

A regional approach to growing Australia's economy and rural communities

Monto Agricultural Strategy

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Acknowledgements

We wish to acknowledge the traditional owners of the lands and waters that support our region and recognise their continued spiritual and cultural connection to land, water and community. We pay our respects to Elders past, present and emerging.

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Message from the Mayor



People, Profit and Planet. It is with this understanding of the intrinsic connection between environmental vitality, economic security and social well-being, that the Monto Agricultural Strategy has been developed.

This strategy makes clear, that the only way to move forward, is together. Long-term success depends on strong partnerships between growers and all levels of government and industry, to advocate for efficiency gains, innovation, trust and leadership that serves to advance capacity within the sector.

North Burnett Regional Council is proud and immensely supportive of this innovative and technological approach to Agriculture, which has been founded on careful analysis of current agricultural practices, along with an exploration into both historical and future economic, market, consumer and environmental trends.

The North Burnett boasts a fertile and versatile landscape that allows for a variety of different crops, produce and livestock. With an ever-increasing global market for high quality, fresh food, the region, and its immense agricultural capabilities is well placed to capitalise on these opportunities now, and into the future.

North Burnett Regional Council Mayor - Rachel Chambers





About the Monto Agricultural Strategy

The Monto Agricultural Strategy has been guided by the principles of sustainability through the application of the Triple Bottom Line approach (People, Profit and Planet). This approach understands the intrinsic connection between environmental vitality, economic security and social well-being.

The strategy aims to support the development of meaningful and long-lasting resilience by addressing the fundamental economic and Natural Resource Management (NRM) foundations of the region. By carefully researching current agricultural practices, economic, market, consumer and environmental trends, the strategy provides a plan for long-term success that delivers a vision for the region's agricultural and environmental sustainability. The strategy seeks to determine the support and infrastructure required for existing markets and examine value-adding opportunities to drive productivity and growth along the supply chain, ultimately empowering growers and yielding financial rewards for individual operations, the local economy and the wider community.

It is anticipated that this strategy will assist to build stronger partnerships between growers, government and industry to advocate efficiency, innovation, trust, leadership and advance capacity to enable growers to develop effective business plans and economic security.

This strategy also provides the foundation for the future investigation and detailed exploration of fresh, innovative opportunities and changing markets that suit the specific growing conditions of Monto and the North Burnett, while building on the back of other BCCA projects including; regional resilience building projects and the development of an online resource SMART-Hub.

Key drivers identified by the community that affect agricultural sustainability in the Monto district were:

Financial viability broadly driven by improved productivity, efficiency, knowledge and technical advice, market access and predictability in commodity prices

- Improved risk mitigation
- o Environmental sustainability and stewardship
- Legislative requirements

The strategy consists of three (3) Outcomes:

- 1. Access to information, tools and resources
- 2. Exploration of alternative and emerging opportunities
- 3. Advocacy, promotion and pursuit of regional infrastructure investment

A series of key objectives and practical actions are explored in the strategy to assist in realising the above outcomes.

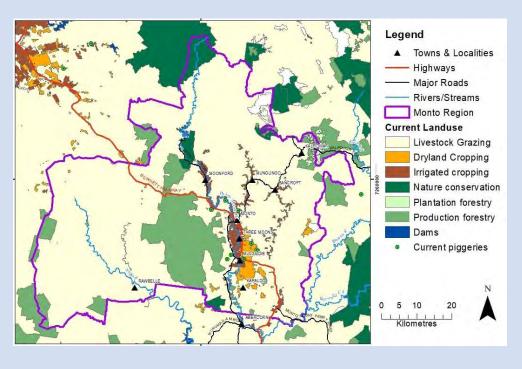




Monto District's Agricultural Industries

Monto is located approximately 175km west of Bundaberg and 480km northwest of Brisbane, on the edge of the Great Dividing Range. As the most northern of the North Burnett's six districts, Monto is situated at the head waters of the Burnett River catchment system that subsequently flows in a U-shaped course through Mundubbera and Gayndah before reaching its estuary and mouth via Bundaberg. The topography of the district is diverse, ranging from fertile farmland and rich alluvial flats to rugged geographical formations and areas of environmental significance, that include Cania Gorge and Kroombit National Parks.

Agriculture in the region is both abundant and diverse. As the leading employment sector and underpinning the entire region's economy, the current major primary industries of Monto include beef, pork, fodder, pulses, grains, tree nuts, milk production and timber. Historically however, Monto was once a significant dairy producer, with rail infrastructure and local butter factory. Monto still boasts the southern hemisphere's only dairy festival, a tribute to its prosperous dairying past.



Even though Monto is comprised of small to medium rural farm holdings (an average of 1560 hectares) the districts producers are quietly proactive in their pursuit of sustainability and innovation, with various land holders individually exploring or partnering with local NRM bodies, industry and universities to further explore alternative practices and opportunities such as:

- Implementing zero tillage practices
- Using livestock effluent to improve soil condition and retain valuable nutrients for broad acre cropping and grazing pastures
- Sequestering carbon and reduction of nitrous oxide emissions practices
- Flood plain hydrology remediation works

- Protection of riparian zones through the fencing of waterways to strategically manage grazing, groundcover, soil moisture and topsoil retention, while reducing sediment run off to waterways and the Great Barrier Reef
- Organic farming
- Biogas exploration



Why an Agricultural Strategy is Needed

Global and domestic markets continue to be major influencers on agriculture with global food demand set to increase by 70% by 2050 thereby placing increasing pressure on our regions to produce. In addition, changing climatic conditions and greater environmental consciousness is necessitating continual development in agricultural practices, production, business and stewardship.

The initial motivation for this strategy was inspired by leading members of the Monto Growers Group who sought direction following severe flooding in October 2017 and combined losses in excess of \$4.5 million. This event alone, was one of seven natural disaster flooding events that were declared over an eight year period, in addition to two separate drought declarations.¹⁸

Additionally, agriculture is one of the five pillars of Australia's economy and is a key priority for Federal and State Governments. The Agricultural Competitiveness White Paper outlines the initiatives and commitment by the Federal Government to Australia's agriculture sector of which 'Farming Smarter' is one of the key themes. This theme highlights the need for agribusinesses to have access to the most advanced technologies and practices to continue to not only 'farm smarter'

but to develop resilience to changing markets and climatic conditions.

Agribusiness was identified in the *Building the Lucky Country: Positioning for Prosperity* as one of the 'Fantastic Five' industries that has the most potential to out-perform the mining sector as the key driver for economic growth in Australia (refer to graph bottom right). It is both well positioned to produce what the world is increasingly demanding and playing most to Australia's competitive advantages. With food demand predicted to rise by 60 million people (the current size of India) over the next 20 years, the challenge to feed the world is an exciting opportunity. So too is the challenge to supply the increased demand for higher-value food products (such as meat, dairy, fruit and vegetables) as global household incomes also increase (Deloitte, 2014).

Farming Smarter, Not Harder: Securing our agricultural economy (Eadie, L., et al. 2012) identifies that farmers require support "to diversify their revenue sources to reduce financial risk and ensure more reliable farm incomes"



Source: Deloitte Access Economics

Farming Smarter, Not Harder: Securing our agricultural economy identifies that producers require support "to diversify their revenue sources to reduce financial risk and ensure more reliable farm incomes". The Organisation for Economic Co-operation and Development also confirms that agriculture investment has benefits far beyond the agricultural sector in its paper 'Economic Importance of Agriculture for Sustainable Development and Poverty Reduction'. ²⁸

Agriculture is the largest contributor to GDP in the North Burnett and therefore, it is vital for stakeholders in the agricultural district of Monto to be able to consult with a relevant and current strategy that will guide them to make the most of the opportunities arising in the industry.

The North Burnett region has a total land area of approximately 20,000km² (over three (3) times larger than Bundaberg). Agriculture, forestry and fisheries make up approximately 40% of GDP, with a large responsibility to ensure the region's social and economic wellbeing. Anecdotal evidence suggests that young people are leaving the area for higher incomes and more opportunities in the city, so it is imperative that the agricultural industry is able to retain or attract skilled employees by encouraging a resilient and thriving agricultural sector.

Social science research suggests a strong correlation between economic security and social wellbeing, including rates of depression, community connection, family and social cohesion and risk of suicide.^{35,50} Therefore, it could be assumed that successful social recovery following disruptive events is heavily reliant on long term economic wellbeing of both the individual and broader community. Access to information, expertise and resources facilitates rapid economic recovery. This has the potential for significant savings in social support following natural disaster events.

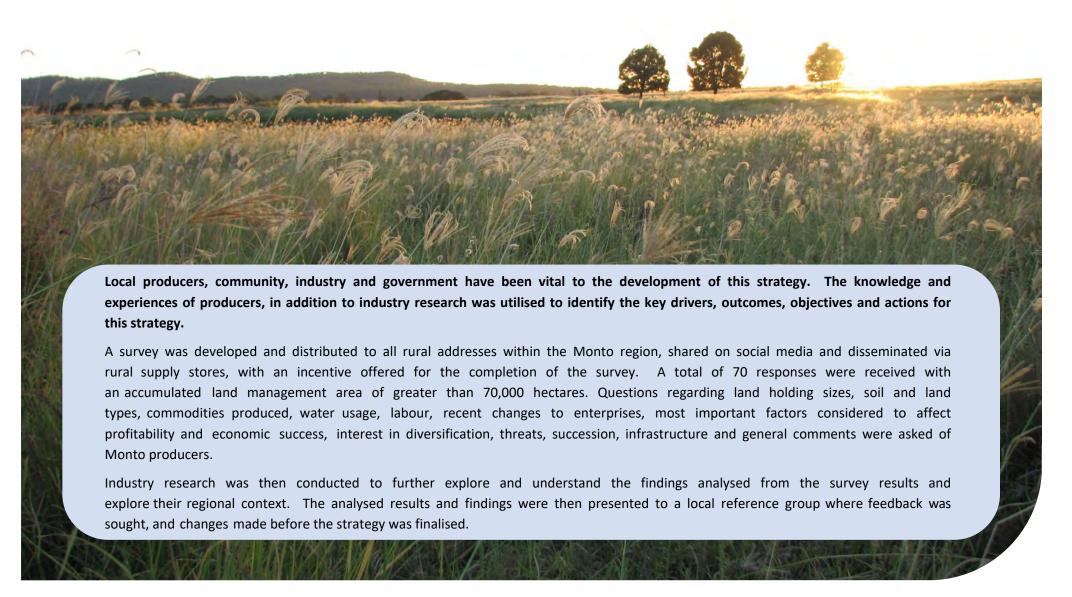
Furthermore, the need for economic development and long-term sustainability of the community was identified by a large cross-section of residents as part of the NBRC, as the most crucial need. Agriculture, forestry and associated industries underpin the economy of the North Burnett region and therefore will continue to be major drivers of economic development.

By applying the Triple Bottom Line approach to sustainability, loosely defined as People, Profit and Planet, and understanding the intrinsic connection between environmental vitality, economic security and social well-being, this strategy is intended to assist in developing meaningful and long-lasting economic development by addressing the agricultural and NRM foundations of the region.



"Development of a strategy that makes farming at Monto sustainable and produces people who enjoy challenges and can start small and grow their enterprises through knowledge gained is required" – Monto grazier and lucerne grower

How the Strategy was Developed: The Methodology

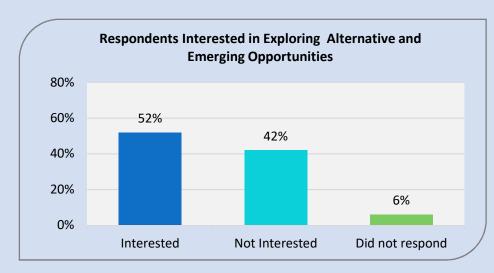




What the Community Told Us

The Monto community has communicated passionately about key drivers, their future aspirations and possible opportunities regarding agriculture in the region. Many producers expressed the desire to improve farm business incomes with the intention to secure farming financial viability, succession and reduce their reliance on off farm incomes (predominately mining, local retail and services).

More than half of respondents want to explore business diversification options, value adding enterprises and alternative opportunities for flood prone agricultural land (refer to graph below). The community is keen to reinvigorate and reinvent the once thriving local agricultural industry, utilising the region's unique and abundant natural resources, while maintaining family and community connection that family farming presents.



Most rural landholders are seeking new and innovative ways to farm, though many have a desire to secure and improve existing markets with more reliable market prices that will improve their ability to plan and make decisions.

The most common alterations already made by farming enterprises over the last five years have been in the areas of:

- Infrastructure investment
- Altering commodities produced
- Improving grazing practices and pasture management

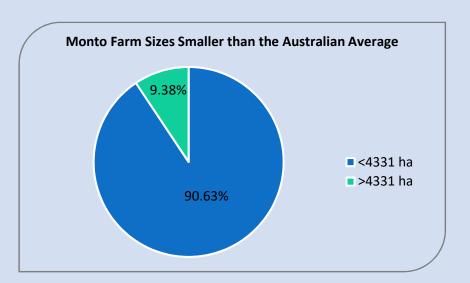


Monto producers highlighted their struggles and challenges with maintaining reliable or predictable returns, along with the ability to raise capital to take advantage of opportunities and implement practice change. Many feel that they are not being heard during government consultation processes, nor the sustainability of their farming futures considered in policy development, infrastructure investment or market regulation.

Over 90% of respondents operate on land sizes under the national average of 4331 hectares (refer to graph top right).⁵ Although, "currently there is no clear definition of a small farm – small means different things to different people"¹⁴. Farms in the Monto district are generally considered to consist of small to medium operations, as they are well below the national average of 4331 hectares, with the average size of respondents farms being 1560 hectares and the smallest at 32 hectares.

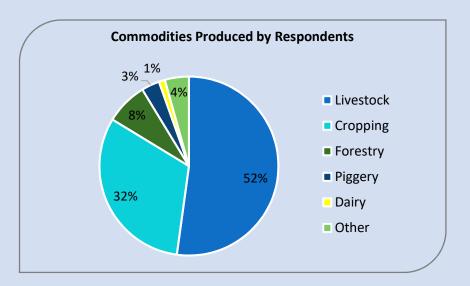
Over half of survey respondents were livestock producers, 32% produce broad acre crops, 8% are timber producers, 3% are pork producers, 1% were dairy producers and the remaining were tree crop producers, feedlots managers and pasture seed producers (refer to graph below right). The majority of producers however, were producers of more than one industry.





"The Monto area has many primary production assets and many potential areas for development of new business ideas."

— Monto grazier and timber producer



Ninety-eight percent of the survey respondents rely on water infrastructure (e.g. dams, bores) to operate their farming enterprises regardless of whether their enterprise was cropping, horticulture or livestock. Fourteen percent relied on water source from bores, 10% from private storage infrastructure such as on-farm dams and only 2% relied solely on creek or river systems. Seventy-four percent of the respondents rely on a combination of more than one water source, in addition to rainfall (refer to graph below right).

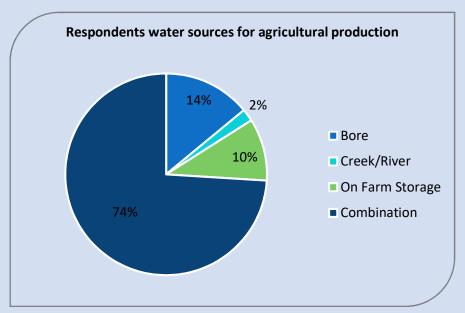
Survey respondents rated, in order, the following factors as the most important to improving the profitability of their agricultural businesses:

- Electricity costs
- The scale of their enterprise
- Input costs
- Livestock reproductive rates
- Market reliability and diversification
- Pests, weeds and disease

These factors were carefully considered and taken into account when developing the Outcomes and Actions of this Strategy.









Challenges and Opportunities for Regional Agriculture

Agriculture in Australia has evolved exponentially over the last 230 years from a mere 7 horses, 7 cattle, 29 sheep, 74 pigs, 5 rabbits, 18 turkeys, 29 geese, 35 ducks and 209 fowls reported in 1778, to the \$60.8 billion immensely diverse industry that it is today. Changing markets, consumer demands and environmental conditions continue to create challenges and opportunities for Australian regional agriculture, and the ability to proactively address these is key to the long-term viability and sustainability of this industry.

The following is a SWOT analysis overview, taken and developed from community consultation data and industry research for the Monto district.

Internal **Strengths** Weaknesses Soil fertility Inadequate road infrastructure to transport produce effectively Climate Limited farm size of individual enterprises Quality of produce grown Limited access to multiple independent and impartial agronomic advice and practice management options High vields Longevity of farming history in the region Increase in younger more entrepreneurial farm ownership Potential to increase regional productive output Negative Positive **SWOT Opportunities Threats** • Access to knowledge regarding the improvement of soil health, Changing international markets more efficient use of natural resources, improved farm practice and Continuing decline in regional population implementation of best management practices to advance Rising cost of labour and input expenses production Extreme weather conditions • Alternative and emerging markets such as agritourism, value Biosecurity risks, disease, weeds and pests (e.g. African swine flu in adding, market trends, niche products, diversification and the pork industry, pasture dieback in the grazing industry) specialised marketing Changing legislation (e.g. vegetation management impacts on the • Increased investment in regional infrastructure timber industry)

External

As competive pressures are exerted by influences such as globalisation, population increases, changing international markets and consumer demands, farming is experiencing a transformation. The trajectory of present-day agriculture in Australia is substantially different from the past. Producers who were once relatively independent commodities producers selling products under state-authorised marketing arrangements, have been progressively integrated in the industrial food sector. Control over the production chain now rests with off-farm entities such as banks, food processors and supermarkets having greater influence and control in processes. Due to a decline in state funded involvement, producers are relying heavily on agronomic advice and practice management options from input suppliers or market contractors. This raises concern regarding the quality and impartiality of advice, and the additional reduction in autonomy of producers, placing them in a one-sided dependent relationship with agricultural input businesses and production contracts.²¹ Monto predominately relies on the support and advice of one local agronomist for the cropping industry, which places the district's producers in a heavily vulnerable situation if this advisor becomes ill, injured or unavailable.

Economic pressures pose challenges and to ensure viability, farms are often forced to become larger in size and more productive.²¹ Additionally, changes in overall lifestyle (such as an increase in migration to coastal areas, rising incomes and labour expenses and severe weather conditions such as flood and drought) impact the farm size required to maintain viability.^{3,6,26,41,48} Even so, many rural regions are enduring contraction resulting from policy and the withdrawal of services and infrastructure, not because of changes in the agricultural sector itself.²¹



In addition to these, the sophisticated technologies and mechanisation associated with precision farming, resulting in higher yields, cost savings for fertilisers and pesticides, reduced environmental impact and higher quality produce, primarily serve large-scale commercial farming with economies of scale, contributing to larger farm sizes.^{25,31} This economy of scale has favoured specialised production of one or two crops/livestock for production, with the assistance of access to genetically diverse crops and livestock, allowing producers to select breeds most suited to their needs and conditions.^{25,30,31}

Despite the challenges that exist for modern agriculture, there are numerous opportunities available for producers in the Monto district. Some of these include access to knowledge regarding the improvement of soil health, more efficient use of natural resources, improved farm practice and implementation of best management practices to advance production.⁴² In addition, opportunities exist in alternative and emerging markets such as agritourism, value adding, market trends, niche products, diversification and specialised marketing, along with the increased investment in regional infrastructure.

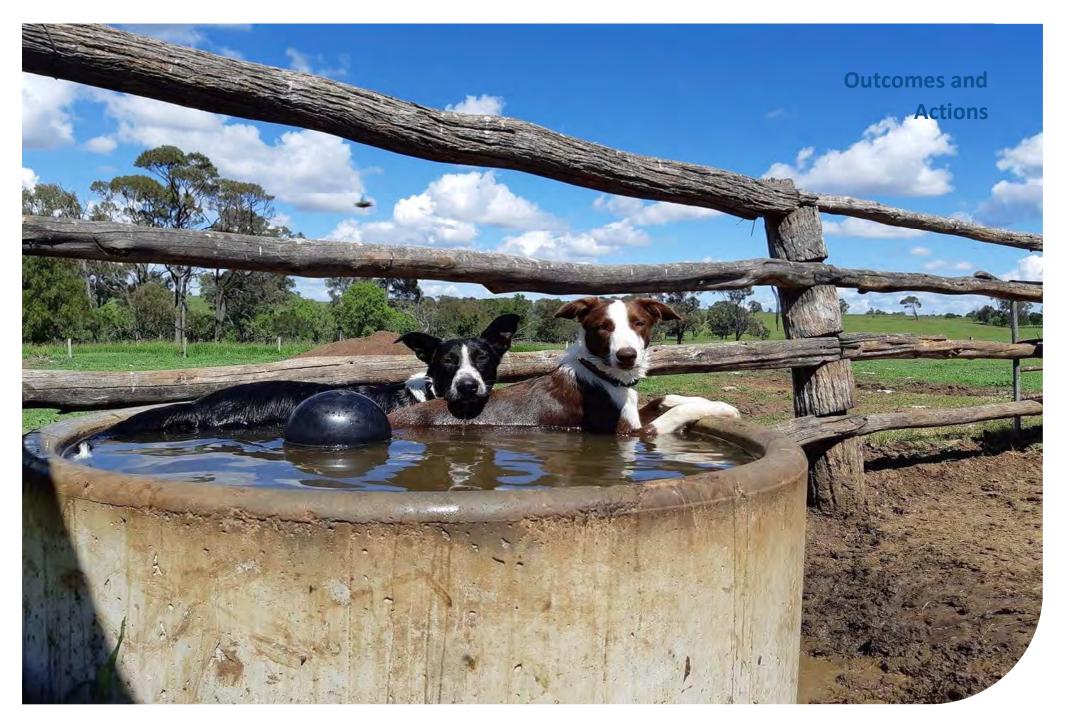
Smaller family farm holdings, such as those in the Monto district, often struggle to compete with larger enterprises' economies of scale. However, there is an opportunity to develop their own niche markets and value adding to their produce with the use of specialised marketing - such as provenance branding that is unique and recognised by high value consumers.



Many farmers "are taking more control of their product and processing, as well marketing their products into niche environments." Chris Morrison (Business Coach)



Value adding specialist, Creative Cuisine managing director Roger Graf, believes that "farmers have not yet begun to scrape the surface of opportunities their produce could be used for."



Outcome 1: Access to Information, Tools and Resources

Successful farming is becoming increasingly knowledge intensive, requiring producers to have timely access to the latest accurate and regionally specific information regarding everything from weather patterns and climate change, crop management and market trends, technology and innovation, soil health and biodiversity, biosecurity and animal husbandry. 12,30,44

Monto producers are often smaller scale family enterprises where they are required to work both on and off-farm, making them exceptionally time poor, in addition to being rurally located, away from effective telecommunication infrastructure. This makes it difficult for producers to gain timely access to information that improves their skills and knowledge, while keeping them abreast of industry developments and innovative advancements.

Objective 1.1: Producers have access to information and networks

Producers require access to timely, up-to-date information and benefit from networks and resources that allow for information sharing both in social and isolated paddock settings. With the gradual decline in state funded extension provisions many producers have been left unsupported and without connection to the information and resources required to maintain or grow their businesses.

Enhancing the ability of farming communities to connect with knowledge banks, networks and institutions, improves productivity, profitability, food security and employment opportunities substantially (Food and Agriculture Organisation of the United Nations).

- Assist producers to be well informed, connected and equipped with skills, knowledge, networks and access to information that assists and supports them to make and implement confident informed business, agricultural and environmental decisions
- Develop a regionally specific 'SMART-Hub' (Sustainable Management & Agricultural Resources & Tools) - an online hub designed to enhance user accessibility and connection to regionally relevant, smart farming resources
- Support and promote educational opportunities for existing and aspiring agriculturalists
- o Encourage peer-to-peer learning and bridging social capital
- o Support the further growth and enhancement of the local Monto Growers Group
- o Support the development of a similar local grazing group



Objective 1.2: Improve farm planning, management, resilience and preparedness for climate change and natural disasters

Planning and management is essential for preparing and developing resilience to natural disasters and climate change. The ability to recover and attain full business functionality after disruption requires a transformation in "attitudes towards risk and a willingness and capacity to adapt to change". Farm resilience and adaptability development involves a triple bottom line approach through the planning and management of environmental, economic and social implications.

Understanding and preparing for the potential risks of natural disasters, climate change and climate change policies – including financial, business management, land rehabilitation, environmental engineering, risk management, decision making, crop selection, rotation and innovation, water security and management – are significantly important for farm planning and resilience development. Additionally, insurance implications and biosecurity risks rate high among the concerns of producers when dealing with the consequences of environmental extremes and policy decisions.¹⁹

"Farming Smarter, Not Harder: Securing our agricultural economy" identifies that farmers require support to "act now to prepare for future risks, particularly more frequent droughts under climate change. Without action to adapt to more variable and extreme weather, by 2050, Australia could lose \$6.5 billion per year in wheat, beef, mutton, lamb and dairy production."

- Action priority activities and themes identified in the 'Building Resilience in the Agricultural North Burnett: Community Needs Analysis' that are not addressed by that funded program
- Improve accessibility to information, tools and resources via a regionally specific 'SMART-Hub' (Sustainable Management & Agricultural Resources & Tools)
- Support and promote educational opportunities for resilience and disaster preparedness training
- Assist producers to connect with industry professionals regarding climate change, insurance, mapping, resilience development and innovation
- o Encourage personal connection, check your neighbours and mates
- o Support local council disaster and recovery plans
- o Advocate and support the availability of affordable crop insurance options



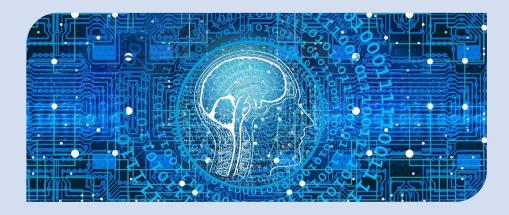
Objective 1.3: Improve telecommunications connectivity, coverage and accessibility

Effective Information and Communication Technologies (ICT's) are essential for modern agricultures' participation in state, national and international markets and economies. They are also an essential part of an overall rural development strategy such as the Monto Agricultural Strategy. Through enhanced access to information, rural communities can overcome some of the obstacles they face to developing and improving their economic and social well-being. ICT's can also assist in reducing social isolation, improve access to services, and increase business efficiency for rural and regional communities.⁵²

Enhancing the ability for farming communities to connect with knowledge banks, networks and institutions via ICT's improves productivity, profitability, food security and employment opportunities substantially. It also indirectly benefits rural development, banking, insurance, transportation, research and development, technology industries, innovation, service industries, conservation, tourism, individuals, communities and local business.^{29,30}

Actions:

- Advocate for telecommunication investment to increase connectivity, coverage and accessibility by Monto and North Burnett agribusinesses
- Support community, industry and other regional bodies (such as local government and non-government organisations) to lobby for telecommunications infrastructure investment



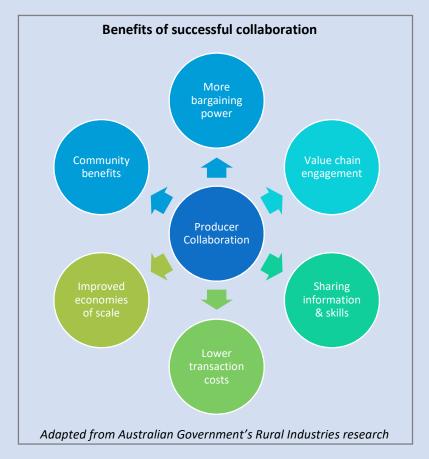


"Increased reliability would allow business growth in RRR (Rural, Regional and Remote) areas, given the importance of a stable internet connection for so many basic business operations e.g. stable reliable connections are needed for remote video monitoring equipment of livestock and weather conditions." Better Internet for Rural, Regional and Remote Australia (BIRRR)

Objective 1.4: Improve collaboration and information exchange between producers and industry

While producers benefit from the information exchange that occurs via networking with other producers and industry bodies, collaboration between producers and agribusinesses has far wider and significant potential.

Enhancing farming collaborations builds a foundation for a thriving agricultural ecosystem that offers producers the opportunity for higher returns in both domestic and international markets. Collectively taking greater control of their product, processing, value-adding, branding and marketing as well as input purchasing and resource efficiency, producers can connect directly with consumers, creating their own niche environments and improving productivity.⁴⁰ According to the Australian Government's Rural Industries *Local to Global* publication, collaboration can assist producers to shift from 'price takers' to 'price makers'.



- Encourage and assist in the growth and enhancement of the local Monto Growers Group by providing educational and social opportunities to build collaboration skills and capacity in the community
- Support the development of a similar local grazing group
- Nurture and encourage leaders and champions to drive change, knowledge and implementation aspirations
- $\circ \quad \text{Inform producers of current support programs, grant and funding opportunities} \\$
- Facilitate better connection between producers and industry (e.g. GRDC, MLA and AgForce)
- Support local leadership programs (e.g. BIEDO)



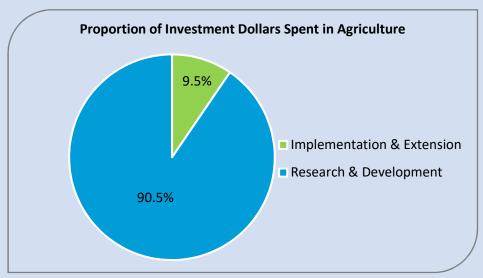
Objective 1.5: Improve access to extension services that link research and innovation to on-farm implementation

The gradual decline in government provision of extension services has left a significant divide between investment in agricultural research and development (R&D) and the implementation of these advances.^{29,49} In 2014-15, approximately 9.5% (\$316 million) of funding from both public and private sources, was invested into extension and implementation compared to R&D's \$2,997 million investment for the same period.²⁹

Local producers require greater support, communication, involvement and understanding of their needs by Australian agricultural innovation. By supporting farming groups through improved adoption and extension pathways, greater connection with R&D and the end users can advance and significantly expediate implementation and adoption practices by producers, thereby growing agricultural industries more effectively.^{29,33,34}

- o Develop and share knowledge through workshops, field days, online resources and community events
- o Provide extension services to producers to assist on-ground implementation of research and development
- o Facilitate connections between R&D institutions and end users (producers and land managers)
- Strengthen extension and adoption of innovation by enhancing and supporting the development of farming groups
- Support grazing and pasture management education to increase sustainability, productivity and profitability





Objective 1.6: Support the development and succession of skilled agricultural land managers

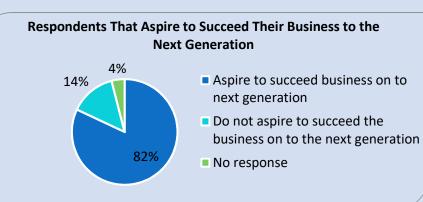
As more young people move away from family farms to pursue off farm opportunities in metropolitan areas, the average age of producers is continually increasing and farming skills are not being passed on to younger generations.

Ninety-nine percent of all Australian farming businesses are family owned and operated with an average age of 52 years (12 years above the national average for all other occupations) and are five times more likely to still be working past the age of 65. Successful succession planning tools are critical to encouraging and supporting new participants to replace our aging farming population, allowing more collective, transparent and multigenerational farming operations. Succession planning is essential to allow the smooth transition of the farming business and assets with minimal disruption.²³ Even though 82% of Monto producers aspire to succeed their businesses to the next generation (see graph below), much more needs to be done to facilitate this to become a reality.

- o Collaborate with industry and institutions to promote agriculture as a worthy career choice
- o Support and promote opportunities for agriculturalists to plan their farming enterprise succession strategy
- Support initiatives that enable young people to enter farming and access land (including start-up programs, shared farming, land leases etc.) and succeed at building a viable enterprise
- o Nurture and encourage industry champions and progressive farming elders to help inspire younger generations







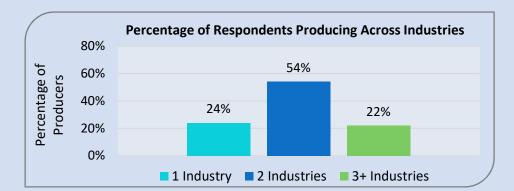
Objective 1.7: Understand and Streamline Legislative Requirements

Queensland's agriculture is subject to a plethora of regulatory requirements across all three levels of government, in addition to government endorsed industry regulatory obligations.⁴ Although they are often considered a barrier, regulations are important in that they provide "important protections for business owners, workers and the community, and set a minimum level of performance required to meet community standards and expectations".⁴⁴

However, excessive legislation can impede profitability with inconsistencies "across and within jurisdictions making it difficult for farmers to understand their obligations and adding to the cost of doing business." "The number and complexity of regulations affecting farm business means that the cumulative burden of regulation on farmers is substantial." ¹³

Many producers feel that they are not consulted and engaged in meaningful discussions regarding the "complex and regularly changing legislation" that adds to "landholder frustration in not being able to effectively manage agricultural production systems and balance income streams." 1

In addition, different industries often have varying regulations and legislative requirements making the challenge of understanding their obligations increasingly difficult for mixed commodity producers such as those in the Monto district. Seventy-six percent of survey respondents produce commodities over two or more different industries, such as cropping and grazing (refer to graph below).



Actions:

- Link producers to industry lobby groups (e.g. AgForce and QFF)
- Support industry lobby groups to advocate for legislation to be streamlined across all levels of government and improve consultation with producers
- Link producers to appropriate government departments to assist in explaining and interpreting legislation
- o Encourage communication between all levels of government

"Regulatory burdens impact on primary producers' capacity to operate their businesses through the time and energy required for compliance activities being diverted away from running their enterprises and seeking further productivity and profitability improvements." - AgForce

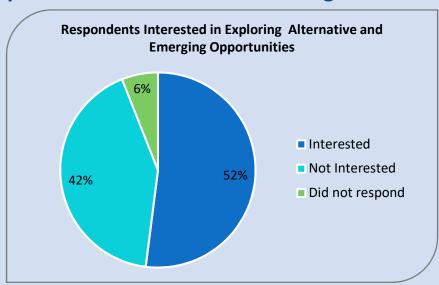


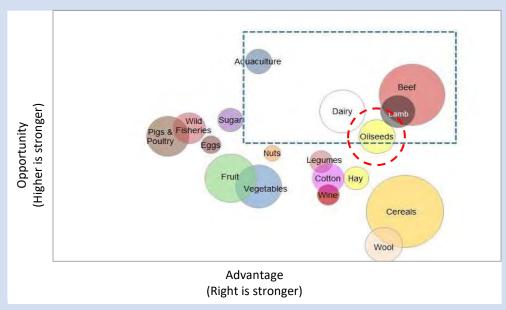
Outcome 2: Exploration of Alternative, Emerging Opportunities and Latest Technologies

The Monto region is well positioned to service a large, diverse and expanding consumer base of the greater Queensland area and the growing export markets of Australia. Benefiting from alternative and emerging opportunities, and the latest technologies involves education and taking a calculated risk.

Survey respondents rated diversification as one of the top five (5) most important factors to improving the profitability of their agricultural businesses (refer to page 17), with over half interested in exploring alternative and emerging opportunities (refer to graph top right).

Oilseeds were rated as one the 'Fantastic Five' industries that is both well positioned to produce what the world is demanding and plays well to Australia's advantage (refer to graph below). Monto has suitable growing conditions, soils and water to take advantage of this high value emerging opportunity.







Source: Deloitte Access Economics

Objective 2.1: Increase agribusiness opportunities

Alternative and new opportunities can provide fresh and substantial economic benefits to farms, communities and regions. While diversification and value adding are becoming more common language (as rising opportunities to be explored) niche markets, consumer branding and interpreting market trends are not so common place. Yet these opportunities offer resilience building prospects and potential for substantial gains.

Even so, the structural characteristics of the Australian food market provide supermarket chains with dominant market power in distribution and wholesaling placing monopsony pressure on small to medium sized family farms that contribute most of the agricultural production in Australia, maintaining their position as price takers not price makers.¹²

One way of improving farm returns is through strong leadership and coordinated collaboration that can provide pathways to investigate, collaborate, innovate and implement alternative and emerging opportunities for producers. Proactive action allows producers to take immediate advantage of strategic opportunities such as changing markets, commodity trends, processing, value adding and specialised marketing - such as provenance branding that is unique and recognised by consumers. 12,45

Additionally, commodities outside of food, such as fibre and timber production, may provide opportunities for producers to diversify, improve returns and contribute to long term resilience and economic growth.

- Complete a detailed investigation into fresh innovative opportunities that suit the specific growing conditions of Monto and the North Burnett including the effect of changing markets
- Work with industry to attract funding and investment into research, development and productivity enhancement
- Provide information and support to producers by holding regular events that connect them with experts and industry to present diversification examples, market trends, innovations and opportunities that have local implementation potential as well as showcasing local success stories
- $\hspace{1cm} \circ \hspace{1cm} \textbf{Make this information available via a regionally specific SMART-Hub} \\$



Objective 2.2: Consumer expectations and increasing demand for premium food

Consumers are becoming increasingly selective and are no longer content to purchase standard produce that is available on scale. They are demanding food that meets their expanding expectations for ethical production. These growing expectations are providing an opportunity for producers to supply premium markets that meet quality, safety, provenance, credence, integrity, accreditation, certification and traceability requirements.⁷

Although food is essential and socially important to individuals, families and communities, Australians have become largely disconnected from their food production as it often takes place completely out of sight and away from metropolitan areas.³² Even so, consumers are increasingly desiring knowledge regarding the origin of their food to ensure it aligns with their personal values and are willing to use their money and buying power to make a stand regarding their values and beliefs (e.g. consuming organic, sustainable or ethically sourced products).

- Showcase to local producers, examples of family operated agribusinesses successfully producing premium products and meeting quality, safety, provenance, credence, integrity and traceability requirements for these premium markets
- o Connect producers with industry professionals that can educate and assist producers to access premium markets
- o Encourage producers to develop and communicate provenance related branding regarding the Monto region and their personal farm management stories
- Support NBRC's current activities, and non-government organisations, to promote the region as a unique, exceptional and quality food producing region
 of Queensland



Objective 2.3: Agri-tourism as a complementary income stream

As many small to medium sized family farms rely on off farm income to maintain their farming operations, being able to supplement primary agricultural incomes with an on-farm option can be highly desirable. Agri-tourism has the potential to do this while offering the opportunity to generate additional income from an existing land base with seasonal flexibility around harvesting, grey nomad tourism season etc.¹⁵

In addition, a thriving Agri-tourism ecosystem can have significant flow-on effects to the local community by promoting rural small communities to outside tourists that consequently spend money on local products and services, enhancing revenues and the overall local economy.

- Encourage and support information and resources that assist producers to viable Agri-tourism opportunities
- o Support North Burnett Regional Council's *Economic and Innovation Strategy* and promotion of the North Burnett as a tourist destination
- o Support Bundaberg and North Burnett Tourism's North Burnett Tourism Strategy





Objective 2.4: Utilising new and improved technologies

Technology and the opportunities associated with it are becoming increasingly more available to the agricultural sector. 'Agtech' (agriculture technology) includes digital technologies, precision machinery, robotics, water efficiency irrigation technology and smart farming data-based technologies.⁴⁴ While technology can improve productivity and increase output volumes to meet the demands of the future, the costs associated can be a significant barrier to implementation.

This is a very real challenge for Monto producers, as most farm holdings are small to medium sized enterprises that lack the economies of scale to gain the financial returns on major capital investment such as expensive spray coups, headers, large precision planters or variable rate application equipment.

A potential solution to this challenge is producers purchase new and improved technologies and offset the initial capital costs of new technology by contracting to other producers within the region. Another option could be collaborating to share the initial capital costs and sharing the acquired ag-tech across multiple farm holdings. Economies of scale issues could be combated through progressive producers with the desire to grow their business (but inadequate finances to purchase more land) leasing suitable land that is not being utilised to its potential.

- Investigate ways to utilise new technology (e.g. Collaborate to purchase new technology, encourage sharing of new technology, contracting etc.)
- Encourage the exploration and implementation of new technologies that improve productivity and approaches that can help combat the economies of scale issues
- Support producers to understand and utilise cost benefit calculators to determine the return on investment expected to ensure any major capital expenditure has the potential to be profitable



Outcome 3: Advocacy, Promotion and Pursuit of Regional Infrastructure Investment

Regional infrastructure is critical to maintaining and developing economies, education, innovation, social capital and resource supply to metropolitan users. Deficiencies in infrastructure and government support has led to increased transportation, processing, energy and telecommunication costs for rural and regional communities, contributing to the decreased viability and resilience of farming enterprises and communities.^{21,46}

Additionally, lack of infrastructure investment can significantly contribute to carbon emissions associated with energy and transportation. Given Australia's large geographical spread and isolation, regional infrastructure investment is critical to growing our economy, decreasing the impact on natural resources and building Australia's resilience to tackle climate change.

Objective 3.1: Improved Road and Rail Transport Infrastructure

Effective and efficient transportation of agricultural commodities is an essential element of the supply chain. To plan and grow agricultural agribusinesses and economies, certainty and efficiency of transportation is a necessity.

Inadequate transport infrastructure (road and rail) increases logistics, compliance and safety costs exponentially, especially for smaller to medium enterprises or regionally isolated communities, despite their economic producing potential.³⁶ This also adds to a substantial increase in carbon output.



The Federal Government's Inland Rail Route Project through the Australian Rail Track Corporation, announced in 2017, will connect Brisbane and Melbourne via regional Victoria, New South Wales and the Queensland/NSW border through Toowoomba. Access to markets from the North Burnett and Central Queensland regions, via this infrastructure, presents a series of challenges and opportunities that will place additional pressure on current road network systems.

KPMG and the National Farmers Federation highlighted in their *Talking 2030: Growing Agriculture into a \$100 Billion Industry* discussion paper, that additional investment into ancillary rail infrastructure, intermodal freight facilities and supply depots will be required to reap the benefits from this project and ensure that it is successful. However, this project offers the opportunity to begin creating an "infrastructure spine for freight haulage for agricultural producers and suppliers. However, it is only one element of what will be needed for a fully integrated logistics chain. It will be important not to overlook the need for ongoing investment in the 'supporting limbs', to bring the vision to life and realise the wider benefits in regional Australia." (Graham Matthew, Partner, Head of Infrastructure and Projects Group for Queensland KPMG Australia).³³

Adequate and efficient transport infrastructure is an important part of the supply chain.¹¹ Key findings from Productivity Inquiry: Regulation of Australian Agriculture 2016 state that "agricultural competitiveness is critically dependant on efficient and cost- effective transport system[s]" and recommend to increase the number of routes gazetted for heavy vehicle access, with provision for users to propose routes.¹³

Australia's size and geographic location mean that transport continues to form a large proportion of the overall cost to producers, yet efficient and effective public infrastructure supports economic productivity growth and are key to Australia's competitiveness.¹¹

- Advocate and promote for additional B-Double grade road and rail investment to improve and extend commodity transportation options and efficiency for the Monto and North Burnett region
- o Connect producers with advocacy groups and government entities to collectively communicate their road and rail infrastructure needs
- Encourage producers and regional bodies (such as local government) to develop strategic priorities for road infrastructure to help inform government investment
- o Support WBBROC's First and Last Mile and Freight Logistics projects and its Building the future trade potential of Wide Bay Burnett agenda



Objective 3.2: Local Processing and Storage Infrastructure

Infrastructure has proven to be a successful catalyst for the generation of economic development in rural and regional areas with far reaching benefits for the wider state and national economies. However, with a withdrawal of government investment in public infrastructure linked to financial challenges of governments in the 1970's and 80's, regional areas are now in danger of being excluded and alienated from the global environment due to lack of access to services, deficiencies in infrastructure and low levels of government support with unsustainable expectations that these regions are completely self-reliant and self-sustaining.²¹

Many survey respondents expressed a need for local commodity processing, including the storage infrastructure to facilitate the dispensation, value adding and sale of their produce, to both remain viable and to grow their businesses.

With the continued decline of regional investment by governments, a need to attract private investment or to collaborate locally for these developments may be pertinent.

Actions:

 Support local producer groups to actively pursue private investment, government funding and possible collaboration options

Objective 3.3: Improved Telecommunications Coverage and Quality

Telecommunications and associated technologies provide an exciting new platform to deliver services to rural communities, but infrastructure must keep pace with demand.^{32,33} Access to effective current communications technology and infrastructure is critical to Monto's, and indeed Australia's, agricultural success in a changing global environment.²¹

Rural telecommunications infrastructure is critical to the sustainability and advancement of Monto's agricultural industry and more broadly Australia's, as well as the nation's economy overall.



- Support NBRC and WBBROC in their pursuit of improvements to regional telecommunications
- Advocate for telecommunication investment to increase connectivity, coverage and accessibility by Monto and North Burnett agribusinesses
- Support community, industry and other regional bodies (such as local government and non-government organisations) to lobby for telecommunications infrastructure investment

Objective 3.4: Securing Affordable Energy Supply

Energy is essential for agricultural production and the costs associated are often one of the largest input expenditure items for producers. As pressures for production efficiencies increase, along with the effects of climate change variability, producer's reliance on water and its associated pumping costs are likely to intensify.³⁸

Increasing energy efficiencies and reducing exposure to projected increases was raised as a concern by participants. Producers are curious about renewable energy - solar, wind and bioenergy, with Monto having a long history of advocating for biogas electricity generation from the district's large supply of piggery effluent.





According to the Australian Government Department of Environment and Energy, opportunities exist for Australian producers to better control their energy costs by:

- improving practices and systems
- changing or modifying equipment
- switching to alternative, less expensive energy sources
- purchasing energy more strategically

- Action priority activities and themes identified in the 'Building Resilience in the Agricultural North Burnett: Community Needs Analysis' that are not addressed by that funded program
- Support Burnett Inland Economic Development Organisation's (BIEDO) North Burnett
 Ag Network Energy Forums
- Assist in the collection and ground truthing of information that will assist in prioritising and directing investment
- Provide peer-to-peer support to assist in education and implementation of new renewable off-grid technologies
- Support community, industry and other regional bodies (such as local government and non-government organisations) to lobby for changes to electricity price reduction and stabilisation

Objective 3.5: Securing Affordable Water Access

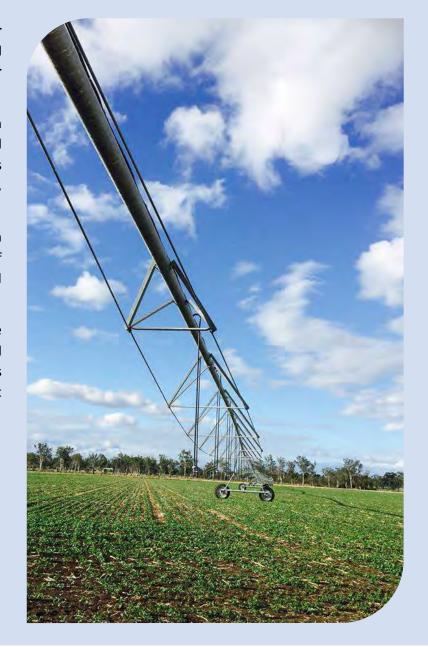
Water and agriculture are inseparably linked, with water being essential for agricultural production and productivity. If producers are to meet the State and Federal Governments' commitments to double agricultural production, affordable access to water must be secured.

Monto's agricultural industry is well positioned to take advantage of the growing demand in domestic and international markets for high quality produce. However, reliable and affordable water security is required to make this a reality. Increasingly, water insecurity is becoming a 'threat multiplier' in the face of market instability, environmental pressures, climate change, droughts, population increases and the rising demand for water. ⁴²

Sunwater manages the agricultural and domestic water supply to Monto via the Three Moon Creek Scheme serviced by Cania Dam (with a storage capacity of 88,500 ML) and a series of weir storages. Periodic releases from the dam assist in the replenishment of the ground water aquifer. Irrigation also occurs along the Monal and Splinter Creek systems.⁴⁹

The installation in recent years of more efficient irrigation infrastructure such as centre pivots and laterals by Monto producers is a positive step in improving the efficiency and effectiveness of water use. It is anticipated that this trend will continue so long as commodity prices remain at a level to warrant the investment, capital costs are not prohibitive and water is affordable.

- Support community, industry and other regional bodies (such as local government and non-government organisations) to lobby for security and affordable water access for agriculture
- Connect producers to water efficiency technology and educational resources
- o Support WBBROC's Water for Economic Development project
- Support community, industry and other regional bodies to lobby government to ensure when water becomes tradeable on the market through Sunwater in the coming years, that it is affordable





The Future of Agriculture and Farming in Monto

Agriculture is integral to Monto's economic, social and environmental fabric. It underpins the entire North Burnett economy and is fundamental to the region's continued existence and future development. Agriculture provides the food, infrastructure services, environmental stewardship, natural resource management, household and consumer incomes.

Sustainability: To effectively sustain and develop the Agricultural industry in Monto a holistic root-cause approach must be utilised by applying the *Triple Bottom Line* method to sustainability, loosely defined as *People, Profit and Planet*. This is imperative to understanding the intrinsic connection between environmental vitality, economic security and social well-being.

Productivity Growth: Economic development theory stresses that synergies of social capital and networks are required to stimulate productivity growth in regions by ensuring that productivity-stimulating inputs are present such as human capital resources, information and transport infrastructure. It is "clear that the attraction and retention of human capital and the nurturing and enhancement of social capital are increasingly crucial to the future of rural communities".²¹

PLANET
Natural
Environment

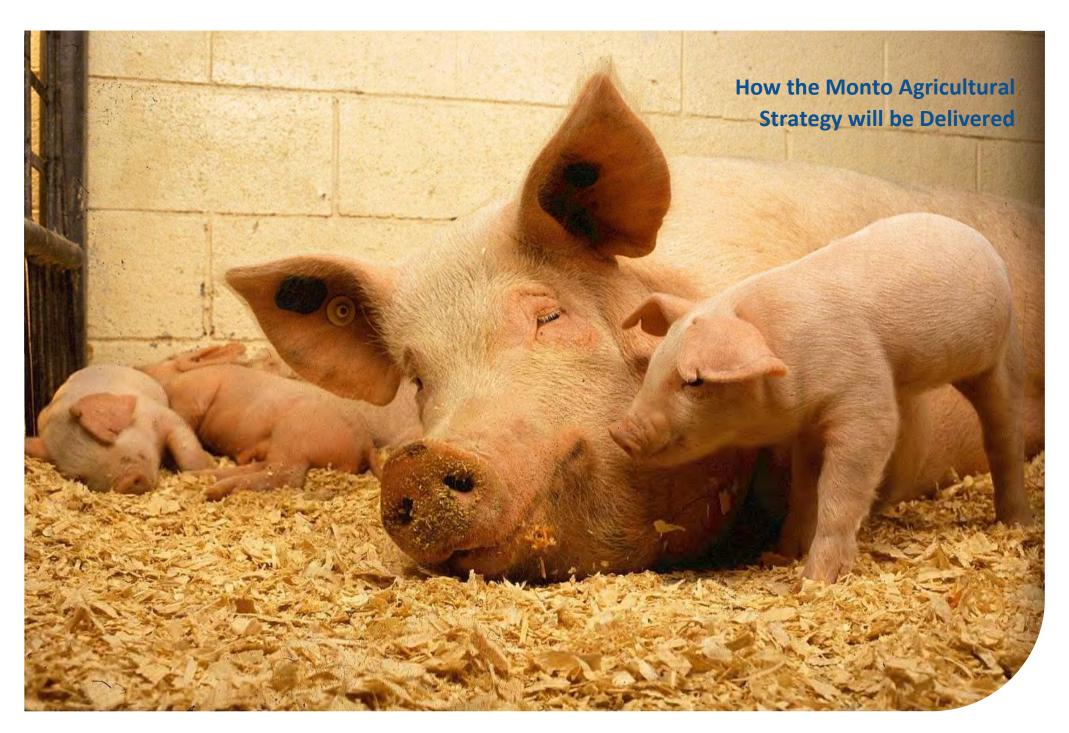
PROFIT
Economic
Vitality

PEOPLE
Social
Wellbeing

Accessibility to Knowledge Resources: Regions are inherently at a disadvantage compared to cities regarding their capacity to "offer access to dense networks of knowledge-rich resources that are increasingly important to new economic activity". The Food and Agriculture Organisation of the United Nations: E-Agriculture Strategy Guide also states "the agriculture sector faces many challenges posed by climate change, loss of biodiversity, drought, desertification, increase in food prices and inefficient supply chains. The sector is increasingly becoming knowledge-intensive, and the availability of the right information, at the right time, in the right format, and through the right medium, influences and affects the livelihoods of many stakeholders involved in agriculture and related fields. The availability, accessibility and applicability of agricultural research outputs are keys to addressing a range of issues related to food security."

Monto has several progressive producers who have sought out information, adopted more sustainable practices, diversified their production commodities and made business changes to take advantage of market opportunities as they arise. BCCA works with producers to increase their access to knowledge, continually improve their agricultural practices and to strive for sustainability, productivity, prosperity and resilience.





How the Monto Agricultural Strategy Will be Delivered

Implementation of this strategy is required from all levels of the community including government, non-government organisations, grower groups and industry. Realising this vision is a shared responsibility that does not rest with a single group or organisation, but rather successful implementation will require a collaborative effort and investment from all stakeholders and levels of government.

The Monto Agricultural Strategy will be delivered through a combination of, but not limited to:

- Research and development
- On-ground delivery
- Technical support
- Education
- Infrastructure investment
- Advocacy and promotion

Communication and collaboration by all stakeholders are essential to ensure the effective delivery of the strategy as well as avoid gaps and unnecessary duplication of actions.





Conclusion

The initial motivation for this strategy was inspired by leading members of the Monto Growers Group who sought direction following severe flooding in October 2017 and combined losses in excess of \$4.5 million. This event alone, was one of seven natural disaster flooding events that were declared over an eight year period, in addition to two separate drought declarations.¹⁸

The Monto Agricultural Strategy has been compiled as a foundation from which the community, service providers and government can implement meaningful actions that will build Monto, and the greater region's long-term agricultural and economic prosperity. This strategy has been formulated as a pilot study for potential implementation through-out the remainder of the North and South Burnett regions. It is designed so that the community, stakeholders and government may build upon the findings and research of this strategy to implement meaningful projects that assist in creating a sustainable and thriving agricultural industry in Monto.

Local grower groups (such as the Monto Growers Group) will be able to use this resource to not only build on their core membership base to include more agriculturalists across the district and create greater social support, cohesion, collaboration and peer-to-peer learning that will assist them to make informed decisions for their own businesses, but also to pursue funding for invaluable research, infrastructure and market development.

In addition, this strategy provides a foundation for public agencies and private providers to consider the region for future research and development opportunities and as a platform for BCCA, NBRC, BIEDO and other stakeholders to leverage funding to develop, upgrade and build critical infrastructure and implement onground projects that will secure and grow our long-term agricultural economy and communities.

It is evident, from the producers involved in the development of this strategy that the majority of Monto producers are enthusiastic to take advantage of the opportunities created from increasing domestic and global populations and their demand for high quality produce. They are also eager to tackle the challenges of our changing environment and global economy so that they can build a long-term and sustainable future for generations to come. However, they require support and leadership to make this a reality.

Approximately one third of Australia's population resides outside major capital cities, yet an impressive 67% of all exports come from these same rural and region areas.^{37,47} These regions are critical to securing and growing Australia's national economy. The long-term agricultural economic success of Monto, will contribute significantly to the long-term economic prosperity of the entire North Burnett, the state of Queensland and Australia as a whole.



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Acronyms and Abbreviations

ABS	Australian Bureau of Statistics	MLA	Meat and Livestock Australia
BBRF	Building Better Regions Fund	NBRC	North Burnett Regional Council
BCCA	Burnett Catchment Care Association Inc.	NRM	Natural Resource Management
BIEDO	Burnett Inland Economic Development Organisation	QFF	Queensland Farmers Federation
BIRRR	Better Internet for Rural, Regional and Remote Australia	R&D	Research and Development
GDP	Gross Domestic Product	SMART-Hub	Sustainable Management & Agricultural Resources & Tools - Online Hub
GRDC	Grains Research and Development Corporation	SWOT	Strengths, Weaknesses, Opportunities, Threats
ICT	Information and Communications Technology	WBBROC	Wide Bay Burnett Regional Organisation of Councils
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