintaining quality products and nurturing the environment.

Agriculture is one of Australia's great success stories, with a long-term contribution to GDP of between 3% and 4%. More recently, agriculture has been a significant source of economic growth and the fastest growing of all industries at 16.3% (ACIL Allen Consulting, 2019), despite the ongoing eastern Australia drought.

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

The agribusiness and food sector supports regional economies and communities across the state. It contributed around $30 billion to Queensland's gross value of production in 2016–17 and it is a key export industry contributing approximately $12 billion in 2016–17. More than half of Queensland's agriculture and food output is exported overseas; around one-fifth is also domestically 'exported' to other states of Australia. Queensland producers supply 93% of the agricultural, forestry and fishing products used in the state (with overseas and interstate sources providing 1% and 6% respectively) (Queensland Department of Agriculture and Fisheries, 2018).

Agriculture occupies over 88 per cent 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.

In May 2019, there were 41 100 businesses in the agriculture, forestry and fishing industry in Queensland. Farm numbers have been declining at a steady rate, but 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 operators, or have fewer than 20 employees.

Many of these businesses are themselves diverse, producing multiple commodities. A large percentage of farms has both cropping and grazing activities. On 'average' broadacre crop farmers produce 1.7 broadacre crops, producers of orchard tree and nut products can grow 1.6 different orchard tree and nut products, and vegetable growers can produce 1.6 different vegetable products.

The agriculture sector has shown flexibility and market responsiveness to change presented in the composition of outputs, moving away from some traditional commodities such as sheep, wool, dairy, sugar and wheat, towards more diverse poultry products, fruit, cotton and cattle and value-adding processing (Queensland Department of Agriculture and Fisheries, 2018).

In Queensland, agriculture supports over 300 000 jobs across the supply chain and around 69 594 directly employed in agriculture, forestry and fishing (Australian Bureau of Statistics, 2019). The industry increased its level of employment by 10.4% in Queensland and, in particular, in the regions considered "Rest of Qld" by 15.5%. 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 direct employment.

The most recent Queensland agriculture snapshot produced by the Department of Agriculture and Fisheries details that agriculture is an important contributor to regional employment including:

- providing 25–40% or more of direct employment in a number of communities in the north (e.g. Etheridge, which has the highest share in the state at 42%), the west (e.g. 30% in Goondiwindi), and Central Queensland (e.g. 36% in Barcaldine), and in some coastal communities (e.g. 35% in Burdekin).
- overall, the sector provides more than 25% of jobs in 18 of the 78 local government areas in Queensland. The sector provides 10–25% of jobs in 21 other local government areas in all areas of the state, including on the outskirts of South East Queensland (e.g. 25% in Lockyer Valley and 17% in Gympie) and in some major centres (e.g. 14% in Bundaberg).
- The sector has a significant presence in most communities, including the major cities such as Brisbane, Gold Coast and Townsville (all 2%, largely food processing).
- In some remote communities there is little direct employment in the sector. (However, this is most likely undercounting, as the census may not have collected data on work in many Indigenous community market gardens and Indigenous fishing activities.)

OPPORTUNITIES THAT CAN BE CREATED

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 (CSIRO, 2015; CSIRO Futures, 2017; Queensland Department of Agriculture and Fisheries, 2018).

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 ago (State of Queensland, 2019)**.**

According to the CSIRO, in addition to those global drivers, five 'megatrends' are impacting the Australian agricultural sector:

- A hungrier world - population growth will drive global demand for food & fibre;
- A bumpier ride - globalisation, climate change and environmental change will reshape the risk profile for agriculture;
- A wealthier world - a new middle-income class will increase food consumption, diversify diets and eat more protein;
- Choosy customers - information empowered consumers of the future will have expectations for health, provenance, sustainability and ethics; and,
- Transformative technologies - advances in digital technology, genetic science and synthetics will change the way food and fibre products are made and transported.

CSIRO's "Rural Industry Futures" (2015) report describes these megatrends as having an impact horizon for the next twenty years, out to 2035, although some affects are already being seen and these include several emergent issues that represent key opportunities and challenges:

- Continued productivity gains (including labour productivity) are required to deal with competitive terms of trade and an ageing labour force in agriculture.
- Australian agriculture is predominantly export-oriented, a sector with real comparative advantage and a crucial part of the economy now and in the future. This export orientation means the sector benefits from, and is reliant on, the performance of these global markets.
- Variability in returns to agriculture has increased significantly due to increased climate variability, volatile exchange rates and fluctuations in market demand. Skills and systems to effectively anticipate and manage these increasing risks are a crucial component of the future for the sector.
- The trend to fewer, larger farms continues in response to the need for improved competitiveness. While new business models are emerging, the family farm remains the most common ownership structure and it increasingly faces pressure to grow and to maintain efficiency.

- Rural industries must continually grow and diversify exports in response to structural change in emerging economies. As more people (in the Asian region especially) join the middle-income classes, there will be a stronger demand for conventional products and for a more diverse range of food and fibre products.
- Access to quality production resources (arable land, reliable water) and proximity to markets remain major factors in planning for increased production capacity.

All of these megatrends represent both challenges and opportunities for Queensland businesses. Opportunities include (Queensland Department of Agriculture and Fisheries, 2018):.

- 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.

On top of these opportunities, an important disruption facing the sector is digital innovation. We know the sector will be highly influenced in the coming years by disruptive technologies that may increase efficiency, productivity and profitability. Improving the capability to use technologies, data, robotics and automatisation more efficiently is a challenge that can bring production 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 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.

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 extension, and an innovative culture more generally

— social infrastructure such as a supportive education and training system.

ROLE OF VOCATIONAL EDUCATION PROVIDERS IN ENABLING RESKILLING AND RETRAINING

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% compared with 11% of all business) (Australian Bureau of Statistics, 2015-16). 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 that compete or prevent technology uptake Queensland (Queensland Farmers' Federation, 2018) . These findings align to the findings of the Future Skills report (AlphaBeta, 2019).

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 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, particularly in Queensland's regional communities, so it is critical that the awareness, education and employment pathways for the agriculture sector are effective.

The agriculture industry in Queensland is supported by a network of education and training providers who offer a wide selection of courses ranging from short non-accredited training, through accredited training as part of the vocational education and training (VET) system, to degree and higher degree level as part of the tertiary education system. In 2016–17, there were 13 540 publicly funded students undertaking accredited VET primary industry programs in Queensland (Queensland Department of Agriculture and Fisheries, 2018).

The RJSA concurs with the recommendations of the Independent Review into Regional, Rural and Remote (Hasley, 2018)(RRR) Education, which cited:

• 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.

The agribusiness sector is recruiting a new generation of technologically savvy graduates as the sector provides more modernised and diverse career pathways for young generations (Australian Academy of Science, 2017).

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 the specific skills required. To navigate rapid job and tasking changes in the future, the sector will need to foster opportunities to improve their skills while at work (AlphaBeta, 2019).

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 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 needed.

Industries will also need to also 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 hours (AlphaBeta, 2019).

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.

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. Increased funding support for skills sets should be a

priority. Government will need to provide public funding models and incentives to encourage individuals and business to invest in education and training.

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 (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.

CONCLUSION

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.

More than many other sectors 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 (CSIRO Futures, 2017; CSIRO, 2015; Department of Agriculture and Fisheries, 2018). To meet these market demands the mix and diversity of industries that already exists within Queensland agriculture will change and intensification will be required. These growth and structural opportunities bring with them interesting future workforce opportunities and changes.

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. 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.

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