

**SITUATION ANALYSIS FOR THE
DEVELOPMENT OF AGRITOURISM IN
THE RIVERINA MURRAY REGION**

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DIAGNOSIS & PLANNING • PRODUCT DEVELOPMENT • FEASIBILITY STUDIES



Authorship

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Disclaimer

Specific investment decisions addressing recommendations in this report require further planning, engineering, environmental and heritage advice, and costing by an estimator. Costings should not be used for construction.

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Acknowledgement of country from NSWALC

We acknowledge the traditional custodians of the lands and waterways that make up the Riverina Murray region on which we live, work and visit. The diverse First Nations people from this region have been caring for country and welcoming visitors for tens of thousands of years before us and still do to this day. We pay respects to past and current Elders and acknowledge the significant contribution made by First Nations people to our visitor economy.

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EXECUTIVE SUMMARY

Why Agritourism?

Destination Riverina Murray (DRM) has set a strategic objective to “Position the Riverina Murray as an authentic and sustainable agritourism destination...” as detailed in the 2023-2030 Destination Management Plan. Despite the agricultural sector being a core strength of the region with significant scale, diversity, and economic impact; the tourism sector has not to date leveraged this strength, and the region is currently under-represented in agritourism experiences. This report and the forthcoming Agritourism Strategy will provide Destination Riverina Murray and its stakeholders with the directions needed to grow a differentiated and competitive agritourism sector to benefit the region’s visitor economy.

Agritourism is a type of experiential travel which connects people to product or produce, delivered on farming land through a direct "on farm" experience. A thriving agritourism sector is strengthened by a broader eco system of visitor experiences, that can contribute additional touchpoints with the product or produce of the region.

Agritourism has been identified as a growth area not just within this region but across Australia’s regional economy. It can provide benefits to both consumers through connection to primary producers and a greater understanding of where their food comes from; and to farmers and their communities through strengthening their brand and building customer loyalty, diversification of income and social benefits. Agritourism can provide significant social benefits for the farmers and indeed the broader community through increased on-farm employment opportunities, increased social contact and sense of purpose, lifestyle changes and an opportunity to tell their story and distribute direct to consumer.

Whilst there has been growth, development and innovation in agritourism, it is still a relatively immature sector, and there are few documented and accessible best practice examples.

How does Agritourism fit within Destination Riverina Murray?

Most of the leading agritourism regions across Australia and indeed the world have a vastly different agricultural sector to the Riverina Murray. Leading agritourism regions have significant diversity in a relatively small and attractive setting. They have boutique farms that are often building consumer brands. On contrast, the Riverina Murray has large land holdings dominated by dry land grazing and commodity cereal-based cropping. Many businesses are operating at great scale, innovation and productivity. Consequently, DRM will require a different approach to building agritourism to other regions; and will need to focus on the agricultural strengths of the region as a point of difference and competitive advantage.

How do we grow Agritourism in Destination Riverina Murray?

Existing agritourism operators within the region are currently largely clustered within several locations, reflecting both the size of the visitor economy and the type of agriculture. Given the large geographic area of the Riverina Murray and the existing dispersal of visitors, it is recommended that initial development of agritourism experiences focuses on select regional hubs with an existing competitive advantage.

Within these agritourism hubs, a set of anchor attractions could be developed to reflect the regions agricultural strengths and (future) agritourism brand.

Opportunities exist to address the current gaps in offering and unmet consumer demand including:

1. Showcasing and educating visitors on the agricultural sector through dedicated centres, demonstration farms and tours
2. Enhancing or developing a visitor experience within existing agriculture and / or agritourism operators
3. Developing Aboriginal agritourism
4. Increasing the quality and quantity of on-farm accommodation offering an agritourism experience

Agritourism experiences can appeal to certain segments of the existing DRM target markets as well as new markets that are not currently targeted by the region.

Agritourism can increase length of stay and yield of existing visitors, plus generate new visitation. As agritourism product is further developed with DRM, the region (and indeed Australia) will need to consider how the cluster of agritourism visitor experiences are best marketed to visitors.

A key enabler to further development of agritourism through both enhancing existing businesses and establishing new businesses will be capacity and capability building. This will require resources to identify and attract the right agricultural operators to diversify into tourism; to navigate the barriers to entry; and to build their capability to deliver high quality agritourism experiences.

Definitions

Agriculture: the science, art, or practice of cultivating the soil, producing crops, and raising livestock and in varying degrees the preparation and marketing of the resulting products.

Agritourism: a type of experiential travel which connects people to product or produce, delivered on farming land through a direct 'on farm' experience.

Brand: source of a distinctive promise for customers from a product, service or place. Everything the lead organisation does in collaboration with its partners and community should be orientated around delivering and constantly enhancing the promise. Not just a logo.

Experience: The emotions, feelings and sensations generated by the people met, places visited, activities participated in and memories created by travel, through watching, testing, smelling, touching, listening and being part of a culture or lifestyle that is distinctly different from everyday life and that reaches an individual's deep needs and desires. An experience is not a product (which is the simpler / stripped back / commercialisation of an experience).

Indigenous tourism is generally regarded as tourism specifically to interpret Indigenous cultures and stories, but it can also include any of the following attributes: Indigenous people directly operating or investing in tourism operations; business partnerships between Indigenous organisations and tourism operators; Indigenous people employed in tourism operations; mainstream tourism incorporating Indigenous culture and stories to enhance their programs; and Indigenous input into the way tourism is managed.

Interpretation: an experience that enriches our lives through engaging emotions, enhancing experiences and deepening the understanding of places, people, events and objects from the past and present. Interpretation communicates ideas, information and knowledge in a way which helps people to make sense of their environment.

Local Government Area: An LGA included in the ASGC LGA Structure is a spatial unit which represents the whole geographical area of responsibility of an incorporated Local Government Council or an Aboriginal Council in Queensland. An LGA consists of one or more statistical local areas (SLAs). LGAs defined.

Marketing: the management process through which goods and services move from concept to the customer. It includes the coordination of four elements called the 4 P's of marketing: identification, selection and development of a product ; determination of its price; selection of a distribution channel to reach the customer's place, and development and implementation of a promotional strategy.

Operator: an individual or organisation that conducts a tourism activity which results in some degree of commercial return.

Product: a good or service (tangible or intangible) that an organisation offers to customers.

Target market: the portion of actual and potential visitors that an organisation most wants to attract to their destination or product. The target market is chosen because the needs of the market segments chosen most naturally fit what the destination or product can offer and offer the best return on any marketing investment to attract them.

Visitor (local): a person who comes from the local government area.

Visitor (day tripper): a person who comes to a destination from outside the immediate local area (such as a local government area) and leaves in the same day.

Visitor (overnight): a person who comes to a destination from outside the immediate local area and stays overnight within the same immediate local area.

Yield - The expenditure injections of tourists (sales revenues) or the profitability of catering to different visitor markets. Yield can be defined purely from an accounting perspective (sales revenues per visitor) or the financial rate of return to operators, or gross operating surplus of different industry sectors. Alternatively, the profitability to the tourism industry of different market segments can be assessed.

1. INTRODUCTION

1.1 Why an agritourism strategy for the Riverina Murray?

The Riverina Murray region of NSW Australia, is presented in **Figure 2.2.2**.

The need for an agritourism strategy for the Riverina Murray region of NSW comes directly from the region's 2023 Destination Management Plan (DMP). The DMP noted that while the region is known as the food bowl of NSW, there is a disproportionate lack of agritourism and associated local dining and produce to capitalise on this point of regional differentiation.

World Class Food and Drink is a major strength identified in the NSW VES 2030. The Riverina Murray is a natural region to help deliver this strength and attract visitors to NSW. To effectively leverage its point of difference, the region needs to increase the number, accessibility and quality of local dining and produce, especially in spectacular settings, such as riverfront areas. This means adding more product beyond the few regional centres where they are currently clustered.

Two subsequent strategic objectives of the DMP were to:

1. Position the Riverina Murray as an authentic and sustainable agritourism destination that delivers and promotes a suite of local produce experiences for visitors to drink, eat, stay and explore the region.
2. Develop trails and touring routes, agritourism and new accommodation product at strategic locations to differentiate the Riverina Murray region and grow overnight stays

The DMP also proposed that Destination Riverina Murray (DRM) lead the development and implementation of a Riverina Murray Agritourism, Produce, Food and Drink Product & Experience Development Strategy including identification of experience trails and best practice sustainability practice (eg. the Canola Trail).

Figure 1.1.2 Map of the study area known as the Riverina Murray



The DMP also suggested that agritourism in the region should go beyond the paddock to plate concept that fits nicely with small-scale boutique food production and highlight:

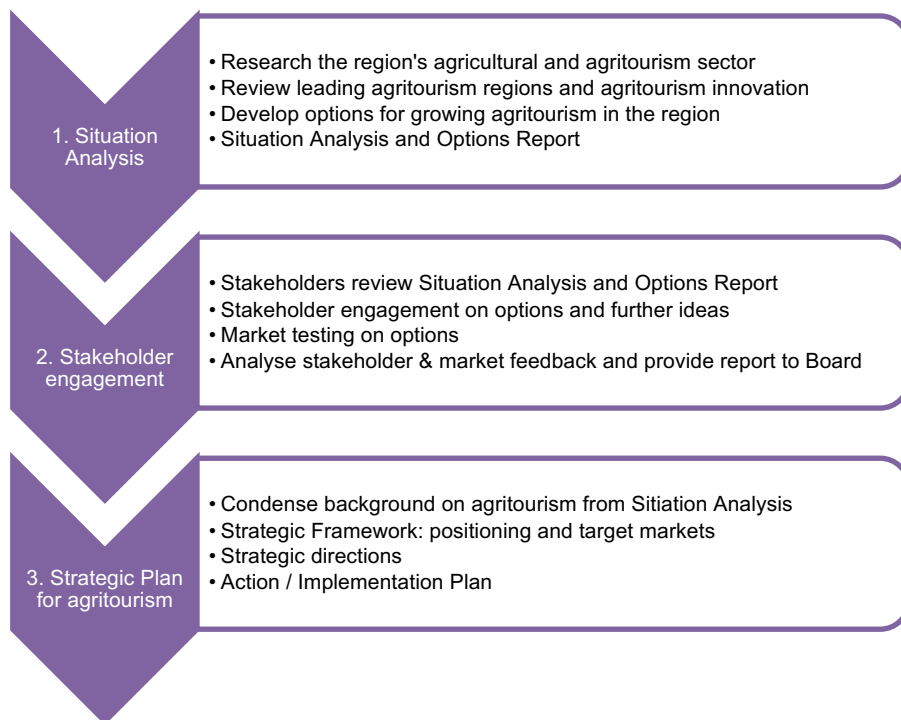
- how food is grown, irrigated, produced, processed and distributed; and
- the sustainability challenges in food production
- how to choose food that reflects one's values.

1.2 Purpose of this Strategy

The purpose of this Agritourism Strategy is to provide Destination Riverina Murray and its stakeholders with the directions needed to grow a differentiated and competitive agritourism sector that will leverage the strength of the agriculture sector to strengthen the appeal of visiting the region and enhance the benefits of the region's visitor economy. The approach to developing a Strategic Plan for agritourism is presented in **Figure 1.2.1**.

This Strategy can be read alongside its predecessor Situation Analysis and Options Report (SMA Tourism 24 April 2023). This Report provided useful background and options for further developing agritourism in the region, to support consultation input to the Strategy.

Figure 1.2.1 The approach to developing this Strategy



2. BACKGROUND ON AGRITOURISM

2.1 WHAT IS AGRITOURISM?

National definition

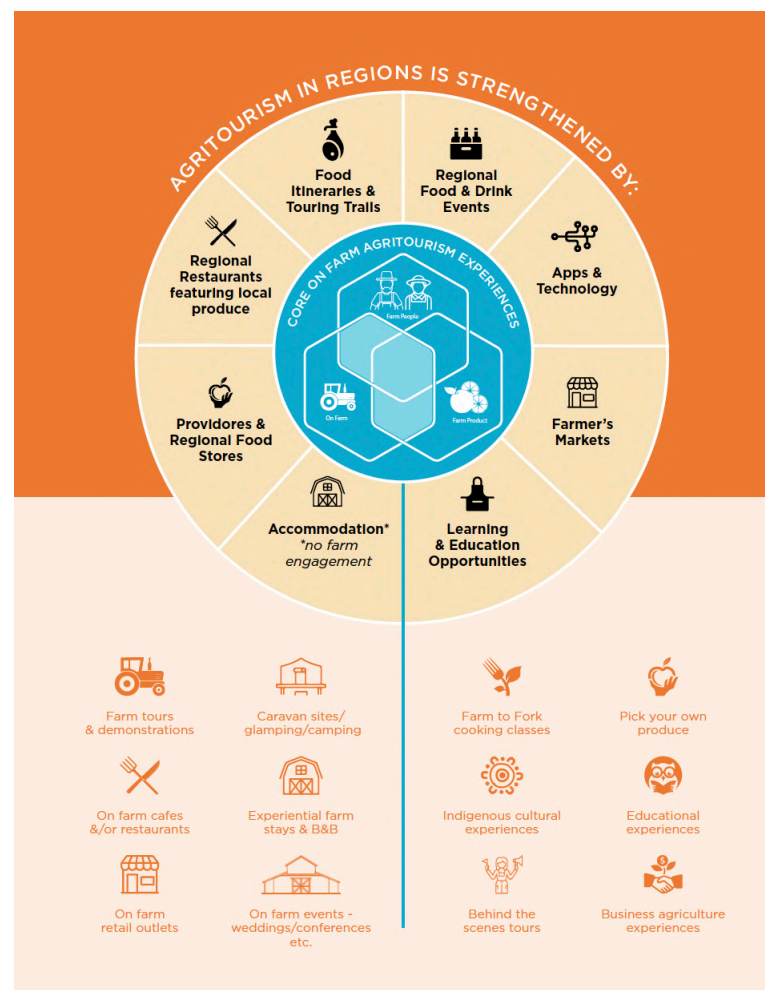
Agritourism has been defined in Australia as a type of experiential travel which connects people to product or produce, delivered on farming land through a direct “on farm” experience (Australian Regional Tourism 2023). This definition posits four essential elements:

1. Combines tourism and agriculture industries
2. Attracts members of the public to visit **on farm**
3. Farmers diversify from agriculture into tourism, increasing farm income and/or employment
4. Provides recreation, entertainment and/or educational experiences related to the agriculture enterprise

Applying this definition, to be acknowledged as Agritourism, an experience must be delivered on farm and include one or both of engagement with people and product. Food and drinks being produced and sold locally, without featuring local produce, is not necessarily agritourism. Agriculture without a visitor experience is not agritourism.

The National definition focus of the experience being on farm is supported by an ecosystem of supporting visitor experiences that may also provide opportunities to access the people and product of the region, such as restaurants featuring local produce, farmer’s markets and providore stores.

Figure 2.1.1 Ways to strengthen agritourism (Source: Australian Regional Tourism 2023, National Agritourism Framework)



Definition of agritourism used for this Strategy

This Strategy is one of the first planning documents to apply Australia's National definition of agritourism explained in **Section 2.1.1**. As such, the region is 'road testing the definition'. Consultation for this Strategy identified the need to be slightly broader and accommodating for producers that cannot host agritourism on farm due to biosecurity, but still wish to engage with visitors and have subsequently chosen a more robust and accessible location to interpret their agriculture and sell their product, such as in a packing shed within a township. A regional example of this could be Holbrook Paddock Eggs.

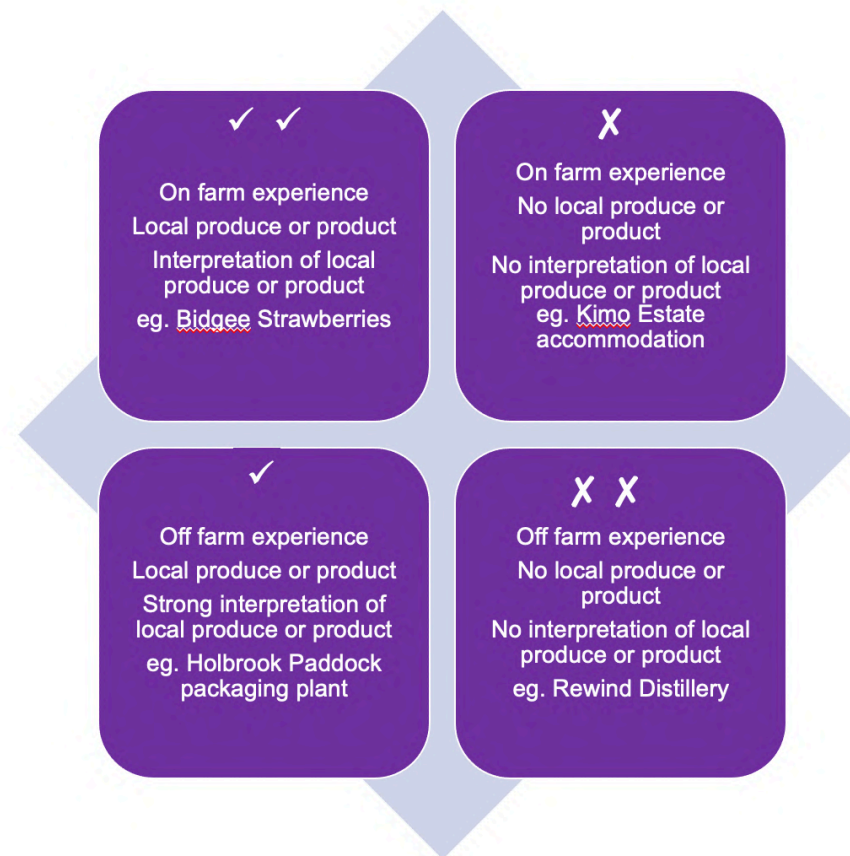
Figure 2.1.2 presents the adaptation of the National definition of agritourism for practical application across the region. The regional adaptation allows for an off farm experience of local produce or product, providing it includes strong interpretation of this. Strong interpretation requires (as a minimum):

1. Comprehensively addressing growing / producing
2. Addressing relationship with environment
3. Using more than one interpretation technique

This has been included to recognise that some agricultural producers want to provide an experience of their business but may not be able to due to accessibility or biosecurity constraints. Conversely, an on-farm experience that does not feature and experience and interpretation of local produce or product is not considered agritourism. This subsequently excludes some on farm accommodation.

In addition, off farm experiences featuring the production of non-local produce or product is not considered agritourism. This subsequently excludes many food and beverage experiences.

Figure 2.1.2 Adaptation of the National definition of agritourism for practical application across the Riverina Murray region



The importance of agritourism

Agritourism has an important role in creating a more direct connection between primary producers and the end consumer. It also:

- provides educational opportunities for consumers to learn about food growth, production and manufacturing (which leads to educated decisions about food choices);
- generates a supplementary revenue stream or product for farmers;
- provides social benefits to farmers through increased interaction and purpose;
- helps reconnect people with farming and the land and relationships between city and country; and
- contributes to local economies and additional employment opportunities.

Agritourism is an emerging sector. Pre COVID, it was valued at:

- \$6B in 2019 (farm producers only); and
- \$16B in 2019 (including drink sector eg. wine, spirits) (2019 International Visitor Survey year end December 2019)

CSIRO has identified agritourism as a key growth area for Australia's regional economy for the next decade, with a nationally projected total expenditure of \$18.6B by 2030 (growing at approximately 5% per annum). This unique diversification opportunity can enable financial resilience for businesses, agricultural workers, and support local transport, accommodation, and retail industries.

In a recent survey of regional local councils, conducted by Australian Regional Tourism, 84% of respondents nominated agritourism in their top five key growth

areas for development (CSIRO 2018, Opportunities for Australian food and agribusiness).

Examples of agritourism

Some examples of agritourism might be:

- farm tours and demonstrations, behind the scenes tours;
- pick your own product;
- on farm cafes and / or restaurants;
- on farm retail outlets;
- experiential farm stays and bed & breakfast;
- on farm events;
- farm to fork cooking lessons
- Indigenous cultural experiences (a crossover with caring for country and Indigenous tourism generally)

Examples of agritourism visitor markets

Like other niche tourism sectors, agritourism visitor markets might come to a region especially for agritourism, or they might come for another reason, but add on an agritourism experience. Like all tourism, agritourism visitor markets can come for leisure, visiting friends and family, business and education. There are many people working in agriculture that travel to regions for agricultural learning or business, that could also be classed as part of agritourism.

2.2 AUSTRALIA'S LEADING AGRITOURISM REGIONS

Leadership elements we looked for

Nationally there are a number of regions that have been successful in positioning themselves as food and wine destinations. Places such as Margaret River, the Barossa Valley, the Hunter Valley and the Yarra Valley have built a reputation for food, produce and wine experiences and benefit from their close proximity to large urban markets and were largely established on the success of the wine industry.

Approximately 92% of Australia's agritourism experiences are delivered in regional areas. While there is considerable overlap between successful food and wine regions against agritourism regions (as suggested by visits to farms and farmgates), we did not find many regions well established for agritourism. We suggest that a regional leader in agritourism might have:

- an agritourism plan / strategy;
- a network and collection of partnerships for sharing agritourism ideas, getting support and growing business;
- local government planning and approval support for developing agritourism;
- a regional agritourism brand;
- a diverse range of agritourism experiences and products;
- regionally based marketing collateral to support the brand and product; and
- a portion of the visitor market coming to the region to experience its agritourism.

We found that that the Southern Forests (WA), the State of Tasmania and the Scenic Rim (Qld) appear to be achieving more of these best practice criteria than

anywhere else, with Scenic Rim following on. Case studies of these three regional leaders were provided in the Situation Analysis Report (SMA Tourism 24 April 2023).

Dominant characteristics and trends

Analysis of the agritourism regions in Australia suggests that there are very few agritourism strategies, and that there are no organisations publicly reporting on their implementation. The Murray Region has prepared a set of cluster plans (see **Section 5.2.2** for case study, implementation uncertain). We only found one region that had vertically integrated their agricultural sector and tourism sector, via a committee, capacity building and marketing (Southern Forests WA). We found agritourism focussed capacity building sporadic and dependent on external funding. There are few examples of fundamental reforms to regulations constraining agritourism and most that exist are very recent. The positioning and lead product offer has been based around:

- Gourmet / boutique food and wine
- Fresh produce
- Attractive surrounding natural settings

Over 90% of the operators are small scale owner operators. We found most of the trails are more orientated around sampling food and wine trails than agritourism and are more a collection of product in the region, with no interpretation or experiential elements interlinking them, and no incentives for visiting more of them. There is a growing portion of farm-based accommodation that is either just rural accommodation, or accommodation on a farm setting with limited farm experience.

2.3 INNOVATION IN AGRITOURISM ACROSS THE WORLD

It is quite challenging to find best practice agritourism examples. We found no government, NGO or private sector distribution channel had collated and profiled these examples.

the Situation Analysis Report documented examples of innovation in agritourism across the World (SMA Tourism 24 April 2023). Examples from the Riverina Murray are covered later in **Attachment A**.

Demonstration Farms

Demonstration farms are generally farms that in addition to their farm as a core business, have established visitor facilities, interpretation and experiences to understand the workings of a farm. Experiences may include demonstration spaces, visitor centres, guided and self-guided tours, cafes and restaurants and food retail outlets – which also offer online ordering. Conventional demonstration farms were aimed at young families and featured petting the cuter farm animals. Contemporary demonstration farms are revealing innovation in farm practice that leads to greater productivity and quality, but also greater sustainability across many dimensions. These contemporary dimensions often feature partnerships with research and conservation organisations.

While there have been a few smaller sized examples in the Riverina over the years, there is a gap in Australia's supply of contemporary demonstration farms revealing innovation in farm practices linked to provenance and contemporary values including sustainability, productivity and quality.

The Situation Analysis Report presented a range of case studies profiling innovation in demonstration farms.

Agricultural centres of excellence

Like demonstration farms, agricultural centres of excellence can act as tourist attractions when delivering interesting interpretation and education experiences. Larger centres are placed in cities and regional centres where there is a large market. Smaller centres are built adjacent to a demonstration farm.

The strength of the centre for farmers and agricultural business sector, is to host information sessions, displays and experts to access insights that can improve farming practices.

The strength of the centre for leisure markets is to feature immersive and interactive displays that address more complex ideas than just day to day farm operations. Centres are ideal at providing an introduction to diverse agriculture spread across a large area and can act as a 'hub and spoke', introducing topics that can then be explored across the region with the benefit of a background knowledge.

Centres can also provide substitution experiences for agricultural practices that are not always easily viewed due to seasonality, safety or biosecurity constraints. Centres also provide an opportunity to bring agricultural industry groups together to educate and showcase innovation.

There is a gap in Australia's supply of agricultural tourist attractions able to introduce the strengths, challenges and innovation of agriculture in a given region. This gap extends to the provision of substitution experiences and a hub and spoke

model that can coordinate visits to farms in ways that help reduce on-farm visitation constraints.

The Situation Analysis Report presented a range of case studies profiling innovation in agricultural centres of excellence.

Aboriginal agritourism experiences

Books like Len Pascoe's Dark Emu have led the way in debunking theories that Aboriginal people were simply hunters and gatherers, but that they have a deep knowledge of the land, knew how to harvest food sustainably, could manipulate the land to ensure they got what was needed, and built dams and wells for water supply, planted and harvested seeds to preserve the surplus that was stored in houses and shed.

Self-guided bush tucker gardens and guided bush tucker tours were some of the first Aboriginal tourism experiences created by First Nations people. From this has come Indigenous cafes, restaurants and caterers. However, there are few examples translating Pascoe's revelations into visitor experiences. This is a gap in Aboriginal tourism for the time being.

There is a huge gap across the World in providing an Indigenous perspective on agriculture that addresses sustainable and traditional approaches. While there are a growing number of research papers, books and documentaries, the tourism sector is yet to take this up. Experiences that dispel myths about Aboriginal hunter gathering dominance is not only an unmet demand among experiential travellers but with Aboriginal people.

The Situation Analysis Report presented a range of case studies profiling innovation in Aboriginal agritourism experiences.

Agritourism accommodation

Providing accommodation on farms can be a great way to generate additional income for farms and some employment for the owners. Some of this has been done with care, character and quality, and some has not.

There is a growing supply of accommodation on Australian farms that are not visually or interpretively linked to farm activity. Cost effective tiny houses are placed into an attractive setting but are otherwise a passive experience. This passive form of on-farm accommodation is not considered to be core agritourism. It requires less effort but does little to engage people and raise their awareness.

There is a gap in the volume of agritourism accommodation and especially in sufficient close to regional agritourism centres. Generally, farm accommodation grows as a result of the growth in other local experiences and attractions, so requires less intervention to stimulate.

The Situation Analysis Report presented a range of case studies profiling innovation in agritourism accommodation.

Agritourism for business and education

Agritourism for business and education is a less developed sector worthy of further consideration for regions with larger scale agriculture. The Situation Analysis Report presented a range of case studies profiling agritourism for business and education.

Agritourism trails and tours for leisure and or business markets

The development of tourism trails has not been extensive in Australia and most of them have been more of a patchwork of semi-related attractions than a collection integrated with a common story. In this sense, there is a gap in the Australian market for agritourism trails and tours that interlink a collection of farm experiences with an interpretive story that is relevant to contemporary living.

There may be a larger gap for business and education markets than for leisure. The Situation Analysis Report presented a range of case studies profiling agritourism trails and tours for leisure and or business markets.

Agritourism events

Agricultural events

There are a number of agricultural events that attract visitors on agricultural business, such as Henty Field Days and AgFest in Tasmania. The Situation Analysis Report presented a range of case studies profiling innovation in agritourism events.

Agritourism marketing

At the time of researching, there were few examples of innovation in agritourism marketing identified. One example – the Southern Forests brand, is profiled in the Situation Analysis Report. Within the region, the Taste Riverina logo and website has potential to grow into innovative marketing for the region.

Agritourism capacity building

Agritourism capacity building has had a short life in Australia and is largely delivered by a small number of consultants as one-off, short-term programs

addressing business development and marketing. Tasmania has been particularly active in this space.

There may be a gap in the delivery of capacity building that addresses agritourism product development for the region – particularly interpretation and storytelling.

Four examples of innovation in agritourism capacity building are provided in the Situation Analysis Report.

2.4 Underlying unmet market needs of agritourism

This section has profiled a great deal of agritourism product and some product innovations. From this work we have interpreted these innovations as being designed to address some unmet / under-delivered agritourism market needs. This section 'unpacks' each of these.

Authentic

People seeking agritourism are seeking authenticity. This need arises from increasingly fast and disconnected lifestyles. There is an increasing disconnect between purchasing and consuming products that come from agriculture in a finished state and having any sense of connection to what it is. Agritourists seeking authenticity are seeking to form a connection and some insights about what they consume, such as:

- where it comes from;
- how it was produced;
- what depicts quality; and

- what depicts responsible and sustainable produce.

Seeing the product grown and produced helps address the need for consumption to be more authentic.

Personal

Aligned with authenticity is the need for a personal touch. A personal touch means some sense of connection between the maker and the consumer. Personality traits often associated with farmers include being real, honest, decent and fair. An agritourism connection could be built from emotional interactions that generate politeness, hospitality, generosity, friendliness, to cognitive interactions that deliver stories, lessons and suggestions that benefit quality of life.

Having personal experiences helps consumers to feel more human.

Empowerment

People seeking empowerment want ways to improve their life. Empowerment can come from useful information, demonstrations, guidance and systems that depict standards that can be relied on. Getting an authentic experience about agriculture from a helpful person involved in it empowers the consumer to make better choices that reflect their needs and wants and avoid what they don't like and want.

Sustainable

Increasingly people are wanting to consume in ways that are more responsible to ensure they can lead a healthy and happy life while minimising their impact on the environment. Pragmatically this means being able to choose products and services that are as sustainable as they can be, or as sustainable as can be afforded at the time. Sustainability is coming from the wise use of limited resources, minimising

and reusing waste, innovative practices, smart technology and reducing consumption to what is needed over what is wanted.

2.5 Interpreting unmet market needs into differentiated and competitive agritourism experiences

Authentic locations to purchase, eat and drink locally produced produce spearheaded the development of agritourism in Australia. Following this development has been the development of accommodation on farms. While there are some innovative exceptions, overall key market needs remain unmet because there just isn't enough examples with the heart, soul and cognitive dimensions to really move and wow people.

Consequently, there is a danger of copy-cat replication that results in less authenticity and more bland, disconnected product development. There remain some big gaps in Australia's agritourism offer and some of these gaps we found were agritourism experiences that:

- interpret the challenges of growing food, and especially the challenges of being productive and sustainable;
- demonstrate agriculture in action – things happening that represent processes and outcomes;
- how Indigenous knowledge is being used to enhance agricultural practices and production;
- conservation that addresses the challenges of being productive and sustainable; and

- showcasing large-scale agriculture and broad acre farming.

At a more specific product level, there are National gaps in:

- demonstration farming integrated with food experiences.
- agricultural tourist attractions that can act as a hub and spoke model; and
- Aboriginal agritourism experiences.

The previous sections identified the following gaps (in more detail):

- agricultural visitor centres able to introduce the strengths, challenges and innovation of agriculture in a given region;
- an Indigenous perspective on agriculture that addresses sustainable and traditional approaches; and
- Potential gap in the delivery of capacity building that addresses agritourism product development for the region – particularly interpretation and storytelling.

3. AGRICULTURE IN THE REGION

3.1 Aboriginal agriculture in the region

We know very little about traditional Aboriginal cultural practices related to food and use of natural resources, and the significance of the rivers and waterways to the traditional custodians of the lands in this region. We would benefit from knowing and sharing much more.

Pre colonisation, soils across the Riverina Murray were able to absorb more moisture than they do now, and pastures were based on deep rooted perennial (not annual) grasses (mainly kangaroo grass) that were able to maintain a high level of production even in drought years¹. These pastures supported the large stock of kangaroos, emus and other game needed to help feed the large Aboriginal population.

The extremely large Wiradjuri tribe which occupied much of central and southern NSW actively built dams and stocked them with fish for the benefit of the growing population.

Aboriginal people drew on a wide variety of plants for nutrition. Typha ('bulrushes') was a staple in Southern Australia and was the plant grown under controlled irrigation along the Murray mentioned above. It was burned at a key point in the growth cycle. It could be processed into something similar to bread and the fibre was used in a variety of ways including the making of nets.

¹ Hinchley, M 2018, Latest Research on the Aboriginal lifestyle in 1788 and Relevant References, Researchgate.net

Aboriginal population density was reportedly higher in the Riverina Murray region than in many parts of Australia (Webb 1995). Populations were most dense alongside rivers and aquatic resources. The coalescence of people and language families along the rivers produced diversity in cultural practices and phenotypes.

Figure 3.1.1 Aboriginal women gathering food (Federation University)



Flexibility in response to the highly variable environment was maintained through networks, shifting locations, and following resources as the water levels ebbed and

flowed. Early settlers report net fishing, hunting emus, crows and eating seasonal foods, such as large amounts of tadpoles and caterpillars.

In a 350-kilometre band either side of the Murray River running from Echuca to west of Swan Hill there was a semi-permanent population that practised irrigated agriculture and aquaculture (the controlled production of fish) on an extensive scale. Dykes about one metre high had been built on the banks of the Murray in the Swan Hill area to control the river flow for this purpose. The ovens that were used to steam-cook food still dot the area. The largest ovens were capable of cooking more than one tonne of food. In the central Murray ovens become increasingly younger the greater the distance from the Murray suggesting it was an area of population growth.

On the Murrumbidgee River there are also concentration of ovens in areas where there usually was annual flooding near Wagga Wagga and Hay. In the Northern Territory concentrations of ovens occur under similar conditions on the Adelaide River.

Ironically, the Aboriginal population in the central Murray where irrigated agriculture and aquaculture were developed was possibly one of the less healthy in all of Australia (Hinchley 2018). The higher population density meant that disease (including European diseases) spread more rapidly. There was also a much higher incidence of anaemia in this population which is typical in populations undergoing the transition from hunter gatherer to agricultural lifestyles.

² As farming and grazing intensified, colonists began poisoning dingoes and conducting large scale shooting of kangaroos, and numerous species including rat-kangaroos, hare-wallabies, bandicoots, stick nest rats and nail tailed wallabies began to become extinct in this period.

In comparison with other regions being settled, the availability of food and water allowed Aboriginal people in the Riverina to maintain their lifestyle and even co-exist with colonists for a longer period of time. In the 1860s, Aboriginal people were still living independent of Europeans and still living with traditional foods. Some communities were observed living on typha roots (or wargal) gathered from nearby swamps.

However, with extensive colonial settlement occurring in the late 1860s, (including fencing and water control), sheep over eating the deep-rooted perennial grasses, declining game meat sources², the spreading of European disease and exposure to violence and killings, Aboriginal people began to lose access to fertile land and water, agriculture and hunting practices began to decline, and people began moving into camps and lose their independence.

3.2 Non-Aboriginal agriculture in the region

The raw materials driving contemporary agriculture in the Riverina Murray

The visitor economy region known as the Riverina Murray is different to the agricultural Riverina region – it stretches further west to include Balranald and

Wentworth LGA's and south to include Murray River border areas, but not as far north as the agricultural region does.

Geographically, the agricultural version of the Riverina Murray region is bounded in the east by the Great Dividing Range, north by a line drawn from about Yass to Hillston and then directly west to the South Australian border, and south by the Murray River. Statistically, it comprises the Murrumbidgee and Murray statistical districts.

The occurrence of several climate classes, various terrain and landform types, numerous soils, and diverse ecosystems all contribute to the wide variety of biophysical features noted in the region.

In the east, the Riverina is characterised by high rainfall grazing lands, which slope westward to the main cropping belt which extends from Wagga to beyond Griffith. Several major irrigation areas and irrigation districts occur around Leeton-Griffith, Deniliquin-Finley, and Wentworth-Mildura. Low-rainfall grazing lands dominate the western part of the region.

The Basin is characterised generally by low rainfall, light soils, hot summers and cool winters, with long sunlight hours. Where irrigation water can be delivered the soils and long sunlight hours ensure fast and luxuriant growth of crops.

The role of rainfall and irrigation

The Riverina agricultural region occupies a large southern segment of the Murray Darling Basin. This system of rivers drains 15% of the Australian continent. It covers parts of the states of Queensland, Victoria, New South Wales, Victoria and South Australia.

The three main rivers of the Riverina Murray region are the Murray, Murrumbidgee and Lachlan Rivers, all fed by numerous creeks and tributaries. The three river systems are part of the greater Murray-Darling Basin.

The Snowy Hydro Scheme made it possible for major irrigation schemes to be designed to drought proof inland Australia and provide food security for the nation. The Murrumbidgee Irrigation Area (MIA) was established in 1912 following construction of Burrinjuck Dam, on the Murrumbidgee River, Berembred Weir and associated canals. Murray Irrigation Area and Districts were constructed between 1933 and 1964 when the NSW Government undertook the development of the state's largest irrigation network known as the Murray Irrigation Area, fed by the waters of the Murray River. Coleambally Irrigation Area was developed in the 1950s and uses water from the Murrumbidgee River. The irrigation areas were governed by the State government until privatisation in 1990's.

In recent decades the Basin has become the scene of major political disputes, typically triggered by claims of commodification and over allocation of water harvesting rights to some irrigators. Also, increasingly variable climatic conditions and growing environmental concerns regarding the health of riparian biozones are present.

In 2007 the Commonwealth government released The Murray Darling Basin Plan. This plan was designed to redress conditions from which disputation arose. The Plan has proved controversial and problematical with various lobby groups demanding mutually exclusive amendments.

Key agricultural strengths of the region

Agricultural reports and stakeholders consulted to date have suggested four agricultural strengths of the region (in bold) and a fifth emerging strength:

1. **Diversity** of agricultural product within a relatively small area (assisted by a Mediterranean climate and irrigation)
2. Large **scale** irrigation increasing productivity
3. Preparedness to **innovate**, trial and implement new technology (eg. monitoring and automation) allowing for improved efficiency and adaptive management)
4. **Sustainability** leadership for some products (eg. efficient use of water by rice growers)
5. Ability for consumers to trace where their food came from (within the region)

Summarising agricultural focus

Land use in the region is mainly agricultural with dry land grazing and cereal based cropping accounting for over 80% of land use. The Riverina Murray includes some of the most highly productive agricultural land in the Murray Darling Basin. The variety of landscapes in the region supports a diverse range of agricultural industries that all place a high value on the region's reliable water supplies.

Agriculture in the region includes beef grazing and temperate fruit (apples, pears, cherries) production in the east, through broad-acre cropping (cereal, oilseed and pulses), beef and sheep grazing, intensive poultry and pigs, irrigation cropping (cotton, rice, maize), to rangeland grazing in the west. Irrigated agriculture (cotton, rice, horticulture – citrus, grape, nuts and dairy) is a key feature of the region.

Agricultural production

The region plays an important role in feeding Australians and the world. In 2020/21, the total value of agricultural output in the Riverina and Murray Region was \$3,604M. The largest commodity produced was cereal crops, which accounted for 32.2% of the Riverina and Murray Region's total agricultural output in value terms.

Key local government areas where this is produced include Carrathool, Bland, Murray River and Edward River.

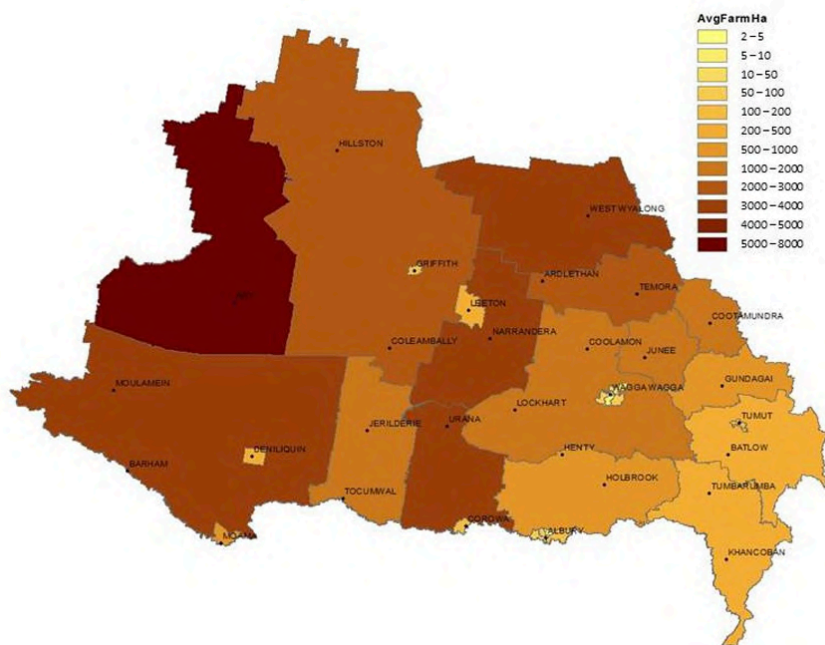
The Riverina produces nearly one-fourth of the agricultural production of New South Wales. provides detailed contrasts the value of agricultural production in the Riverina to NSW in 2020/21. **Attachment B** provides a series of tables profiling production in the region. Key findings from analysing this data include:

- the region is the largest producer of rice in Australia, and of rice, lentils, maize (for stock feed) and canola in NSW – and possibly Barley (which is why the Whitton Malthouse is located in the region).
- the region is the largest producer of citrus in Australia. It can be noted that Griffith is not in the top three LGA's for any of the Citrus categories.
- while Griffith produces and processes a large volume of grapes, the region is a relatively small player in terms of grapes grown in the region – only 6%;
- the region produces 57% of 'All other nuts' across Australia (most of Australia's almonds come from Mildura & Swan Hill, but Carrathool & Wentworth grow most of the NSW supply); and
- the region produces 64% of NSW Fruit & Nuts (based on GV).

Average farm size

The size of farms varies greatly across the region depending on location, landscape and production system. Generally, farms are largest in the west (4,000 – 8,000ha) where it is drier, midrange in the centre (2,000 – 4,000 ha) and smaller (but still large) in the southeast (200 – 2,000ha). The largest urban areas have around them the smallest farms (<50ha) are found close to the larger urban areas.

Figure 3.2.3 Average farm size across the region (Source: NSW Department of Primary Industries, 2018, Riverina Murray Region Agricultural Profile)



We were unable to find information regarding farm ownership (corporate versus family owned) and whether farm consolidation is causing an issue.

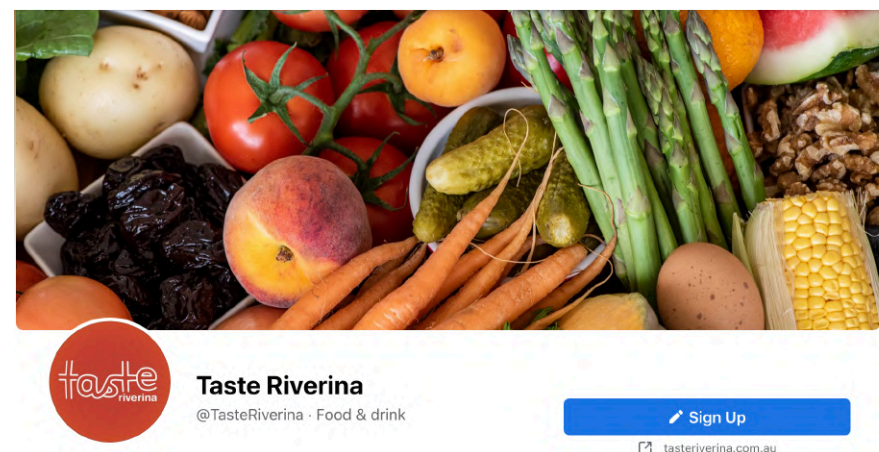
Current challenges

No regional brand

The region doesn't have an agricultural brand to capture the essence of strengths of the region and build customer loyalty. Instead, most agricultural produce branding and marketing is done on a commodity or supplier basis only.

The closest to a regional agricultural brand is Taste Riverina, which, via Facebook and Instagram sites, promotes local food, beer and wine in the Riverina. Head to our website for upcoming events or to register your event.

Figure 3.2.4 Taste Riverina branding (from Facebook site)



Smaller and more boutique regions have achieved brand recognition, largely driven by agriculture businesses commercially motivated to do so to build their brand with consumers. This brand and regional brand building by the agriculture sector has helped develop agritourism.

Consultation associated with the development of this Strategy found limited interest in the agricultural sector to develop a regional agricultural brand.

No regional marketing and education of the brand

There is no coordinated marketing or education to raise awareness of the region's agricultural strengths and brand. This limits the potential for greater recognition and support for the region.

Stakeholders report a huge range of untold or under marketed success stories in the region that could support the brand. Agritourism could be one of the channels needed to get this started.

Other challenges facing the region's agricultural sector

The challenges faced by the agricultural industry in the Riverina-Murray Region are reflective of issues across NSW:

- weather/climate (including seasonal variations and extremes in weather, El Nina, El Nino and climate change and its subsequent impacts);
- commodity prices/returns;
- rising input costs;
- security to operate and thrive (land use conflict, right to farm);
- dealing with the rate of change;
- engaging forward planning and instilling a broader societal recognition and value of agriculture; and
- no regional brand.

Challenges facing farmers in the region

Some of the challenges facing the region's individual farmers include:

- Fragmentation and an increase in land use conflict;
- Increasing pressure from other resource users;
- Cross-border complexity;
- Adequate quality water supply; and
- Regional decline reducing quality of life, health & attraction and retention of people to regional areas

Attachment C presents further detail on some of these

Agricultural innovation in the region

There has been significant innovation across the region's agricultural sector. Agriculture in the region has been economically successful enough for enough time to generate financial reserves that allow farmers to take risks in terms of trying new crops, new farming techniques and animal husbandries.

Attachment D profiles some 17 examples of innovation in the region's agricultural businesses, sustainability and local Aboriginal initiatives. These examples were sourced from published material on sites such as Local Land Services Riverina and the Department of Primary Industries Wagga Wagga Agricultural Institute. From this small collection several themes emerge that could become themes for agritourism experiences:

- increased productivity – how to grow more food from the same footprint without impacting the environment;
- environmentally friendly production – how to grow food and reduce natural resource consumption and other impacts on the environment;
- partnering farming and conservation – how farmers and conservationists are working together; and
- Indigenous partnerships with farming – how farmers and local Aboriginal people are working together.

4. AGRITOURISM IN THE REGION

4.1 Agritourism planning

Recent NSW agritourism reforms

The NSW Department of Planning and Environment recently introduced some reforms to support small scale on farm agritourism and agricultural development.

Exempt development (proposals not requiring development approval consent) have been defined as those that are minor and low-impact development and can be carried out without the need for planning or building approval if it meets specified development standards.

Complying development is a fast-tracked approval process for straight-forward development where planning and building standards can be signed-off by the council or a registered certifier. This process offers many benefits to applicants including certainty, as well as time and cost savings.

Table 4.1.1 summarises the applicability of these to farm gate premises, farm experiences. These changes were well overdue and are a welcome start. However, in our view, they assist establish hobby scale businesses rather than establish sufficient scale to engage professional staff. For example, the limitation on complying farm stay accommodation at six buildings is insufficient, as farm sheds and residents can be caught up in this count, reducing units to perhaps three – insufficient for a serious business.

Cootamundra Gundagai Agritourism Development Plan

The Cootamundra Gundagai Agritourism Development Plan (Tilma Group 2020) was developed for the Cootamundra Gundagai Regional Council. Some 12 strategies were proposed:

1. Develop an agritourism business development program
2. Amend LEP to increase opportunities for agritourism development
3. Develop an approvals process for agritourism development
4. Create an agritourism brand story for the region
5. Bundle products into itineraries and a map
6. Capture and share the region's stories
7. Develop an alliance with Hilltops and Snowy Valleys Council
8. Secure funding and implement the agritourism business development program in collaboration with industry partners
9. Attract agritourism investment
10. Invest in strategic marketing
11. Secure a destination attraction at the Gundagai Old Mill
12. Develop a Spring and Autumn Food Festival

Implementation of the strategies has not been identified, but further work had commenced at the time of preparing this Strategy.

Table 4.1.1 Key development standards for agritourism in NSW (Source: Department of Planning and Environment)

Activity	Exempt development	Complying development
Farm gate premises	<p>Permitted in RU1, RU2, RU4 zones and in other zones where agriculture, extensive agriculture, intensive livestock agriculture and intensive plant agriculture are permitted under the LEP</p> <p>100 visitors at any one time.</p> <p>Hours of operation - Sunday to Friday and public holidays 8am-5pm, Saturday 7am-5pm</p> <p>Use up to 200m² gross floor area of an existing building</p> <p>Off street parking</p>	<p>Permitted in RU1, RU2, RU4 zones where agritourism is permitted under the LEP</p> <p>Maximum 200m² gross floor area for each building to maximum 500m² for all farm gate premises and farm experience premises buildings on the landholding</p> <p>The standards for exempt development for maximum guest numbers, hours of operation and parking also apply</p>
Farm experience premises	<p>Permitted in RU1, RU2, RU4 zones and in other zones where agriculture, extensive agriculture, intensive livestock agriculture and intensive plant agriculture are permitted.</p> <p>50 visitors at any one time (excluding school visits, farm tours and horse-riding tours).</p> <p>Total 100 guests at any one time for all farm gate premises and farm experience premises (excluding tours and school visits).</p> <p>Maximum 52 days per year (excluding school visits, farm tours and horse-riding tours).</p> <p>Hours of operation - Sunday to Thursday and public holidays 8am-6pm, Friday and Saturday 8am-midnight.</p> <p>Use up to 200m² gross floor area of an existing building.</p> <p>Off street parking.</p>	<p>Permitted in RU1, RU2, RU4 where agritourism is permitted</p> <p>Maximum 200m² gross floor area for each building to maximum 500m² for all farm gate premises and farm experience premises buildings on the landholding.</p> <p>The standards for exempt development for maximum guest numbers, maximum days, hours of operation and parking also apply</p>
Farm stay accommodation	<p>Permitted in RU1, RU2, RU4 zones and in other zones where agriculture, extensive agriculture, intensive livestock agriculture and intensive plant agriculture are permitted.</p> <p>Maximum 20 guests in tents, caravans and campervans.</p> <p>Maximum 6 caravans and campervans.</p> <p>Maximum 21 consecutive days of stay.</p> <p>Minimum landholding of 15ha for camping/caravans.</p> <p>Use up to 60m² gross floor area of an existing residential accommodation or manufactured home.</p> <p>Off street parking.</p>	<p>Permitted in RU1, RU2, RU4 zones where farm stay accommodation is permitted under the LEP.</p> <p>Maximum 6 buildings on the landholding.</p> <p>Maximum 21 consecutive days of stay.</p> <p>Minimum landholding size of 15ha (new buildings).</p> <p>Maximum 60m² gross floor area for a new building or use up to 60m² of an existing building.</p> <p>Use up to 25m² of an existing building to provide communal amenities or facilities.</p> <p>Off street parking</p>
Roadside stalls	<p>Permitted in RU1, RU2, RU4 zones</p> <p>One stall per farm, located on the property</p> <p>Cannot be located on land adjacent to a freeway, tollway or highway</p> <p>Max 9m² footprint</p> <p>Parking on the property or on the road verge subject to certain requirements</p>	N/A

Paddock to Plate Cluster Plans for Murray Region

Murray River Tourism (MRT) commissioned the Murray Farm-to-plate (F2P) Program to develop the Murray region as a renowned agri and culinary tourism destination. Stakeholders identified a number of key factors that underpin or impede the development of agri and culinary tourism in the region, including:

- an expectation by consumers that regional experiences will offer local produce as part of the food and drink offering and that they will have access to agri and culinary tourism experiences on and off farm;
- significant challenges in identifying and accessing the region's fresh seasonal and value-added regional produce from both a consumer, visitor and commercial food service perspective;
- recognising that the food system is designed to supply the urban based central markets, which in turn supply back to regions;
- insufficient knowledge and regulation prevent farmers from diversifying into tourism or value adding their produce;
- tourism, hospitality and agriculture do not connect easily; and
- there is no current system of provenance to understand seasonality and to connect the produce to the source.

The F2P was designed by Regionality (2018) to boost the region's food and drink related products and experiences, by improving the quality, authenticity and availability of offerings to visitors and locals. Key recommendations included:

1. Regional provenance using a Geographical Indication System;
2. Regional Food Systems involving:
 - developing the supply of produce and experiences;
 - driving commercial and consumer demand;

- creating a distribution system that supports regional trade; and
 - addressing barriers that arise from systemic and cultural change.
3. Application of the value chain system to the regional food system.

Separate Paddock to Plate Cluster Plans were produced for the Western Murray, Mid-west Murray, Central Murray, Mid-east Murray and East Murray regions. Implementation status of the cluster plans has not been identified, but the opportunity to integrate some of the propositions with the Riverina Murray region should be explored.

4.2 Existing brand

The region does not have an agricultural brand to integrate its produce under a common brand, nor does it have an agritourism brand to competitively position it against other emerging regions.

Taste Riverina promotes locally inspired quality food and drink across the region through Facebook but does not offer positioning of what makes the region's offer distinctive. The use of the term taste excludes non-edible agricultural produce.

The website the.riverina.com.au contains a Taste section that profiles breweries, distilleries and eating out options, but offers no positioning for these.

Consultation for this Strategy specifically asked stakeholders if they wanted a brand and received 21% of the votes. However, beyond the agricultural strengths, these strengths were unable to suggest brand essence for regional agritourism beyond some tag lines.

4.3 Existing agritourism visitors

Unfortunately, visitor monitoring for regional tourism is not particularly honed to detect agritourism and thus agritourists, beyond visiting wineries, farmgates and food markets. **Tables 4.3.1, 4.3.2 and 4.3.3** present available data for the region.

Table 4.3.1 Agritourism activity in Riverina Murray region by overnight visitors for year ending September 2022 (Source: TRA, NVS extracted using TRA Online)

Summation Options	Stopover activity	Stopover state/region/SA2	Annual average over 6 years (000)	Share of total domestic overnight
Overnight trips (000)	Visit farmgates (2016 onwards)	Riverina	3.4	0.3%
		The Murray	3.4	0.3%
		Central NSW	10.5	0.4%
	Visit food markets (2016 onwards)	Riverina	5.7	0.5%
		The Murray	11.3	1.0%
		Central NSW	35.1	1.4%
Total	Riverina	8.7	0.8%	
	The Murray	14.3	1.3%	
	Central NSW	43.1	1.7%	
Nights (000)	Visit farmgates (2016 onwards)	Riverina	9.7	0.3%
		The Murray	11.1	0.4%
		Central NSW	27.8	0.9%
	Visit food markets (2016 onwards)	Riverina	35.6	1.3%
		The Murray	50.1	1.7%
		Central NSW	131.9	1.9%
	Total	Riverina	45.1	1.6%
		The Murray	60.4	2.0%
		Central NSW	154.9	2.3%

Table 4.3.2 Share of domestic holiday visitor nights in key Riverina regions over 2015-19 by Visit wineries and semi-related activities (Source: TRA, NVS extracted using TRA Online)

Region	Attend festivals / fairs or cultural events	Experience aboriginal art / craft and cultural displays	Go to markets	Visit wineries
Riverina	10%	0.2%	7%	4%
Central Murray	4%	0.2%	11%	12%
Mallee	3%	1.0%	13%	8%
Murray East	7%	0.0%	10%	5%
The Murray (NSW)	8%	0.7%	11%	8%
New South Wales	5%	0.3%	14%	4%

Table 4.3.3 Agritourism activity in Riverina Murray region by day trippers for year ending September 2022 (Source: TRA, NVS extracted using TRA Online)

Activities	Destination State/Region/SA2	Annual Average over 6 years (000)	Share of Total day trip visitors with these activities
Visit farmgates (2016 onwards)	Riverina	0.8	0.06%
	The Murray	0.0	-
	Central NSW	4.0	0.02%
Visit food markets (2016 onwards)	Riverina	9.8	0.70%
	The Murray	3.8	0.30%
	Central NSW	26.4	0.15%
Total	Riverina	10.7	0.76%
	The Murray	3.8	0.30%
	Central NSW	30.4	0.17%

Findings from the three tables suggests:

- visiting wineries is quite a small activity – the Riverina is quite low at 4%;
- visiting farm gates and food markets is quite rare, especially among domestic overnight visitors; and
- these activities are slightly more common in Central NSW among domestic overnight visitors and more common for domestic overnight than domestic day trip visitors.

Reflecting on agritourism being concentrated in regional centres like Griffith and Wagga Wagga, it is interesting to note that half of the domestic visitor nights in the Riverina region over the five years pre-COVID were spent in Wagga Wagga and its surrounding area. A further 16% were in Griffith and its surrounding area, 12% in Hay and 9% in Gundagai. Regional centres have a higher share of VFR and business travel, but a lower share of holiday visitor nights.

Most of the coach companies touring the area are small forms (eg. Expanding Horizons) and arrive via gateways. Many general tourism coach tours come to the region for a particular event (eg, Leeton Rice Festival) or arrive incidentally, on their way to somewhere else (eg. the Snowy Mountains or Broken Hill).

4.4 Existing product

Limited amount of product across the region

General consensus from consultation to develop the region's Destination Management Plan was that agritourism is under-represented for an area with so much agriculture, and so much diversity in agriculture. There has not been an audit

of agritourism product in the region. **Attachment A** profiles some of the region's agritourism product.

Most prevalent product sub-sectors in region

The most prevalent product sectors in region are alcohol producers; namely wine, cideries and distilleries. These are predominantly focussed as cellar door attractions, with about half offering food. Less than 20% pair with local foods, offer a guided tour or alternative interpretive experience. So there is more work to do to give these experiences more differentiation. **Tables 4.4.1 & 4.4.2** provide high level profiles of some products, and some case studies are presented in **Attachment A**.

The second largest subsector is attraction and retail distribution of specialised foods, such as strawberries, prunes, almonds, fruit and vegetables and salt. Like the alcohol producers, these attractions focus on selling their product in situ, and about 30% offer tours, pick your own or interpretive displays. So there is more work to do to give these experiences more differentiation. Some case studies are presented in **Attachment A**.

There are a growing number of accommodation options on farms in the region. Some case studies are presented in **Attachment A**. Some properties like Kimo Estate are being developed to a high accommodation and food and beverage standard, including eco-tourism and function dimensions. However, we found very few farmstay experiences in the region that helped guests immerse themselves in the hosts agriculture activity.

There is much work to be done to reinvigorate existing product and create new product to deliver more of the unmet agritourist needs profiled in **Sections 2.4 and 2.5**. Undertaking this work will greatly increase differentiation and competitiveness.

Table 4.4.1 A collection of wineries in the region with cellar doors offering more than wine tasting (see Section 9.2 for case studies)

Name	Locality	Cellar door tasting	Speciality tasting	Cheese / grazing platters	Paired with regional foods	Tours
Courabyra Wines	Tumbarumba					
Crafty Cider	Batlow					
Calabria Family wines	Griffith					
Baratto Wines	Griffith					
Calabria Wines	Yenda					
Berton Vineyards	Yenda					
De Bortoli Wines Bilbul Estate	Bilbul					

Table 4.4.2 A collection of breweries, distilleries and cideries from the region (see Section 9.2 for case studies)

Name	Locality	Pub / bar	Tastings	Meals	Using regional foods	Tours
Corowa Distilling Co	Corowa	9am-4pm on-Sun	7 days self-guided	Break & lunch		Tues only
Whitton Malt House / Southern Cotton / Voyager Craft Malt	Leeton / Griffith	7 days 8am-5pm	7 days self-guided	Thu-Sat 6-9pm		Available 7 days
Tumut River Brewing Co	Tumut	Mon-Thur 3-9pm Sat & Sun 11am-10pm		Lunch & dinner 7 days		Sat & Sun Midweek by appt
Thirsty Crow Brewing Co	Wagga	Tue-Thu 4pm-10pm Fri 4-11pm Sat 12-11pm Sun 12-5pm		Lunch Sat & Sun Dinner Fri & Sat		
Ladbrooken Distilling Co	Tumbarumba		Sat & Sun 12-5pm			By appointment
The Apple Thief	Batlow	Rebuilding cellar door capability after bushfire				

Table 4.4.3 A collection of other agritourism businesses and which gaps identified earlier that they appear to address, to some extent (Attachment A presents these agritourism case studies)

Name	Agricultural focus	Locality	Value adding	Sustainability	Farm to fork	Tours
Agricultural Tours Riverina	Tour operator	Whole of the Riverina				
Fresh Technique	Hydroponics	Griffith				
Piccolo Family Farms	Fruits & vegetables	Griffith				
Catania Fruit Salad Farm	Fruits & nuts	Griffith				
Borambola Wines	Vineyard	Wagga Wagga				
Food I Am	Cooking school / condiment range	Wagga Wagga				
Riverina Oils and BioEnergy	Manufacturing facility	Wagga Wagga				
Coolamon Cheese	Cheese maker	Coolamon				
Uncle Charlies Tastes of Country	Indigenous gourmet snack food	Coolamon				
Wag Snap	Cattle & cropping	Ardlethan				
Bundarra Berkshire Free Range Pork	Pork / chicken	Barham				
Murray River Salt	Attraction	Mildura				
Shear Outback	Attraction	Hay				
Bidgee Strawberries and Cream	Attraction	Wagga				
Naturally Dried Prunes	Attraction	Griffith				
Southern Cotton Gin	Attraction	Leetong				
Rad Growers	Attraction	Albury				
Bella Vita Tours	Tour operator	Griffith				
Outback Almonds						

Pipeline and potential agritourism products and experiences in the region

There are approximately 11 pipeline and potential agritourism products and experiences in play within the region:

1. The Apple Thief – Batlow Cidery Experience
2. Borambola Wines multi-function events venue (east of Wagga Wagga)
3. Buronga Organics accommodation (Mildura)
4. Eaglerise Farm adults-only chalet on the top of the hill, outdoor produce kitchen, cellar door, Lakeside dining, sunrise breakfast, heli-pad (NE Albury)
5. Griffith Wine & Food Hub
6. Kimo Estate expansion (microbrewery, boutique hotel in homestead, market garden, stalls & school program) (Gundagai)
7. Murray Darling Basin Authority Interpretive Centre, Wentworth / Mildura
8. My Chef Health Farm – farm to fork tours; produce traceability to Riverina farmers (QR code tech), run workshops and events promoting paddock to plate, wellness through food etc; My Chef production tours; health and wellness space for events (north of Wagga Wagga)
9. New Cellar Door at Tumblong Hills (west of Gundagai)
10. Gundagai Lamb (near Gundagai)
11. Charles Sturt University Global Digital Farm

5. STRATEGIC FRAMEWORK

5.1 TARGET MARKETS

Source areas

- Canberra (eastern half of region)
- Melbourne (southern third of region)
- Sydney
- Griffith
- Wagga

Demographic profile

Leisure market profiles are:

- 40 – 65 years
- Older Millennial families
- Young Generation X
- Young Baby Boomers

Business market profiles are:

- Tradespersons prepared to bring their families back to region
- Meetings
- Agricultural industry groups

Education market profiles are:

- Upper primary and lower secondary private schools for the larger lead agritourism products that can handle the group size

Table 5.1.1 Target agritourism markets for the Riverina Murray region

Target agritourism growth markets	Regional target market	Agritourism target potential	Description and opportunity	Opportunity to support agritourism growth
Leisure – Younger Baby Boomers	Yes	High	Replacing much of the traditional Grey Nomad market. Higher level of education, greater spending capacity and higher expectations for experiences, quality service and authenticity	Modest interest in agritourism can be significantly lifted by grafting dimensions of Indigenous, conservation and sustainability
Leisure Young Gen X / older Millennial families	Yes	High	Short to medium term opportunity to the region that is larger than normal. Region supports families with young children rather than teenagers. Target young families to explore the region within school terms, when there is more accommodation choice available	Best matching products likely to be demonstration farms, interactive agritourism visitor centres, Aboriginal and conservation dimension agritourism experiences
Leisure – Millennials / Gen Z	Yes	Modest Future market	Have not been a significant portion of visitation to the region. Increasingly motivated to experience local food, wine and spirits in interpretive, social and dining environments	Agritourism a significant motivator for this market. Food and Wine and events & festivals will be a key stimulus in attracting this market for the first time. Motivation to visit increased by packaging food and wine derivations with nature tourism and matching accommodation
Leisure – Groups	No	Modest Outside leisure peaks	Groups such as Probus are looking for day and multi-night programs that are different and of interest	Programs that support group socialisation would be preferred
Agricultural business	No	Modest	A small but high yielding and strongly motivated market. Visiting to learn about innovation to take back to their region. Stay multiple nights in region. Some use Agricultural Tours Riverina	THE PURE agritourist, knows what they want and can be on-sold a range of services and extended stay. Target agricultural organisations
Conventional business	Modest	Low to Modest Outside leisure peaks	Think tradesmen, health sector, defence, mines and energy	Shift them from dinner in pubs to a wider range of food and beverage and some experiences in their time off, sufficiently impress to trigger a return visit as a leisure market with family or friends
Upper Primary and Secondary schools in NSW and Victoria	No	Low Outside leisure peaks	Some schools have the resources to conduct day and overnight trips into the region. The development of a tour program matching the curricula could be attractive and useful for the mid week in school term periods	Programs that address agricultural innovation and sustainability dimensions, as well as Indigenous dimension

5.2 POTENTIAL BRAND FOR AGRITOURISM IN THE REGION

Positioning boutique agritourism within a wider context

Much of the established and flourishing agritourism across Australia has been boutique, set in highly attractive settings and delivered by treechanger farmers that are building consumer brands. The boutique model fits well in regions where there is a lot of product packed into relatively small areas (eg. Tasmania, Margaret River and Far Northern NSW). Think paddock to plate, a concept that fits nicely with small scale boutique food production.

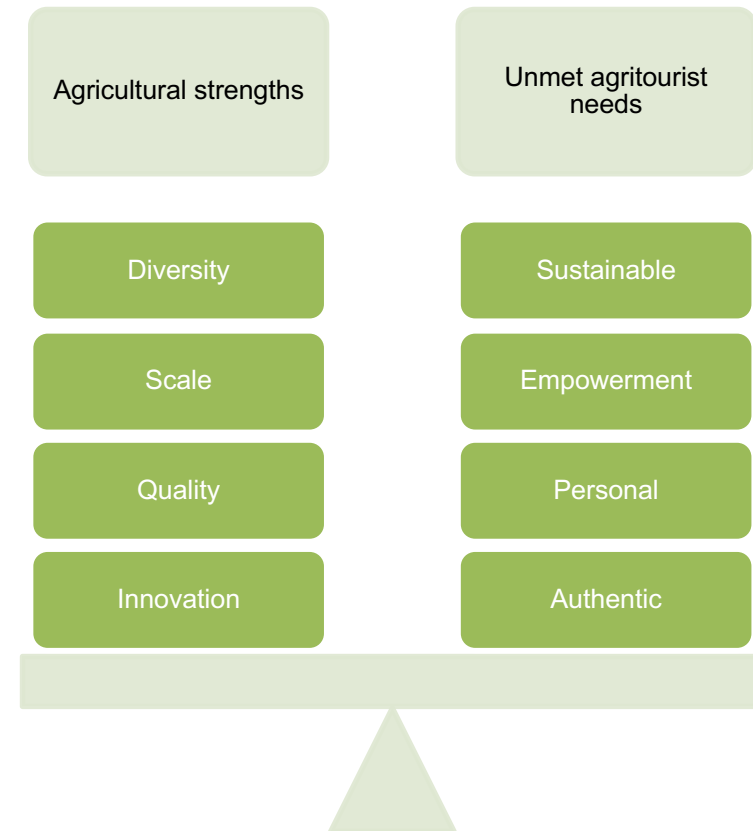
The Riverina Murray region has some pockets of boutique agriculture and associated agritourism, such as the Snowy Valleys and Griffith local areas. These can be promoted in the popular boutique manner. However, most of the region's agriculture is vastly different. The land holdings are large, and the farms are spread over great distances within flatter, less dramatic settings. Dry land grazing and cereal based cropping account for over 80% of land use. The Riverina Murray agriculture operates at great scale and innovation and subsequent high productivity. These strengths are not easily comprehended and appreciated, but if they could be, could greatly strengthen the region's brand and visitor economy.

Potential strengths for brand

If a brand was to be developed for the region's agritourism, then following best practice, it should blend the region's agricultural strengths with key unmet needs of agritourists, that the region could deliver on. This combination ensures authenticity and competitiveness. **Figure 6.1.1** summarises potential strengths in the region's

agriculture alongside potential unmet agritourist needs that together could generate a brand.

Figure 5.2.1 Potential strengths for a regional agritourism brand



Proposed positioning

Agritourism development in the Riverina Murray should go beyond the boutique model and directly address its strengths through innovative experiences that feature interpretation and engagement. The region's agritourism experiences need to highlight this character and could further differentiate through providing opportunities to portray:

- how food is grown, irrigated, produced and distributed; and
- the sustainability challenges in food production (eg. use of water, fertilisers and pesticides, food mile choices, quality versus cost).

Potential tag line

The potential agricultural tag line of the region being the food bowl of NSW needs to be used carefully, because this relies on food production areas that are located either side of the Murray River and the NSW / Victorian border. Consultation undertaken as part of this Strategy suggested that a broader use of the term be applied, such as 'one of Australia's great food bowls' or just 'The food bowl'.

Consultation also suggested that the agricultural strength of scale is de-emphasised when promoting agritourism the region's east.

³ <https://regionaltourism.com.au/projects/agritourism/> and

https://www.business.tas.gov.au/starting/tasmanian_agritourism_toolkit_navigating_the_regulatory_process

6. STRATEGIC DIRECTIONS

6.1 Build capacity across the sector

Building capacity across the agritourism sector received the most votes from stakeholders participating in consultation for this Strategy (34% of total votes).

To establish more agritourism product largely requires establishing more agritourism businesses, which in turn requires capacity building to help people transition, address impediments, create competitive product and minimise impacts on the agricultural core business. There are several guides to assist farmers planning to diversify into agritourism and for local governments to enable agritourism development approvals³, though nothing much has been produced by the NSW government to date.

The following initiatives are designed to collectively deliver this strategy.

Conduct a road tour addressing agritourism approvals with local government

The road tour would target local government planners, development approval, economic development and tourism staff to:

1. Provide a briefing on the NSW agritourism planning reforms and how to interpret them and work with agritourism proponents

2. Ask what (if any) agrotourism proposals they have received / processed
3. Share examples of local government approved agritourism attractions, accommodation and eateries, including what (if anything) was added to Council policy and processes to accommodate proposals

Produce a DA approval flow chart for agritourism proposals

The process would identify the sequence of steps, indicative time frames and costs to the proponent. It could be posted on the DRM website Resources section with examples of local government approvals for agritourism (collected from **6.1.1**). It could also be delivered as an online presentation.

Develop a list of consultants that could assist with agritourism product development and approvals

Product development could include experience and interpretation development, architecture, engineering, planning approvals and construction. An EoI process could be used that requires consultants to demonstrate prior experience with agritourism. Place the list on the DRM website Resources section with web links to consultant websites and a suggested person to contact.

Develop an agritourism network

Potential activation of the support network could include:

1. Agritourism operator profiles and contacts
2. A closed Facebook site for posting issues, solutions and networking initiatives
3. An annual agritourism seminar that:
 - o Reports on implementation of the agritourism Strategy
 - o Profiles new / expanded / reinvigorated agritourism product

- o Conducts a Q&A session on relevant challenges to a panel of experts

Work with NSW Dept Planning & Env to further enhance agritourism policy for development approvals

Work with State government planning approval experts to address gaps and shortcomings in the current legislation, such as components that limit agritourism development to very small business models.

Assist lead agritourism operators to act as inspiration and mentors for the region

Identify lead operators from existing businesses, especially those identified as having the region's lead product from **Strategy X** to provide inspiration and leadership for the region's potential and emerging agritourism operators y:

1. Hosting famils of their product
2. Participating in the agritourism network (see **6.1.4**)

Research and share alternative sources of capital and insurance to support agritourism development

Research alternative loans, super funds and other financing mechanisms suited to agritourism development. Research alternative cost effective public liability insurance to address agritourism needs, starting with those used by some of the region's lead operators. The results could be posted on the DRM website Resources section and delivered as an online presentation.

Lobby the State government for an agritourism development fund

As one of NSW's leading agritourism regions, there is value in lobbying the NSW government (Destination NSW) to generate an agritourism development funding program, as they have done for the nature tourism sector. This would help leverage the government's recent legislative change to assist development of agritourism on rural lands.

Seek funding to run a Destination Inspiration Program especially for agritourism

If new funding became available, there could be a special edition(s) of Destination Riverina Murray's annual six-month Destination Inspiration tourism business development and mentoring program specifically allocated for agritourism development.

6.2 Focus support for agritourism development and marketing on emerging focus areas

The Riverina Murray region is too large to try and develop and promote every local area as an agritourism feature. A pragmatic and efficient approach is to start with focus areas; meaning areas with already established clusters or emerging clusters of agritourism experiences within an hour's drive of each other, and with supporting accommodation and food and beverage offers to maximise overnight stay.

Figure 6.2.1 presents the location of these areas and Table 6.2.1 profiles these areas. This strategy proposes to concentrate support and promotional focus on these areas, as a means of sufficiently building them to attract visitors to undertake a multi-night stay in the region that features multiple agritourism experiences.

Figure 6.2.1 Proposed agritourism focus areas in the Riverina Murray region

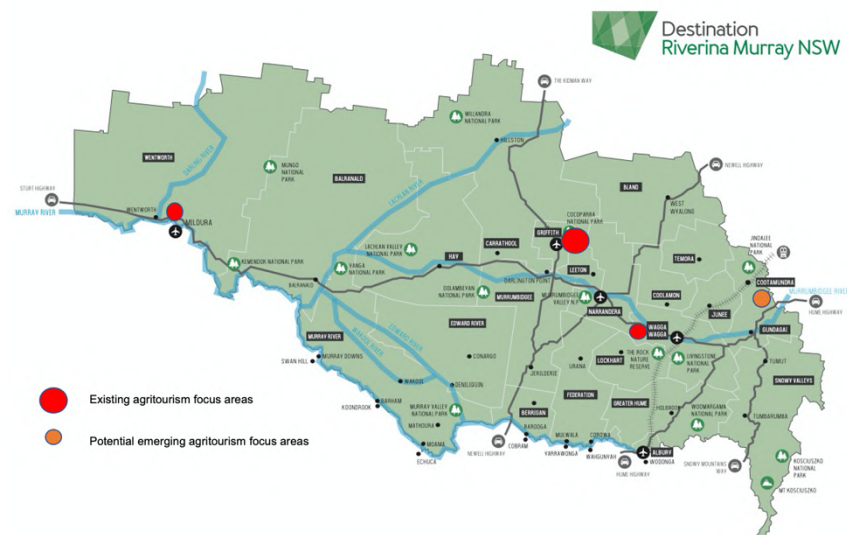


Table 6.2.1 Profiles of the region's agritourism focus areas

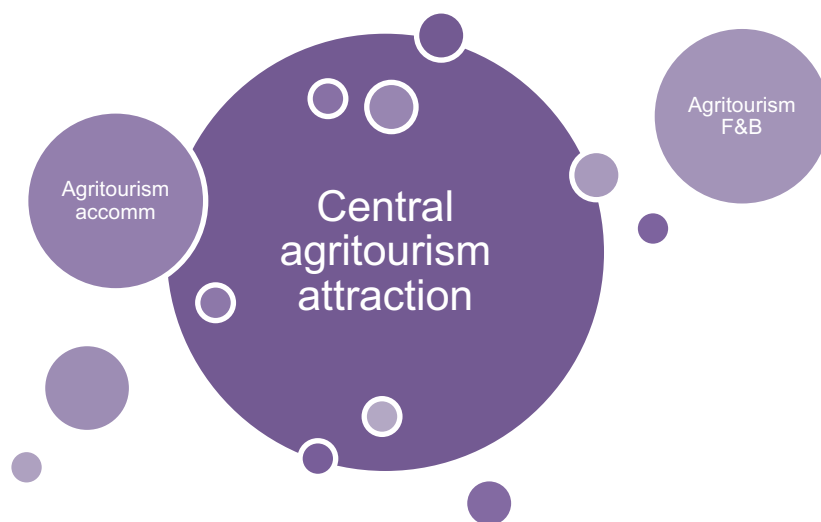
Focus area	Agricultural focus	Agritourism focus	Source market
Snowy Valleys / Gundagai	<p>Diversity of agriculture</p> <p>Horticulture, stone fruit / orchard fruit – apples and pears, berry fruit, grapes, cut flowers, livestock / cattle and calves</p> <p>Only premium boutique wine in the region (as opposed to scale)</p>	<p>Consolidate value adds at boutique wine and cider tasting, then develop a touring trail to integrate the cluster</p> <p>Develop more farmgate sales</p> <p>Interpret the use of the Snowy Hydro scheme to supply water for irrigation</p> <p>Develop more farm based experiential accommodation</p> <p>Investigate opportunities to develop Aboriginal agritourism</p>	Canberra
Eastern Riverina (Wagga precinct)	<p>Experimentation and innovation in agriculture</p> <p>Nurseries / cut flowers, cauliflowers, cultivated turf, wool</p>	<p>Hub and launching point for introducing the region's strengths in agriculture and agritourism</p> <p>Further develop cooking schools that feature local produce</p> <p>Develop a venue for purchasing local produce</p> <p>Further develop dining menus to feature local produce</p> <p>Develop farm based experiential accommodation</p>	Canberra and Sydney
Western Riverina (Griffith / Leeton precinct)	<p>Scale of agriculture</p> <p>Citrus fruit, berry fruit, nuts, non cereal crops / oilseeds</p> <p>Processing innovation</p>	<p>Develop interpretive experiences presenting large scale agriculture across multiple produce and products</p> <p>Assist wineries providing cellar doors serving durif, montepulciano, pinot grigio and vermentino to add more value</p> <p>Promote eateries across a range of cuisines and featuring Italian and develop dining menus to feature local produce</p>	Sydney and Canberra
Mid Murray (Barram precinct)	<p>Irrigation innovation</p> <p>Agriculture and land regeneration</p> <p>Most of the region's production of rice, avocados and nuts</p>	<p>Stories that address environmental management and Aboriginal influences on conservation</p> <p>Develop an eatery focussed on local produce</p>	Melbourne

Focus product development on focus areas

Focus DRM support on focus areas

There are several locations where agritourism is most concentrated in the Riverina Murray visitor region, and there are several potential emerging focus areas. The most successful focus areas are where there is an anchor attraction comprehensively reflecting the brand, supported by agritourism food, drink and accommodation, and other experiences. In this way, a visitor can stay immersed in agritourism across all their experiential and basic visiting needs (see **Figure 5.1**).

Figure 6.2.1 An agritourism focus area components



6.3 LEAD PRODUCT OPTIONS

The region needs a set of anchor attractions that comprehensively reflect the regions strengths and (future) agritourism brand. These anchor attractions should be supported by nearby agritourism food, drink and accommodation. In this way, a visitor can stay immersed in agritourism across all their experiential and basic visiting needs. The following potential anchor attractions follow the review of innovative agritourism in **Section 2**, key agricultural strengths of the region and unmet needs of agritourists.

Agriculture Centre of Excellence

An agriculture focused tourist attraction could be developed alongside a signature demonstration farm that integrates:

- educational opportunities and meeting spaces for existing farmers and suppliers to drive agricultural business events;
- interactive displays that allow visitors to view the diversity and innovation of live farming across the region and talk directly with farmers via camera feed and pre-recorded seasonal moments;
- interactive holographic projections and virtual reality experiences that allow visitors to engage in innovative farming practices;
- an adjacent demonstration farm that highlights the region's innovation in practice;
- an interactive display demonstrating the region's Geographical Locational System and how to use it when shopping (see **Section 6.2.1**); and
- a regional visitor information centre that promotes and books the region's agritourism experiences, perhaps also delivers the local visitor information centre.

This lead product could be really useful to agricultural businesses, and bond them with the agritourism sector. This lead product could also be an ideal starting point for some agritourists, and a useful launching pad for guided agri-tours and a future agritourism trail.

Examples of agricultural centres of excellence and visitor centres from across the world were presented in **Section 7.2 and 7.3** The centre could be built alongside the Charles Sturt University Digital Farm at Wagga Wagga (see **Section 9.1**) or alongside another anchor demonstration farm.

The Centre could be a launching point for guided tours and any self-guiding trail.

Rice growing demonstration farm

A portion of an existing rice growing farm could be adapted into also delivering a demonstration farm that:

- interprets the challenges of growing rice in relation to achieving high quality, high productivity and sustainability;
- interprets the innovative approaches to water use and irrigation;
- interprets the approach to growing Bittern friendly rice (combining farming and conservation for an important bird species); and
- offers a rice café that serves rice dishes and drinks that demonstrate the quality of the different rice varieties grown – possibly as a partnership with a food and beverage operator

The attraction could be hosted by Sunrice Australia as a means of promoting its strengths and building brand loyalty. We understand there used to be a Rice Industry Room in the region.

Enhance some existing and create new agritourism attractions to better address the key strengths of the region

There are a number of existing agritourism attractions that could have their visitor experience enhanced and/or expanded to more comprehensively interpret their version of the region's agricultural strengths. There are also a number of innovative agricultural operations that could have a visitor experience developed that interprets their version of the region's agricultural strengths. Some examples for consideration by the businesses could include:

- Whitton Malt House, Voyager Craft Malt and Southern Cotton Gin (who were contemplating constructing interpretive pathways to interpret their production and provide additional wedding photo settings);
- Murray River Salt (Mildura);
- Murray Cod Australia / Aquna (NW Leeton);
- A host of the vertical farming systems;
- Holbrook Paddock Eggs (Holbrook);
- Narrandera Mill and its dryland and irrigated crop area (Narrandera);
- Riverina Fresh (Wagga Wagga); and
- Fresh Technique (Griffith); and
- Uncle Charlie's Tastes of Country (Coolamon).

Agricultural businesses like these could contemplate a range of different visitor experiences that present varying levels of competing demands with their core agricultural business. For example, **Section 9.1** presented various demonstration farms and introduced ways to interpret farm activity through live streaming.

Enhance a winery to provide a more sensory experience

The case study of Cite du Vin, Bordeaux (see **Section 7.3**) demonstrated there is much more that can be done to interpret wine and the provision of more sensory experiences. There may be a winery interested in playing a lead role and expanding their visitor area to deliver this experience.

Agriculture and conservation tour

There are some innovative initiatives in the region that are integrating conservation with agriculture for a 'win win' that could be of interest to some target markets.

There could be potential to develop a guided or self-guided tour that allows visitors to see and learn about these projects. Examples of this from **Section 8** include:

- Swift Parrot Conservation sites
- Growing Bittern friendly rice
- Carbon and biodiversity pilot sites
- Highfield Farm Conservation
- Feral pig control

Aboriginal agritourism

An absolute niche agritourism product that could integrate nature conservation and Aboriginal culture could be of interest to some target markets. **Section 4.1** profiled some of the history and potential content that could be developed for this niche.

There could be potential to develop a guided or self-guided tour that allows visitors to see and learn about historic and contemporary Aboriginal agritourism. Examples of this from **Section 8.3 and Section 9.3** include:

- Uncle Charlie's Tastes of Country

- Growing native yam daisies near Hay; and
- Various cultural burns used to heal country at various sites such as Top Gobarralong

Examples of Aboriginal agritourism were presented in **Section 7.4**.

Discussion questions:

Which lead product initiatives do you support for the region?

Do you have any other ideas for the region's lead products?

Do you have a view on prioritising the lead product ideas?

Is there an opportunity to commercialise and promote abundant native crops such as saltbush?

Do you agree that it is premature to deliver an agritourism trail until more product is established?

6.4 DIFFERENTIATED FARM STAY ACCOMMODATION

The region needs a lot more agritourism accommodation for two reasons:

1. There is a shortage of differentiated accommodation across the region that meets the emerging market needs for more space, privacy, views and self-contained facilities.
2. Agritourists typically want an integrated agritourism experience where after doing agritourism experiences during the day, they can seamlessly continue with agritourism in the night via farm stays.

Developing agritourism accommodation will help the region capture more of the potential overnight leisure market and generate more economic benefits. Ideally, accommodation could be developed close to agritourism focus areas, or at least close to other agritourism experiences in the local area. There are at least three challenges to achieving this:

1. Making it easier to get development approvals for accommodation on land zoned for primary production (RU1) and Rural landscapes (RU2). While the NSW government has recently made changes to the Principal Local Environment Plan to make it easier for camping and caravan accommodation, hard roofed agritourism accommodation proposals are limited to a maximum of six buildings on the property and a maximum gross floor area per building of 60m². This limits agritourism to tiny businesses and prevents an economy of scale that leads to regionally significant ventures.
2. Attracting farm owners to invest in the development of agritourism. While the NSW government has a specialised funding program for nature tourism, there is nothing for agritourism.
3. Ensuring agritourism accommodation is not just a tiny house in a paddock but includes genuine farm-based experiences that anchor it as agritourism. Addressing this requires some product development expertise to deliver authentic experiences and ensure farm operations are not compromised.

Examples of agritourism accommodation were presented in **Section 7.5**

Discussion questions:

What could be done to reduce the impediments and/or incentivise farmers to develop agritourism accommodation in the region?

Where do you think agritourism accommodation should be developed?

What type of agritourism accommodation would most suit the region and make it most competitive?

Are there particular agritourism accommodation products that the region should focus on, to differentiate from competitor regions?

6.5 MARKETING

If agritourism is going to be a lead sector for the region, then the region's marketing needs to make it easier for the consumer to find it. If the region's agritourism is going to be positioned to feature its strengths, and perhaps its brand, then it needs to have content that is focussed on this.

It should be noted that the National Agritourism Strategy Framework does not provide direction for a consumer facing name for the agritourism sector of tourism. An action in the strategy is to "Collaborate with Agriculture sector to develop a consumer facing name for the category to support growth".

Tourism Australia testing has indicated that 'On Farm Experiences' is the most appealing name for the sector.

Improved agritourist insights

There is very little information about agritourists in the region, and this situation is unlikely to change through Tourism Research Australia. Collecting market insights about the region's agritourists could assist guide agritourism product development and marketing. One option could be to implement a visitor monitoring program at a collection of key agritourism attractions.

Determining how to market agritourism experiences

We could not find any destination websites that clearly define or market agritourism as a sector in its own right. The typical approach has been dominated by a specific focus on local Food and wine / breweries / distilleries. Other types of agritourism are slotted under Attractions / Things to do and Places to stay. It is therefore very time consuming for the consumer to try and package an agritourism visit that combines matching experiences, food and wine and accommodation.

To grow the agritourism experiences within the region, consideration should be given as to how they would be marketed within the broader destination offering.

Agritourism specific website or portal

Eventually there may be value in developing an agritourism specific website or portal that either focuses purely on agritourism or adds agricultural production that links key industry sectors to agritourism.

One option could be a brand story that capture's the region's strengths and essence through specific stories, images and video. This could be used for a wide range of marketing, including campaigns, websites and visitor information centres.

Discussion questions:

Are the owners of Tasteriverina.com.au interested in expanding their brand and digital tools to accommodate a wider agritourism offer / or is this a good idea or should an alternative brand and platform be built?

Should we create a brand story for the region that capture's the region's strengths and essence through specific stories, images and video?

Should some destination marketing websites be restructured to feature agritourism and vertically integrate its experiences, food and beverage and accommodation opportunities?

Should the region implement a visitor monitoring program at a collection of key agritourism attractions?

6.6 Investigate the merits of a regional agricultural quality / sustainability labelling program

In addressing innovation and featuring interpretation and engagement, it might even be possible to develop an experience that empowers visitors to know how to choose foods that reflect their ethical values in areas such as freshness, food miles, sustainability, physical and mental health. This approach is akin to the COVID-19 recovery emergence of responsible tourism. This would further differentiate and strengthen the region.

The Leopold Centre for Sustainable Agriculture has researched the impact that labelling food with ecolabels containing information such as food miles and CO2 emissions has on consumers. The study aimed to determine consumer opinion of locally produced food and food miles. Surveys found that consumers were more responsive to labels that focused on the food product's freshness and quality rather than environmental impact or CO2 emissions. Consumers perceive that locally grown food is fresher; therefore ecolabels that contain information such as "locally grown by family farmers" may be effective in influencing consumer food choices.

The study also found that consumers are willing to pay more for food that has low environmental impacts.

The Murray Paddock to Plate Cluster Plans (Regionality 2018) proposed the development of a Geographical Location System (GLS) to collectively promote particular attributes unique to the region or localities. Criteria that relate to local content and provenance could be identified and used in a similar way as already applied to the wine sector to support provenance and a regional brand.

The GLS could be supported by a brand mark and QR code that is applied to produce and its marketing.

There are some food miles / produce tracking systems with emerging barcoding and tracking technologies already existing.

We found at least 147 ecolabels for agriculture across the World (see <https://www.ecolabelindex.com/ecolabels/?st=category.food>). Many have a focus on:

- being grown as an organic product;
- a specific product, such as cotton, sugar cane, coffee, lobster;
- low water use and recycling of water;
- carbon reduction, minimisation or removal;
- lifecycle assessment; and
- Fairtrade.

⁴ <https://www.choice.com.au/shopping/everyday-shopping/ethical-buying-and-giving/articles/tools-and-certifications-for-ethical-shopping>

There's often no universal regulatory definition or agreed-upon standard for these claims, which means there is great variation in what they stand for. For example, sustainably labelled products from one manufacturer could indicate they're using sustainable farming techniques, whereas from another it could mean recycled packaging is used or that the product is biodegradable. Some businesses may also 'greenwash' their products and misrepresent how sustainable or ethical they actually are, undermining the trustworthiness of eco labelling claims.

Products and businesses with an imperfect certification system in place may still be better than uncertified ones. Choice⁴ identified 17 common eco labels that you'll see in use in Australia. All of these were independent third-party certifiers that conduct audits unless otherwise specified.

Potential challenges

To grow agritourism, the tourism sector needs farmers to diversify into tourism. With scale agriculture that has high turnover and is largely focused on commodity products rather than finished products sold to consumers, we may have challenges in building the economic business case for the agriculture sector. The social benefits may need to be the lead when engaging with the agricultural sector.

The development of major agritourism experiences will need to address barriers to diversifying into tourism, including exclusive commercial contracts, insurances to

allow visitors on-site, biosecurity, current staffing challenges for the primary business, rotational/seasonal product and relatively insignificant financial return.

7. Attachments

Table 7.1.1 Summary of innovation case studies profiled in Section 9 (sourced from published material on sites such as Local Land Services Riverina and the Department of Primary Industries Wagga Wagga Agricultural Institute) – the are many more examples across the region

Innovation	Product / program	Location	Increased productivity / quality	Environmentally friendly production	Partnering farming and conservation	Indigenous partnerships with farming
Sunrice Australia	Rice	Murrumbidgee / Murray valleys				
Precision Agriculture	Soil services	Wagga Wagga				
Murray Cod Australia	Murray cod	Griffith				
Holbrook Paddock Eggs	Eggs	Holbrook				
Southern Cotton Gin	Cotton	Leeton				
Riverina Fresh	Dairy production	Wagga Wagga				
Highfield Farm conservation	Livestock	Mount Adrah				
Long term recovery of scolded soils	Study	Hay				
Gundagai Lamb	Lamb	Gundagai				
Narrandera Mill (Manildra Group)	Grain crops	Narrandera				
Vertical farming	Feed to bush program	Rosebury				
Growing Bittern friendly rice	Program	Riverina				
Carbon & Biodiversity pilot in the Riverina	Pilot program	Riverina				
Swift Parrot conservation initiative	Project	Eugowra				
Feral pig control	Program	Western Riverina				
Native yams	Program	Near Hay				
First Aboriginal cultural burn since contact	Event	Top Gobarralong TSR				

7.1 Attachment A Regional agritourism case studies

7.1.1 Demonstration farms

The CSU Global Digital Farm, Wagga Wagga



The Charles Sturt University (CSU) and Food Agility Cooperative Research Centre's Global Digital Farm Initiative is transforming the CSU 1900ha commercial mixed farm in Wagga Wagga to a fully connected and digitalised landscape laboratory to develop, evaluate and demonstrate the use of digital technologies.

As a platform for research, teaching and community engagement, the Global Digital Farm is working with industry to meet current challenges and prepare for future adaptations.

Central to the operation of the Global Digital Farm is the requirement to demonstrate the range of communications options to connect devices, people, livestock and equipment across the farm landscape and beyond the farm gate. When successfully implemented, this integration of data and technology, combined with the vast bank of farmer knowledge and experience will improve efficiency, safety, profitability and sustainability of farming businesses and communities.

7.1.2 Regional winery, breweries and distilling case studies

Courabyra Wines

Courabyra Wines is a family-owned and operated vineyard in the foothills of the Snowy Mountains, producing cold-climate wines.

The award-winning wines are the result of using select parcels of the finest quality, handpicked grapes. A selection of wines are available for tasting and purchase at the cellar door. **Seasonal lunch and dinner menus are made with regional produce and private vineyard tour** is also available. Indoor and outdoor dining available, overlooking the vineyard and rolling hills beyond.

Children's playground to keep the kids entertained. Group and function catering is offered by prior arrangement.

Calabria Wines

Calabria wines dates to 1945 as a multi-generational business. They offer a one-hour hosted tasting masterclass, seated in Ba private cellar, featuring five Riverina heroes wines from the Calabria Family portfolio paired with a regional platter of local blue cheese, almonds, quince paste, artisan blood orange cracker and more

(1 board p/2guests). They also offer a 45-minute seated tasting at the Cellar Door Bar featuring a selection of up to eight wines from the classic Calabria Family Wines portfolio, with a complimentary light platter of breadsticks, olives, crackers and dried apricots.

Corowa Distilling Co

The Corowa Distilling Co is located on the NSW border town of Corowa. The operation uses locally-grown ingredients and traditional varieties that have now become scarce, including barley that was once exported to Scotland. They source organic grains from a local family farm and work with local farmers who have been harvesting the land for generations.

Corowa Distilling Co. offers a unique and **interactive whisky making experience** with head distiller Beau Schilg in, in a **repurposed historic and industrial 1920's flour mill**. The Corowa Distilling Co offers a 30 minute behind the scenes tour and tasting for two that includes limited releases along with other unique bottles.

They have recently added Regional Picnic Baskets as an online bookable experience.

The business was listed as one of the top 10 up and coming whisky distillery's in the world in 2017 and named a 'whisky brand' of the future by 'the spirit business'. The venue also provides dining and functions.

Whitton Malt House, Voyager Craft Malt and Southern Cotton Gin

The Whitton Malt House formed a partnership with Southern Cotton and Voyager Craft Malt with a shared vision for the malt industry - to build a **sustainable world-**

class, craft malting facility to supply artisan malt to elite whisky distillers, craft brewers and bakers.

Southern Cotton provides **best practice cotton ginning services** to growers in the Southern Valleys. Their mission is to gin cotton to the highest quality, in the most efficient and sustainable manner. Located adjacent to the Whitton Malt House, the Southern Cotton gin provides **guided gin tours to educate growers, tourists, students and other visitors** about the local cotton industry, as well as the cotton ginning process. Tours operate via specially-built observation walkways run 11am Monday to Friday during the ginning season (May-September) and the non-operational season (October – April).

Voyager Craft Malt produces small batch artisanal malts from locally grown and regionally sourced grains in NSW's Riverina. They specialise in growing and malting hand-crafted malts from a diverse range of premium quality grains. Visitors can taste craft beers, gin or whisky.

The Apple Thief Cidery

The Apple Thief premium ciders are crafted from 100% fruit, freshly pilfered and pressed at the Cidery in Batlow. The product has no added sugars and no juice concentrates.

Other regional agritourism case studies

Agricultural Tours Riverina

Agricultural Tours Riverina (ATR) have developed strong networks with agribusinesses and government agencies across the region. Their guided tours help participants tap into that knowledge and see first-hand how our farming

enterprises operate and why the systems that support them are so successful. Tour itineraries involve visits to operational farms and factories. The operation offers five pre-planned tours or customised tours.

Farming in the Riverina is a three tour focussed on Leeton/Griffith aiming to demonstrate the complexity of systems for growing produce and delivering food from the Leeton area to metropolitan markets and other consumers. It is designed for adults and senior students (maximum group size is 55 persons).

Organic agriculture: sustainability on the table is a one to two day tour focussed on Leeton/Griffith designed to highlight the range of organic food produce grown in the Riverina. The Organic Agriculture tour explores commercial organic food production in the Riverina. Certified organic farmers will provide information and insight about this alternative farming system in the Riverina.

Rice farming in the Riverina is a day tour in Leeton/Griffith designed to showcase the Riverina rice industry. The tour takes in the local industry and the irrigation practices that sustain it. You will visit a commercial rice farm, historical sites and water management systems in operation. Rice industry experts will provide their first-hand knowledge and insights.

Wine appreciation is a tour through Leeton/Griffith//Coleambally that is designed for groups interested in learning about wine products, wine production techniques, and ownership models and marketing strategies (especially for export), from award-winning winemakers in the Western Riverina Region. The Wine Appreciation tour incorporates a variety of wineries, insights into production and styles, plus a broader range of rural activities and enterprises, if requested.

School excursions / field trips are designed to supply NESA accredited, experienced and locally knowledgeable teachers with current WWCC to accompany your school tour or college group excursion. They tours offer:

- extended excursions for university students and staff in agricultural sustainability, biosecurity issues, WHS practices, rural health and plant variety;
- agricultural activities for high school students focused on irrigation water management, food technology, sustainable agricultural practices and business studies including supply chains in nominated industries;
- for teachers, tours looking at soil health, the tree nut industry, fish farming and technologically advanced food technology; and
- for pre-schoolers close-up experiences with cattle, emus, pigs and other farm animals.

Fresh Technique Griffith, NSW – protected cropping / Commercial hydroponics

Fresh Technique uses state of the art technologies on their now established 1ha Cravo retractable roof greenhouse with a fully equipped on-farm processing facility that manages all of their products from seed to harvest and beyond, guaranteeing absolute freshness, and most importantly achieving 48 hours from harvest to consumer. Products include fresh herb, salad and green bunched vegetable products including: kale; watercress; lettuce varieties; spinach; and wombok. It is evident when touring the operation that this is the highly sophisticated future of food production.

The Fresh Technique model combines the **latest in industry technology for production, zero agricultural run-offs and maximised water efficiency** – crucial in today's climate of limited water. Included is an on-farm value-add facility,

significantly reducing time in the value chain, from raw product to finished (shelf-ready) healthy meal options. A retail shop front is located on site for locals and visitors alike to purchase the product direct. Vital to their operation is the continual assessment of the market climate, issues in agricultural production, consumer demands and industry performance to ensure they forward plan while growing the industry and sustaining the environment for generations to come.

Piccolo Family Farms and Limone Restaurant

The Piccolo Family Farm is a fully functional farm that supplies the Piccoli's family owned restaurants with fresh produce daily. Sitting on 20 acres just outside of Griffith, the farm produces the majority of the herbs, garnishes, fruits and vegetables. They use **sustainable farming practices, with all the produce harvested by hand and free of chemicals and pesticides**. A farm to fork approach is central to the ethos of both Limone and Miei Amici, with their menus reflecting the availability of local and seasonal produce. They also grow grapes and are now producing their own wine.

Catania Fruit Salad Farm

Catania is a family-owned farm where you can view and gain an understanding of how a wide variety of horticulture and viticulture crops are grown in Australia's largest irrigation area, the Murrumbidgee Irrigation Area.

Your journey begins with a look around the original mud brick home built in 1912, and a bus ride around the farm.

The farm produces a variety of fruits and nuts which are sampled on tour. Enjoy jams, mustards, prunes, pickles and traditional Sicilian preservative free wine in a relaxed and friendly atmosphere.

Borambola Wines – Food and Wine Tourism

Borambola Wines and Homestead is located 25km east of Wagga Wagga in the Gundagai wine growing region of NSW. The boutique winery's philosophy is to grow the best grapes and to make the best quality wines with regional expression. They utilise **organic and environmental best practice**, combining the traditional 'old wine world' winemaking methods with the technology of the 'new wine world'. The vineyard was planted in 1995 and is one hundred per cent estate grown producing a range of white and red wine products as well as the Tuckerbox Hoppy Lager beer range and Apple Cider. Borambola combines **sustainable and value-added products** with a cellar door experience, which showcases local produce (in the form of a simple, cost-effective ploughman's platter), along with tourist drawcard events such as, meet the winemaker.

They offer any engaging cellar door wine tasting experience where they talk about the homestead, its history and how the history plays a role in naming every wine label. They also do weddings and events.

Riverina Oils & BioEnergy

Riverina Oils crush and refine over 200,000 tonnes of oilseeds a year through their manufacturing facility sourcing raw materials from local farms to produce oils and vegetable protein meals. It is one of the **largest value-added investments** in the Agri-Food processing sector in regional Australia.

Coolamon Cheese

Coolamon Cheese Co. creates an innovative range of handcrafted cheeses, using single-source local milk. Set in the heritage Co-op building, the front retail section displays their artisanal cheeses including soft white mould cheeses, blue vein

cheeses, and a range of Australian native flavoured cheeses and an assortment of Riverina produce.

A viewing corridor allows visitors to experience cheese making tours, from milk to end product, while the front-of-house is a cheese kitchen where visitors can taste cheese inspired meals matched with regional produce. You can also watch cheese being handcrafted and matured or take a cheese-making workshop.

Coolamon Cheese is an interesting **story of a community coming together and using crowdfunding as a source of business funds**. In the last seven years, the Coolamon Shire Council has worked together to shift the focus of their largely agricultural LGA to a weekend destination. They have effectively used events including celebration events, and a seasonal events calendar that encourages shire residents to invite family and friends to visit and encouraging day trips to the region at event time.

Uncle Charlie's Tastes of Country - Value adding, sustainability, 100% indigenous owned

Uncle Charlie's Tastes of Country is a 100% owned Aboriginal gourmet snack food business putting Aboriginal peoples, their knowledges and practices at the centre of everything they do. They are all about sharing stories, sharing food, yarnning, caring for country and sustainability. Uncle Charlie's uses **environmentally sustainable crops, ethically harvested and sourced with community knowledges and relationships**. The Australian native foods and botanicals are all carefully sourced from trade relationships practiced for 80,000 years and continue today. The gourmet snacks have at least three Australian Native foods and Botanical flavours and the packaging shares stories of country by visual language. They are working with suppliers to utilise technology to show each nation

that contributes to their country and stories in each batch. 5% of the cost to the nationals where each of the raw ingredients come from are reinvested to ensure more specialised, diverse and sustained equipment opportunities for Aboriginal peoples.

Wag Snap – Ardlethan Food Niche and Value adding

The Clemson's property near Ardlethan is a traditional 2,430ha dryland cropping and livestock property growing canola, wheat and legumes. Running a herd of 350 Blonde d'Aquitaine-Blue-E cattle, initially for weed clean up purposes and selling the grass-fed cattle direct to the abattoir; they found the loss of traceability for the niche product disappointing. In turn, the decision was made to **value-add**, by using a local butcher and branding the sausages which are hormone, antibiotic and pesticides free. In a The Weekly Times interview, they explained the economies of scale as; you go to the saleyards and receive \$7/kg carcass weight for a beast, but we are selling the meat as a value-add premium sausages at \$15.99/kg, and they cost \$2/kg to make them.

Bundarra Berkshires Free Range Pork

Bundarra Berkshires is a small 100 per cent free-range Berkshire Pork farm on the edge of the Koondrook State Forest and Murray River. Their aim is to produce the highest quality free-range pork and Sommerlad chickens with **the lowest carbon footprint and raised in the most natural environment possible**. Bundarra Berkshires also do their own butchering and production at & Co Butchery for a true paddock to plate product. A Micro-Abattoir will open in late 2023 to process various animals for the local community, 100% owned by farmers. The produce is available directly from the Butchery in Barham, by local home delivery, farmers markets or a monthly CSA online membership. **Sustainable farming practices** include planting a tree for every order which offsets 3 times the amount of carbon

they produce. You can visit the farm and meet the pigs by appointment and they are also a farm gate on the Backroads Trail.

Murray River Salt

Murray River Salt began producing salt flakes in 2000 at the Mourquong salt mitigation basin, 13kms north west of Mildura. The concentrated brine is pumped up from an ancient inland sea where the water travels through several canals before making its way to crystalliser ponds. The brine is evaporated by the sun and harvested in the summer months. Murray River Gourmet Salt Flakes are a natural pink colour and are packed with minerals. Murray River Salt® works closely with government authorities to access the brine from the Mourquong Salt Mitigation Basin which is part of the Salt Interception Scheme. Murray River Salt® tap into this natural resource and convert it into a **value-added gourmet food product whilst contributing to protecting the environment** from the detrimental effects of salinity. By harvesting the salt at the Mourquong mitigation site, we are assisting in preventing 200 tonnes per day of saline water from entering the Murray River. This is a vital scheme that ensures saline water does not enter the precious fresh water resources in the Murray Darling Basin, including the Murray River. The successful management of salinity in this region ensures water quality, plant growth, biodiversity and agricultural productivity remain, and that good quality water is available for human consumption. Tours to see the salt harvest site or visit the factory shop to purchase a variety of gourmet salt products are available through Discover Mildura.

Food I Am

Food I Am Cooking Classes in Wagga offer a range of cooking experience, hands on cooking, demonstrations and chef table at their purpose built facility. Hands on classes work in small groups with a chef to master each recipe. At the end of the

class participants enjoy their dishes with a glass of wine. Classes over a range of cooking styles. Drawing on **premium local produce**, Food I am also produce a range of award winning condiments called 'small batch produce', available from their venue, online store and through various local stockists. Their venue is also available for private events, intimate events in the open plan kitchen and dining room, a cocktail party on the deck or a larger event on the lawn with marquee.

Shear Outback – Australian's Shearer's Hall of Fame

The shearer is a legendary character of Outback NSW. Go behind the myth and meet the real men and women who shaped this vital industry, at Shear Outback in Hay. Hear the click of the shears, learn the lingo of the trade, meet the sheepdogs and watch a **live demonstration** at the Murray Downs Woolshed. Live demonstrations are daily at 10:30am and 1pm.

Shearers will be on hand to talk about the machinery and equipment, types of sheep, wool classing and microns for measuring wool quality. You can even test your own skills and see if you would be able to beat the famed Jackie Howe, the 19th-century Queenslander who was Australia's fastest ever hand shearer.

Also on site is the Australian Shearers' Hall of Fame, beautiful homestead gardens, a maze and a café where you can stop in for a traditional 'smoko' (morning or afternoon tea).

8.1.4 Agritourism (farmstay) accommodation in the region

Kimo Estate

Kimo Estate is a 7,000 acre working sheep and cattle farm. The Estate offers farm stay accommodation in two fully self-contained cottages and Shearers Quarters (six rooms), off the grid luxury glamping eco huts with wood fired hot tubs and also

a Boutique Hotel accommodation in Gundagai (nine rooms). Kimo Estate converted the historic homestead and 115 year old Grain shed into event spaces mainly for hosting weddings, large and small.

Kestrel Nest at Highfield Farm and Woodland

Highfield is a small-scale farm which aims to combine ethical and sustainable farming practices with the conservation of critically endangered Box Gum Grassy Woodland. The philosophy suggests that they can farm and enhance the habitat for native birds, animals and plants...They farm only one-third of the 820 acre property. The remaining two-thirds is left as protected woodland.

Customers wander bush trails, spot endangered birds, meet farm animals and eat paddock to plate.

Kestrel Nest EcoHut is the perfect off-grid and off-line (no phone or internet) eco-retreat for couples and small families. Solar panels and batteries will guarantee energy for your stay, while panoramic double-glazed windows will allow glorious views. Linger in the outdoor bath.

The operator also offers a guided tour of the small-scale sustainable farm to meet Dorper Sheep, Dexter Cattle and pasture-raised chickens and learn how the operation farms with endangered habitat to provide refuge for native wildlife and to increase diversity.

Highfield Farm & Woodland, Kestrel Nest EcoHut and their Farming with Habitat and Bird Watching Tours are all certified by Ecotourism Australia.

Hillview Farmstay

Hillview Farmstay has seven self-contained luxury accommodations ranging from one bedroom cottage to four bedroom lodge, glamping safari tents and a dome

tent. **Breakfast and BBQ packs using beef from farm** are available for guests to purchase and cook themselves. Activities include feeding farm animals, watching cattle mustering, buggy rides, picking your own fruit, swimming, fishing in the dam. Welcome guests with horses and pets. Hillview also has a Tesla charging station.

Wallendbeen Park Farm

The former schoolhouse at Wallendbeen Park Farm has been converted to guest cottage, sleeping two. The farm uses **sustainable practices for regenerative farming** of free range pigs, sheep and cattle. feed pigs, August 2021, Wallendbeen Park Farm launched The Home Paddock brand under which we will sell our farm produce from. The farm also offers tours or bird walks, guests can also forage in garden for produce. An exhibition space, The Green Room is a space for art, which visitors also enjoy.

Glamping at Outback Almonds

A working almond farm on the banks of the Darling River in far west NSW, Outback Almonds was established in 1998. The property produces a selection of natural, blanched, slithered and chocolate coated almonds. Guests can stay the night on the property in one of three Canvas Bell Tents (glamping) or stay at The Cottage. Guests can also book for a Long Lunch or dinner under the stars. Harvest takes place from January to April and farm tours are available.

North Bundy Station Stays

North Bundy is a 30,000 acre working sheep station that has been run by the McCrabb family for three generations. The original shearer's quarters have received an upgrade, mixing rustic charm with air-conditioned comfort. Guests are offered home-cooked dinners (homegrown saltbush lamb and rangeland beef) and

free-range breakfasts. There is one double room and five twin rooms the venue can entertain groups of up to 12 guests.

7.2 Attachment B Agricultural productivity in the Riverina Murray region

Table 7.2.1 Profiles of the major agricultural activity of the region (Source: NSW Department of Primary Industries, 2018, Riverina Murray Region Agricultural Profile)

Major agricultural focus	Major activity	Location and further detail on products
Irrigated summer cropping	Includes cotton, rice, sorghum and maize and occurs primarily in the government established now private Irrigation Areas (IA), private irrigation districts (PID) and where irrigation (surface and groundwater) is available in the western half of the region	<p>Cotton is grown on irrigation, surface and groundwater, in an area encompassing Hillston, Hay, Jerilderie, Griffith, Coleambally, Narrandera and Berrigan. Cotton has specific water requirements and temperature requirements for germination and growth. Recent varieties, more suited to the shorter southern season, have made cotton a more viable crop in the south</p> <p>Rice growing in Australia is concentrated in the Murrumbidgee and Murray valleys, due to large areas of flat land, suitable clay-based soils, the availability of water and the development of storage and milling infrastructure in or near the regional towns (Leeton, Coleambally & Deniliquin). The rice industry has strict regulations in place to ensure the production of high quality rice has minimal impact on the environment. Once Australian rice growers harvest their rice, the subsoil moisture remaining in the soil is used to grow another crop; either a wheat crop or pasture for animals</p>
Dryland winter cropping	Cereals (wheat, barley, oats, triticale), canola & pulses (chickpeas, faba beans, lupins, lentils)	Wheat, barley and canola are the three major crops grown, by value. Crops are grown in varying rotations (sequence of crop and duration) depending on site characteristics, seasonal variations, disease control, market demand and production preferences
Hay	Hay is produced across the region	Cereal hay production is closely linked with the main broad-land cropping areas. Lucerne hay production follows the Tumut, Murray and Murrumbidgee Rivers where it is grown primarily on the river flats
Livestock - meat	Includes cattle, sheep, goats, pigs, and poultry	<p>The majority of cattle, sheep and goats are produced under extensive outdoor grazing production systems, though cattle and sheep may be 'finished off' in feedlots</p> <p>The majority of pigs and poultry are produced under intensive indoor shed production systems</p>
Other livestock	Includes dairy, wool and eggs	<p>Dairy is in a rapid phase of change. The biophysical diversity of the region facilitates diversity of farming systems, and as such the region supports low-input pasture</p> <p>Wool is produced across all landscapes in the Riverina Murray region, and will remain a component of many mixed enterprises</p> <p>Egg production is concentrated in the Bland Shire around West Wyalong (86% of GVP). There is some egg production to the south-east around Cootamundra and further south between Urana and Corowa</p>
Horticulture	Includes fruit and nuts, vegetables, nurseries, cut flowers and cultivated turf	<p>Main berry produced is the blueberry, grown in cooler climate of the Highlands, area also suited to pome fruit, particularly apples</p> <p>Most of the Regions' and State's citrus (oranges and lemons, stone fruit and nuts) is grown in the irrigation areas</p>

The irrigation areas around Griffith produce grapes for wine production

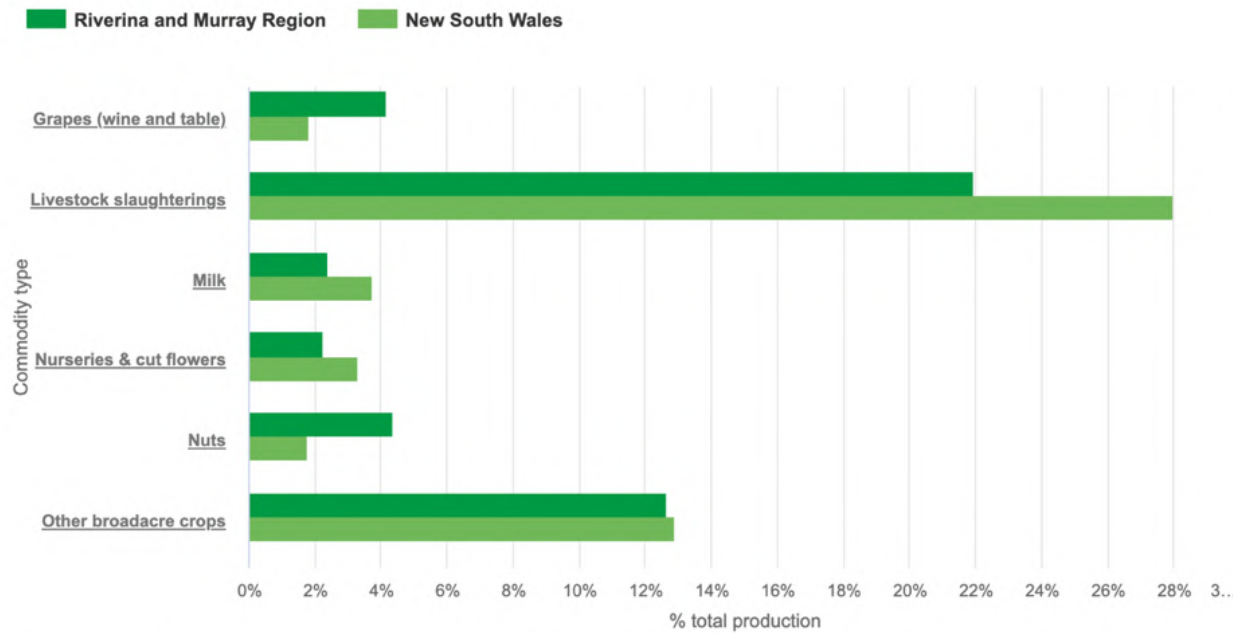
As with fruit most of the vegetable production region occurs in irrigation areas (potatoes, pumpkins, melons, tomatoes and onions)

Majority of nurseries are in the irrigation areas around Griffith and central Riverina down to Murray. Cooler climate nurseries occur in the east Slopes and Highlands

Turf production occurs on river flats of the Murrumbidgee near Wagga Wagga and in the irrigation area around Griffith. Both locations have access to flat country, reliable water supply and a ready market in the large urban centres

Figure 7.2.1 Value of agricultural production 2020 / 21 (Source: Australian Bureau of Statistics (ABS) - Value of Agricultural Commodities Produce 2020-21)

Value of agricultural production 2020/21



Source: Australian Bureau of Statistics, Census of Population and Housing, 2021 Compiled and presented in economy.id by .id (informed decisions).

.id informed decisions

Table 7.2.2 Broadacre production data from the Riverina (we only used the data from LGA's in the DRM DN region – not the wider agricultural region of the Riverina, nor any cross-border Vic LGA data) from the ABS (released in July 2022): VACPDCLGA202021 - Value of Agricultural Commodities Produced, Australia, 2020-21

Type of Broadacre crop	GVA	% of Aust \$	% of NSW \$	Top 3 Riverina LGAs (\$)
Cereal crops - Barley for grain	\$ 436,824,426	12%	47%	Bland, Federation, Carrathool
Cereal crops - Maize for grain	\$ 50,119,520	44%	78%	Carrathool, Murrumbidgee, Federation
Cereal crops - Oats for grain	\$ 64,851,339	12%	40%	Bland, Carrathool, Wagga
Cereal crops - Rice for grain	\$ 169,353,199	97%	99%	Carrathool, Murrumbidgee, Edward River
Cereal crops - Sorghum for grain	\$ 3,163,454	1%	2%	Edward River, Murray River, Wagga
Cereal crops - Wheat for grain	\$ 1,414,811,717	14%	37%	Bland, Carrathool, Federation
Non-cereal crops - Cotton lint (irrigated and non-irrigated)	\$ 196,996,656	13%	22%	Carrathool, Murrumbidgee, Hay
Non-cereal crops - Oilseeds - Canola	\$ 549,594,771	19%	62%	Federation, Wagga, Bland
Non-cereal crops - Oilseeds - Other oilseeds	\$ 3,716,872	6%	11%	Carrathool, Murrumbidgee, Griffith
Non-cereal crops - Pulses and legumes - Chickpeas	\$ 11,812,644	2%	4%	Bland, Carrathool, Wentworth
Non-cereal crops - Pulses and legumes - Lentils	\$ 7,608,870	1%	97%	Carrathool, Wentworth, Balranald
Non-cereal crops - Pulses and legumes - Lupins	\$ 41,725,184	12%	65%	Wagga, Federation, Narrandera
Non-cereal crops - Pulses and legumes - Other pulses (b)	\$ 33,206,184	6%	38%	Carrathool, Wagga, Bland
Non-cereal crops - Sugar cane - Cut for crushing	\$ -	0%	0%	-
Broadacre crops - All other crops n.e.c.	\$ 9,344,640	4%	26%	Carrathool, Coota-Gundagai, Murray River

Table 7.2.3 Production of citrus in the Riverina Murray (from the ABS (released in July 2022): VACPDCLGA202021 - Value of Agricultural Commodities Produced, Australia, 2020-21

Type of citrus	GVA	% of Aust \$	% of NSW \$	Top 3 Riverina LGAS (\$)
Oranges	\$ 293,737,830	46%	93%	Carrathool, Leeton, Wentworth
Mandarins	\$ 39,075,620	10%	97%	Wentworth, Leeton, Carrathool
All other citrus fruit n.e.c.	\$ 25,186,345	10%	84%	Carrathool, Leeton, Wentworth

Table 7.2.4 Production of grapes in the Riverina Murray (from the ABS (released in July 2022): VACPDCLGA202021 - Value of Agricultural Commodities Produced, Australia, 2020-21

Type of grapes	GVA	% of Aust \$	% of NSW \$	Top 3 Riverina LGAS (\$)
Wine production	\$ 240,740,974	20%	95%	Carrathool, Wentworth, Balranald
All other uses	\$ 74,395,460	13%	99%	Wentworth, Balranald, Murray River

Table 7.2.5 Production of nuts and berries in the Riverina Murray (from the ABS (released in July 2022): VACPDCLGA202021 - Value of Agricultural Commodities Produced, Australia, 2020-21

Type of nuts and berries	GVA	% of Aust \$	% of NSW \$	Top 3 Riverina LGAS (\$)
Berry fruit - Strawberries	\$ 4,352	0%	0%	Carrathool, Murrumbidgee, Griffith
Berry fruit - All other berry fruit n.e.c	\$ 5,834,306	1%	2%	Greater Hume, Snowy Valleys, Wentworth
Nuts - Almonds	\$ 128,329,634	20%	100%	Carrathool, Wentworth, Balranald
Nuts - Macadamias	\$ -	0%	0%	-
Fruit and nuts - Nuts - All other nuts n.e.c.	\$ 69,905,676	57%	80%	Carrathool, Leeton, Murrumbidgee

Table 7.2.6 Production of fruit in the Riverina Murray (from the ABS (released in July 2022): VACPDCLGA202021 - Value of Agricultural Commodities Produced, Australia, 2020-21)

Type of fruit	GVA	% of Aust \$	% of NSW \$	Top 3 Riverina LGAS (\$)
Orchard fruit - Apples	\$ 46,727,548	6%	52%	Snowy Valleys
Orchard fruit - Avocados	\$ 1,644,120	0%	4%	Wentworth
Orchard fruit - Mangoes	\$ -	0%	0%	-
Orchard fruit - Olives	\$ 8,303,910	7%	71%	Carrathool, Murrumbidgee, Berrigan
Orchard fruit - Pears (including Nashi)	\$ 198	0%	1%	Snowy Valleys
Orchard fruit - All other orchard fruit n.e.c.	\$ 2,493,542	2%	25%	Carrathool
Plantation fruit - Bananas	\$ -	0%	0%	-
Plantation fruit - Pineapples	\$ -	0%	0%	-
Stone fruit - Cherries	\$ 5,463,423	2%	17%	Carrathool, Murrumbidgee
Stone fruit - Nectarines	\$ 11,591,870	9%	87%	Murrumbidgee, Berrigan
Stone fruit - Peaches	\$ 3,766,841	5%	76%	Murrumbidgee, Berrigan
Stone fruit - All other stone fruit n.e.c.	\$ 15,185,231	13%	92%	Carrathool, Murrumbidgee, Edward River
Other fruit - All other fruit n.e.c.	\$ 6,750,461	7%	40%	Murrumbidgee, Berrigan

Table 7.2.7 Production of hay, livestock and cut flowers in the Riverina Murray (from the ABS (released in July 2022): VACPDCLGA202021 - Value of Agricultural Commodities Produced, Australia, 2020-21

Type of produce	GVA	% of Aust \$	% of NSW \$	Top 3 Riverina LGAS (\$)
Hay	\$ 185,011,537	9%	36%	Greater Hume, Edward River, Murray River
Livestock products - Eggs	\$ 68,003,665	6%	17%	Bland, Temora
Livestock products - Milk	\$ 114,225,847	2%	17%	Murray River, Edward River, Murrumbidgee
Livestock products - Wool	\$ 277,386,805	10%	33%	Greater Hume, Coota-Gundagai, Wagga
Livestock slaughtered and other disposals - Cattle and calves	\$ 548,797,112	4%	20%	Snowy Valleys, Greater Hume, Coota-Gundagai
Livestock slaughtered and other disposals - Pigs	\$ 182,939,659	12%	73%	Federation, Edward River, Temora
Livestock slaughtered and other disposals - Poultry	\$ 324,142,293	11%	42%	Carrathool, Narrandera, Federation
Livestock slaughtered and other disposals - Sheep and lambs	\$ 416,363,491	10%	33%	Coota-Gundagai, Greater Hume, Carrathool
Livestock slaughtered and other disposals - Other n.e.c.	\$ 1,142,976	1%	15%	Coota-Gundagai, Wentworth, Carrathool
Nurseries, cut flowers or cultivated turf - Cultivated turf	\$ 8,984,176	3%	6%	Wagga, Lockhart
Nurseries, cut flowers or cultivated turf - Cut flowers - Total	\$ 1,250,446	1%	4%	Wentworth, Edward River, Murray River
Nurseries, cut flowers or cultivated turf - Nurseries - Total	\$ 92,894,343	7%	22%	Carrathool, Edward River, Murray River

Table 7.2.8 Production of vegetables in the Riverina Murray (from the ABS (released in July 2022): VACPDCLGA202021 - Value of Agricultural Commodities Produced, Australia, 2020-21

Type of produce	GVA	% of Aust \$	% of NSW \$	Top 3 Riverina LGAS (\$)
Vegetables - Beans (including french and runner beans)	\$ 39,313	0%	1%	Hay, Carrathool
Vegetables - Broccoli	\$ 7,653,161	6%	88%	Carrathool, Murrumbidgee
Vegetables - Cabbages	\$ 9,767	0%	0%	Greater Hume
Vegetables - Capsicums (excluding chillies) - Outdoor and undercover	\$ 996,176	1%	33%	Wentworth
Vegetables - Carrots	\$ 27,187,173	9%	94%	Murray River, Edward River
Vegetables - Cauliflowers	\$ 43,233	0%	1%	Wagga, Lockhart, Greater Hume
Vegetables - Cucumbers	\$ 3,859,296	3%	5%	Carrathool, Murrumbidgee
Vegetables - Herbs (including basil, coriander and parsley)	\$ 17,400	0%	0%	Carrathool, Murrumbidgee
Vegetables - Lettuces - Outdoor and undercover	\$ 44,894	0%	1%	Hay, Carrathool
Vegetables - Mushrooms	\$ -	0%	0%	-
Vegetables - Onions	\$ 4,639,341	3%	87%	Carrathool, Murrumbidgee
Vegetables - Potatoes	\$ 24,459,277	3%	49%	Murrumbidgee, Berrigan
Vegetables - Pumpkins (including butternut)	\$ 4,132,186	6%	47%	Carrathool, Murrumbidgee
Vegetables - Sweet corn	\$ 3,154,648	2%	39%	Carrathool, Murrumbidgee
Vegetables - Tomatoes - Outdoor and undercover	\$ 60,477,480	12%	59%	Edward River, Murray River, Murrumbidgee
Vegetables - All other vegetables n.e.c.	\$ 30,733,772	3%	21%	Carrathool, Wentworth, Murray River

7.3 Attachment C Current challenges facing agriculture in the Riverina Murray

Table 7.3.1 Current challenges facing agriculture in the Riverina Murray (Source: NSW Department of Primary Industries, 2018, Riverina Murray Region Agricultural Profile)

Challenges	Explanation
Fragmentation and an increase in land use conflict	This is coming from significant urban development (urban housing and lifestyle/rural residential parcels) around the larger regional centres (particularly Wagga Wagga, Albury and Griffith), along the Murray River (Corowa, Mulwala, Moama) and around villages, now becoming satellite residential areas (such as Junee, Jindera). Fragmentation of prime agricultural land for housing developments reduces land availability for viable agricultural production. In addition, fragmentation causes inflated land prices and reduces the ability of farmers to purchase additional land for enterprise expansion
Increasing pressure from other resource users	Solar farms utilising prime agricultural land (as it is typically cleared, level to minimal slope and already has access to utilities (connectivity) and transport networks (important for installation and maintenance) is emerging as another competing land use. Mining is another conflicting land use that has arisen more recently as a concern in the Riverina Murray. This concern is emerging as prime agricultural land in adjoining regions is lost to mining
Cross-border complexity	Operating across policy and regulatory variations Travelling populations Market and market access Transport connectivity Tourism Population migration Biosecurity
Adequate quality water supply	Securing water for production in terms of quality, quantity and delivery. The demand on an already over-allocated water supply can only intensify with the projected increase in the population of the Riverina Murray, the associated higher water demand from expanding urban development, escalating resource harvesting and mining development, and the ongoing need to meet environmental water requirements. Combined with the impacts of climate change water availability is high on the list of pressures on existing and future agriculture Trade of water has pushed prices up for access to LR water supply for agriculture
Regional decline reducing quality of life, health & attraction and retention of people to regional areas	Reduced and limited social services (particularly health and education) and/or further to travel for such social services Large distances to scattered places of employment for farm workforce Reliance on private / self-transport Poor public transport services (limited number of services, service availability not aligned with work hours) between smaller centres

7.4 Agricultural innovations in the Riverina Murray region

Points of difference in each case study have been bolded for quick identification if reader is short on time.

7.4.1 Individual agricultural business innovation

Sunrice Australia

SunRice formed in 1950 when early rice growers pooled funds to establish a co-operative and built a much-needed rice mill at Leeton in the Riverina.

The Riverina rice growing region is based in the Murrumbidgee and Murray valleys across south-west New South Wales and northern Victoria. Sunrice grow medium grain Japonica varieties, long grain Indica varieties, and premium short grain rice such as Koshihikari, which is ideal for use in Japanese cooking.

In 1955, the co-operative launched its own branded retail pack of 'Sunwhite' rice. It was the first time that nutritional value and product quality and consistency were emphasised in the marketing of Australian rice. Decades of research and adoption of new technology followed, with SunRice manufacturing an ever-growing and innovative range of new products from rice and rice by-products.

Australian rice growers only grow rice when there is water available. When there are drought conditions, our farmers can't and don't grow as much rice. Rice is an annual crop which means, unlike permanent tree plantings, rice production can be switched on or off depending on water availability. Most rice is grown using general water security allocation. When available this is allocated after the environment, towns, stock, domestic and high security allocations.

In years of normal rice production, a strong SunRice delivers close to \$400 million per annum directly into the Riverina region of NSW and supports 600+ growers, 600+ employees and 400+ local suppliers. SunRice also supports local causes with an annual **\$700,000 for social impact spending** - regional sponsorship, community engagement, training & development.

Vertical farming - Feed the bush program

Vertical farming systems grow plants under wholly or partially controlled environmental conditions to allow crops to be grown throughout the year. Vertical systems utilise artificial control of light, temperature, moisture, and carbon dioxide concentrations. 'Feed the Bush' concept will use an intensive horticulture system called the InvertiCube to grow sustainable produce.

The 1.5m x 1.5m cubes are kept indoors, **use 95% less water than broadacre cropping, require no chemicals or pesticides and are controlled completely via an iPad.** In addition, they provide an optimum growing environment that can reduce the growing cycle to up to 35 days. The idea is to establish the concept, create a blueprint of the business model and commercialise it right across the country.

InvertiCube's are very affordable, take up very little space, are easily scalable and provide innovative opportunities for farmers to diversify just how they produce a crop, or create an additional income stream. There's over 100 crops that could grow in the system. Everything from various fruit and vegetables to micro herbs and Indigenous plants.

Precision Agriculture

Many growers are looking to reduce input costs by utilising their technology in conjunction with agronomic practices to target applications for site specific management. Precision Agriculture (PA) is a recognised leader in the industry.

Grid soil sampling, EM38 soil conductivity mapping and Elevation data are all services offered by PA to help meet grower need. **Grid soil sampling is a key tool to help make decisions for applications such as lime, gypsum and fertiliser through variable rate application technology.** EM38 looks at the soil variability across paddocks, offering insights into water holding capacity and areas with structural issues resulting in yield loss. Elevation data is useful for water flow modelling and drainage applications saving time and costs.

Murray Cod Australia – produces premium, pond-grown Murray Cod

Based in the Riverina, New South Wales, Murray Cod Australia has a vertically-integrated approach for breeding, growing and supplying Murray cod. They grow high-quality Murray cod in open ponds (or dams) on the Murray-Darling Basin river system – the fish’s native environment. Driven by a commercial fishing ban on wild Murray cod and an increasing appetite for the iconic fish in culinary circles they use a land-based aquaculture model, resulting in **one of the lowest environmental footprints in the industry.**

Holbrook Paddock Eggs

Holbrook Paddock Eggs are grass fed free ranging Bond brown hens. Stocking density is just 40 hens/hectare compared to the industry standard of 10,000 hens/hectare. The benefit of allowing the hens this freedom is a premium quality egg.

Premium quality natural eggs are achieved by allowing the hens to roam free, not using any hormones or antibiotics. Their eggs are sold in over 60 outlets across Sydney and regional NSW.

Holbrook Paddock is leading the way as one of Australia’s first truly open-paddock, free roaming egg production system. It is also involved in the **App developed by CHOICE, Australia’s leading consumer advocacy group called Cluck**, by pointing your phone at the top of an egg carton you can find out how free range the eggs really are.

Southern Cotton Gin

Southern Cotton operates a state-of-the-art cotton gin some 20km west of Leeton. Australia’s newest ginning facility, Southern Cotton was built and commissioned in the 2012 season and boasts **state of the art technology in quality measurement, cleaning, humidification, processing and data traceability.** This technology ensure maximum yield and quality potential of lint is achieved.

From when the bales are brought in, cleaned and packed ready to ship out, Southern Cotton’s specially-built observation walkways allow visitors to witness these stages first-hand in a safe environment.

Gundagai Lamb

Gundagai Lamb are on a mission to provide all Gundagai lamb farmers with information about their flock which allows them to nurture and breed a healthier more resilient better tasting lamb. Gundagai Lamb have **developed technology that allows accurate measurement of the Lean Meat Yield, Intramuscular Fat.** This grades each lamb on the perfect balance of intramuscular fat and tender lean meat. It also objectively measures the overall health and wellbeing of each lamb.

Narrandera Mill (Manildra Group)

Narrandera Mill is ideally located to directly access quality wheats from both dryland and irrigated crops in the Murrumbidgee Irrigation Area, producing quality flours in **state-of-the-art manufacturing facilities** for biscuit manufacturers, bakery mixes and other speciality flours.

Riverina Fresh

Riverina Fresh partner with a small group of 20 dairy farmers in the Riverina region, to supply premium milk to supermarkets and cafés across NSW, VIC and ACT. The region's dairy farmers have a flat dairy curve which ensures milk is always of a consistent quality and taste. Riverina Fresh seek a **collaborative approach to innovation and R&D** that considers end to end benefits through the supply chain from farm to consumer. They work closely with key partners, leading research institutions and experts in their fields. They take a **holistic view to innovation and look for improvements in systems and processes, applications of technology** as well as development of finished products.

Riverina Fresh have committed to spend 5% of their profit on innovation and R&D initiatives.

Implementing Industrial Internet of Things (IoT) – Rayven

Riverina Fresh was operating with some older equipment operated from the factory floor which lacked real-time oversight and optimisation. After a process of review, engineering management identified potential improvements to the production process that could be realised with increased visibility of real-time data and access to new metrics of efficiency. They were introduced to Rayven by Bridge Hub, the Agrifood tech innovation hub. They collaborated with Rayven to help develop their product for some of their older equipment, bringing it into the 21st century. This

was achieved for a relatively low cost and without the need to replace existing equipment. This is an example of modernising a manufacturing business without having to outlay significant capital expenditure. Rayven IoT was selected as the cloud-based platform of choice based on its ability to integrate seamlessly with existing infrastructure, as well as the customisability of the real-time calculations and dashboards.

The outcomes derived from implementation of the solution included increased run-time and throughput, with opportunities for additional gains as Riverina Fresh use the new metrics to track and improve changeover between products and reductions in line downtime.

Actionable Intelligence across the Dairy Supply Chain

Monitoring and managing the flow of milk from farm to factory is one of the most fundamental elements of the Riverina Fresh business. In collaboration with the agrifood tech innovation hub, Bridge Hub, the company undertook a global search to find the **best-in-class software that solved the need to improve and optimise milk flow management**.

Exploring the future of irrigation technology

Riverina Fresh is collaborating with Israeli based company N-Drip to explore improvements in irrigation technology for the dairy industry. N-Drip is the first and only micro irrigation solution powered by gravity. It provides a simple and inexpensive drip irrigation solution that has the potential to **dramatically increase water use efficiency and crop yields in the dairy industry**. N-Drip's technology is currently being trialled on the farms of a number of Riverina Fresh farmer suppliers.

7.4.2 Sustainability initiatives in the region

Growing Bittern friendly rice

The Riverina is home to the largest population of Australasian Bitterns in the world. It is recognised that about 500 to 1000 Australasian Bitterns use rice crops over the summer months for breeding purposes. Research over the last seven years has found that rice growers can undertake a range of crucial activities to increase the number of successful Australasian Bitterns breeding events and boost the number of chicks fledging prior to rice harvest. This program **offers rice growers an opportunity to demonstrate how farming and wildlife conservation** can be married in the irrigation areas of the Riverina.

Carbon & Biodiversity pilot in the Riverina

The Australian Government is running the Carbon + Biodiversity Pilot in the region. The Pilot is a key part of the Australian Government's \$66.1 million Agriculture Biodiversity Stewardship Package and will reward farmers for the stewardship of their land, **storing carbon and improving Australia's biodiversity**.

Swift Parrot conservation incentives

Swift parrots (*Lathamus discolor*) are one of Australia's rare species of parrot and are listed as critically endangered under Australian Government legislation. It is estimated that less than 2,000 birds live in the wild. This project aims to **improve the long-term viability of nationally endangered Swift Parrot** through the planting of habitat and protection of mature feed trees.

Protection of existing Swift Parrot habitat: grants are available as a contribution towards the cost of standard fencing materials to minimise livestock damage and allow natural regeneration.

Highfield Farm Conservation

Highfield Farm and Woodlands is a small-scale farm whose owners are passionate and dedicated conservationists. They **combine ethical and sustainable farming practices with the conservation of critically endangered Box Gum Grassy Woodland**. They farm one-third of the property, with the remaining two-thirds left as protected woodland.

The owners are designing additional farm stay accommodation and plan to provide a number of value-add tourist products such as farm animal activities – meeting sheep/cattle, their Maremma dog, collecting eggs, and feeding baby lambs; **Indigenous heritage by introducing visitors to the physical evidence of the Wiradjuri Heritage on Highfield**; free walking tracks and bird spotting; and Highfield produce - packaged up in convenient baskets and packs.

Feral pig control in western Riverina

Riverina Local Land Services operates the largest feral pig control program in Australia, delivering **improved production** for landholders and helping **protect several fragile wetlands and threatened species**. The Western Riverina Pig Project has now been recognised for its outstanding achievements, receiving a national Froggatt Award from the Invasive Species Council. The Western Riverina Pig Project started in 2016, after being contacted by NSW Farmers to help manage a feral pig population that was quickly becoming too large for landholders to control. They embarked on a widescale nil-tenure program, integrating a range of

innovative technologies, to effectively manage feral pigs across 187 private and public landholdings, spanning 2.1 million hectares.

7.4.3 Indigenous initiatives in the region

Native yam daisies near Hay

A population of **rare native yam daisies has been discovered** near Hay, with work underway from Riverina Local Land Services to protect the native plant. These plants would have been more widespread in the Riverina Rangelands prior to European use (grazing) of the stock routes.

First Aboriginal cultural burn at top Gobarralong TSR since contact

Riverina First Nations communities and the Rural Fire Service carry out cultural burns on travelling stock reserves. One of these locations is Top Gobarralong TSR, which was the first cultural burn since contact. Fifteen participants from Brungle Tumut Local Aboriginal Land Council and the broader First Nations community participated in the **burn to heal Country, protect an endangered woodland and rebuild skills in the community**.

<https://www.lls.nsw.gov.au/regions/riverina/articles.-plans-and-publications/first-aboriginal-cultural-burn-at-top-gobarralong-tsr-since-contact>