

TOWONG SHIRE

Strategic Plan for Agriculture





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Prepared for

towongshire



innovation : technology : sustainability

Message from the Mayor

On behalf of Council, I am delighted to present our *Strategic Plan for Agriculture*. This strategic plan sets out the ambitions of the Towong Shire agricultural community and provides a framework for advocacy and priority actions for Council for the next five years.

Agriculture significantly contributes to Towong Shire's total economic output and employment, generating \$221.1 million, or 37.5%, of the total output¹. Agriculture is also a significant employer; directly supporting 667 jobs² in the municipality.

We will use the *Strategic Plan for Agriculture* to build an inclusive, diversified and prosperous future, which we will achieve by:

- Empowering current and future generations of people;
- Maximising the natural resource potential to grow existing and new markets; and
- Supporting a connected Shire –strengthening infrastructure and human connections.

We want our people to have the skills, networks and motivation to problem-solve and seize opportunities as individuals and collaborative teams.

We must take advantage of opportunities that promote peer learning, build networks and diversify the agriculture industry.

We want to protect and leverage our natural assets; water, natural resources and the environment, and we see the opportunity to be a major regional food bowl that produces safe, ethical and sustainable products for current and future markets.

We would like to thank Drs Karensa Menzies and Sara Hely, who initially developed and authored our *Strategic Plan for Agriculture*. The plan has been developed in close consultation with Towong Shire producers, producer groups (Acres and Acres, Agriculture Steering Group, Agriculture Working Group - Community Recovery Committee, Alpine Valleys Dairy, Berringa Peninsula Community Network, Mitta Valley Beef, Tallangatta Valley Better Beef, Upper Murray Incorporated) and key external stakeholders.

The document underwent extensive community engagement and consultation and was rigorously reviewed by the community and the Agriculture Steering Group. The Agriculture Steering Group members were Michael Bretherton, Tara and David Brewer, Lachlan Campbell, Lyn Coulston, Chloe Giltrap, Patrick Glass and Cate Prichard. We would like to thank these individuals and acknowledge them as co-authors of the final *Strategic Plan for Agriculture*.

Towong Shire aspires to be the premier location for Victorian agriculture. The plan provides a strategic framework and roadmap to help us work together to support current and future generations to thrive in agriculture across the Shire; support our current population, attract new people and address succession challenges.

We look forward to seeing our agricultural industry prosper now and into the future and contribute to making Towong Shire *the ideal place to be*.



Cr Andrew Whitehead
Mayor

1. Sourced from REMPLAN Economy, retrieved 8 Nov 2021: <https://app.remplan.com.au/Towong/economy/industries/summary>.
2. Australian Bureau of Statistics 2016 Census Place of Work Employment, ABS 2018 / 2019 National Input Output Tables.



Executive summary

With the increasing demand for nutritious and sustainably produced food and fibre globally, the outlook for agriculture is positive.

Towong Shire is home to some of Australia's most fertile land, pristine landscapes and significant water catchments, offering agriculture an ideal foundation to embrace current and emerging market needs for ongoing prosperity. Globally, a range of socioeconomic, geopolitical, technological, and consumer trends are converging to rapidly change the food, fibre and agribusiness landscape. These include urbanisation helping to create a growing pool of new consumer markets, through to increasing supply chain connectivity, food security and shifting consumer preferences linked to health and environmental concerns. The impact and influence of the current COVID-19 pandemic has sharpened the focus on these for many consumers both here in Australian and internationally, while bringing to the forefront the need for resilient, flexible and adaptable agriculture supply chains and communities.

Agriculture is richly entwined throughout the Towong Shire communities and underpins the municipality's largest proportion of jobs and economic output. It has been recognised that agriculture in Towong Shire area is at a critical point, whereby without opportunity creation, next generation producers and skilled employees, the Shire could see a reduction in the ability to maintain critical mass for the community in and outside of agriculture.

The Shire's agriculture sector has experienced considerable contraction over the years and is heavily reliant on beef and dairy production. This narrow base arguably poses significant risk to the local economy. These risks are associated with drought, climate change, market volatility and shifts, and overall sustainability. Farms of the traditional sectors are consolidating to remain profitable, resulting in fewer people in community and land access is difficult for new entrants. Land zoning and planning frameworks are often prohibitive for new or high value production systems on smaller land footprints. The region continues to face challenges characteristic of many rural areas including workforce shortages, succession in land management and poor network coverage. These are exacerbated by Shire's low population density, vast geographic area, topography and more remote location.

To ensure the Towong Shire's agriculture industry remains vibrant and supported, the Shire Council sought research and development of a five-year strategic plan for agriculture. Forestry and energy supply were excluded from scope.

The Strategic Plan for Agriculture here within is the outcome of local community consultation and diverse thinking from a range of regional and agricultural expertise and experience. This involved developing

a nuanced understanding of current agriculture sector in Towong Shire, its people, and local regional trends. Research into market outlooks and insights were undertaken both globally and locally to identify and prioritise opportunities. The analysis explored and identified opportunities and barriers for greater diversification and prosperity across the agricultural community. This document outlines the Strategic Plan for Agriculture in Towong Shire and provides a summary of the underpinning process and report.

An outline of the key recommendations and the Strategic Plan are provided on the following pages 4 – 7. Detail on the strategic priorities, goals, opportunities and recommendations are found on pages 18 – 31. For further detail, as well as narrative on the current individual agriculture sectors within the Shire, please refer to the Final Report on Development of an Agriculture Strategic Plan for Towong Shire (2021). This Strategic Plan for Agriculture is not intended to be static, rather to offer a starting point for future conversations, key relationships and the development of initiatives to pave an inclusive and prosperous future for agriculture across the Towong Shire.

Key recommendations

Create a shared vision and visible roadmap for agriculture prosperity across the Towong Shire, drawing on the proposed Strategic Plan for Agriculture and the underpinning Strategic Priorities:

Strategic Priority 1

Empowering the people in agriculture: current, next and new generations
For detail on see page 20

Strategic Priority 2

Maximising the water and natural resource potential to grow existing and new markets
For detail see page 24

Strategic Priority 3

A connected Shire – infrastructure and human factor
For detail see page 27

Develop an action plan with a range of programs of work with short-, medium- and longer-term approaches to address the identified challenges and opportunities that will allow agriculture and supporting communities to prosper throughout the Towong Shire. The key recommended priority action areas are highlighted in the Strategic Plan outline on the following two pages and include:

- capacity building and networking of producers for diversification and improved production;
- improved facilitation and literacy in succession of land management;
- capability building of Towong Council staff particularly in relation to land use, planning and water;
- capacity building, influencing and advocacy around the intersection of climate change, low carbon production and water access and use;
- acceleration of reliable digital network across the whole of Towong Shire; and
- revised governance arrangements to assist Council consider and deliver relevant, impactful programs of work to support agriculture prosperity.

Create a baseline data of the current contribution of the agriculture sector, which segments the various industries and parts of the supply chain, to the Towong Shire economy. This will allow an evidence base for goals or targets to be set and progress to be tracked. It will also assist in creating a clear shared understanding and vision for agriculture across the Shire community.

Map current stakeholder connections and relationships to establish what can be leveraged, what can be strengthened, and what are the gaps that require attention to progress this Strategic Plan for agricultural prosperity across Towong Shire.

Develop a coordinated engagement process with Traditional Owners and First Nations people to allow development of meaningful relationships and consultation to facilitate an understanding and opportunities for incorporation of Indigenous knowledge, culture and practices into local agriculture prosperity. This should form part of a broader local Reconciliation Action Plan.

Acknowledgements

The authors acknowledge the invaluable contribution of the Towong Shire community and producers in the preparation of this report.

Outline of Strategic Plan for Agriculture, Towong Shire

Vision for a thriving agricultural sector

An agricultural and rural community that

- Responsibly and sustainably manages and utilises its natural resources;
- Can adapt to meet current and emerging market opportunities;
- Producers and enterprises experience ease of doing business;
- Is collegiate, collaborative and embraces diversity.

Mission for Towong Shire Council

“To empower current and next generations to thrive in agriculture throughout the Shire.”

Strategic Priorities and Goals

STRATEGIC PRIORITY 1

Empowering the people in Agriculture: current, next and new generations

STRATEGIC PRIORITY 2

Maximising the water and natural resource potential to grow existing and new markets

STRATEGIC PRIORITY 3

A Connected Shire – infrastructure and human factor

Goals

1.1. Succession in land management is achievable and supported.

1.2. Agriculture diversification options are clear (business case, pathway, and access to required skills) and supported for a range of production systems.

1.3. The skills and knowhow that underpin innovation, entrepreneurship and value-add are supported to enable prosperity across agricultural communities.

1.4. The region can attract current, next and new generations in agriculture and rural industries to ensure a diverse, collaborative and capable workforce for the future.

1.5. Leadership development is supported and integrated to enhance the community's capacity to embrace rural challenges and opportunities both now and into the future.

2.1. Producers understand (where, when and how) the balance and availability of groundwater resources to drive their informed and deliberate decision making.

2.2. Improve access to and availability of regulated water for agricultural producers.

2.3. Improve water utilisation and efficiencies by producers through informed decision making and ensuring a return on investment for farming businesses.

2.4. Sustainability, carbon balance, resilient landscape, and climate adaption practices are clear and supported.

2.5. Brand agricultural product to leverage the natural environment.

3.1. Reliable digital and telecommunication networks are available and provide effective coverage across all the Shire.

3.2. Transport and built infrastructure support progressive and efficient supply chains.

3.3. Contemporary, fit for purpose land-use planning and legislation to support sustainable growth and development of agriculture and rural communities.

3.4. Navigating permits and planning process is seamless – (Ease of doing business).

3.5. A relevant, coordinated and collaborative approach to advance initiatives and advocacy that drive agriculture prosperity and resilience.

3.6. The agricultural community is aware of the roles and responsibilities of all agencies in emergency management, response, relief, recovery, and appropriate sources of support.

3.7. Empower producers to guide the Shire towards a proactive approach to biosecurity.

3.8. Future-proof agriculture to incorporate emerging technology within the production landscape, particularly in relation to transport and energy.

Executive summary

Key recommended actions for each Strategic Priority

STRATEGIC PRIORITY 1	STRATEGIC PRIORITY 2	STRATEGIC PRIORITY 3
Empowering the people in Agriculture: current, next and new generations	Maximising the water and natural resource potential to grow existing and new markets	A Connected Shire – infrastructure and human factor
Priority Actions		
<ul style="list-style-type: none"> • Producer peer learning groups and networks. • Staged succession program. • Agriculture diversification program. • Skills acquisition. • Targeted SME, value add and scale up support. • Leadership framework. • Tangible connection with agriculture learning institutions. 	<ul style="list-style-type: none"> • Roadmaps to assist access to ground and regulated water. • Advocacy for improved water trading rights. • Carbon awareness program. • Climate adaption framework for Towong. • Investigate options to leverage the natural environment to create opportunities for diversification. • Investigate opportunities to brand local products to capitalise on the unique beauty and sustainability of the natural environment. • Sustainable agriculture program. • Coordinate and signpost existing resources and programs to develop resilient landscapes framework. 	<ul style="list-style-type: none"> • Acceleration of digital network and connection. • Dedicated agriculture resource within Shire. • Program to upskill the Shire's agriculture capacity. • Fit for purpose land use zoning and planning system. • Agriculture Steering Group to provide ongoing guidance on issues and opportunities related to agriculture, and implementation of this strategy. • Establish a forum for producers to: <ul style="list-style-type: none"> • engage with the municipal emergency management planning committee; and • identify current or emerging biosecurity issues and identify solutions. • Awareness and advocacy for the broader community around emergency management and planning. • Develop communication plan to distribute and consolidate information concerning current and emerging biosecurity risks. • Conduct a review and develop a strategy to guide agricultural transport links to be fit-for-purpose

The key actions for each Strategic Priority listed above are presented schematically on the following page. It highlights the connection between the three strategic priorities, and shows which areas are 'business as usual for Towong Shire' and those that go beyond and are important to progress agriculture prosperity.

Executive summary

Business as usual

Agriculture resource / officer

- Human factor to assist
- Navigating permits and approvals
- Coordinated advocacy

Program

- Upskill the Shire agriculture capacity

Infrastructure

- Reliable digital network

Policy and legislation improvements

- Water security – improved access, trading rights and on-farm storage
- Land zoning



Roadmaps

- Navigate access to ground and regulated water resources

Market failure? Business opportunities?

Producer learning groups and programs

- Embed skills, knowhow and peer support
- Succession
- Diversification
- Value-add, SME and scale-up
- Skills acquisition
- Climate adaptation
- Carbon neutral production

Program

- Attracting people in agriculture
- Tangible connection with agriculture learning institutions

Framework

- Leadership development



Overview of Agriculture in Towong

Towong Shire is home to some of Australia's most pristine, diverse and enviable landscapes with significant natural resources, arguably placing its agricultural sector in prime position to embrace the increasing demand for clean, green, safe and ethical production of food and fibre.

In the ever-present face of climate change, there is increasing pressure for resilient and sustainable food production and supply chains. The demand for transparency and traceability - proof of provenance - and locally produced also continues to grow. Growing agricultural prosperity across the Shire also presents an opportunity to engage more young people within the region in an effort to reverse the aging population trends.

While the COVID-19 pandemic appears to have brought our rural and regional areas into the spotlight and raised the rural appeal, prosperity of the Shire's agricultural sector continues to face similar challenges to other rural areas such as workforce shortages, succession in land management and poor network coverage. This is arguably exacerbated by the low population density, vast geographic area, topography, and more remote location of Towong Shire. A concerted effort is required to ensure that the Shire's strengths and potential are harnessed for ongoing agriculture prosperity.

Encouragingly, the recent (2020) bushfires continued to reinforce and prove the resilience of the

Shire's communities, and the impacts of COVID-19 pandemic have highlighted the ability for adaption and flexibility. There would appear significant opportunity for greater collegiality and celebration of diversity to realise the opportunities for agriculture and this will start with supporting the human factor, such as through producer-led peer learning groups and upskilling of the Shire staff agriculture capability.

Approximately 20-30% of the Towong Shire area is arable land that supports regional settlement and agriculture, primarily along the floodplains and valleys of the Upper Murray and Mitta Mitta river systems. The non-arable area is largely forested and rugged mountain landscape which remains under state and national parks. There is a need to protect such regional assets – national parks, environmental and heritage sites, indigenous culture and heritage, and scenic landscapes – which in addition to conservation and maintenance of healthy ecosystems, are used for recreational and nature-based activities and tourism. As identified in Upper Murray 2030 masterplan, these will contribute to building a more diverse economy through tourism and reinforce the strong sense of place.

The Agriculture, Forestry and Fishing sector is Towong Shire's largest employer (33%) supporting an estimated 667 jobs³. The economic output of these combined sectors is valued at \$221.1 million and 37.5% of the Shire's total output⁴. The current economic output of agriculture within the Shire is not clear. In 2011 the sector contributed \$90.7 million to the Shire's economic output⁵. Clearly establishing the current economic value of the present and emerging agriculture sectors across the Shire will be useful to benchmark the present status and establish tangible goals and targets to progress a shared vision for agriculture across Towong Shire.

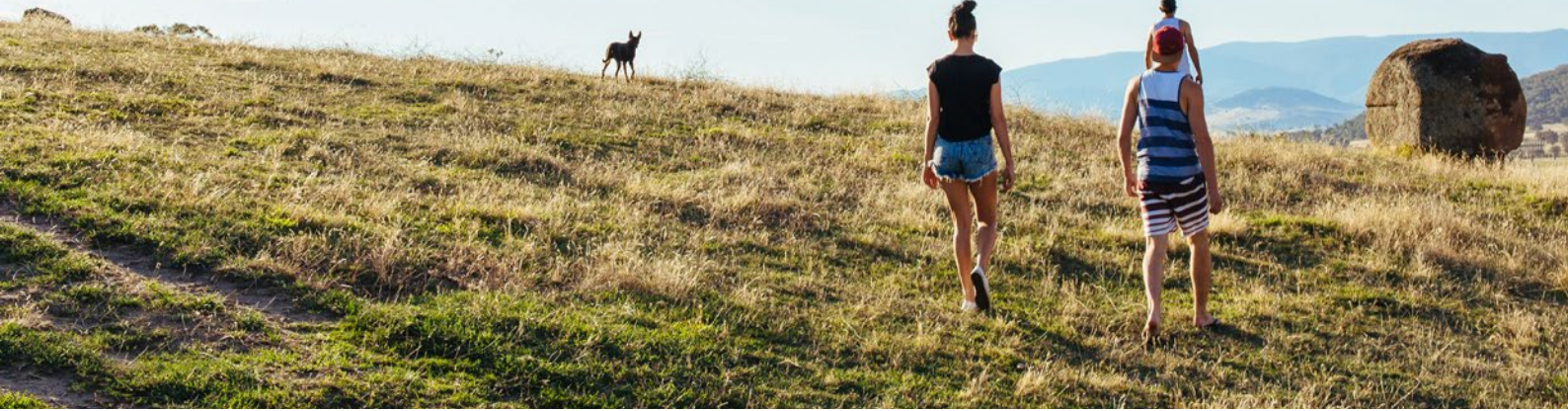
While agriculture has many strengths and is considered the cornerstone of the Towong Shire economy, this sector has experienced considerable contraction over the years with ongoing challenges in attracting and retaining skilled staff and workforce. Succession in land management and holdings also present significant issues across agriculture in the Shire. Presently agriculture is dominated by animal production, primarily beef (\$45.3 million in economic output, 2011) and dairy (\$33.4 million 2011), with cropping and horticulture

3. Australian Bureau of Statistics 2016 Census Place of Work Employment, ABS 2018 / 2019 National Input Output Tables, and ABS June 2020 Gross State Product. Sourced from REMPLAN: <https://app.remplan.com.au/Towong/economy/industries/employment> Retrieved 8 Nov 2021.

4. Sourced from REMPLAN Economy, retrieved 8 Nov 2021: <https://app.remplan.com.au/Towong/economy/industries/summary>.

5. Sourced from Upper Murray 2030 Agriculture Concept Plan (2016); Hume Regional Growth Plan Background Paper (2014).

Overview of Agriculture in Towong



contributing around 10% in production value (at \$2.7 million, 2011)⁶. Growing and developing the horticulture and cropping sectors that are well suited to the Towong Shire environment would reduce the risk posed to the local economy from an overreliance on two specific agricultural industries. These risks are associated with drought, climate change, market volatility and shifts, and overall sustainability.

Agriculture generates local jobs and employment not only on-farm, but also through farm services and post farmgate processing. These people form a vital part of the Shire's communities, contributing significantly to sporting, community service and volunteer activity at every level. While supply chains are generally short within the Shire, in addition to employment opportunities that could be generated from greater post-farmgate supply chain activities, there is desire for greater access to locally produced food products. The impacts of the 2020 bushfires and present COVID-19 pandemic have also highlighted the potential fragility of supply chains into the regions. The community also recognise the potential for value add and regionally branded food and fibre to grow regional identity and visitation and/or agritourism.



6. Sourced from Upper Murry 2030 Agriculture Concept Plan (2016); Hume Regional Growth Plan Background Paper (2014).

Overview of Agriculture in Towong

Summary of Towong Shire agriculture and trends

- Towong Shire contains pristine landscapes and significant water catchments.
- Upper Murray and Mitta Mitta catchments contribute 27% of the total Murray-Darling Basin water.
- Significant proportion (70-80%) is forested and mountainous, and of state and national park status.
- Significant indigenous heritage, including ceremonial and seasonal gatherings involving the Bogong Moth.
- The 20-30% of arable area is high quality agriculture land, primarily on the flood plains of the Murray River and Mitta Mitta and into the surrounding valleys.
- A 'cool temperate' climate with variable seasonal rainfall typifies the arable areas. Average annual rainfalls: Mitta Valley – 1000mm; Tallangatta Valley – 695mm; Upper Murray – 775mm; and Biggara Valley – 1500mm.
- The Shire's total population is in slow decline; town populations of Tallangatta and Corryong appear stable.
- It is an ageing population with low birth rates, net outward migration and median age of 58 years.
~ 52% of population are aged 45 years or older (18% are 45 to 54 years; 34% are 55+ years).
- The youth are often forced to seek employment and education opportunities outside the Shire.
- Agriculture, Forestry and Fishing sector is the Shire's largest employer and contributor to the local economy.
- Agriculture is considered pivotal to the Shire's economy but has been contracting.
- The primary reliance on the agriculture sector and its lack of diversity result in a narrow economy base that is easily exposed to risk and vulnerabilities.
- Farms of traditional sectors are consolidating to remain profitable, resulting in fewer people in community.
- Horticulture and cropping represent less than 10% of total agricultural value in the Shire with significant opportunity for growth.

Overview of Agriculture in Towong

- Horticulture, cropping and aquaculture offer significant diversification and climate adaption opportunities.
- Climate change is affecting water availability, greater variability in temperatures with increased frost, prolonged periods of drought and increased bushfire risk – all significantly impacting agriculture.
- Water access and trading rights for producers are complex, and arguably not fit for purpose.
- In terms of the whole Murray-Darling Basin scheme and the efficiency gains of using water closer to its source, only a very small amount of regulated water is used within the Shire.
- Farms of traditional sectors are consolidating to remain profitable, resulting in fewer people in community.
- Land acquisition is difficult for new entrants to agriculture or the region.
- Land and farm succession is complex, with the traditional model of family farm succession less frequent.
- Although there is some reticence to change, strong producer support to embrace and leverage the Shire's natural assets to meet current emerging market needs and opportunities is evident. There is:
 - awareness of the need to consider diversification and develop climate adaptation strategies and practices; and
 - support for sustainable and carbon neutral agriculture operations and supply chains.
- Poor digital network connections antagonise the regional isolation. This includes the ability to leverage contemporary food and fibre technology, practices and supply chain advancements, as well as capturing flexible working opportunities to attract new residents to the Shire.

Market outlook

The outlook for agriculture is on the whole positive at a national and global level.

The demand for nutritious and sustainably produced food and fibre for the predicted world population of 9-10 billion people by 2050 brings both challenges and opportunities. The impetus to produce more from less while responsibly managing our natural resources, animal welfare, social responsibilities and reducing greenhouse gas emissions, as well as meeting changing dietary preferences and consumer demands is imminent. A volatile climate, markets and geopolitical impacts also contribute to the complexities.

Significant opportunities have been identified for Australian agribusinesses 'willing to take the lead in unlocking new markets' (Table 1 on the following page). At the forefront, the opportunities around health and wellness, traditional proteins (meat, egg and dairy), and supply chain transformation appear promising and are relevant to Towong Shire: They account for 53 % of the total value that Australian businesses could capture in the coming years. Plant-based (nuts and legumes) and fish protein also

offer significant opportunity for Towong Shire, particularly to address the need for diversification and climate adaptation. Many opportunities are underpinned by emerging technologies and digital connection which transform how food is produced, how it is distributed and tracked in the supply chain, and how it finally reaches consumer plates. At the heart, is transformation to sustainable agriculture.



Market outlook

Table 1 Major food and agriculture opportunities 2020-2030⁷

Opportunity	Brief Description
Health and wellness Value added potential: A\$45 billion in 2030 Average growth: 3% / year	Meeting the demand of growing number of health conscious, dietary restricted and values driven consumers. (Premium, sustainable, provenance, animal welfare through to allergies, intolerances, etc.)
Traditional proteins (meat, egg, and dairy) Value added potential: A\$31 billion in 2030 Average growth: 4% / year	Growing middle class market for traditional proteins such as meat, egg and dairy
Supply chain transformation Value added potential: A\$31 billion in 2030 Average growth: 4% / year	Using technologies to improve logistics and achieve efficiency gains
Direct to consumer model Value added potential: A\$21 billion in 2030 Average growth: 7% / year	Developing new digital channels to provide food to consumers Increased online shopping
Targeted eating Value added potential: A\$20 billion in 2030 Average growth: 7% / year	Capturing opportunities in the product reformulation, functional and fortified food markets
Food loss and waste Value added potential: A\$18 billion in 2030 Average growth: 8% / year	Reducing food and fibre loss and waste throughout agricultural supply chains
Soil, water and land management Value added potential: A\$17 billion in 2030 Average growth: 3% / year	Responsible natural resource stewardship. Improving soil health and sustainability of land practices while producing more from less
Animal feed and health Value added potential: A\$11 billion in 2025 Average growth: 4% / year	Controlling transmissible diseases and biosecurity. Using smart feed supplements, health monitoring and diagnostics
Energy smart food Value added potential: A\$6 billion in 2030 Average growth: 2% / year	Increasing energy efficiency in production, manufacturing and supply chains
Food fraud and safety Value added potential: A\$6 billion in 2030 Average growth: 3% / year	Increasing food traceability and detecting origins of food products (provenance)
Plant-based and alternative proteins Value added potential: A\$5 billion in 2030 Average growth: 5% / year	Growing consumption and market for fish, plant (legumes and nuts) and alternate protein sources.

7. Adapted from FIAL (2020) Food and Agribusiness Sector Competitiveness Plan: Capturing the prize: The A\$200 billion opportunity in 2030 for the Australian food and agribusiness sector.

Market outlook

<p>Sustainable fisheries Value added potential: A\$3 billion in 2030 Average growth: 3% / year</p>	<p>Finding sustainable production techniques for aquaculture, wild fisheries and bivalve production</p>
<p>Sustainable packaging Value added potential: A\$3 billion in 2030 Average growth: 18% / year</p>	<p>Reducing unnecessary waste and increasing reuse/recycling of packaging</p>
<p>Protected cropping Value added potential: A\$2 billion in 2030 Average growth: 1% / year</p>	<p>Increasing the size of potential productivity gains linked to production of horticultural crops</p>
<p>Technology, precision agriculture and big data Value added potential: A\$2 billion in 2030 Average growth: 12% / year</p>	<p>Using digital and technology to improve productivity and efficiencies of both large- and small-scale farming and value add operations</p>
<p>Sustainable inputs Value added potential: A\$1 billion in 2030 Average growth: 16% / year</p>	<p>Development of non-chemical fertilisers, weed and pest control, alternative practices. Harnessing wind, sun, biodiesel, soil carbon</p>
<p>Advanced breeding and fertilisation Value added potential: A\$1 billion in 2030 Average growth: 11% / year</p>	<p>Improving productivity through cross breeding and genetics for tolerance and resilience to adverse conditions: eg. disease, salinity, drought, heat, etc.</p>

- Highlights key agriculture market opportunities for Towong Shire.
- Highlights critical practice and adoption opportunities to achieve or maintain market opportunities.
- Unshaded areas remain important considerations.

Note The research sizes the opportunities in terms of their value addition (ie. the amount by which the value of a good is increased at each stage of its production, exclusive of initial costs) so it can be assessed relative to Australia's overall Gross Domestic Product (GDP).



Community engagement and consultation

Overview

Community was identified as those in the field of primary production as well as local residents, stakeholders and service providers of Towong Shire. At the discretion of the Towong Shire, engagement with local Indigenous communities was not included.

Purpose

- Consult and identify current frameworks, policy and strategy being implemented relevant to the Towong Shire in the agricultural and associated sectors.
- Identify and consult with key stakeholders relevant to agriculture, food, innovation and land use.
- Collect a broad range of opinion and knowledge from wider community on local area in regard to agriculture, food, jobs, infrastructure and future vision.
- Collation of qualitative and quantitative data, identifying key threads that run through data sources as well as outliers or unexpected outcomes.

Mixed method

Stage 1: Online open survey.

Stage 2: Targeted individual and group face to face consultations.

Stage 3: Workshop consultation findings and draft strategy with panel of diverse expertise in agriculture and rural development across Victoria.



Community engagement and consultation

Approach

Online open survey – distributed through Towong Shire contacts and social media channels

Face to Face Consultation – identified through survey responses and in consultation with Shire

Group consultations – as above, five groups identified

Expert panel – identified through author networks, and included local Towong Shire producers

Regional strategies, growth plans and initiatives considered in developing this strategic plan and stakeholder engagement and consultation activities

- Hume Regional Growth Plan (2014).
- Upper Murray 2030 Vision (Master) Plan (2016) and its five underpinning Concept Plans.
- North East Dairy Regional Growth Plan and Workforce Development Strategy (2014) (Bridge Logic).
- Project Report (2019): Embedding Climate Adaptation in Agriculture in North East Victoria' (NECMA).
- Project Report (2021): Climate Change Adaptation for Dairy Farming in the Alpine Valleys (Bridge Logic).
- Project Report (2018) Socio-economic indicators of change: Goulburn-Broken and North East Catchment Management Authority regions (Natural Decisions) .
- Nuffield Report (2021): How diversification in production is understood and used by farmers to manage risk (AH Falcette).
- North East Regional Catchment Strategy – Insights Paper 2021 (NECMA) .
- MDBA (2019) Basin-wide environmental watering strategy .
- Food and Agribusiness Sector Competitiveness Plan (2020): Capturing the prize: The A\$200 billion opportunity in 2030 for the Australian food and agribusiness sector (FIAL).
- National Agriculture Workforce Strategy 2020 (National Agricultural Labour Advisory Committee).
- The Future of Australia's Agriculture Workforce (2019) (CSIRO Data61; Wu et al.).
- Australian Rural Leadership Foundation (ARLF) Kitchen Tables (2020) Report on the Future needs for rural, regional and remote Australia.
- AgriFutures Australia: Agriculture – A \$100b sector by 2030? (ACIL Allen Consulting).
- AgriFood Supply Chain Resilience: Leveraging digital and data to enhance Australia's AgriFood sector (2020) (Food Agility CRC; KPMG) .
- National Farmer's Federation (2018) 2030 Roadmap: Australian Agriculture's plan for a \$100b industry.

Community engagement and consultation

Consultation findings

Key themes from community engagement

- Strengthen existing industries
 - Support and strengthen emerging sectors and diversification
 - Diversity in farming – co-existence of small, big, corporate
 - Value-add and provenance opportunities
 - Sustainability and climate adaptation
 - Water security, improved water use efficiency
 - Succession in land management
 - Workforce: development and attraction
 - Land acquisitions – pathways into farming
 - Livability and amenity
 - Celebrating, caring for and capitalizing on our natural assets
 - Variable, unreliable network coverage
 - Permits and approvals – navigating for buildings and infrastructure
 - Varied community attitudes (with some reticence to change)
 - Community diversity and resilience – collegiality, collaboration, coordination, holistic
-

What does a thriving agricultural Towong Shire look like for the community?

- Sustainable land management practices
 - Responsible use and stewardship of natural resources – soil, water, land etc.
 - Maximise productivity and potential of cultivated land
 - A range of agriculture sectors and farming structures co-exist
 - Succession is achievable and facilitated; approached within minimal pain
 - New entrants can see and plan a pathway into farming/ agriculture
 - Farmers can get workers when required
 - Land use planning and permit system is not perceived cumbersome or inhibitive
 - Profitable and viable agribusinesses, understand and manage risks
 - New ideas and practices welcomed
 - Farmers can make informed decisions on what to grow/produce and navigate the implementation
 - Agribusinesses can adapt to meet the needs and demands of current and emerging markets
 - Businesses can embrace technology and digital applications as required
 - Paddock to plate practices and branding is accessible
 - Community can buy locally produced food
 - Diverse and welcoming community – diversity is celebrated
 - Embraces and celebrates Australian indigenous knowledge and culture
 - Tourism and agribusinesses (and other sectors) exist harmoniously with mutual benefit.
 - A collaborative and collegiate culture is embraced across all communities
-

Key barriers to agriculture opportunities and prosperity

- Water security
- Succession in land management
- Visibility of business case and knowhow – diversification and value-add
- Skills – range of technical and business acumen
- Network coverage and digital connection
- Land use planning: zoning; permits and approvals system; Shire agriculture capacity
- Land access for new and next generations
- Mindsets, lack of collegiality and diversity



Strategic Plan for Towong Shire Agriculture

Vision for a thriving agricultural sector

An agricultural and rural community that

- Responsibly and sustainably manages and utilises its natural resources;
- Can adapt to meet current and emerging market opportunities;
- Producers and enterprises experience ease of doing business;
- Is collegiate, collaborative and embraces diversity.

Mission for Towong Shire Council

“To empower current and next generations to thrive in agriculture throughout the Shire.”



Strategic Plan for Towong Shire Agriculture

Strategic Priorities and Goals

STRATEGIC PRIORITY 1	STRATEGIC PRIORITY 2	STRATEGIC PRIORITY 3
Empowering the people in Agriculture: current, next and new generations	Maximising the water and natural resource potential to grow existing and new markets	A Connected Shire – infrastructure and human factor
Goals		
<p>1.1. Succession in land management is achievable and supported.</p> <p>1.2. Agriculture diversification options are clear (business case, pathway, and access to required skills) and supported for a range of production systems.</p> <p>1.3. The skills and knowhow that underpin innovation, entrepreneurship and value-add are supported to enable prosperity across agricultural communities.</p> <p>1.4. The region can attract current, next and new generations in agriculture and rural industries to ensure a diverse, collaborative and capable workforce for the future.</p> <p>1.5. Leadership development is supported and integrated to enhance the community's capacity to embrace rural challenges and opportunities both now and into the future.</p>	<p>2.1. Producers understand (where, when and how) the balance and availability of groundwater resources to drive their informed and deliberate decision making.</p> <p>2.2. Improve access to and availability of regulated water for agricultural producers.</p> <p>2.3. Improve water utilisation and efficiencies by producers through informed decision making and ensuring a return on investment for farming businesses.</p> <p>2.4. Sustainability, carbon balance, resilient landscape, and climate adaption practices are clear and supported.</p> <p>2.5. Brand agricultural product to leverage the natural environment.</p>	<p>3.1. Reliable digital and telecommunication networks are available and provide effective coverage across all the Shire.</p> <p>3.2. Transport and built infrastructure support progressive and efficient supply chains.</p> <p>3.3. Contemporary, fit for purpose land-use planning and legislation to support sustainable growth and development of agriculture and rural communities.</p> <p>3.4. Navigating permits and planning process is seamless – (Ease of doing business).</p> <p>3.5. A relevant, coordinated and collaborative approach to advance initiatives and advocacy that drive agriculture prosperity and resilience.</p> <p>3.6. The agricultural community is aware of the roles and responsibilities of all agencies in emergency management, response, relief, recovery, and appropriate sources of support.</p> <p>3.7. Empower producers to guide the Shire towards a proactive approach to biosecurity.</p> <p>3.8. Future-proof agriculture to incorporate emerging technology within the production landscape, particularly in relation to transport and energy.</p>
Priority Actions		
<ul style="list-style-type: none"> • Producer peer learning groups and networks. • Staged succession program. • Agriculture diversification program. • Skills acquisition. • Targeted SME, value add and scale up support. • Leadership framework. • Tangible connection with agriculture learning institutions. 	<ul style="list-style-type: none"> • Roadmaps to assist access to ground and regulated water. • Advocacy for improved water trading rights. • Carbon awareness program. • Climate adaption framework for Towong. • Investigate options to leverage the natural environment to create opportunities for diversification. • Investigate opportunities to brand local products to capitalise on the unique beauty and sustainability of the natural environment. • Sustainable agriculture program. • Coordinate and signpost existing resources and programs to develop resilient landscapes framework. 	<ul style="list-style-type: none"> • Acceleration of digital network and connection. • Dedicated agriculture resource within Shire. • Program to upskill the Shire's agriculture capacity. • Fit for purpose land use zoning and planning system. • Agriculture Steering Group to provide ongoing guidance on issues and opportunities related to agriculture, and implementation of this strategy. • Establish a forum for producers to: <ul style="list-style-type: none"> • engage with the municipal emergency management planning committee; and • identify current or emerging biosecurity issues and identify solutions. • Awareness and advocacy for the broader community around emergency management and planning. • Develop communication plan to distribute and consolidate information concerning current and emerging biosecurity risks. • Conduct a review and develop a strategy to guide agricultural transport links to be fit-for-purpose.



STRATEGIC PRIORITY 1

Empowering the people in agriculture: current, next and new generations

This priority focuses on supporting people with the skills, networks and motivation so they can navigate and prosper through the myriad of opportunities, issues and challenges in agriculture, both as individuals and as collective teams. The intent is to involve the younger generations, those from diverse backgrounds as well as attracting new entrants, people and professionals into Towong Shire while addressing the region's declining and aging population

trend. Central to this is embracing changing demographics and the increasing complexities of managing and adapting agricultural operations by embedding a continuous learning focus and culture that is driven by producers.

There is significant opportunity to focus on the enabling power of peer learning and networks to explore and raise the visibility of more diverse agriculture

options and production models, particularly for smaller or marginal landholders as well as new entrants, and address succession challenges. There is also a clear impetus to nurture interest, careers and leadership in agriculture and related industries to ensure a diverse, collaborative and capable workforce and supporting communities now and for the future.

Strategic Plan for Towong Shire Agriculture

Goal

Recommended activities / potential projects

1.1. Succession in land management is achievable and supported

Opportunity to leverage professional services in succession planning and facilitation to ensure people have access to appropriate resources, skills, mindset and (common) language to navigate the difficult conversations.

- Increase succession literacy.
- Provide a framework to access this with financial support.
- Support new pathways and business models (including land acquisition and wealth creation) into farming.

Recommend

1. Develop a staged program over several (3-5) years to incorporate and increase succession literacy at multiple community levels.
 - Engage succession expertise to develop and initially pilot with a group of families.
 - Options for cohort learning approach as well as individual family succession planning and mediation.
 - Extend learning and discussion opportunities to broader channels such as peer networks, school education, workshops, or information sessions.
2. Support alternative pathways to land access and acquisition for new and younger farmers. Consider developing a program or framework for pathways into farming with new or variety of business models, including how to start building own equity.

1.2. Agriculture diversification options are clear (business case, pathway and access to required skills) and supported for a range of production systems

Opportunity to raise the visibility, knowhow and implementation of agricultural diversification options that are well suited to the region, the various land types, sizes and farming systems. This will strengthen existing as well as emerging and/or new high-value agricultural industries within the Shire.

Diversification is a way to manage and minimise risk, including climate risk, but requires multiple considerations. There is a need and opportunity to facilitate informed decision making as well as tapping into personal motivators and drivers.

Agriculture sectors that are well suited to conditions across the Shire include:

- Nuts – eg hazelnuts, pistachio, walnut.
- Pasture/grass seeds (both exotic and native).
- Grain and seed crops (canola, wheat).
- High value crops – Potato, hemp, marijuana (water).
- High-value, small-scale horticulture – berries and vegetables ie mushroom.
- Cut flower, plant and seedling cultivation.
- Aquaculture.
- Beekeeping and honey.

Strategic Plan for Towong Shire Agriculture

1.2. Agriculture diversification options are clear (business case, pathway and access to required skills) and supported for a range of production systems
(continued)

Recommend

1. Develop a 3-5 year agriculture diversification program, in consultation with producers, that lifts the visibility and knowhow for a range of focused options. This should facilitate informed decision making and provide access to necessary skill development and offer ongoing support during implementation. Key considerations include:
 - Leveraging existing interests of and initiatives by producers, which will likely be nuanced to each group or region.
 - Clearly defining and communicating what agriculture diversification is, what it means and its relevance to individual enterprises, and why it is important for the region. Access to developing business acumen and risk management skills.
 - Consideration of climate change forecasts, adaptation needs and strategies, as well as requirement for better water security for various high value crops.
 - Develop and profile agreed diversification options (business case, technical and practical considerations, navigation pathway, etc).
 - Capitalise on producer interest to explore and learn from other regions through producer visits to regions and operations with similar conditions, stories, practices.
2. Pilot by forming small peer learning networks or cohorts. These could be geographically based. i.e. Mitta Mitta, Upper Murray, Barringa Peninsular.
3. That the Shire understands disease and biosecurity risks and their management, particularly for horticulture.

1.3. The skills and knowhow that underpin innovation, entrepreneurship and value-add are supported to enable prosperity across agricultural communities

Opportunity to create a more supportive and structured network of motivated producers to strengthen their operations and/or pursue innovative ideas and value add opportunities that capitalise on the Shire's natural assets and strengths.

- Potential for decentralisation of (micro) processing into the region; eg. abattoirs, dairy, grains.
- Clear pathway to improve and impart the necessary information, skill sets and collegiality.
- Targeted support for small-medium businesses (SME) and scale up enterprises.
- Support for innovation through diverse perspectives.

Recommend

1. Establish producer network/s and delivery channels for enhancing innovation, entrepreneurial and business acumen capability.
 - Content to consider:
 - Upskilling in business and risk management, productivity benchmarking, governance, leadership and problem-solving ability.
 - Business case development and navigating set up, logistics and market access.
 - Utilise (proposed) regional tertiary campus in Corryong to deliver variety of tailored learning opportunities. Consider collaboration with Family Business Australia, Australian Institute for Company Directors and/or start up programs to deliver modules.
2. Targeted SME business and scale up support for value-add enterprises:
 - Consider funding discovery program or assistance to support SME business to scale up.
 - Coordinated approach to keeping producers, local businesses and service providers informed on opportunities to explore new or progress current initiatives.
 - Dedicated, consistent point of contact in Shire for SMEs. This will also encourage two-way conversations for the Shire to remain informed of issues, challenges and opportunities.

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1.4. Attracting and developing the current, next and new generations in agriculture and rural industries to ensure a diverse, collaborative and capable workforce for the future.

Opportunity to build capability, capacity and potential at multiple levels to ensure the Shire has a diverse, collaborative and capable agricultural workforce and community for the future.

- Attract more diverse professionals and agriculture graduates into the region.
- Leverage the increasing interest and enrollment numbers in tertiary Agriculture degrees.
- Encourage and engage a greater diversity of interests and participants in agricultural content/activities at school level, not just those from farming backgrounds.
- Explore non-traditional pathways to address agricultural workforce shortages such as involving regional migratory communities and employment/visa schemes.
- Engage with indigenous communities and youth.
- Leverage the power of peer learning and collegiality amongst producers to challenge and support each other to improve productivity, engage in continuous learning and try new things.

Recommend

1. Develop stronger connection with tertiary and vocational training institutions engaged in agriculture studies to grow awareness of the ag opportunities and lifestyle in Towong Shire. Target engagement with Marcus Oldham College, Charles Sturt University, Melbourne University Dookie campus, Southern Cross University and Wodonga TAFE. Consider:
 - Student placement programs, including indigenous cohorts.
 - Scholarships that encourage or embed connection with the region.
 - Research and development engagement opportunities – eg CSU Smart Farm initiative.
2. Learn from existing regional experiences and models that have incorporated migratory communities and labour schemes to address local workforce shortages.
 - Eg. Luv a Duk in western Victoria; Tallangatta Meat Processor engaging Samoan community through Pacific Islander visa scheme.
 - Identify key considerations for their successful implementation to inform the application or development of similar model/s more broadly within Towong Shire.
 - Consider the potential, if and how to effectively engage with Albury Wodonga migratory communities to address workforce shortages.
3. Encourage and support the delivery of existing 'Ag in Schools' modules and programs to lift the profile, awareness and engagement across local schools in the diversity of agriculture opportunities, including indigenous knowledge and practices, and careers.

1.5. Leadership development is supported and integrated to enhance the community's capacity to embrace rural challenges and opportunities both now and into the future

Opportunity to support the growth and development of inclusive leadership skills at every level of the community to ensure the human element that underpins resilient, connected and thriving communities, is a priority.

- Build collegiality and cohesiveness to support diversity and empower all facets of our dynamic rural communities.
- Develop stronger connections with indigenous communities, culture and knowledge.
- Develop mutually beneficial relationships and connections with rural and regional communities beyond the Towong Shire.
- Progress the complex economic, social and environmental challenges and opportunities facing rural communities.

Recommend

1. Promote leadership development at every level of the community – from schools through to tertiary, graduates and all career stages, and from all different cultural backgrounds including urban, rural, migratory and indigenous.
2. Roadmap to support growth and development opportunities for current producers by leveraging existing programs that target both theoretical and experiential leadership elements. Focus on both local to North East Vic as well as those drawing cohorts across various regional and state borders.
 - Signpost to existing rural industry and community leadership programs.
 - Provision of scholarship/ financial support for leadership programs.
 - Consider development of a local Towong Shire Rural Leaders program, or more visible/ stronger connection with Alpine Valleys Community Leadership program.
3. Support an active Shire based leadership alumni to ensure communities have the necessary inclusive leadership to navigate opportunities and challenges, both now and into the future.



STRATEGIC PRIORITY 2

Maximising the water and natural resource potential to grow existing and new markets

This priority focuses on the Shire's key strengths and assets: the water, the natural resources and environmental amenity. The pressure is growing for nutritious and sustainably produced food and fibre for the predicted world population of 9-10 billion people by 2050. The impetus to produce more from less while responsibly managing our natural resources, social responsibilities and reducing greenhouse gas emissions - and meet consumer demands - is imminent. There is growing demand for traditional proteins (meat, dairy, eggs), as well fish and plant-based proteins, including nuts and pulses. Towong

Shire is well poised to be a key regional food bowl that meets contemporary and emerging market needs for products to be safe and ethically and sustainably produced. There is opportunity to realise premium margins for products with demonstrable provenance and/or various nutritional, environmental, sustainability and animal welfare credentials.

There is, however, a need and responsibility to maximise water potential and productivity of all cultivated land while ensuring accountable sustainability practices. Water policy will

remain paramount along with the integrity and flexibility of the associated markets and delivery systems. Understanding the data on climate change, localised climate predictions and adaptation is also critical to facilitate implementation of informed diversification and sustainable practise. There is a significant opportunity for the Shire and its producers to participate in a low or carbon neutral economy to meet the impetus for carbon net-zero agriculture production and supply chains, while ensuring future market access.

Strategic Plan for Towong Shire Agriculture

Goal	Recommended activities / potential projects
2.1. Producers understand (where, when and how) the balance and availability of groundwater resources to drive informed decision making	<p>Opportunity to enable informed and sustainable access to groundwater resources to improve water security as they adapt to impacts of climate change and optimise agriculture production. This potentially underutilised water offers a significant opportunity if producers and regulators understand where groundwater is and the ongoing (seasonal) balance flows, allowing targeted and informed decisions on if, where and how to effectively and sustainably access.</p> <p>Recommend</p> <ol style="list-style-type: none">1. Collaborate with existing initiatives and stakeholders to create a roadmap to assist producers navigate and sustainably access groundwater resources for agricultural purposes. This will be underpinned by:<ul style="list-style-type: none">• Mapping of groundwater resources across the Shire (and connected catchments).• Development of systems and tools to establish sustainable water extraction rates, volumes and timing, etc.• Further catchment-wide water balance work, including linked surface-groundwater modelling, that supports ongoing modelling and monitoring of water resources and builds upon established ECAiA* work.
2.2. Improved access and availability of regulated water for agricultural producers	<p>Opportunity to increase utilisation of regulated water for agriculture production closer to its source in upper catchment zones through significantly improved ease of access – navigation, volumes and flexibility.</p> <p>Recommend</p> <ol style="list-style-type: none">1. Development of a roadmap for a clear and shared understanding on how producers can currently access regulated surface water for agriculture purposes. <i>Potentially combine with 2.1 groundwater roadmap recommended above.</i> This will involve:<ul style="list-style-type: none">• Clarification of the differentiation of ground and surface waters.• Effective relationships with key stakeholders – eg Goulburn Murray Water, NECMA, DELWP, MDBA, agriculture producers etc.2. Advocacy and/or policy development in consultation with producers for:<ul style="list-style-type: none">• Increased (MDB) water rights, water licence trading flexibility, and simplicity to navigate: i.e. reduce the complexity and rigidity of accessing water schemes, particularly in Upper Murray zones.• Improved legislation surrounding on-farm water storage infrastructure (i.e. dams, bores) to support flexible and sustainable harnessing of seasonal water flows.• Review to inform more appropriate legislation surrounding groundwater access.
2.3. Improve water utilisation and efficiencies by producers through informed decision making and ensuring a return on investment for farming businesses	<p>Opportunity to improve soil moisture and water management practices, as well as ensure producers can navigate the return on investment (choices) of water use in their farming system, to competently understand their farming choices and alternative (farming/crop choice) options.</p> <p>Recommend</p> <ol style="list-style-type: none">1. Develop a framework to coordinate or signpost to activities and programs to assist producers:<ul style="list-style-type: none">• Communicate the data on climate change, localised climate predictions and the impact on local natural resources and biophysical environment.• Understand and implement best practice land management practices for retaining soil moisture and health.• Understand and navigate technology available to monitor soil moisture and efficient, effective water distribution.• Understand and navigate cost/benefit analysis (ROI) of water used in their farming system and assess alternative production options.2. Improve access to on-farm water storage opportunities and water use infrastructure including irrigation (financial and/or technical).

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2.4. Sustainability, carbon balance, resilient landscape, and climate adaption practices are clear and supported

Opportunity to be proactive in climate adaptation and sustainable agricultural practices to enable producers to adapt to changing environmental conditions and embrace emerging market opportunities. Importantly, this will sustain the local environmental amenity and natural resources for future generations.

- Producers understand what climate change means for region and how to adapt farm practices and systems.
- Producers can meet the impetus for carbon zero agriculture production and supply chains, while ensuring future market access.
- Leverage the increasing market demand, and associated premiums, for produce that can demonstrate responsible stewardship of the environment and natural resources.

Recommend

1. Develop structured forums to enable implementation of sustainability initiatives and practices. This could include peer networks.
 - Coordinate and signpost to existing resources, programs and initiatives relevant to sustainability. These are often, but not always, developed by industry organisations, state government and various government agencies.
 - Champion the need and opportunities to sustainably manage and adapt agricultural practises to changing environmental and market conditions in order to better manage risk.
2. Develop a carbon neutral awareness program to assist producers understand their farm carbon cycle and how to achieve carbon neutral production.
3. Establish a climate adaption program for Towong Shire that utilises ECAiA⁸ findings to support development and implementation of climate adaption practices and strategies. This will involve collaboration with key stakeholders.
 - Communicate the data on climate change, localised climate predictions and the impact on local natural resources and biophysical environment.
 - Provide/workshop information for adapting current farm sectors and management systems: engage similar producer led approach that dairy used EICAIa to develop localised climate adaption strategies and actions (eg. cropping and grazing).
 - Where appropriate, use ECAiA modelling and findings to develop climate adaption strategies and actions for emerging agriculture sectors well suited to the region.
 - Link with agriculture diversification program (Goal 1.2 Recommendation 1) to provide information and resources on appropriate agriculture sectors in the changing climate and conditions.
4. Maintain localised management of pest and weed species. For eg. couch grass eradication on the river flats: consult with local groups to determine best approach. Continued support for professional deer harvesting with commercial benefit to land holders.
5. Promote understanding that the improvement and maintenance of soil health will support a resilient landscape and create a point of competitive advantage for the Shire.
 - Champion the role of healthy soils in a resilient landscape.
 - Resilient landscapes framework for Towong, including healthy soils, to support existing markets, open new markets, create production efficiencies and/or create higher value product.

2.5. Brand agricultural product to leverage the natural environment

Opportunity to create clearly identifiable brand generated from natural resource assets. This branding will potentially guide and support for the diversification and development of agriculture within the Shire.

Recommend

1. Investigate existing branding and define the points of competitive advantage associated with the Shire's natural resources.
2. Investigate funding opportunities for the development of branded micro-agriculture and associated agricultural opportunities (eg agritourism, dedicated meat label, horticulture, fibre production and processing, flower production, farm kitchen processing, distillery).
3. Support producer led cooperative investigation.
4. Strengthen associations with existing branded organisations within the Shire and the adjacent regions to consider a regional branding option (eg One Gippsland model).

8. Embedding Climate Adaptation in Agriculture in North East Victoria' (ECAiA).



STRATEGIC PRIORITY 3

A Connected Shire: infrastructure and human factor

This priority focusses on supporting progressive and contemporary value chains that are efficient, adaptable and flexible for regional resilience and prosperity. This priority aligns with the Shire's vision of *'We will be a world class small Council and Towong Shire will be the ideal place to live'*: *'To be the desired place to do agribusiness'*.

The quality of digital telecommunications and transport connection, together with the social and natural amenity of

a region may become its main competitive advantage or disadvantage. Having appropriate digital network infrastructure will allow the community to take advantage of the increasing digitisation of farm systems, food safety, market compliance (including quality assurance and premium claims), and optimising supply chain logistics for efficient market access. It will also allow flexible working opportunities to support and attract a greater diversity of professionals and families to live in the Shire.

As the agricultural sector diversifies, the needs and business case for new supporting infrastructure will become clearer. A key role for the Shire will remain ease of navigating land planning and legislative process, collective advocacy for grants and funding, and championing of the needs and opportunities for the agriculture community.

Strategic Plan for Towong Shire Agriculture

Goal

Recommended activities / potential projects

3.1. Reliable digital and telecommunications network coverage across all the Shire

Opportunity to accelerate the provision of quality and reliable digital telecommunication networks across the Shire to reduce the isolation gap and to ensure producers, businesses and community members equal opportunity to participate in technological transformation.

- Digital connection is fundamental for the Shire's prosperity, underpinning business and community potential to remain relevant: efficient, sustainable, adaptive, resilient, attractive.
- Producers can benefit from technological advances relevant to basic business operations, production efficiencies, supply chain logistics and market quality assurances.
- Ensure that the whole Shire can take advantage of flexible working, learning, e-commerce platforms, etc to support its growth and development, including workforce attraction.

Recommend

1. Engage expertise to review the breadth of network challenges across the Shire and assess the feasibility of a range of solutions, including satellite and alternative network systems to NBN to achieve a reliable network with adequate speed, latency and capacity.
 2. Implement the recommendations from the above study/roadmap in a timely manner, leveraging federal and state support (funding) targeted toward 'better connected regions'.
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3.2. Transport and built infrastructure support progressive and efficient supply chains

Opportunity to ensure ease of market access and doing business across the supply chain.

- New infrastructure enquiries require support from the Shire for ease of development.
- Appropriate infrastructure and frameworks to support renewable energy supplies (e.g. localised circuits/ supplies) and efficient water supply/use, and waste management streams.
- Investment into infrastructure to support basic amenity to cope with seasonal fluctuations in and increasing rural visitation.

Recommend

1. A dedicated Shire resource is connected and familiar with agricultural community initiatives and needs so the Shire can respond in a timely and meaningful way to support infrastructure and supply chain needs of emerging industries and new developments – including ease of navigating planning and waste management requirements, utility access, market logistics, etc. (see Goal 3.5 Recommendation 1).
 2. Shire to remain up to date with relevant state and federal government grants and regional development programs to ensure these can leveraged and accessed locally.
 3. Road maintenance and basic amenity infrastructure remain key role of Council. Consider:
 - Road maintenance (with good shoulders if aiming to increase cycling tourism).
 - Stock underpasses with increasing local and tourist traffic (eg Mitta Valley Hwy).
 - Reticulated water and sewage systems across all communities.
 4. Facilitate/support developments in distributed and renewable energy systems for food and fibre production: eg. Decentralised solar, wind, combined heat and power, waste to energy, generator sets and energy storage battery systems.
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Strategic Plan for Towong Shire Agriculture

3.3. Contemporary, fit for purpose land-use planning and legislation to support the sustainable growth and development of agriculture and rural communities

Opportunity for land use planning legislation to reflect the needs and opportunities of contemporary agriculture and value-add production systems, as well as agritourism, to enable the Shire's desired transition to a more diverse and resilient agriculture sector.

Recognise a greater variety of agriculture and value add production systems and footprints

- Rural Activity Zones – Opportunity for smaller and marginal land holders to develop less traditional, more intensive, innovative and/or value-add operations. Key limitation is the restriction of only one dwelling on >40 hectare block.
- Farming Zone – The restriction of extra dwellings to purposes directly related to the farming operations is restricting accommodation and agritourism opportunities.

Recommend

1. Create dedicated agriculture and planning role/s within the Towong Shire Council team to
 - Have nuanced understanding of the sectors' needs and challenges to enable them to respond and/or lobby for legislative requirements in a more proactive manner
 - Consult with community, review and advocate (or develop policy) more appropriate outcomes-based land use and planning legislation to address the current issues.
 - Clearly communicate intentions and pathway to Shire residents

3.4. Navigating permits and planning processes is seamless – (Ease of doing business)

Opportunity for implementation of planning frameworks to encourage agricultural activities and development to support producers, community and the Shire to feel on the same team when navigating the required planning legislation for new agricultural, value-add and processing developments or modifications.

Recommend

1. Create high-level land use planning navigation sessions for the community that covers the following:
 - Ease of doing business: Producers and SMEs have the right information to navigate all required legislation and overlays to set up an agriculture or value add enterprise, etc.
 - Identification of staff for a consistent and competent point of contact where proponents can seek help to navigate planning systems.
2. Upskilling program for Shire staff (agriculture officer) on understanding of planning and agricultural development needs.

Strategic Plan for Towong Shire Agriculture

3.5. A relevant, coordinated and collaborative approach to advance initiatives and advocacy that drive agriculture prosperity and resilience

Opportunity to have a dedicated agriculture resource within the Shire Council that is responsible for, or can coordinate across, all agriculture related roles and:

- Be a trusted and competent navigator to drive agricultural opportunities
- Proactively address evolving food, fibre and agricultural community needs and opportunities.
- Leverage and advocate collectively for the broader NE regional and alpine communities.
- Role model collegiality within Shire.

Recommend

1. Establish a dedicated agriculture officer resource within the Shire to:
 - Lead the coordinated and collaborative implementation of agreed strategic priority actions.
 - Coordinated touchpoint for agricultural related enquiries – including planning.
 - Lobby for and proactively address current and evolving food, fibre and agriculture community needs and opportunities for the Shire, including grants or policy changes.
 - Work collaboratively with regional stakeholders to advocate collectively on current and emerging issues or opportunities for broader NE regional and alpine communities.
 - Communicate to the community what the Shire is doing to better position and support agriculture, and create channels for regular two-way conversations, feedback loop.
 - Champion the opportunities for food and fibre, and the need to sustainably manage and adapt land and agricultural practises to changing environmental and market conditions.
2. Develop an upskilling program for Shire personnel to embed a nuanced understanding of local agricultural operations, the needs, challenges, opportunities etc. while building meaningful and trusted relationships.
 - Involve producers and community in program development.
3. Establish an Agriculture steering group with strong producer representation to:
 - Provide oversight and guidance on the implementation of the agriculture strategy.
 - Provide ongoing guidance to the Shire agriculture officer.
 - Provide ongoing review and prioritisation of emerging gaps, needs, opportunities.

3.6. The agricultural community is aware of the roles and responsibilities of all agencies in emergency management, response, relief, recovery, and appropriate sources of support

Opportunity to strengthen the connection between producers and external emergency management stakeholders in support of the Shire to raise the resilience of the broader community in future emergency occasions while being proactive in biosecurity management.

- Producers understand the structure and interaction of the agriculture community with the municipal emergency management plan.
- Producers understand emergency management arrangements, whereby biosecurity is one of the elements of emergency management.
- Producers understand the effect of biosecurity threats to the Shire and how to adapt farm practices and systems.

Recommend

1. Improve producer understanding of emergency management planning and preparedness.
2. Promote, implement and raise awareness of biosecurity threats' effect on the Shire and producers to adapt farm practices and systems to protect against pests and diseases.
3. Consolidate information and make the information accessible to producers.
4. At Council level, construct a dedicated planning committee to contribute expert comment to:
 - Advise and improve on emergency decisions (ie stock burial, stock water, fodder distribution, washdown water (dairy)).
 - Contribute local knowledge to on-ground decision-making.
 - Support decision-making to deliver a tailored response for producers.
 - Reflect on Council response to past disasters and guide Council organisational knowledge.
 - Drive greater advocacy from the Shire to external stakeholders to better represent producer interests.

Strategic Plan for Towong Shire Agriculture

3.7. Empower producers to guide the Shire towards a proactive approach to biosecurity

Opportunity for producers to be proactive in the management and reduction of the significant risk to agricultural production. Climate change is altering environmental conditions, to support new invasive faunal, floral and microbial populations. Producers hold the opportunity to have an active voice in developing and reviewing the municipal emergency management planning arrangements, particularly with respect to emerging plant and animal disease risks.

Recommend

1. Support producers to have an active voice in developing and reviewing the municipal emergency management planning arrangements, particularly concerning emerging plant and animal disease risks.
2. Foster regional alliances to:
 - strengthen advocacy to external stakeholders and networks.
 - structure a co-ordinated approach for feral animal, invasive plant and microbial control in Biosecurity management.
 - advocate between public and private land managers to promote good neighbour program.
 - gain agreement for management of feral animal control across stakeholders, including cross-border organisations, public land managers and transport managers.

3.8. Future-proof agriculture to incorporate emerging technology within the production landscape, particularly in relation to transport and energy

Opportunity to place producers as innovators and early adopters of emerging technologies. Agriculture must constantly assess and trial emerging technology as an option to improve production efficiencies, attract and maintain the next generation of agriculturalists, and remain viable.

Recommend

1. Develop a future-focussed transport strategy with producers and external stakeholders to consider:
 - Change in agricultural transport network due to economies of scale (eg B-triple road access).
 - Assess the on-going cost of maintaining the current and future road network.
 - Advocate for future investment in road network.
 - The impacts and enablers required to facilitate transition to alternative energy sources and supply networks required across the ShireSupport producers to access alternative energy sources for large vehicles and farming equipment.



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