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BURNETT CATCHMENT CARE ASSOCIATION



JUNE 2022

Western Burnett Agricultural Strategy

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Western Burnett 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.

We also wish to acknowledge the contributors to the Agricultural Strategy; the landholders, producers, communities groups, community members and industry groups.

The Western Burnett Agricultural Strategy was developed by Burnett Catchment Care Association (BCCA) and made possible thanks to the Australian Government's 'Building Better Regions Fund - Community Investment Stream'.



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Contents

Message from the Chair	6
About the Western Burnett Agricultural Strategy	7
Western Burnett's Agricultural Industries	8
Why an Agricultural Strategy is Needed	10
How the Strategy was Developed: Methodology	11
What the Community Told Us	12
Agricultural Strategy for the Western Burnett Survey Results	13
Other Survey Results	16
Challenges and Opportunities	18
Outcomes and Actions	22
Outcome 1: The Human Factors	23
Objective 1.1: Address Human Resource Concerns	24
Objective 1.2: Making the Most of Innovation	25
Objective 1.3: Support Succession Strategies	26
Objective 1.4: Size Doesn't Matter	27
Outcome 2: Resilience is Required Against Shifting External Factors	28
Objective 2.1: International Influences	29
Objective 2.2: Climate Challenges	31
Objective 2.3: Biosecurity Risks	33
Outcome 3: Cross Regional Issues	34
Objective 3.1: Telecommunications	35
Objective 3.2: Improved Road and Rail Infrastructure	36
Objective 3.3: Understand and Streamline Legislative Requirements	37
Objective 3.4: Affordable and Reliable Energy	38
Objective 3.5: Agri-tourism as a Complementary Income Stream	39
The Future of Agriculture in Western Burnett	40
How the Strategy Will be Delivered	41
Conclusion	42
References	43
Acronyms & Abbreviations	46

“With the ever increasing global demand for high quality fresh produce, this region is well placed to capitalise on this into the future.”

Paul Lobegeier, Chair



Message from the Chair

The Western Burnett region is a diverse and productive part of Queensland with its fertile flats prime for horticulture through to its native and improved pastures suited to breeding and growing high quality beef cattle. With the ever increasing global demand for high quality fresh produce, this region is well placed to capitalise on this into the future.

This Western Burnett Agricultural Strategy outlines the importance of the human factor. The majority of our farms are family farms and therefore human resources, innovation, succession planning, operation size and financial literacy are all factors that play an important role in the success of Western Burnett agribusiness enterprises.

Resilience is key to a successful agricultural industry. International influences have always played a part in Australian agriculture and recent times' events including Covid 19 and the Ukrainian war have been no exception. Climate challenges and biosecurity risks are ever increasing and our farmers are always adapting to find new and innovative ways to combat these issues and move forward.

I commend BCCA's team and the Western Burnett community for coming together to develop a comprehensive strategy and key actions to improve and enhance our agricultural industry into the future.

Paul Lobegeier, Burnett Catchment Care Association Chair



About the Western Burnett Agricultural Strategy

The Western Burnett area consists of the old shire districts of Eidsvold and Mundubbera and as the leading employer and greatest contributor to gross regional product, the local agricultural industry is integral to the region. This strategy is intended to provide vision and direction for local producers and support the development of sustainability, profitability and resilience within their rural operations. Local producers, community, industry and government have been vital to the development of this strategy. The knowledge and experiences of producers and thorough industry research was utilised to identify the key drivers, outcomes, objectives and actions for this strategy.

The Western Burnett grazing community responded enthusiastically via survey regarding factors such as their type of operation, current market options, use of technology, labour requirements and use of extension services. They reported that they are primarily a young group of first generation farmers whom are looking to technology and industry professionals to help them seek information and assist with important management decisions. In order to capture data pertaining to the local citrus industry, information was sought from the Growcom Future Fields program and referenced throughout this strategy where appropriate.

An international pandemic, extreme weather conditions and strong demand for agricultural produce continue to provide challenges and opportunities for agricultural producers in the Western Burnett region and test the resilience of even the most profitable producers. Western Burnett producers have been challenged by labour shortages, freight interruptions, supply chain issues and increased input costs. However, buoyant prices, emerging markets and technological advancements have also created business opportunities for those who are poised to adapt to changing market conditions.

Key drivers identified by the community that affect the Western Burnett's agricultural sustainability were:

- Environmental sustainability including drought mitigation and water security
- Financial viability
- Human resources
- Legislative requirements

The strategy consists of three (3) outcomes:

- The Human Factors
- Resilience is Required Against Shifting External Factors
- Cross Regional Issues

A number of key objectives are further explored under each outcome along with practical actions that can be undertaken by all relevant stakeholders, including BCCA to improve the profitability, sustainability and resilience of agribusiness in the Western Burnett.



Western Burnett's Agricultural Industries

The Western Burnett area consists of the old shire districts of Eidsvold and Mundubbera. The old Eidsvold and Mundubbera shires are the two most western districts within the North Burnett Regional Council area. The Eidsvold district is known as the beef capital of the Burnett and is approximately 405km northwest of Brisbane while Mundubbera is better known as the citrus capital of Queensland and can be found approximately 360km northwest of Brisbane.

Home of the Wakka Wakka people, the topography of the region is diverse, ranging from gently undulating, softwood scrub country to deep, alluvial loam flats along the Burnett, Auburn and Boyne rivers. Agriculture in the region is by far the leading sector of employment and the greatest contributor to gross regional product[i](id community, 2016). The major contributors to gross regional product include beef production, citrus, fruit and vegetable horticulture, cropping, forestry and tree nuts.

The Archer Brothers, Thomas and Charles settled both districts in the late 1840's and established the grazing properties known as Eidsvold Station and Mundubbera Station. Eidsvold Station is believed to be where the first Santa Gertrudis cattle were bred in Australia and the town of Eidsvold itself was founded as a result of a gold rush in the 1880's. The famous Australian grazier and businessman, RM Williams, lived on a cattle station known as "Rockybar" to the west of Eidsvold from 1955 until 1972 and has since had the RM Williams Australian Bush Learning Centre (established 2010) named in his honour.

Prior to its association with citrus, Mundubbera boasted a successful butter factory operation from 1916 to 1980, supported by the already established railway infrastructure.

The Western Burnett is comprised of large rural farm holdings in the form of commercial grazing properties to the west and smaller, more intensive citrus, cropping and grazing properties in the east of the region, closer to Mundubbera. Producers are progressive in their pursuit of drought resilience and sustainability with landholders seemingly adapting well to technological advancements in the industry and seeking professional assistance when required to implement various management techniques. Examples of these include:

- Rotational grazing practices
- Integrated Pest Management (IPM)
- Erosion management and topsoil retention
- Drought mitigation and water storage management
- Protection of riparian zones
- Reducing sediment run off to waterways and the Great Barrier Reef
- Pasture improvements
- Investing in infrastructure

Figure 1 (below) shows the landuse make up of the Western Burnett. The region is predominately livestock grazing with significant areas of forestry. Smaller, more intensive areas along the Burnett River are irrigated and dryland cropping and irrigated perennial horticulture (mostly citrus).

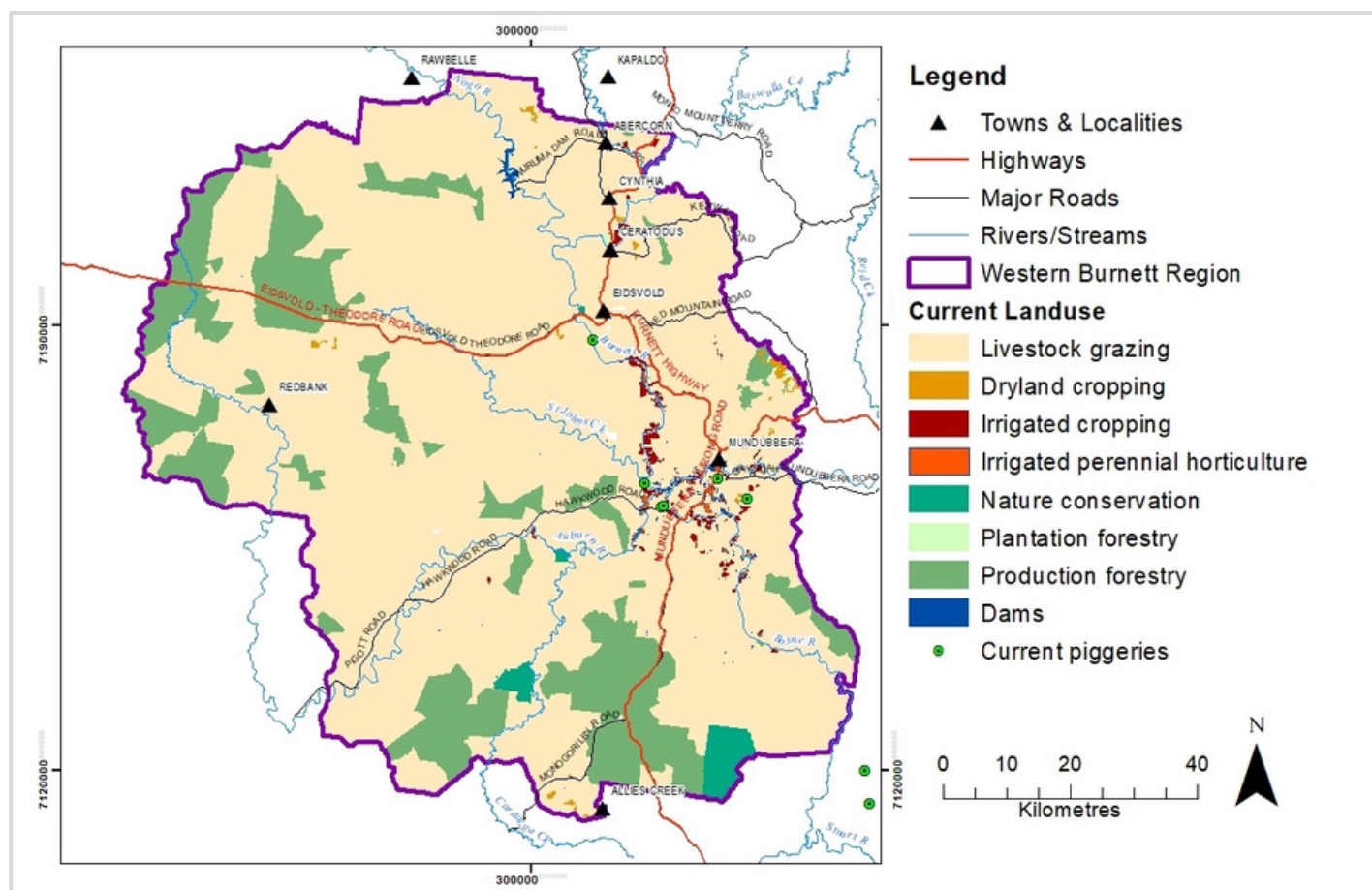


Figure 1 : Landuse Map of the Western Burnett



Why an Agricultural Strategy is Needed

"Australian agricultural producers manage significant variability, including a highly variable climate and volatile commodity prices. These factors generate substantial variation in farm output and incomes, greater than that experienced by farmers in most other countries and greater than that experienced by business owners in other sectors of the Australian economy," (Keogh, 2012) referred to in (ABARES, 2022). Western Burnett producers can attest to the volatility associated with being in agribusiness over the past decade having endured three drought declarations and several natural flooding disasters coinciding with an international pandemic, fluctuating commodity and input prices and supply chain interruptions.

Modern agriculture is becoming increasingly complex and requires "knowledge derived from areas as diverse as plant and animal biology and behaviour, chemistry, statistics, land resource, genetics, environment and climate; and the integration of this knowledge with economics and modern information technologies" (NFF, 2018). Empowering Western Burnett producers with long-term strategic direction will ensure that they are in step with the national agricultural industry and ensure that they "think strategically, work collaboratively and exhibit strong leadership" as per the vision provided by the National Farmers Federation's 2030 Roadmap that is striving to exceed \$100 billion in farm gate output by 2030 (NFF, 2018).

As the leading employer and greatest contributor to gross regional product, the agricultural industry is integral to the Western Burnett and so it is timely to develop an agricultural strategy that will provide direction for local producers and support the development of sustainability, profitability and resilience within their rural operations. Chair of the Growcom Future Fields Advisory Committee Angus Ferrier considers that "now is a perfect time to be thinking and acting strategically to stay ahead of the game" (Growcom, 2022).

An agricultural strategy for the Western Burnett will:

- Consider economic, market, consumer and environmental trends to find fresh and innovative opportunities in the agricultural industry to yield financial reward for growers, the local economy and the community as a whole.
- Develop a platform for greater productivity, community well-being and economic growth.
- Encourage diversity and build resilience to changing climates and markets.
- Build strong partnerships and community connections that advocate efficiency, innovation, trust and leadership.
- Build capacity within the region to further enable growers to develop and action business plans.
- Drive recovery and employment in Agriculture in the Western Burnett District.
- Provide leverage to encourage public agencies and private providers to consider the region for future research and development and project funding opportunities.
- Provide stakeholders a platform to leverage funding to bolster future grant applications and requests for government assistance.
- Assist stakeholders with making well informed long term decisions for the region.
- Enhance community cohesion via grass-roots support and effective collaboration from community groups and other stakeholders.
- Enhance regional economic, environmental and social resilience.



How the Strategy was Developed

Local producers, community, industry and government have been vital to the development of this strategy. The knowledge and experiences of producers and thorough industry research was utilised to identify the key drivers, outcomes, objectives and actions for this strategy.

Initially, the current position of the Western Burnett agricultural industry was established, including identifying key stakeholders and potential constraints. More vital information was captured via a comprehensive survey that was circulated to all rural addresses within the region, shared on social media and disseminated via rural stores, with an incentive offered for the completion of the survey. While the survey was circulated, BCCA staff liaised with individuals and relevant community groups in the region.

Surveys were received from around the region and represented an accumulated land management area of greater than 85,000 hectares. Questions regarding general demographics, land holding sizes, soil and land types, commodities produced, water usage, labour, technology and energy use, ramifications of Covid-19, use of extension services, recent changes to enterprises, most important factors considered to affect profitability and economic success, interest in diversification, threats, succession, infrastructure and general comments were asked of producers.

Survey results showed that the majority of respondents represented the beef industry with a minority including horticulture, cropping and forestry. Given BCCA's knowledge of the agricultural industry in the region, it was apparent that horticulture and more specifically citrus growers were potentially under-represented in the survey responses. As a result, the Strategy Development Officer called on BCCA's collective knowledge of the horticultural industry and liaised directly with horticultural industry groups such as Growcom.

The Future Fields program funded by the Queensland Government and facilitated by Growcom to develop a strategic plan for the Queensland fresh produce sector is well aligned with the Agricultural Strategy for the Western Burnett and identifies bounded areas of strategic interest amongst citrus growers. Where specific alignment was identified between themes developed throughout this project and the Future Fields' program, the Future Fields' areas of strategic interest have been highlighted throughout the strategy.

Primary quantitative and qualitative data from the survey results was analysed and combined with extensive secondary research across industry networks and world-wide sources. Regional context was applied to ensure a strategy that Western Burnett producers can relate to and refer to for the benefit of their own agricultural businesses. The results and findings were then presented to a local reference group where feedback was sought, and changes made before the strategy was finalised.

The background of the page features a collage of financial data visualizations. In the top left, a blue pie chart shows segments for 6% and 18%. In the top right, another blue pie chart shows segments for 17% and 18%. A bar chart with blue bars is visible on the right side, with a y-axis ranging from 40 to 90. A line chart with two blue lines is in the bottom left, with a y-axis ranging from 500.00 to 3,500.00. A silver pen with a black grip lies diagonally across the bottom right. A large, light green number '12' is positioned in the bottom right corner.

What The Community Told Us

The Western Burnett agricultural community and industry survey results.



What The Community Told Us

Agricultural Strategy for the Western Burnett Survey Results

The Western Burnett community responded enthusiastically when information was sought regarding their type of operation, current market options, use of current technology, labour characteristics and use of extension services. Such engagement is indicative of their commitment to the local agricultural industry and economic success in the long term.

Results from the survey circulated as per the methodology of this project showed that 95% of survey respondents are beef producers and hence the majority of statistics collected are applicable to grazing operations. Other industries represented in survey results include horticulture, cropping and forestry. Based on local knowledge, it would appear that horticultural producers are under-represented in the survey results. In order to mitigate this, information was sought from a relevant industry representative and is described in the following section.

The predominantly grazing community reported that they are primarily a young group of producers with 44% of respondents being below the age of 45 years and 52% being first generation farmers, the overwhelming majority of whom are looking to succeed their operation to the next generation.

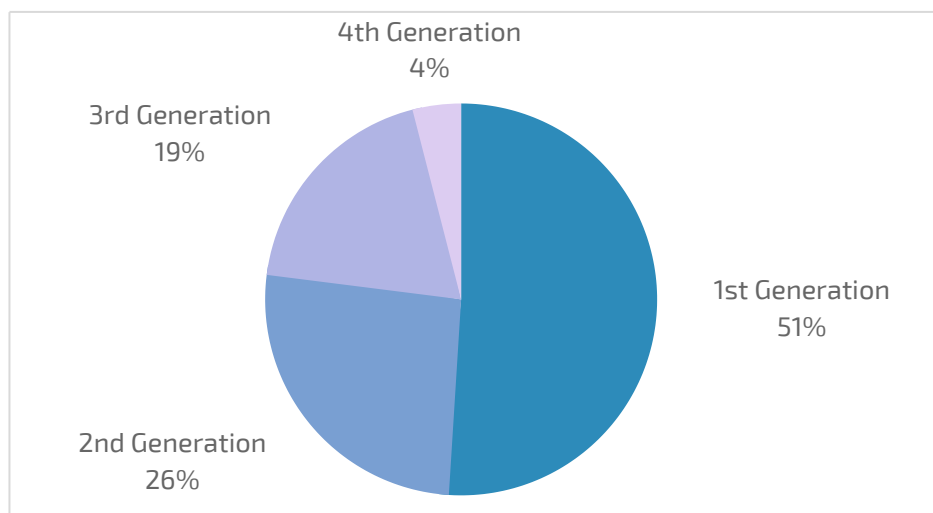


Figure 2 : Generation of survey respondents

Most producers are looking to technology and professionals to help them seek information and assist with important management decisions. One hundred percent of survey respondents have previously sought information from the likes of natural resource management groups, relevant Government departments, veterinarians and agronomists and 95% have attended training opportunities offered by those providers.

Interestingly, a significant number of respondents are earning an off-farm income, generally working between half and full time hours to support their family and improve their agricultural business in order to achieve financial sustainability.

The majority of respondents have made significant changes to their farming enterprises in the previous five years, notably investing in drought mitigation and sustainability. Some examples include infrastructure investment (irrigation infrastructure and water storage), improving pastures and adopting better grazing practices and purchasing or leasing additional property. Forty-four percent of respondents currently use at least one source of alternative energy (non-coal powered electricity) while 81% are interested in pursuing or further pursuing alternative energy sources for example, solar pumps.

Of those producers that felt that changes to their operation were not possible, the barriers cited were:

- Lack of capital funds
- Unfavourable seasonal conditions
- Government regulation

“I believe that the Eidsvold/Mundubbera area is fortunate to be situated geographically where we are & to have the facilities & businesses that support our industries.

Mundubbera grazier”





Eighty-eight percent of survey respondents rely on water infrastructure (e.g. bores, dams) to operate their farming enterprises regardless of whether their operation is grazing, cropping or horticulture.

Seventy-seven percent of respondents have access to bore water, 74% have dam storage, while 66% utilise water from a creek or river system.

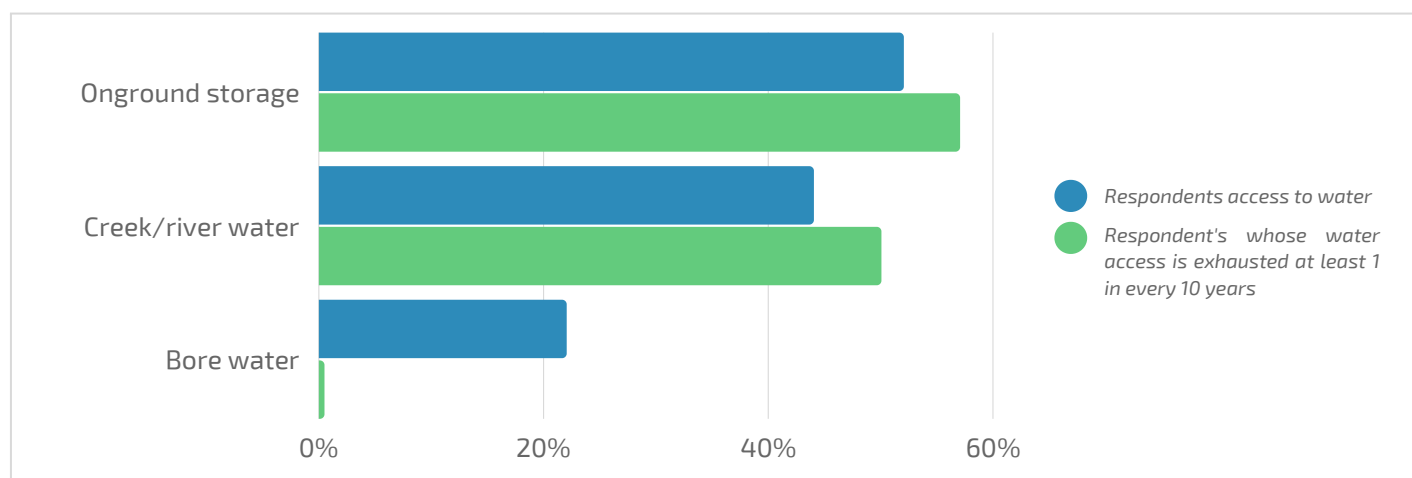


Figure 3: Survey respondents water sources for agricultural production

“...I would like to see irrigation water freed up from businesses with no intention of using it to increase catchment productivity
Eidsvold hay producer”

With regards to improving the profitability of agricultural enterprises in the region, producers rated the following factors as having the greatest influence:

- Improved reliability of forecasts
- Reduced electricity costs
- Input costs
- The scale of their enterprise
- Water accessibility
- Diversification

Other Survey Results

The Future Fields program funded by the Queensland Government and facilitated by Growcom to develop a strategic plan for the Queensland fresh produce sector is well aligned with the Agricultural Strategy for the Western Burnett although is specific to the horticultural industry. As an organisation, Growcom has very strong grass roots support from horticulturalists in the Western Burnett and hence, it is relevant to include results from their engagement and consultation process to address any shortfalls in data collection under the Agricultural Strategy for the Western Burnett program.

The Future Fields program "has involved a wide-ranging engagement and consultation process, designed to elicit the challenges of greatest concern and opportunities of greatest potential that the Queensland fresh produce sector expects to encounter over the next 10 years" (Growcom, 2022).

Through a series of workshops and a qualitative survey, Growcom went about identifying various fields of concern/opportunity that were subsequently reviewed, prioritised and shortlisted. A graphical summary of survey results collected from 93 respondents from a diverse cross section of the horticulture sector can be seen below:

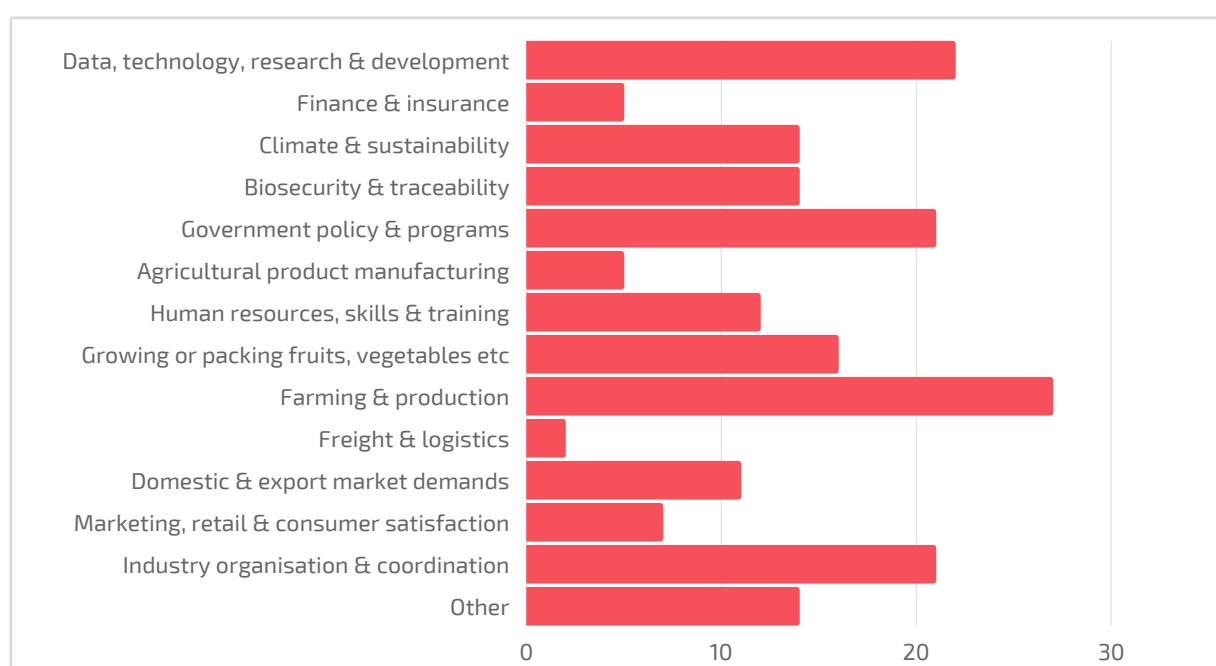


Figure 4: Future Field survey results representing areas of concern for horticulture farmers (Growcom, 2022).





“A wide range of challenges and opportunities were registered, with labour, sustainability, technology and data, biosecurity, markets and competition, and collaboration all commonly raised” (Growcom, 2022). It is interesting to note that many of the fields identified in Figure 4 specific to horticulture, are also represented in the survey results above pertaining to the grazing industry.

In addition to survey results, the fields of concern/opportunity identified throughout the engagement process were assessed by the Future Fields Advisory Committee members according to two factors; collaboration and impact. This is represented in the following graph where the final four fields are highlighted in blue.

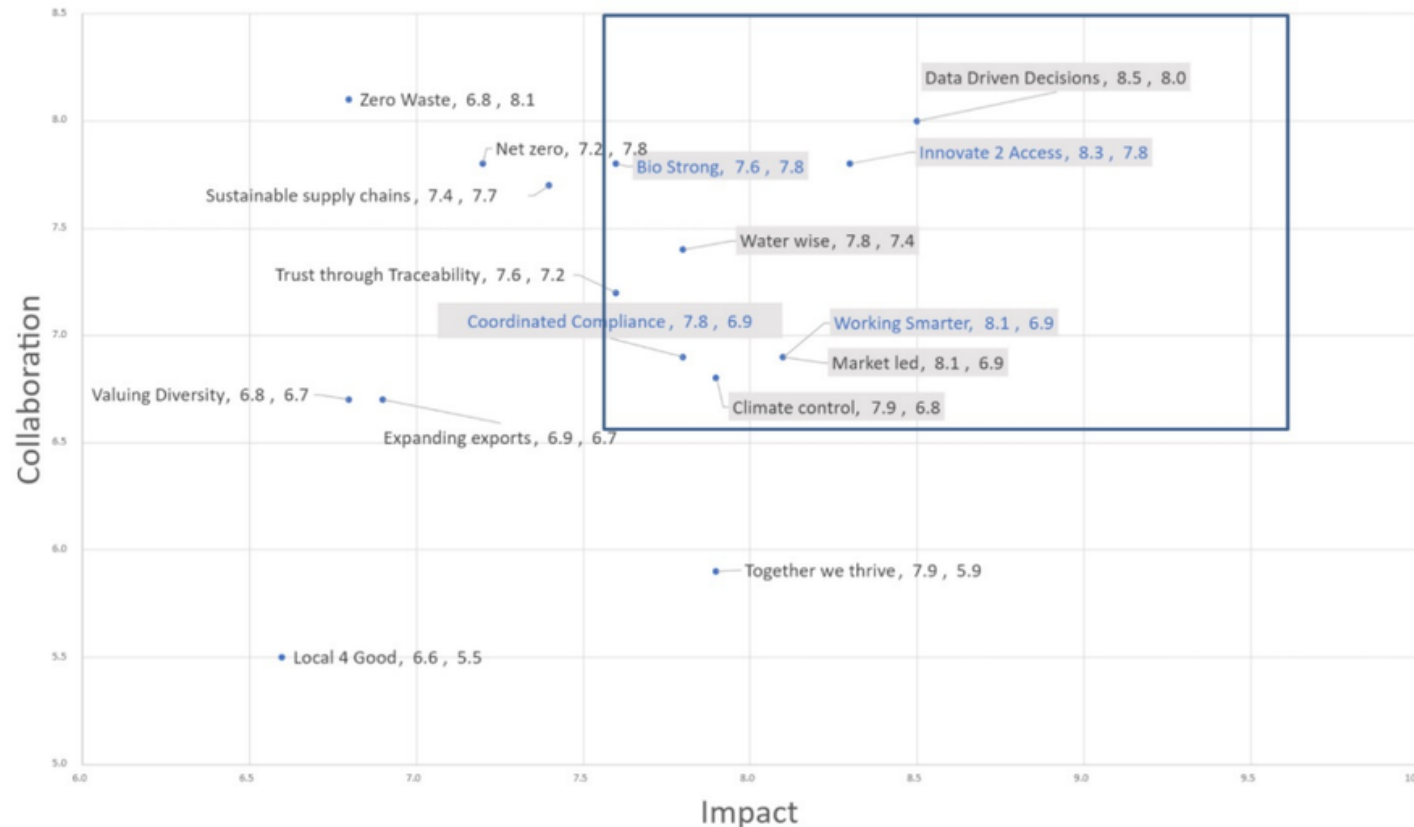


Figure 5: Fields of concern/opportunity by Future Fields Advisory Committee members (Growcom, 2022).

The themes identified as a result of community consultation and data collection will be carefully considered when developing the Outcomes and Actions of this Strategy and the direct links to the Future Fields themes are shown in the blue link boxes.





Challenges & Opportunities

A SWOT analysis of the agricultural industry in the Western Burnett

Challenges & Opportunities

Agriculture in Australia has developed rapidly since the first European settlers brought farming practices with them from their homelands in the year 1788. In the more than two centuries since, the agricultural industry has grown into a \$62.2 billion industry in 2019 with \$49.2 billion of that being exported (National Farmers' Federation, 2018).

An international pandemic, extreme weather conditions and strong demand for agricultural produce continue to provide challenges and opportunities for agricultural producers in the Western Burnett region and test the resilience of even the most profitable producers.

The following is a SWOT (Strengths, Weaknesses, Challenges and Opportunities) analysis, taken and developed from community consultation data and industry research for the Western Burnett district.

Strengths

- Proximity to select markets
- Attitude to learning and preparedness to take advice and innovate
- Longevity of farming in the region
- Young age demographic
- Traceability systems to encourage provenance
- Soil fertility
- Moderate climate

- Inadequate road infrastructure to transport produce effectively
- Lack of reliable internet connectivity
- Distance from select markets
- Access to working capital

Weaknesses

Opportunities

- Technological advances in the industry
- 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
- Alternative and emerging markets such as agri-tourism, value adding, market trends, niche products, diversification and specialised marketing
- Buoyant markets with strong domestic and international demand
- The reputation of Australia's agricultural industry as 'clean, green & fresh'
- Increased investment in regional infrastructure (e.g. drought preparedness funding) and soil health (e.g. National Soil Strategy)

- International pandemic and associated restrictions
- Supply chain disruptions and labour shortages
- Unreliability of international air and sea freight
- Extreme weather conditions and water insecurity
- Rising cost of labour and input expenses
- Biosecurity risks, disease, weeds and pests (e.g. pasture dieback)
- Market fluctuations and changing international markets and attitudes (e.g. as seen as a result of the war between Russia and Ukraine and/or China ceasing trade with nominated beef processing plants)
- Continuing decline in regional population
- Supply chain disruptions
- Changing legislation

Threats



The Covid-19 pandemic commenced in late 2019 and was officially declared in Australia in March 2020 and has presented major and unexpected challenges to all of society, and the agricultural industry was no exception. In order to manage the pandemic, restrictions were imposed by both the Australian Federal and State Governments including lockdowns, stay at home orders, limited domestic and international travel and conditional trade that impacted employment rates and required working from home arrangements. Both positive and negative flow-on effects from the world-wide pandemic have rippled through the agricultural community, including producers in the Western Burnett district.

As a direct result of the Covid-19 pandemic, Western Burnett producers have been challenged by labour shortages, freight interruptions, supply chain issues and increased input costs. For example, a survey respondent and beef producer reported that the pandemic response had caused them "delays in access to machinery parts and consumables for farm production that are delivered from overseas". However, the pandemic has also created opportunities for citrus producers as confirmed by Mr Angus Ferrier, Chair of the Future Fields Advisory Committee, Growcom who stated that "while COVID-19 has caused enormous pain and disruption, it will also continue to create opportunity for those ready and willing to adapt". This concept is also supported by beef industry representative Scott Cameron, a strategist for Meat and Livestock Australia who reports that "Seventy per cent of Australia's stock or sales is through export markets and we've had really strong demand during COVID in high value markets such as Japan, Korea, the Middle East, and the US" (Borello, 2022).

Supply chain challenges have been further exacerbated by international affairs such as the war between Russia and Ukraine and trade relations between Australia and China. Producers are currently at the mercy of an extreme shortage of urea, a commonly used ingredient in fertiliser and diesel exhaust fluid, pushing prices to unprecedented highs (Ladgrove & Hughes, 2022). With soaring fuel prices and suspended export trade between China and nominated Australian meatworks, producers in the Western Burnett have significant challenges to overcome moving forward.

Climate change has also provided challenges for Western Burnett producers having endured three drought declarations and various declared natural flooding disasters (depending on exact location) in the last decade. The most recent drought was declared by the Queensland Government in September 2019 and producers have only recently received relieving rain and the drought declaration being removed in April 2022. Incidentally, the extended period of drought coincided with the timing of the Covid-19 pandemic making it a difficult time for agricultural businesses in the region.

In recent years, both the Queensland and Australian Governments have shifted their drought assistance measures from a recovery perspective to a preparedness focus and hence, creating an opportunity for producers to increase business resilience via the installation of additional water infrastructure and the introduction of more effective drought management strategies. Survey results show that Western Burnett producers have already commenced implementing drought mitigation strategies and are using technological innovations and alternative energy sources in the process.

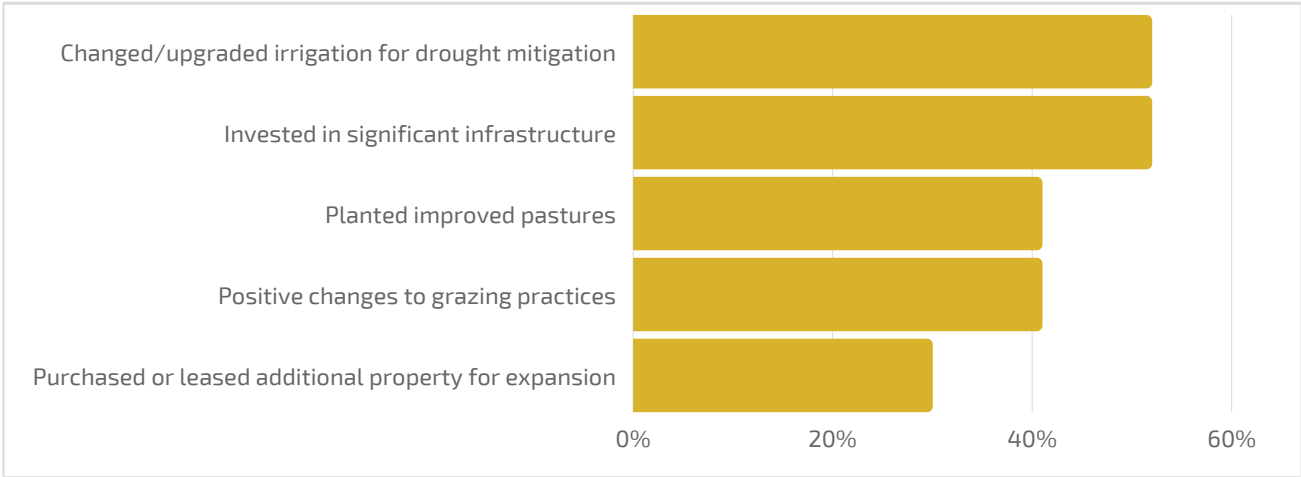


Figure 6: Survey respondents who have made changes to their agribusiness operation in the previous 5 years.

Survey results also confirm that the producers themselves are an asset to the Western Burnett agricultural industry. The age demographics of the region show a majority of first generation farmers whom are adept at seeking business and environmental information from knowledgeable sources and acknowledge the importance of provenance in the future of food producing. “Australia's new generation of farmers... are harnessing their access to a global market of information. They are changing the sector through innovation, big data, land regeneration and contemporary thinking around finance and marketing” (Agribusiness View, 2021).

While it is encouraging to know that Western Burnett producers are seeking to innovate and adopt alternative energy solutions, internet connectivity and reliability remains an issue in the district. Producers are in the vicinity of 300-400km from the major centres of Brisbane and Toowoomba yet almost half of those surveyed do not consider their internet connection reliable and the majority only have access to satellite services. Inadequate internet communications can stifle business communications, innovation, distance education and basic personal communication (BIRRR, 2020).





Outcomes & Actions

Outcomes and relevant actions of the Western Burnett Agricultural Strategy



Outcomes & Actions

Outcome 1: The Human Factors

With the large majority of Australian farms being family owned, human factors play a large part in agricultural operations and ultimately, financial viability. Human resources, innovation, succession planning, operation size and financial literacy are all factors that play an important role in the success of Western Burnett agribusiness enterprises.

Objective 1.1: Address Human Resource Concerns

People make the difference in every business and “whether you’re a small or large agribusiness company..., finding the right talent is critical and difficult” (Agricultural Appointments, 2022). The agricultural industry and especially horticulture has experienced a worsening labour crisis over the past decade and the Covid-19 pandemic has exacerbated that shortage due to the illness itself taking a personal toll and the imposition of interstate and international travel bans.

Survey results predominantly representing beef farmers show that approximately 63% of respondents have at least one family member working forty hours or more per week in their business, with some working up to eighty hours per week. This Western Burnett specific data is representative of whole-of-industry analysis carried out by the Australian Bureau of Statistics of census data that shows a larger section of the beef cattle farming workforce were the owner manager of their enterprise as opposed to a direct employee as seen below.

“
We have invested
in significant new
infrastructure in
order to reduce
labour inputs.
Eidsvold grazier
”

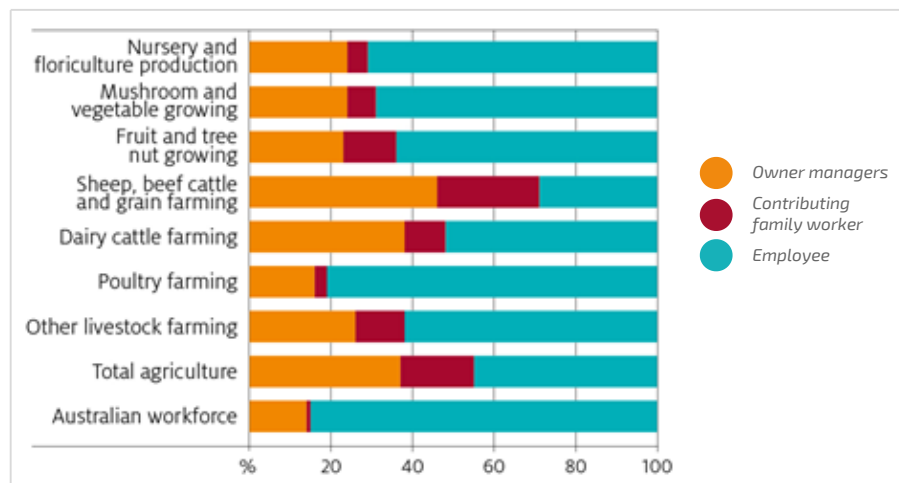


Figure 7: Agricultural Industry Employment Status 2016 (Source: ABS Census Population and Housing appearing in (Binks, Kancans, Stenekes, & Kruger, 2018))

With the beef and horticulture industries facing different challenges with regards to human resources, it is reasonable that each sub-industry will rely on industry representatives such as Meat and Livestock Australia, Agforce, Growcom and Citrus Australia to represent their interests and advocate for change.



Actions

- Support industry bodies such as Growcom and Citrus Australia to lobby state and federal governments to access skilled and semi-skilled workers from overseas.
- Encourage career pathways in the agricultural industry such as traineeships and apprenticeships and offer comparable employer and employee support as other industries.
- Support industry bodies such as Agforce and Meat and Livestock Australia to promote and lobby for more agriculture career opportunities and pathways.

Objective 1.2: Making the Most of Innovation

Innovation is a broad term that can encompass new or different processes, products or technological advancements that allow producers to achieve more and do better with less. Innovative practices can be directly related to improved productivity, profitability, environmental sustainability and resilience. Australia has a “unique opportunity to leverage our higher-education infrastructure, skilled workforce and sophisticated capital markets to integrate modern technology into our agricultural industry for the purpose of vastly improving the volume of high-quality agricultural products being produced in the country” (Yeomans, 2022).

Western Burnett producers have an important role to play in both developing and adopting innovations in the agricultural industry. With the vast majority already using smart technology and a reported younger age demographic than the average age of the Australian farmer of 58 years (ABS, 2019), they are well placed to adopt technological advancements such as machine learning, artificial intelligence and robotics. Such advancements can also play a role in alleviating human resource shortages as described above.

The Australian Government has recognised the importance of innovation to the future of agriculture and has contributed \$30 million towards a new National Centre for Digital Agriculture and contributions to regional Innovation Hubs to support the uptake of digital agriculture. “Australia needs a world-class agricultural innovation system that can quickly respond and adapt to the emerging risks and opportunities of the 21st century” (DAWE, 2022).



Actions

- Encourage producers to pursue their innovative ideas and document their process.
- Facilitate and connect producers with key players in the innovation space such as the National Centre for Digital Agriculture and Innovation Hubs to assist with leadership, education, and skill enhancement for digital agriculture.
- Encourage producers to apply for relevant innovation funding such as Smart Farming Partnerships (a component of the National Landcare Program).
- Advocate for the promotion and adoption of agriculture and agtech as a valid and successful career path.
- Support connection between producers and organisations offering corporate funding opportunities for innovation development.



Innovate 2 Access: Accessing new markets through innovation including on farm, processing, new products and services, packaging and extending shelf life.

Working Smarter: Building skills to adopt and apply the new technologies that will reduce reliance on low skilled jobs and labour intensive roles.



Objective 1.3: Support Succession Strategies

"There are approximately 85,681 farm businesses in Australia, 99 percent of which are family owned and operated" (Australian Farmers, 2018) and this is reflected in survey results from Western Burnett producers with eighty-five percent of respondents looking to succeed their operation to the next generation. Succession planning is essential to allow the smooth transition of the farming business and assets with minimal disruption, although it can be a challenging process in a family farming business.

Beattie (2014), describes succession planning as a "complex process that requires good communication, planning and ideally a long lead in time to maximise the chance of a successful transition". Whatever their age or whether they are a first- or multi-generation farmer, it is imperative that Western Burnett producers commit to undertake constructive succession planning in order to avoid the risk of disagreement between family members, personal stress and business underperformance. An early start to the succession planning process will allow for the consideration of more options and sufficient time to implement the plan.



Actions

- Support and promote opportunities for agriculturalists to plan their farming enterprise succession strategy.
- Facilitate connection between producers and reputable professionals providing succession planning services.

Objective 1.4: Size Doesn't Matter

Survey results show that there is a large variety of scale within respondents' agricultural enterprises with property sizes varying from 100 hectares and all the way up to 20,000 hectares. Further analysis shows that the median farm size is 2,275 hectares and those respondents farming an area greater than the median are far less likely to earn an off-farm income. Correspondingly, approximately half of the respondents currently have one or more family member/s earning an off-farm income by way of outside employment.

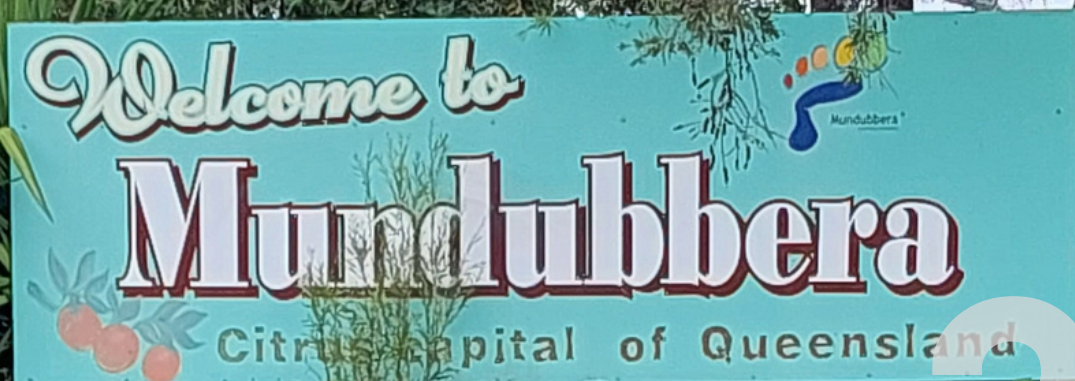
While economies of scale generally lead to increased turnover, it is also often presumed that a larger scale operation will drive the profitability of agricultural enterprises, however, not all research supports this concept and rather, suggests that "scale, per se, will not make a farm more profitable" (Fritsch, 2018). Understanding profit drivers such as cost-of-production and cost-conversion-to-income and making sound business decisions based around these drivers will have a much greater influence on profitability than the scale of the enterprise (Fritsch, 2018).

While some producers are ready to scale up or have already done so, others are proving viable at their current scale whether that be with or without an additional off-farm income. It is imperative that producers understand how to manage cash flow, structure debt and access working capital. While Western Burnett producers focus on their business acumen and make sound financial decisions as a result, scale will not dictate the profitability of their agricultural enterprise.



Actions

- Develop and share knowledge through workshops, field days, online resources and community events, especially in the fields of financial literacy and agribusiness development.
- Inform producers of current support programs, grant and funding opportunities and encourage them to apply for sustainability and/or scale-up funding through relevant providers such as the Queensland Rural and Industry Development Authority (QRIDA).





Outcomes & Actions

Outcome 2: Resilience is Required Against Shifting External Factors

“Australian agriculture increasingly faces big, complex challenges and opportunities, driven by changing global markets, increasing international competition, technological disruption, climate and water-related risk and global economic shocks—such as the COVID-19 pandemic.” (DAWE, 2022). While some may be growing weary of hearing the word “resilience”, with the ongoing influence of external factors such as international affairs, prolonged drought conditions and biosecurity risks, the requirement for agribusinesses to be able to adapt and transform in the face of increasingly complex economic, environmental and social circumstances is more imperative than ever before.

“The need to develop greater resilience across Australia’s agribusiness sector has compounded, given many operators are still reeling from the extended drought, the still recent and devastating bushfires and, right here and right now, the COVID-19 global pandemic” (Favaro, Symons, & Mullumby, 2020).

Objective 2.1: International Influences

Australia currently exports approximately 72% of its total agricultural production (ABARES, 2022), including beef and citrus, two of the Western Burnett's greatest contributors to gross regional product sales. The state of international trade and other international factors has never played a more significant role in the business of the average producer than they do currently.

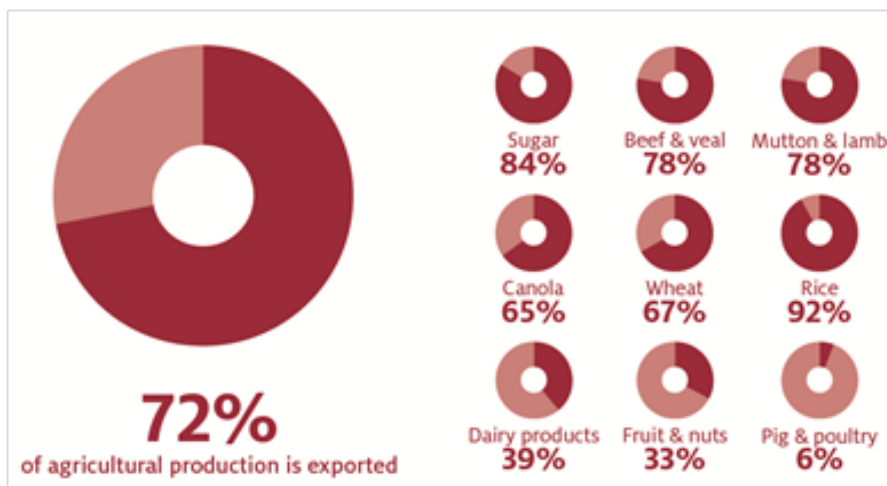


Figure 8: Share of agricultural production exported by sector, 3 year average, 2017–18 to 2019–20
Source: ABARES, following method outlined in Cameron (2017), viewed at (ABARES, 2022)

The Covid-19 pandemic has presented major challenges to Western Burnett producers by way of labour shortages, freight interruptions, supply chain issues and increased input costs. Supply chain issues in particular have been further exacerbated by tense trade relations between Australia and China and product shortages as a result of the war between Russia and The Ukraine. Shortages of key agricultural input products such as urea and fuel has made it difficult to manage even the most basic of farming practices and threatens significant impact on profitability as a result of extremely high prices.

Although the threats are numerous, where there are threats, there are also opportunities. Western Burnett producers can take advantage of opportunities presented to Australian agriculture such as strong demand for 'clean and green' products, resulting in higher commodity prices from export partners. "Overseas demand for more sustainable food is a high value opportunity for Australian Agribusiness (Lehmann, 2021) and "burgeoning global populations and incomes – particularly on our Asian doorstep – will fuel demand for food and fibre in years to come" (National Farmers Federation, 2018).

Government and industry bodies alike will have significant roles to play in managing and responding to market access issues, emerging consumer preferences, access to imported inputs and arising export opportunities. "Key industry roles include responding to emerging consumer preferences, and driving efficiencies through the food supply and value chains. Key Government roles include pursuing new and improved international market access, ensuring import and export regulations are effective and low cost systems, and providing an efficient and competitive business environment" (Greenville, Duver, & Bruce, 2020).

While individual producers in the Western Burnett may feel that they have little influence over such high level, complex and ever changing international trade conditions, they can choose to stay abreast of such issues and develop their business resilience to be ready and willing to adapt as required.



Actions

- Via BCCA's online 'SMART-Hub' (Sustainable Management & Agricultural Resources & Tools), link producers with relevant and current articles, journals and research regarding agricultural economics and export trends such as the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) to assist with business decisions. Other government providers include Commonwealth Scientific and Industrial Organisation (CSIRO), Australian Bureau of Statistics (ABS), Department of Foreign Affairs and Trade (DFAT) and Department of Agriculture, Water and the Environment (DAWE).
- Via BCCA's online 'SMART-Hub', link producers with relevant and current articles, journals and research from non-government organisations such as Meat & Livestock Australia (MLA), Citrus Australia and National Farmers Federation (NFF).
- Assist producers to be well informed and help them to understand complex but important information regarding international affairs as they pertain to agricultural industries specific to the Western Burnett district.
- Support and promote educational opportunities for producers to increase business and financial resilience using tools such as an early warning system to track current and emerging risks and scenario analysis to demonstrate due diligence (Favaro, Symons, & Mullumby, 2020).
- Inform producers of current support programs, grant and funding opportunities and encourage them to apply for export assistance where relevant through providers such as Austrade.
- Facilitate connection between producers and industry bodies that represent producers and lobby government on behalf of the industry to influence government policy.



Expanding Exports: Access new and expand existing export markets by gaining a deep consumer understanding and taking a collective approach to supply and marketing.

Sustainable Chains: Creating new supply chains to augment the existing chain that are shorter, decentralized, resilient, efficient and environmentally friendly.

Market Led: Delivering what markets demand, based on data analysis of consumer preferences, trends and production information.

Objective 2.2: Climate Challenges

Incidentally, this strategy has been developed following an extended period of drought for Western Burnett producers and survey results reflect not only the difficulties that producers have faced in recent years but the methods they have employed to mitigate the effects of drought and improve water security and soil biology. "Droughts are part of Australia's landscape and managing drought is a feature of Australian agriculture. Australian farming businesses and farming communities are adopting increasingly sophisticated and effective strategies to deal with drought and respond to climate change and variability" (DAWE, 2018).

A large majority of respondents have installed or upgraded irrigation infrastructure to allow for more efficient use of water allocations and the production of hay to store feed for dry times. Installation of additional watering points and fencing to land/soil types to allow for balanced grazing distribution and to minimise livestock dominating land type/plant species preferences are further techniques employed by Western Burnett producers. Many have also increased and upgraded on-farm water storage capacity to ensure they can capture as much natural rainfall as possible.

In addition to making improvements to property infrastructure, producers are looking to improve pasture performance and soil biology by sowing improved pastures and implementing rotational grazing procedures and regenerative agriculture practices. Regenerative agriculture is a "holistic approach to land management that keeps water in the landscape, improve[s] soil health, stores carbon and increases biodiversity" (WA Landcare Network, 2017). "Producers practicing regenerative agriculture and grazing typically manage through droughts more easily with fewer adverse impacts on their land and profitability" (Aljoe, 2022).

Whether producers subscribe to regenerative agriculture as a land management philosophy or not, there is no doubt that soil health in general is high on their agenda. Western Burnett Graziers and citrus growers alike have shown keen interest in learning about soil health via high attendance numbers at workshops hosted by both BCCA and Growcom in the region featuring prominent agronomists as expert facilitators. Healthy soil can increase underground hydration and reduce the need for irrigation, increase the nutritional value of forage and plants for grazing livestock or food production, increase carbon absorption from the atmosphere and improve productivity – all of which contribute to the overall increase in resilience of an agricultural operation.

The Australian Government is moving away from exceptional circumstances funding arrangements in place of prioritising "long-term preparedness, sustainability, resilience and risk management for farming businesses and farming communities in Australia" (DAWE, 2018) as per the Australian Government's Drought Resilience Funding Plan 2020-2024. The plan prioritises harnessing innovation, better risk management, better climate information, more resilient communities and better land management. Furthermore, the National Soil Strategy 2021-2041 is aimed at restoring and protecting Australian soils through on-ground action, research, education, monitoring and governance (DAWE, 2021).

While Western Burnett Producers are demonstrating that they are already committed to building resistance to external climate challenges, there is opportunity to increase both individual business and regional resilience through the various funding opportunities offered under these drought and soil initiatives (and additional innovation funding as referred to in Objective 1.2). Government, industry, research institutions and land managers all have a role to play in developing resilience and drought mitigation strategies through education and collaboration.



Actions

- Assist producers with developing important business management documents such as 'Farm Business Resilience Plans' to aid effective land management and relevant funding applications, ensuring that infrastructure planning is included in the plan.
- Inform producers of current support programs, grant and funding opportunities and encourage them to apply for relevant funding where appropriate through providers such as QRIDA.
- Continue to provide and promote educational opportunities for producers to improve soil health, business resilience and drought preparedness.
- Seek opportunities for producers to collaborate with NRM, Government and industry representatives to attract investment into research, development and drought-preparedness.
- Continue to support producers to achieve 'best practice' across their agricultural business and assist them with change management as they implement new practices such as rotational grazing or controlled traffic farming or similar.
- Via BCCA's online 'SMART-Hub', link producers with relevant and current articles, journals and research regarding advancements in research on soil health, rainfall retention and drought mitigation.
- Assist producers to be well informed of government policy on drought and soil health and help them to understand how they relate to Western Burnett producers.



Water Wise: Improving water security through greater on-farm efficiency, and utilising existing water assets better with additional infrastructure.

Net Zero: Actively contributing to net zero carbon by restoring biodiversity, improving soil health, transitioning to renewables and reducing emissions.

Climate Control: Developing production systems that allow greater control of growing conditions, in a world of greater variation in weather and climate.

Objective 2.3: Biosecurity Risks

Biosecurity refers to the management of the spread of pests, diseases and weeds which may pose risk to the environment, community and/or the economy. "Australia's geographic isolation has meant that we have relatively few of the pests and diseases that affect agricultural industries overseas. Freedom from these exotic pests and diseases is a vital part of the future profitability and sustainability of Australian agriculture" (farmbiosecurity).

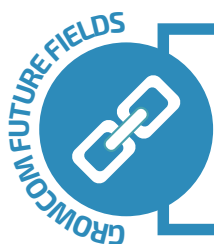
Biosecurity risks are often thought of on an international scale, especially when diseases such as African Swine Fever and Foot and Mouth disease continue to spread around the world and is rampant in countries with close proximity to Australia. Such biosecurity risks can reach Australia via the movement of people, freight and animal migration and managing the spread is generally the responsibility of the Australian Government. However, it is also important to consider biosecurity risks on both a regional and individual farm scale where pests, weeds and diseases are already present and impeding plant and livestock health and productivity. Pests such as feral pigs and wild dogs and noxious weeds such as Parthenium and Giant Rats Tail Grass are known to exist in the Western Burnett and the spread of such needs to be managed.

Good biosecurity practices can help prevent the spread of weeds, pests and diseases across neighbouring properties and regions and minimise production losses and unnecessary costs. It is important to outline producers' biosecurity requirements in a biosecurity plan for the management of risks on individual properties and a biosecurity management plan for managing access to said properties (DAF, 2020). Natural Resource Management (NRM) bodies and local council can collaborate with producers to inform them of potential risks and provide resources and information to tackle emerging issues.



Actions

- Assist producers to understand the Western Burnett's specific biosecurity vulnerabilities, engage them on the importance of control measures and invite them to report sightings to relevant authorities.
- Encourage producers to develop and maintain a biosecurity plan and biosecurity management plan to protect their property from the entry and/or spread of pests, diseases and weeds.
- Support North Burnett Regional Council's (NBRC) Biosecurity Plan 2019 - 2024 to liaise with Western Burnett producers and implement the Biosecurity Act 2014.
- Inform producers of current support programs, grant and funding opportunities and encourage them to apply for relevant pest and weed management funding.
- Support producers to introduce biocontrol solutions to manage established weed species in the Western Burnett such as Parthenium.
- Via BCCA's online 'SMART-Hub', link producers with relevant information regarding biosecurity plans, issues and alerts and local providers of biosecurity programs.



Bio Strong: Preparing, preventing and managing pests, diseases and biosecurity risks using data intelligence and collaboration.



Outcomes & Actions

Outcome 3: Cross Regional Issues

Survey results and community feedback from Western Burnett producers identified several fields that were also identified in the Monto Agricultural Strategy as developed by BCCA in a previous program completed in 2019 (BCCA, 2019). Monto is part of the North Burnett Regional Council (NBRC) alongside the Western Burnett towns of Eidsvold and Mundubbera so it is reasonable to expect that each district shares similar factors affecting agriculture in the region.

Ineffective telecommunication services, inadequate road infrastructure, excessive legislative requirements and the availability of affordable and reliable energy are all reported as priority concerns for local producers while agri-tourism is being considered as an opportunity to diversify and create an additional income stream.



Objective 3.1: Telecommunications

Reliable telecommunications infrastructure and effective Information and Communication Technologies (ICT's) are essential for the sustainability and advancement of Western Burnett agribusinesses. "Connectivity to support digital agriculture is required across the entire farming operation... not just at the homestead" (AEWG, 2021). As innovations are introduced to the industry connectivity is required across the entire farming operation for the likes of soil moisture probes, drone operation, monitoring water levels, virtual fencing and so much more, and as mentioned above, producers need access to current news and information to keep abreast of international affairs, opportunities and industry developments.

Internet connectivity and reliability remains an issue in the district with almost half of those surveyed considering their internet connection unreliable and the majority only have access to satellite services. "Discussions... have indicated that while there have been significant gains in connectivity, there is a persistent problem of inconsistent, unreliable or 'thin' coverage which means that the connectivity threshold for digital agriculture has not been achieved" (AEWG, 2021).



Actions

- Advocate for telecommunication investment to increase connectivity, cover and accessibility by Western Burnett agribusinesses.
- Support community, industry and other regional bodies (such as local government and non-government organisations) to lobby for telecommunications infrastructure investment.
- Support NBRC and Wide Bay Burnett Regional Organisation of Councils (WBBROC) in their pursuit of improvements to regional telecommunications.

Objective 3.2: Improved Road and Rail Infrastructure

Western Burnett producers rely heavily on road freight to take their produce to market and often that produce will travel hundreds if not thousands of kilometres over regional roads to reach its intended market. While major motorways and highways are sealed, the rural road network is generally unsealed and/or in poor condition. As identified in the Monto Agricultural Strategy, “[e]ffective 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” (BCCA, 2019).

“ever increasing freight costs are certainly a concern

Mundubbera grazier

Since 2012, the Australian Government has used freight mapping information from CSIRO's TraNSIT program to identify transport bottlenecks and determine funding priorities for regional road networks. “CSIRO developed the Transport Network Strategic Investment Tool (TraNSIT) to provide a comprehensive view of transport logistics costs and benefits due to infrastructure investments and policy changes in agricultural supply chains in Australia” (Higgins, et al., 2017).

Despite this, Western Burnett producers believe that not enough is being done to maintain local road networks with almost 30% of respondents claiming that the state of the roads is negatively impacting their bottom line.

“better road access for trucks, particularly B Doubles

Rawbelle grazier



Actions

- Advocate and promote for additional B-Double grade road and rail investment to improve and extend commodity transportation options and efficiency for the Western Burnett region.
- Connect producers with advocacy groups and government entities to collectively communicate their road infrastructure needs.
- Encourage producers and regional bodies (such as local government) to develop strategic priorities for road infrastructure to help inform government investment.
- Support NBRC and WBBROC in their pursuit of improvements to regional road infrastructure.



Objective 3.3: Understand and Streamline Legislative Requirements

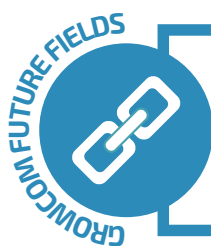
Queensland's agriculture is subject to a plethora of arguably complex regulatory requirements across all three levels of government, in addition to government endorsed industry regulatory obligations and the majority of the legislative burden is felt by the producer. Repetitive and time consuming activities such as completing forms and applying for permits to meet legislative requirements can become cumbersome and present a barrier to factors such as innovation and risk-based-decision-making. Of those surveyed, 18% of respondents selected 'government regulation' as a major impediment to making positive changes to their agricultural operations.

However, "the need for regulation is not disputed by farm businesses. In fact, some regulations, such as biosecurity and food safety regulations, were highlighted as providing clear benefits to Australian farmers" (Productivity Commission, 2016). Rather, producers would benefit from a more streamlined approach to reduce the cumulative burden of redundant legislature that is inefficient in terms of cost and what it is intended to achieve.



Actions

- Link producers to industry lobby groups, such as Agforce and Queensland Farmers' Federation (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 department to assist in explaining and interpreting legislation.
- Encourage communication between all levels of government.



Coordinated Compliance: Making it easier for growers to comply with government regulations and meet market driven requirements through digitization and eliminating duplication.





Objective 3.4: Affordable and Reliable Energy

Energy is a current and contentious topic with power shortages presently occurring across Queensland and Australia wide due to maintenance issues with coal-fired power generators and unfavourable weather conditions affecting both demand for electricity and the supply of coal. There is also ongoing pressure for society to move away from fossil fuel power generation in place of renewable options such as solar and wind generation in order to reduce gas emissions.

“Energy is essential for agricultural production and the costs associated are often one of the largest input expenditure items for producers” (BCCA, 2019). This is likely a contributing factor to 40% of surveyed Western Burnett producers already using at least one source of renewable energy and 81% are keen to further pursue alternative energy sources, especially solar energy.



Actions

- Via BCCA's online 'SMART-Hub' or otherwise, link producers with relevant information and provide opportunities to educate regarding available renewable energy options and potential rebates, innovations in energy supply and experts who can further advise.
- Promote awareness of energy rebate schemes for eligible producers, e.g. Ergon Energy drought relief scheme.
- 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: Agri-tourism as a Complementary Income Stream

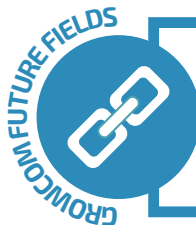
"Agri-tourism is a tourism-related agricultural experience, service or product that connects visitors with people, places or products on a farm" (QFF, 2022).

Fifty-five percent of survey respondents reported their interest in pursuing other markets with agri-tourism mentioned repeatedly by those respondents as a market opportunity for the region. "[A] thriving agri-tourism ecosystem can have significant flow-on effects to the local community by promoting small, rural communities to outside tourists that consequently spend money on local products and services, enhancing revenues and the overall local economy" (BCCA, 2019). Deloitte, 2022 agrees with this sentiment citing that "the increasing interest of consumers to know the provenance of their food is leading to strong growth in agri-tourism in regional areas".



Actions

- Encourage and support information and resources that assist producers to establish viable agri-tourism opportunities and inform them of current funding opportunities for agri-tourism business development.
- Support NBRC's Economic and Innovation Strategy and promotion of the North Burnett as a tourist destination.
- Support Bundaberg and North Burnett Tourisms' "North Burnett Tourism Strategy"
- Support BIEDO (Burnett Inland Economic Development Organisation) with their initiatives to support producers with agri-tourism related business opportunities.



Local 4 Good: Networks of fresh produce suppliers collectively inspiring communities to consume more hyper local produce.



The Future of Agriculture in the Western Burnett

As the leading employer and greatest contributor to gross regional product, the agricultural industry is integral to the Western Burnett in an economic sense. However, it also underpins the social and environmental well-being of the region. While the outcomes in this strategy are largely intended to ensure the profitability of agribusiness in the Western Burnett, there are other factors that should be taken into account when considering the future of Agriculture in the region.

Provenance: Understanding the origins of food and fibre and its journey to market is becoming ever more important to consumers as they are “keen to discover the provenance of the food they buy and then use this information to make choices when shopping and dining” (Gallagher, Johnston, Mantilla, & Drury, 2020). Consumers want to understand the ‘who’, ‘where’ and ‘how’ behind the agricultural produce they consume and make conscious purchase decisions based on their individual values.



Trust Through Traceability: Leveraging existing and new traceability tools to tell consumers more about the provenance of their food and the sustainable practices used in its production.

Environmental Stewardship: Agforce's General President, Georgie Somerset reports farmers as genuine environmentalists whose “love of the environment is innate... [They] are fundamentally committed to sustainable land management practices, [they] constantly strive to improve and adapt [their] farming methods, and [they] are always – ALWAYS – focused on [their] environmental performance” (Somerset, 2021). It is imperative that Western Burnett producers live up to this expectation to ensure that the consuming public is aware of their commitment to environmental stewardship, reducing carbon emissions and caring for the land for future generations.

Telling the overall story of agriculture: The descriptive power of stories affects us deeply... [and] are a powerful tool in human communication” (Gallagher, Johnston, Mantilla, & Drury, 2020). It is important that Western Burnett producers tell their stories of provenance and environmental stewardship in such a way as to engage and connect with their customer and assure them they are worthy of social license. “Building provenance and storytelling can play a critical role in sustaining, increasing or expanding market share for Australian products” (AgriFutures) while also building familiarity and trust with end users.



Horticulture Heroes: Telling the positive horticulture story and being respected for doing the right thing by workers, communities and the environment.

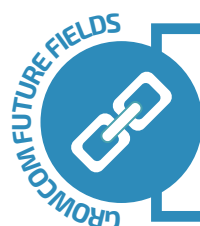


How the Strategy will be Delivered

Implementation of this strategy is the responsibility of all levels of the community including local, state and federal governments, non-government and industry support organisations and Western Burnett producers themselves. Approaching this strategy as a shared obligation, requiring ongoing collaboration to support investment, education and resilience will ensure that all stakeholders are invested in the sustainability, profitability and ongoing success of the Western Burnett agricultural industry into the future.

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

- Research and development
- Facilitating connection and collaboration
- On-ground delivery
- Technical support
- Education and skill development
- Infrastructure investment
- Advocacy and promotion



Together We Thrive: Supporting multiple leaders who will drive collaboration to make the fresh produce sector more prosperous & sustainable.

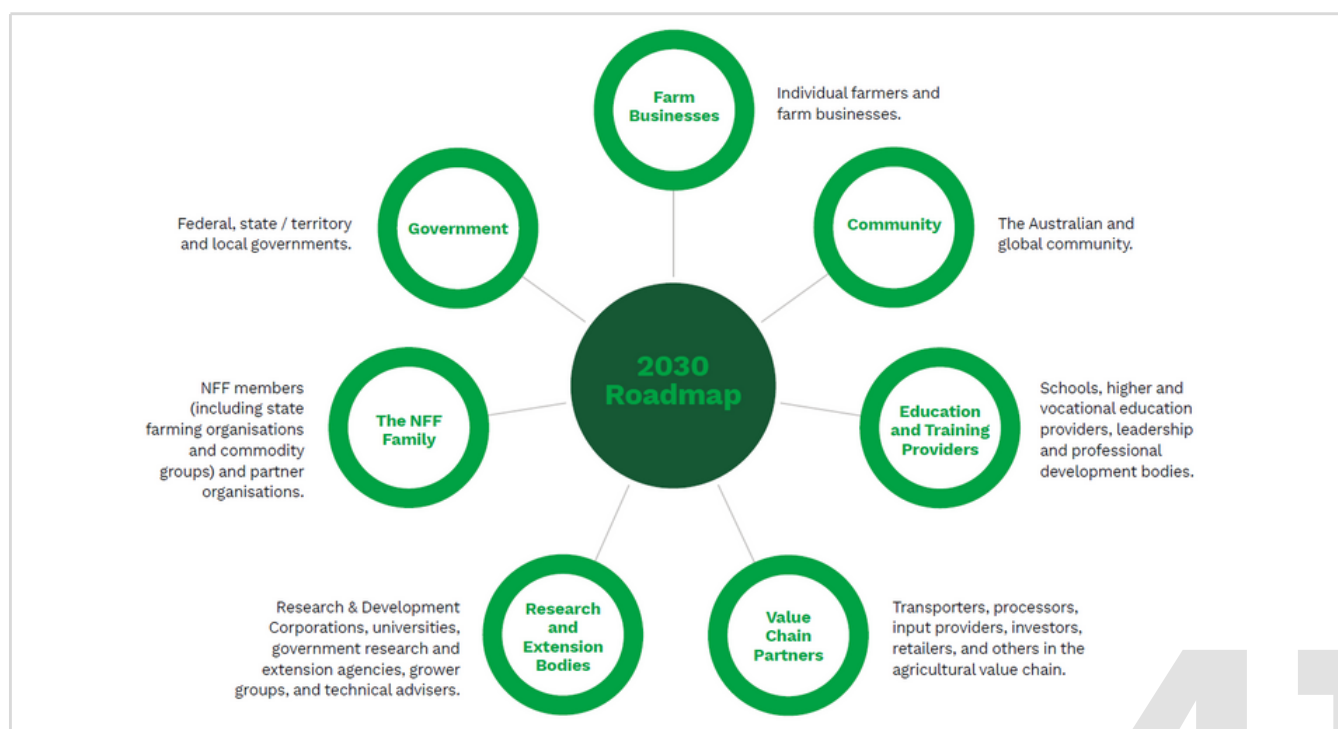


Figure 9: A snapshot of industry stakeholders collaborating to achieve the vision of the 2030 Roadmap collaboration (NFF, 2018)

A scenic landscape with a river, trees, and a grassy bank. The river is on the right, with trees along its banks. The grassy bank is on the left, with some trees and a fence. The sky is blue with some clouds.

Conclusion

This document is intended to provide strategic direction for Western Burnett producers and support the development of sustainability, profitability and resilience within their agribusiness operations. The knowledge and experiences of local producers and industry and government research were some of the sources utilised to identify three main outcomes with key objectives and practical actions discussed under each outcome.

The Human Factors: With the large majority of Australian farms being family owned, human factors play a large part in agricultural operations and ultimately, financial viability. Human resources, innovation, succession planning, operation size and financial literacy are all factors that play an important role in the success of Western Burnett agribusiness enterprises.

Resilience is required against shifting external factors: While the term “resilience” is not new to producers, the ongoing influence of external factors such as international affairs, prolonged drought conditions and biosecurity risks, the requirement for agribusinesses to be able to adapt and transform in the face of increasingly complex economic, environmental and social circumstances is more imperative than ever before.

Cross Regional Issues: Ineffective telecommunication services, inadequate road infrastructure, excessive legislative requirements and the availability of affordable and reliable energy are all reported as priority concerns for local producers while agri-tourism is being considered as an opportunity to diversify and create an additional income stream. These items were also identified in the Monto Agricultural Strategy with Monto being a neighbouring rural district to the Western Burnett.

Social and environmental factors that should be taken into account when considering the future of agriculture in the Western Burnett include provenance, environmental stewardship and telling the overall positive story of how producers manage these factors to ensure that they are afforded trust by end users considered deserving of social licence.

Approaching this strategy as a shared obligation requiring ongoing collaboration between producers, industry, government and non-government organisations to support investment, education and resilience will ensure that all stakeholders are invested in the sustainability, profitability and ongoing success of the Western Burnett agricultural industry into the future.



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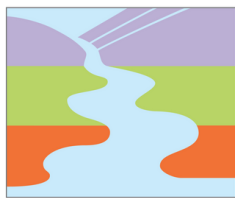
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Acronyms & Abbreviations

ABARES	Australian Bureau of Agricultural Resource Economics and Sciences
ABS	Australian Bureau of Statistics
AEWG	Agri-tech Expert Working Group
BCCA	Burnett Catchment Care Association
BIEDO	Burnett Inland Economic Development Organisation
BIRRR	Better Internet for Rural, Regional and Remote Australia
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DAF	Department of Agriculture and Fisheries
DAWE	Department of Agriculture, Water and the Environment
DFAT	Department of Foreign Affairs and Trade
ICT's	Information and Communication Technologies
MLA	Meat and Livestock Australia
NBRC	North Burnett Regional Council
NFF	National Farmers' Federation
NRM	Natural Resource Management
QFF	Queensland Farmers' Federation
QRIDA	Queensland Rural and Industry Development Authority
SMART-Hub	Sustainable Management & Agricultural Resources & Tools Hub
SWOT	Strengths, Weaknesses, Opportunities and Threats
TraNIT	Transport Network Strategic Investment Tool
WBBROC	Wide Bay Burnett Regional Organisation of Councils



BCCA

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