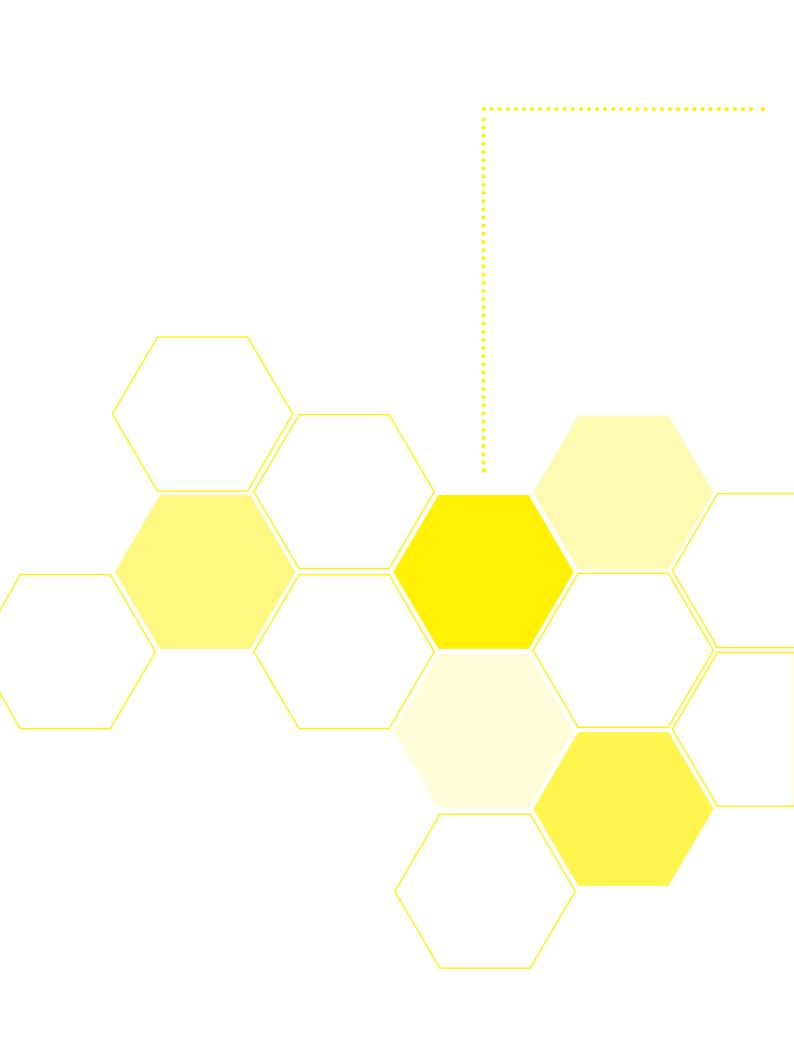
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# NORTH EAST LOCAL FOOD STRATEGY 2013 - 2022

Strengthening the local food system in North East Victoria

Developed by the North East Local Food Strategy Working Group



This document was developed by a consortium of project partners who came together as the North East Local Food Strategy Working Group.

The development of this document was funded by Northeast Health Wangaratta. North East Local Food Strategy Working Group: Alpine Health Beechworth Food Co-op Beechworth Health Service Gateway Health Indigo Shire Council North East Catchment Management Authority Northeast Health Wangaratta Tourism North East Towong Shire

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January 2019

The following organisations acknowledge alignment of this Strategy with their organisational priorities:



# EXECUTIVE SUMMARY

This Strategy has been developed in response to an identified need for a collaborative, cross-sector, approach to ensure a sustainable, resilient and equitable food system in North East Victoria.

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North East Victoria's food system contributes to the region's economy, natural environment, community health and well-being, identity and liveability. However, there are significant food-related challenges affecting the viability and resilience of agricultural businesses, the health and wellbeing of our communities and the protection of our natural environment. Food system issues within the region, relate to each of the four broad components of the food system: production, distribution and processing, consumption and waste management.

This Strategy focuses on opportunities to strengthen the local food economy as a key means of addressing many of the food system challenges. This document presents research demonstrating how strong local food systems can facilitate the establishment of values-based supply chains, which benefit both producers and consumers, and deliver environmental outcomes. A strong local food system also enhances food literacy and improves consumer access to fresh, healthy food choices.

This document was developed by a consortium of representatives from the health, local government, agriculture, tourism and community sectors.

The purpose of the Strategy is to:

- Ensure a coordinated, systems-level approach to strengthening the regional food system
- Identify priority areas for action that can provide a basis for future project development and collaborative opportunities
- Provide a resource and strategic framework to support funding applications

A range of strategic directions and priority actions are outlined in this Strategy, which relate to each of the following five Aspirational Goals:

- North East Victoria has a coordinated approach and collective voice that drives a strong local food system.
- North East Victoria has a thriving, diverse and resilient agricultural sector, where sustainable land management practices ensure natural resources are protected and enhanced.
- North East Victoria has strong short food supply chains where producers have access to logistics appropriate to their scale of operation at all stages of the supply chain.
- All community members have access to fresh local produce, understand the benefits of a strong local food system and make informed and healthy food choices.
- Waste is minimised through closed-loop food redistribution systems and initiatives that reduce the use of single-use packaging and support recycling.

The priorities outlined in this Strategy are consistent with key regional strategies and frameworks across local government and regional development, agriculture and environment, health and tourism (Appendix 1).

Numerous organisations and individuals have contribued their thoughts and knowledge to this Strategy and it is intended to provide strategic direction for the next steps, which will include detailed project planning, funding acquisition and project delivery.

The organisations represented on the North East Local Food Strategy Working Group will continue to work together to develop project partnerships and seek funding (from government, industry groups and other sources) to support implementation of the priority actions within this Strategy.

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# G L O S S A R Y

### Food literacy //////

Food literacy encompasses both the knowledge and skills to plan, select, prepare and consume appropriate types and quantities of foods to meet dietary needs, as well as an understanding of the processes, impacts and interconnectedness of the food system more broadly, which provides the basis for empowerment to support a sustainable, resilient and fair food system (Vidgen, 2014).

### Food security //////

Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life (Food and Agriculture Organisation, 2009). The concept of food security encompasses a range of elements which include, but are not limited to, sustainable food production, food supply and consumers' access to food.

When people do not have access to the food they need, this is defined as food insecurity.

### Food system //////

A food system includes all processes and infrastructure involved in feeding a population: growing, harvesting, processing, packaging, transporting, marketing, consumption, and disposal of food and food-related items. It also includes the inputs needed and outputs generated at each of these steps. A food system operates within, and is influenced by, social, political, economic and environmental contexts.

### Resilience //////

The resilience of a system refers to how effectively it can respond to shock and adapt to change.

### Social determinants of health /////

The social determinants of health are the circumstances in which people are born, grow up, live, work and age, which are in turn shaped by a wider set of forces including economics, social policies, and politics (World Health Organization, 2008).

### Supply chain //////

A supply chain is the sequence of activities that move food from the producer to the consumer, including processing, packaging, distribution, wholesalers and retailers.

A short food supply chain is where a producer sells food directly to consumers, or with a minimum of intermediaries.

# **1.INTRODUCTION**

## 

### Purpose

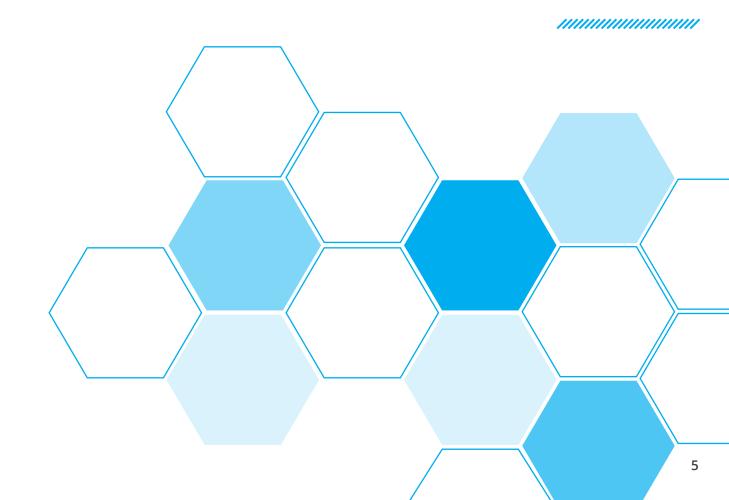
This Strategy aims to contribute towards a strong, sustainable and equitable food system in North East Victoria.

### 'A sustainable and resilient food system conserves and renews natural resources, advances social justice and animal welfare, builds community wealth, and fulfils the food and nutrition needs of all eaters now and in the future.' Tagtow & Harmon (2009)

This Strategy considers key food system challenges relating to food production, distribution, consumption and food waste in North East Victoria, which encompass social, economic and environmental issues, and identifies key opportunities for action.

This is a high level document that brings together what we know about the food system in North East Victoria and sets out a way forward. It identifies strategic directions and priority actions, providing a basis for future project and program development and a resource to support the development of funding submissions. It aims to facilitate the coordinated and collaborative implementation of initiatives across the region, to build a food system where:

- people are connected to where their food comes from;
- food production is well positioned for the future;
- natural resources are managed in a way that protects the natural resource base and supports ecosystem functions; and
- healthy and nutritious food is accessible to everyone.



# **1.INTRODUCTION**

### **Context and Approach**

The Australian Government acknowledges the need for a more coordinated approach to addressing food system issues, recognising that food is not currently dealt with in a way that brings together food-related policy, regulatory agencies and research organisations, despite the food system's fundamental role in Australia's economy and its contribution health and wellbeing of its citizens (Prime Minister's Science, Engineering and Innovation Council, 2010).

This Strategy takes a collaborative, cross-sector approach, focusing on opportunities to strengthen the local food economy as a key means of addressing many food system challenges.

Strengthening the local food economy will increase the production and consumption of locally-grown food, leading to a multitude of social, economic and environmental benefits. The goals, objectives and priority actions presented in this document aim to foster collaboration across a range of sectors to drive long-term systems-level change. It aims to foster knowledge and resource-sharing and facilitate coordinated and mutually-reinforcing activities across organisations to avoid duplicated or isolated efforts.

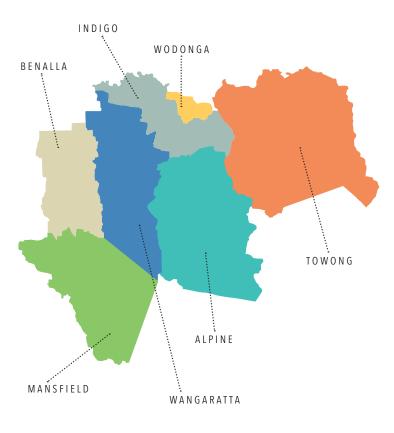
Opportunities to trial new ways of working to solve problems, especially those that can be expanded and scaled up, and building on successful innovative approaches in other areas, are presented in this document.

Similar strategies, plans and policies with a focus on strengthening local food systems have been developed in other regions of Australia, including Melbourne (City of Melbourne, 2012), Surf Coast (Surf Coast Shire, 2018), Gippsland (Regional Development Australia Gippsland, 2014), and the Mornington Peninsula (Mornington Peninsula Shire, 2013) in Victoria. Food plans in other regions of Australia include Illawarra NSW (Wollongong City Council, Shellharbour City Council and Kiama Municipal Council, 2013), Central Coast Tasmania (Central Coast Council, 2016), and South East NSW (South East Food Project, 2012).

It is acknowledged that there are many other relevant approaches and actions that can also contribute to addressing the regional issues discussed in this document, such as those outlined in the Upper, Central and Lower Hume Sub Regional Food Opportunity Strategy and Action Plan 2015 - 2018 (McKINNA *et al*, 2015).

### **Geographic Scope**

This strategy covers the seven Local Government areas of Alpine, Benalla, Indigo, Mansfield, Towong, Wangaratta and Wodonga, the Upper Hume and Central Hume Primary Care Partnership catchments, the North East Catchment Management Authority area and parts of the Goulburn Broken Catchment Management Authority area.



# **1.INTRODUCTION**

## 1.2 COLLABORATION & COMMUNITY ENGAGEMENT //////

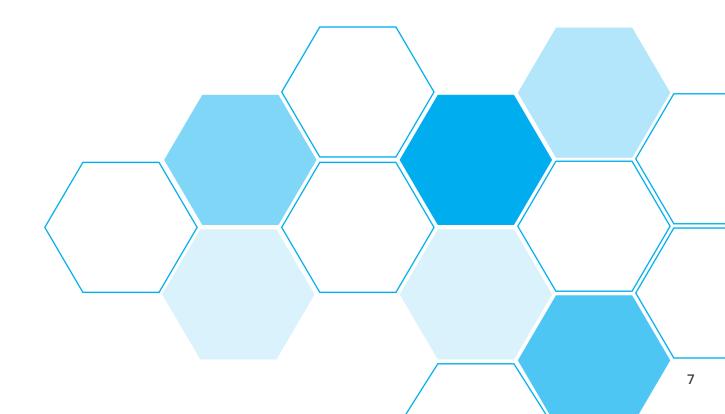
This Strategy has been developed by a consortium of representatives from the health, local government, natural resource management, tourism and community sectors, in response to an identified need for a cross-sector, systems-level approach to strengthening the food system.

The priorities presented in this Strategy are consistent with key regional strategies and frameworks across local government and regional development, agriculture and environment, health and tourism (Appendix 1), and draw upon the existing evidence base.

The issues and solutions outlined in this document have been identified through extensive community consultation undertaken by various organisations across the past three years.

Key events where community and stakeholders have contributed ideas regarding potential opportunities and collaborative approaches to addressing regional challenges relating to the food system, have included:

- Building a Local Food Future forum (May 2015; coordinated by North East CMA, Gateway Health, Beechworth Health)
- Fair Food film screening: community and panel discussion (Beechworth Urban Landcare, July 2015)
- Wangaratta Community Food Hub Feasibility Study (2016; Alden *et al.*, for Wangaratta Community Food for All)
- Food Mapping Wangaratta project (2017; R. O'Hagan, for Wangaratta Community Food for All Network)
- Food Lab workshops (June, August & October 2017; coordinated by Northeast Health Wangaratta and Gateway Health)
- Wodonga Food Strategy (2017; coordinated by City of Wodonga and Gateway Health)
- Strengthening the regional food economy workshop (Nov 2017; coordinated by North East CMA)
- Ovens Murray Regional Partnership Agribusiness Forum (Oct 2017; coordinated by Ovens Murray Regional Partnership)
- Farm to Plate Pilot Project workshop (April 2018; coordinated by Murray Regional Tourism)



# **2.THE FOOD SYSTEM IN NORTH EAST VICTORIA**

# The food system includes everything from farming, food processing, distribution and the selling of food, through to how we buy, enjoy and dispose of food.

It encompasses all of the resources (e.g. soil biota, farm inputs, infrastructure), activities (e.g. harvesting, marketing, waste disposal) and people (e.g. farmers, processors, retailers, stock agents, chefs, policy makers) involved in providing and regulating nourishment to people. The food system influences the way that we eat through the types of food that are available to us, their cost and the way food is marketed. We all influence the food system through what we choose to eat and where we obtain it. The complexity of the food system is illustrated in Figure 1.

North East Victoria's food system contributes to the region's economy, natural environment, community health and well-being, identity and liveability.

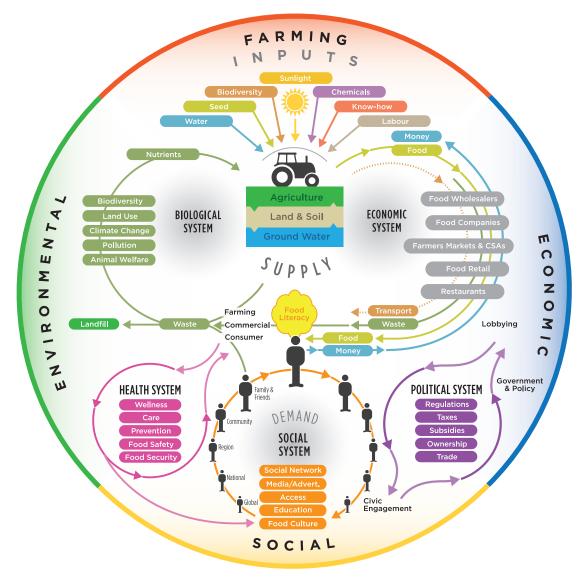


Figure 1. Food system diagram (image adapted from the Nourish Food System Map – nourishlife.org)

# 32% of the land area in North East Victoria is used for agricultural production, contributing around \$475 million annually to the region's economy.

Source: Australian Bureau of Statistics (2016)

# On farm activity accounts for 15% of the total Upper, Central and Lower Hume sub-region workforce.

Source: Regional Development Victoria (2015)

The High Country's diverse agricultural landscapes and high quality local produce contribute to a regional tourism offering that attracts 3.8 million visitors per annum, who generate \$1.145 billion in spend.

Source: Tourism North East (2019)

# **2.THE FOOD SYSTEM IN NORTH EAST VICTORIA**

A remarkable diversity of food is grown in the region. The dominant agricultural commodities are dairy, beef, grain and horticultural crops (grapes, apples, berries, nuts), while a diversity of smaller enterprises produce honey, eggs, olives, vegetables and various niche crops.

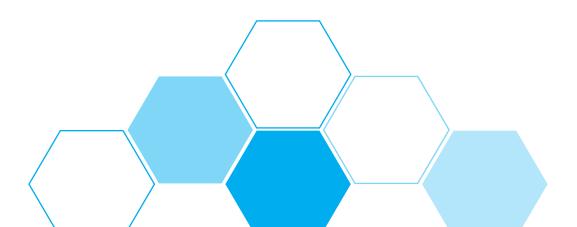
Some parts of the region, particularly Indigo Shire, are characterised by a large number of small farms, which Barr (2005) suggests is a legacy of settlement patterns from the gold mining era and dairy farming. Despite low profit margins, proximity to the regional cities of Wangaratta and Albury/Wodonga and opportunities for off-farm work have maintained the viability of farming these small-scale properties (Roots, 2013).

The region also has a number of large food processing and distribution facilities including Uncle Toby's in Wahgunyah, Saputo and Danone in Tangambalanga, Vitasoy in Wodonga, saleyards in Wangaratta and Corryong, abattoirs in Wodonga, Wangaratta, Tallangatta and Ovens, Logic and Woolworths distribution centres in Barnawartha, and numerous wineries. More than 10 per cent of the population of Indigo Shire is employed in the food processing sector (Australian Food and Grocery Council and EY, 2015). The State government's *Agriculture Victoria Strategy* recognises that growing Victoria's agriculture sector is vital to the economic and social prosperity of rural and regional communities (Agriculture Victoria, 2017).

The food that consumers choose to purchase is influenced by many factors including convenience, price, food preferences, habits, marketing, ethics, health beliefs, medical issues, desire for quality or freshness, safety concerns and other drivers.

Opportunities to purchase locally-grown produce within the region include monthly farmers' markets in many towns, some grocery stores, butchers, cafes and speciality food stores who stock local produce, and direct sales from producers via farm gate stalls, produce box schemes or online ordering. The Mountains to Murray Local Produce Guide website provides a resource of where to access fresh local produce in the region (www.localproduceguide.com.au).

Strengths of the regional food system include the temperate climate with many microclimates and associated diversity of produce, good location relative to transport routes to markets, global reputation for safe food, great liveability that attracts quality employees, high tourist traffic, access to support services and technical skills (McKINNA et al, 2015).



# 2.2 REGIONAL FOOD SYSTEM CHALLENGES

Despite the wide diversity of food grown in North East Victoria and the importance of the food system to the regional economy, there are significant food-related challenges affecting:

- 1. Viability and resilience of agricultural businesses
- 2. Health and wellbeing of our communities
- 3. Protection of the natural environment

Key food system issues within the region, relate to each of the four broad components of the food system, production, distribution and processing, consumption and waste management, as outlined in Figure 2.

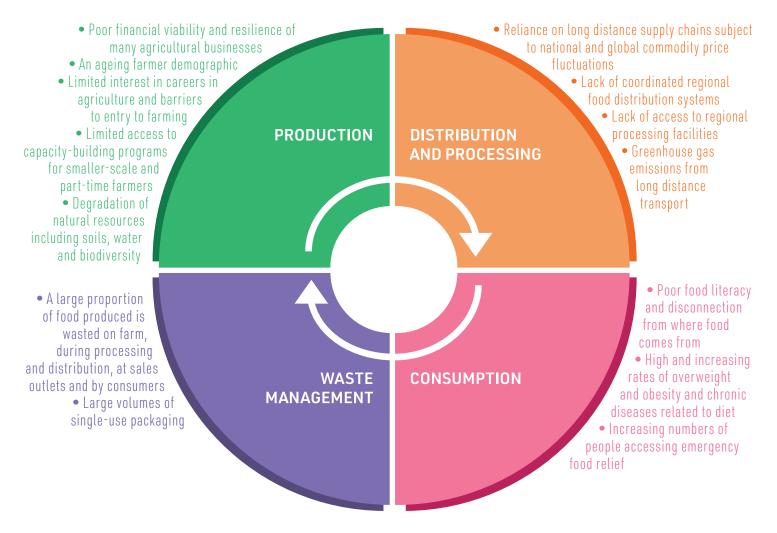


Figure 2. Key food system issues in North East Victoria.

# 

There has been an 11.3% decline in employment in agriculture, forestry and fishing in the seven LGAs of Central and Upper Hume over the 10 years to 2016 Calculated from data from Australian Bureau of Statistics (2007; 2017)

**49% of Australian farmers made a profit in 2013-14** Source: Schirmer *et al.* (2015)

The average age of farmers in the North East CMA region is 59 Source: Schirmer *et al.* (2015)

#### 

The loss of agricultural land is acknowledged as a significant threat to Australia's long-term food security (Commonwealth of Australia, 2009; Millar & Roots, 2012).

Agricultural production is vulnerable to a range of pressures that are impacting agribusiness viability and resilience, and ultimately contributing to the loss of land from agricultural production and a decline in the number of agricultural businesses.

Pressures include changing climate, an ageing demographic, enterprise profitability (increased input costs and reduced returns), fluctuating commodity prices, demographic shifts and land use change, regulatory barriers and lack of access to telecommunications infrastructure (Hume Regional Management Forum, 2010; North East Catchment Management Authority, 2013; Schirmer et al., 2015). The impacts of these pressures are illustrated, at a national scale, by the data from The 2014 Regional Wellbeing Survey - Farmers and Agriculture (Schirmer et al., 2015), where more than a quarter (27.5%) of farmers reported poor household financial wellbeing and 48.7% of farmers reported that they were experiencing moderate to high psychological distress (Schirmer et al., 2015).

Across Australia, off-farm employment has become increasingly important, with the proportion of farm families deriving income from off-farm wages and salaries increasing from 30% to 45% between 1990 and 2005 (Productivity Commission, 2005). The effects of climate change are already impacting food production in North East Victoria, with an increasing trend of hotter summer temperatures, reduced rainfall reliability, shorter growing and harvesting seasons, increased humidity and increased frequency of extreme weather events. These changes are resulting in decreased crop yields, increased pests and disease, and the need for farmers to invest in more infrastructure to harvest and process in shorter timeframes (Goulburn Broken Greenhouse Alliance and Centre for Regional and Rural Futures, Deakin University, 2016).

In North East Victoria, demographic shifts are also contributing to significant change in the agriculture sector. Like most of Australia, the region has an ageing farmer demographic, with the average age of the region's farmers being 59, compared to an average age of 39 for all Australian workers (Australian Bureau of Statistics, 2017).

The high average age of farmers suggests limited interest and/or capacity for young people to pursue careers in agriculture. As many farmers approach retirement, strong population growth in some parts of the region is creating increased demand for rural 'lifestyle' properties, with agricultural land being lost from production and an increase in property prices (Hume Regional Management Forum, 2010; Roots *et al.*, 2013). The high capital costs of land, as well as machinery and infrastructure, are perceived barriers to establishing farm enterprises. The Hume Regional Plan identifies that agricultural restructuring is likely to accelerate into the future under conditions of a changing climate and fluctuating commodity prices (Hume Regional Management Forum, 2010).

While there is clear opportunity and policy in place to support the expansion of agricultural exports to meet growing demand for 'clean and safe' food by Asian markets in particular (Agriculture Victoria, 2017), many agricultural businesses in North East Victoria are not of sufficient size to utilise this business strategy.

The Victorian government also acknowledges the need for planning reforms that include scale-appropriate planning regulations for small-scale livestock producers, recognising that "applying the same planning requirements to all scales of animal industries could result in over regulation of smaller operations" (State of Victoria, 2016).

# 

Agricultural production can also have damaging effects on the environment. The impacts of inappropriate land management and production methods include decline in soil health, increased erosion, decline in water quality, loss of vegetation and biodiversity, damage to wetlands and waterways, and spread of pest plants and animals, which are all key natural resource management issues in North East Victoria (North East Catchment Management Authority, 2013). A wide range of terms are used to describe production methods that aim to enhance the condition of the natural resource base, including sustainable agriculture, regenerative farming, holistic management, agroecology, permaculture, restoration agriculture, land stewardship and others.

Research regarding the adoption of improved natural resource management (NRM) practices by landholders, demonstrates the important influence of economic and social factors in driving behaviour change that leads to environmental outcomes. Lower income farm businesses are less likely to implement on-ground NRM activities (Curtis *et al.*, 2017). Other environmental impacts of the food system include the consumption of non-renewable resources, greenhouse gas emissions from vehicles, processing, livestock and organic landfill, and the use of non-recyclable packaging.

These, and other challenges relating to the agriculture sector, are discussed in detail in the National Farmers' Federation report, Blueprint for Australian Agriculture 2013-20 (Sefton & Associates, 2013).







# DISTRIBUTION AND PROCESSING

Australian producers export 60% of what they grow Source: Sefton & Associates (2013)

# 74.5% of farmers feel they have no choice in the prices they receive for their produce

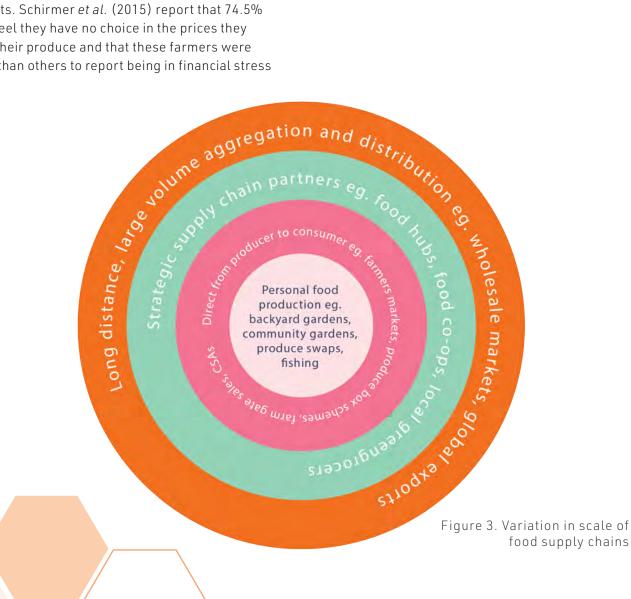
Source: Schirmer et al. (2015)

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Historically, Australian primary producers have relied primarily on long distance supply chains (Figure 3), where the prices that producers receive for their produce are dictated by intermediaries and subject to the influence of global commodity prices. In 2015-16 Victoria exported \$11.9 billion of food and fibre, making Victoria Australia's largest food and fibre exporter (Agriculture Victoria, 2017), while distribution within Australia relies largely on wholesale markets based in capital cities or contracts with large retailers such as the major supermarkets. Schirmer *et al.* (2015) report that 74.5% of farmers feel they have no choice in the prices they receive for their produce and that these farmers were more likely than others to report being in financial stress on the farm. While some producers sell produce locally via short food supply chains, such as direct to local retailers, at farmers markets, or via farm gate sales (Figure 3), a lack of coordinated, scale-appropriate logistics for distribution of fresh produce within the region, is a barrier to producers accessing short supply chains.

Other barriers to accessing short supply chains, include lack of consumer demand for local produce, inadequate volume of sales to be economically worthwhile, lack of knowledge or capacity to use new technology that can facilitate access to short supply chain sales, lack of knowledge of skills in appropriate marketing strategies, or lack of desire or unwillingness to risk diversification into new distribution channels.

Local producers have also reported that lack of access to processing facilities within the region, particularly for processing of smaller volumes or processing certified organic produce, is an issue.



# **CONSUMPTION - Health**

**63% of men and 46% of women are overweight or obese in the Hume region** Source: Department of Health and Human Services, (2017)

**91.6% of adults in the Hume region do not meet vegetable consumption guidelines (five serves daily)** Source: Department of Health and Human Services, (2017)

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Good health is of social and economic value to individuals, society and the economy. It is an enabler of the prosperous and flourishing societies that governments strive to achieve (Lovell & Bibby, 2018). Healthy individuals are able to contribute to building strong and resilient communities, while communities with strong social, emotional and cultural well-being, allow each individual to achieve their full potential as a human being (National Aboriginal Health Strategy Working Party, 1989).

Health is intimately linked to what we eat. Poor diet is the single biggest contributor to poor population health (Ng & Fleming, 2014). Overweight and obesity, which applies to 63% of men and 46% of women in the Hume region (Department of Health and Human Services, 2017), are linked to a range of chronic diseases, including high blood pressure, stroke, heart disease, diabetes and some cancers (World Health Organisation, 2013).

Healthy food choice is influenced by the social determinants of health, most of which are outside the control of an individual. The social determinants of health are the circumstances in which people are born, grow up, live, work and age, which are in turn shaped by a wider set of forces including economics, social policies, and politics (World Health Organization, 2008). The social determinants of health include, but are not limited to: socio-economic status, education, employment, housing, transportation, food security, the social environment, the physical environment, social support networks, community and civic engagement. A strong and sustainable regional food system has the potential to have a positive influence across a number of the social determinants of health.

#### 

Research shows that improved 'food environments', encourage consumers to purchase and consume more nutritious and healthy foods (Committee on World Food Security, 2017). The food environment refers to the physical, economic, political and socio-economic context in which people acquire, prepare and consume food. While food literacy is increasing in many schools and through initiatives such as community gardens, improving the region's food supply so that 'the healthy choice is the easy choice', remains a challenge.

Supply chains, which move food from production to consumption, are a leverage point for agriculture to improve nutrition (Committee on World Food Security, 2017) – for example, by making fresh, local produce more readily available, significant improvement in nutrition and health is possible.





# **CONSUMPTION - Food Insecurity**

5.8% of adults in the Hume region ran out of food in the
12 months prior and could not afford to buy more
Source: Department of Health and Human Services, (2017)

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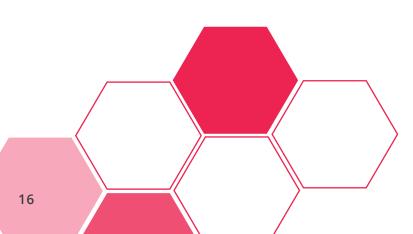
Most people in the region have regular access to enough safe, nutritious and culturally appropriate food to meet their dietary needs. However, some people in the region experience food insecurity.

Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life (Food and Agriculture Organisation, 2009).

Emergency food relief providers within the region indicate that the demand for emergency food relief is increasing (North East Food Policy Working Group, 2016). Local data shows that for most local government areas in our region, food insecurity is higher than the state average of 4.6% of the population (Department of Health and Human Services, 2017). Albury Wodonga Regional FoodShare is the second largest food rescue operation in Victoria, operating across nine Local Government Areas to coordinate the collection and redistribution of rescued food to 148 welfare agencies, schools and neighbourhood houses in Albury-Wodonga and surrounding regions. The reasons why people experience food insecurity include a lack of resources (including financial resources and other resources such as transport), lack of access to nutritious food at affordable prices, lack of access to food due to geographical isolation and lack of motivation or knowledge about a nutritious diet (Australian Institute of Family Studies, 2011). People most vulnerable to food insecurity are those on low incomes, frail and aged people, newly arrived immigrants and refugees, indigenous Australians, single parent families, homeless people and people with disabilities (VicHealth, 2005).

Solutions to food insecurity need to address underlying causes, which relate to the social determinants of health, and should not be limited to the provision of emergency food assistance.





WASTE MANAGEMENT

The total cost of agricultural food losses to Australian farmers is \$2.84 billion a year

Up to 25% of all vegetables grown in Australia don't leave the farm

An average of 361 kg of food per person is wasted by Australian consumers each year

An estimated 7.6 million tonnes of carbon dioxide equivalent will be generated from food waste disposed of in 2014–15 over the life of its decay

Source: Department of Health and Human Services, (2017)

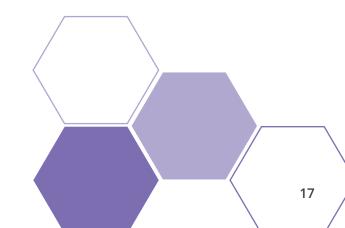
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Food waste is estimated to cost the Australian economy around \$20 billion each year (Commonwealth of Australia, 2017). Around 36% of rubbish from the typical Victorian household is food waste (Sustainability Victoria, 2014) and it equates to an average of 361 kg of food waste per person per annum (Commonwealth of Australia, 2016).

This means that a third of all the resources used to grow, process and distribute food are also wasted. Food grown but not eaten also contributes to degradation of the environment through soil carbon loss and through greenhouse gas emissions from fuel and energy used in production and methane gas produced by food sent to landfill (food waste in landfill decomposes anaerobically, releasing methane, a gas with 25 times the global warming potential of carbon dioxide). Waste occurs at all stage in the food system: on farm, during processing and distribution, at retail outlets and food service providers, and by households. Waste occurs for a multitude of reasons: damage to produce, produce not meeting specifications regarding size or shape, poor prices making it unprofitable for producers to harvest, spoilage due to contamination or inadequate temperature control, excess trimming, damage to packaging, over-ordering leading to excess stock, confusion over 'use-by' and 'best-before' labelling, over-catering or over-purchasing, lack of consumer knowledge of how to repurpose leftovers, and lack of access to food waste collection systems (Commonwealth of Australia, 2017).

Within the North East region and southern NSW, Albury Wodonga Regional Foodshare collects and redistributes food that would otherwise go to waste, recovering 902,000kg of food in from 44 donors (manufacturers, distributors and local producers) in 2016 (Albury Wodonga Regional Foodshare, 2017).





# **3. STRENGTHENING THE LOCAL FOOD SYSTEM**

The ways in which we interact with food are an important part of how we connect as people and communities. They also influence the strength of our local economy and the quality of our environment (City of Melbourne, 2012). A strong local food system, based on short food supply chains, delivers benefits for both food producers and the wider community in a number of ways.

A strong regional food economy strengthens the capacity for producers to access local short food supply chains. This is where producers have the opportunity to dictate the price at which they sell their produce and to by-pass many of the escalating post farm gate costs (processing, packaging, long-distance distribution, etc.) that contribute to low commodity prices and declining farm business profit margins.

A strong local food system also facilitates the establishment of values-based supply chains. Values-based supply chains are based on strategic collaborative alliances between producers and other supply-chain partners (e.g. processors, distributors, wholesalers, retailers), where consumers receive information about the social, environmental or community values incorporated into the production of a product and rewards are distributed equitably across the supply chain, improving returns to producers (Diamond *et al.*, 2014).

This approach supports product differentiation, which is the act of highlighting a set of meaningful differences to distinguish one enterprise's offering from a competitor's. Products can be differentiated on the basis of production processes, provenance (the place of origin) or product quality. It allows small and mid-sized farm enterprises to band together and respond to market trends, such as growing consumer demand for food products differentiated by values such as "local", "organic" or "sustainable" (Diamond *et al.*, 2014). For consumers, research demonstrates that reduced distances between food production, points of sale and consumers improves local access to healthier food choices (Hensgen 2009), an important social determinant of health. A study in Italy showed that a higher density of farmers' markets is associated with lower Body Mass Index (BMI) in adults and that this relationship becomes more marked for individuals with higher BMIs who have limited supermarket access (Bimbo *et al.*, 2015).

Other community benefits include access to freshly harvested produce with higher nutrient levels (as nutrient degradation begins to occur post-harvest (Shewfelt, 1990)), access to seasonal and more diverse produce varieties that may not be available from supermarkets, reduced environmental impacts and increased social connections and community resilience.



# **3. STRENGTHENING THE LOCAL FOOD SYSTEM**

A report published by the Australian Department of Agriculture, Fisheries and Forestry identifies that one of eight key opportunities identified in regard to the Australian food supply chain, relates to the trend of "Consumers showing a preference for 'local', and other personal and social aspirations" (Spencer & Kneebone, 2012).

The long-term outcomes of a strong local food system are diverse, encompassing social, economic and environmental outcomes (Figure 4).

Strengthening our local food system requires a collaborative, cross-sector approach to drive systems-level change.

Systems thinking is based on the concept that changing one part of a system that's made up of interrelated and interdependent parts (e.g. the food system) affects other parts and the whole system, with predictable patterns of behaviour (Kim, 1999). For example, working to implement improved regional food distribution logistics will make it easier and more attractive for producers to access local short food supply chains, driving behaviour change in individuals. The development and implementation of food policy within local government is critical to provide the foundation for systems-level change to support a strong regional food economy (North East Food Policy Working Group, 2016). Working across council departments to support appropriate land use planning and embed the principles of healthy food access into council policy and plans, will ensure the responsibility of building a strong local food system is everyone's business (Department of Health, 2014).

A collaborative, multi-faceted approach to strengthening the regional food system has proven to have positive environmental, economic and social outcomes in other parts of the world. For example in the state of Vermont in the USA, the implementation of actions from the Farm to Plate Strategic Plan - A 10-year strategic plan for Vermont's food system (Vermont Sustainable Jobs Fund, 2010) has contributed to an increase in food system enterprises of 6.9% (799 businesses) from 2009-2014, an increase in the value of local food purchases, and a 40% decline in the number of waterways impaired due to agriculture (Vermont Sustainable Jobs Fund, 2016).

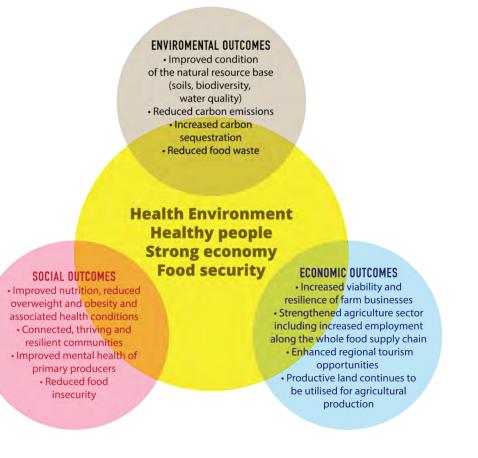


Figure 4. Long-term outcomes of a strong local food system.

# 4. GOALS, DIRECTIONS & PRIORITIES

This Strategy focuses on strengthening the local food economy as a key means of addressing many of the social, economic and environmental issues relating to the food system within North East Victoria.

#### 

In addition to the strategies outlined in this document, which focus on stregnthening the local food economy, it is acknowledged that there are other strategies and approaches that can contribute to addressing the issues discussed in this document.

This Strategy identifies:

**Aspirational Goals** – These are goals that will most likely take more than 10 years to achieve, which aim to reverse the negative trends outlined in Figure 2.

**Strategic Directions –** These are strategic four-year objectives that aim to be achieved by 2022.

**Priorities** – These are priority areas for action that regional organisations are committed to seeking investment for, to support delivery.



Goals, Objectives and Priorities are grouped under five themes within this Strategy:

- Leadership and advocacy A coordinated approach and collective voice
- Production Agricultural land management and food production
- Distribution and processing Transporting and processing food between farms and consumers
- Consumption Food literacy, food access and food choices
- Waste reduction Reducing food waste and food packaging

While a number of initiatives are currently underway that will contribute to the identified objectives, successful delivery of all identified priorities will be dependent on the acquisition of further funding.



# **THEME 1: LEADERSHIP AND ADVOCACY**

### Aspirational Goal:

North East Victoria has coordinated approach and collective voice that drives a strong local food system.

### **Rationale:**

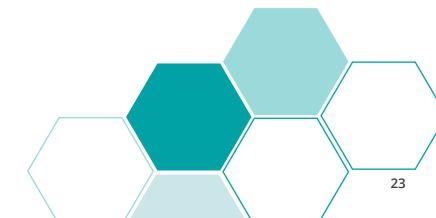
- A coordinated and collaborative, cross-sector approach is essential to effectively address food system issues at a systems level.
- Local government policy can drive long-term food system change through appropriate land use planning, incentives, regulations, food procurement policy, community engagement and advocacy, providing the basis for a collaborative regional approach across agencies and organisations.
- A strong regional food identity will foster community awareness, increase demand for local produce, and grow the agri-tourism sector.



### Current regional initiatives:

- Established local food networks in Wodonga, Wangaratta and Benalla implementing a range of projects.
- The Wodonga Food Strategy is in the final stages of development by the Wodonga Local Food Network, in partnership with Wodonga Council.
- The Indigo Shire Council Plan 2017-2021 includes the Strategic Action: 'Develop and implement a local food policy and support initiatives that strengthen the local food system and improve access to healthy food'.
- Mansfield Shire have produced the Mansfield Paddock to Plate Agri-tourism Alliance Growth Plan and Report 2017, which aims to support growth of the agri-food and agri-tourism sectors across the shire.
- The North East Victoria Local Government Food Policy and Strategy Discussion Paper 2016 (North East Food Policy Working Group, 2016) provides direction for food policy in local government.
- Tourism North East delivers a range of initiatives with an agri-tourism focus, including the annual High Country Harvest festival, and two current research projects: an Agri-tourism Consumer Insights Research Project and an Agri-tourism Mapping Project, which will inform future programs.
- Regional annual forums are held, such as the Agriculture Summit and Fair Food Farmers and Followers gathering, that provide opportunities for networking and development of new initiatives.
- Murray Regional Tourism has commenced development of a regional Farm to Plate Strategy, encompassing Greater Hume, Albury, Wodonga and Indigo LGAs, to identify opportunities to enhance the regional farm to plate value chain.
- Wangaratta Council are currently developing a plan to enhance support for local food initiatives.

Strategic Directions (4-year)		Priorities		
advoc. initiati	dinated approach to acy and implementation of ves to strengthen the local ystem.	<ol> <li>1.1.1</li> <li>1.1.2</li> <li>1.1.3</li> <li>1.1.4</li> <li>1.1.5</li> </ol>	Establish a regional organisation with cross-sector representation and clear key advocacy messages. Seek funding for a project officer position to coordinate delivery of actions within this Strategy. Support the establishment of local alliances that aim to support agri-food and agri-tourism businesses. Engage with national, state and regional agencies and organisations to ensure opportunities to strengthen the local food system are included in key strategic documents. Advocate for planning reforms that include scale- appropriate planning regulations for small-scale livestock producers.	
strate	councils have policies and gies that aim to strengthen the ood system.	1.2.1 1.2.2	Advocate to local councils to develop policies that aim to strengthen the local food system. Advocate to local councils to incorporate strategies to strengthen the local food system in council plans and other strategic documents.	
1.3 A stro	ng regional food identity.	1.3.1 1.3.2 1.3.3	Develop and implement a regional marketing strategy, including regional branding, that will assist in establishing a strong regional food identity. Establish communication channels, as per the marketing strategy (1.3.1), to regularly disseminate information and promote local producers, local food and food-related events and initiatives. Deliver programs to support growth in quality agri-tourism operations.	



# **THEME 2: PRODUCTION**

### Aspirational Goal:

North East Victoria has a thriving, diverse and resilient agricultural sector where sustainable land management practices ensure natural resources are protected and enhanced.

### **Rationale:**

- Diversification is a key risk management strategy, with opportunity for primary producers to increase their business resilience through diversification of commodity types, sales channels, marketing strategies and non-weather dependent income streams such as agri-tourism.
- There is a growing number of small-scale and part-time producers in the region, as well as lifestyle landholders, who can have limited experience in rural land management.
- With an aging farmer demographic in the region, learning opportunities and capacity-building initiatives are needed to encourage and support the next generation of food producers.

### **Current regional initiatives:**

- The Climate Smart Agricultural Development Project, delivered by the Goulburn Broken Greenhouse Alliance, has modelled changes to 17 agricultural commodities under the future impacts of climate change.
- The North East Catchment Management Authority and Goulburn Broken Catchment Management Authority's sustainable agriculture programs deliver events and support agri-business groups to run workshops and demonstration trials to increase knowledge of sustainable land management practices.
- Agriculture Victoria's Land Health and Sustainable Irrigation Programs deliver services to producers that support improved production and sustainability, while reducing impacts to the environment.
- Agriculture Victoria, in partnership with Meat and Livestock Australia and Australian Wool Innovation, facilitate delivery of the Better Beef and BestLamb/ BestWool sustainable production programs.

- Landcare groups and production groups support peer-to-peer learning and skills training.
- Agricultural education and career pathways are delivered by a number of secondary schools, TAFEs, Universities and Local Learning and Employment Networks, in partnership with local agricultural industry groups, through a range of offerings including agriculture curriculum, VET in Schools and Australian School-based Apprenticeships.
- An annual Food and Fibre Careers Day, held at the University of Melbourne Dookie campus, is coordinated by a consortium of educational institutions and organisations, and attracts over 200 secondary school students from across the Goulburn Valley and North East Victoria each year.
- The local branch of the Victorian Farmers Federation has recently started a Next Generation Farmers group.
- Agriculture Victoria and Australian Wool Innovation have funded Young Farmer Business Bootcamps in 2017 and 2018.
- The Rural Financial Counselling Service, delivered through AgBiz Assist, provides financial support services to primary producers who are suffering from, or at risk of, financial hardship.
- Tourism North East provides support to producers through delivery of workshops covering topics such as path to market creation, digital training, business development and marketing, as well as the opportunity for individual support from an industry development specialist.
- Cultivate Farms is a local enterprise with a national focus, that connects aspiring farmers with retiring farmers and investors, to provide pathways that address the barrier of the high capital requirements to buy a farm.

Strategic Directions (4-year)			Priorities
2.1	Producers have the capacity to improve business viability and re- silience through diversification of business strategies.	<ul><li>2.1.1</li><li>2.1.2</li><li>2.1.3</li></ul>	Delivery of capacity-building events and resources to improve business skills and capacity of agribusinesses to adopt new business diversification strategies, including non-weather dependant income streams such as agri-tourism services. Delivery of capacity-building events to increase knowledge and adoption of alternative sales and marketing approaches by agribusinesses, such as access to local short food supply chains, branding and marketing, industry sustainability frameworks, co-operatives, and Community Supported Agriculture. Deliver training to build capability in online marketing and communications.
2.2	Agricultural industries and individual producers plan for climate change.	2.2.1 2.2.2 2.2.3	Deliver capacity-building events that build knowledge and support producers to under take business planning that includes seasonal risk assessments and planning to better prepare individuals for decision-making associated with climate variability. Expand the geographic scope of the modelling undertaken as part of the Climate Smart Agricultural Development Project, to determine the impacts of climate change on regionally-important agricultural commodities in North East Victoria. Analysis of management and commodity options to adapt to projected climate and associated modelling of the economic and labour value of these choices to the local agribusiness economy.
2.3	Improved accessibility to learning opportunities that encourage land management practices protect the natural resource base and support ecosystem functions, for all land managers.	<ul><li>2.3.1</li><li>2.3.2</li><li>2.3.3</li><li>2.3.4</li></ul>	Deliver capacity-building events that aim to increase skills in sustainable agricultural production methods, such as regenerative farming, holistic management and permaculture. Establish a group peer learning program for smaller-scale producers, based on Agriculture Victoria's successful Better Beef and BestWool/BestLamb model, including provision of access to technical expertise. Increase the availability of learning opportunities that are accessible to busy producers and lifestyle landholders, such as webinars and short one hour presentations. Deliver learning opportunities or resources targeted at rural lifestyle landholders, on land management topics including biosecurity risk management, grazing management and weed control.
2.4	Support for the next generation of producers.	2.4.1 2.4.2	Support secondary schools and tertiary institutions to deliver programs that promote and encourage agricultural career pathways. Promote and support initiatives that address barriers to entry to farming.

# **THEME 3: DISTRIBUTION AND PROCESSING**

### Aspirational Goal:

North East Victoria has strong regional short food supply chains where producers have access to logistics appropriate to their scale of operation, at all stages of the supply chain.

### **Rationale:**

- Through access to local short food supply chains, producers can bypass multiple intermediaries ('middle men'), increasing the likelihood of them dictating the price at which their produce is sold and keeping a bigger share of the value of their produce.
- Local short food supply chains allow producers to make use of marketing strategies based on differentiation, such as sustainable production methods or local provenance.
- Lack of coordinated, scale-appropriate logistics for distribution of fresh produce within the region, is a barrier to producers accessing short supply chains.
- Lack of access to processing facilities within the region, particularly for processing of smaller volumes or processing certified organic produce.

### Current regional initiatives:

- The Beechworth Food Co-op is a non-profit community enterprise that sells seasonal produce from over 30 producers across the region and runs regular events to increase food literacy and connection with local producers.
- A feasibility study has been developed that provides the basis for the future development of a food hub in Wangaratta that would provide regional logistics services for fresh local produce.
- Mountain Milk Co-operative established in 2017 by diary producers in the Kiewa Valley; their aims include empowering farmers, increasing members level of choice and influence in relation to the market, sharing risks and returns, and reducing the disconnect between farmers and consumers.



Strategic Directions (4-year)		Priorities		
3.1	Improved supply chain logistics for fresh local produce within the region.	3.1.1	Undertake a review of regional logistics and identify potential opportunities to improve distribution options for fresh produce within the region; explore solutions for local small volume delivery runs that are cost effective.	
		3.1.2	Delivery of capacity-building programs to the establishment of regional food hubs that can facilitate coordinated logistics for local produce.	
3.2	Growth of community and business initiatives that aim to strengthen local short food supply chains.	3.2.1	Delivery of capacity-building programs that support the establishment and growth of community initiatives that aim to strengthen local short food supply chains, such as food co-ops, produce box schemes and farmers markets, based on learnings from successful initiatives in other regions of Australia.	
		3.2.2	Provision of mentoring support for agribusiness co-operatives and Community Supported Agriculture enterprises (CSAs) that aim to strengthen local short food supply chains.	
		3.2.3	Explore options to increase utilisation of online marketplace platforms that connect producers with customers, and coordination with local logistics services.	
		3.2.4	Work with fresh food retailers and food service providers to increase the amount of local produce sold through these outlets.	
3.3	Increased procurement of local produce by public facilities.	3.3.1	Regional health services to investigate opportunities for procurement of local produce.	
3.4	An increase in access to local food processing facilities.	3.4.1	Advocate for establishment of processing facilities for organic and small volume livestock operations.	



# **THEME 4: CONSUMPTION**

### Aspirational Goal:

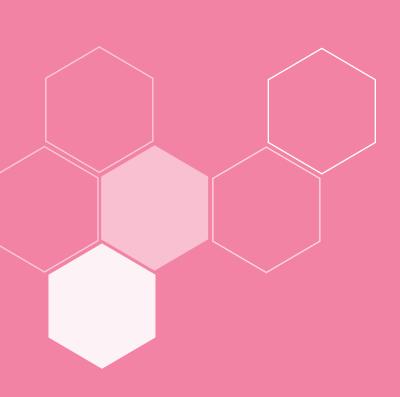
Fresh local produce is accessible to all community members and people understand the multiple benefits of a strong local food system, making informed and healthy food choices.

### Rationale:

- Initiatives that enhance connections between producers and consumers, or direct engagement in food production, can increase awareness and understanding of food production issues, leading to more sustainable food choices.
- Improved accessibility of local produce, particularly in terms of convenience and affordability, is likely to facilitate increased consumption of local produce.
- Research shows that improved 'food environments' encourage consumers to purchase and consume more nutritious and healthy foods. Increasing access to fresh local food can assist in making 'the healthy choice, the easy choice'.
- Emergency food relief providers within the region indicate that the demand for emergency food relief is increasing.

### Current regional initiatives:

- Weekly farmers markets are held in Albury-Wodonga. Monthly farmers or produce markets are held in Beechworth, Benalla, Bright, Corryong, Mansfield, Moyhu, Myrtleford, Rutherglen, Wangaratta and Yackandandah.
- A number of farm businesses in the region offer seasonal pick-your-own produce events, which allow consumers to directly connect with producers and farms.
- Many primary schools have school kitchen garden programs that enhance food literacy.
- Many community gardens across the region provide opportunities to gain skills in food production and enhance food literacy.
- A Community Food Centre is being established in Wangaratta to provide access to fresh local produce and opportunities for social connection.
- The Wodonga Local Food Network is developing strategies to support regional community groups and education settings with healthy canteens, community gardens, cooking programs and other food literacy initiatives.



Strategic Directions (4-year)	Priorities
4.1 Support for programs and initiatives that enhance food literacy and understanding of food production.	<ul> <li>4.1.1 Support community food initiatives that enhance food literacy (e.g. food hubs, farmers markets, food swaps, community gardens, gardening skills workshops etc.), including: <ul> <li>support to access funding</li> <li>delivery of training and mentoring support</li> <li>promotion</li> </ul> </li> <li>4.1.2 Investigate options to encourage support regular farm open days across the region.</li> <li>4.1.3 Identify opportunities to support existing school kitchen garden programs, and establish mechanisms to support other schools to implement new programs and connect to community initiatives.</li> <li>4.1.4 Develop a comprehensive communication plan to support the goals of this strategy, increasing community awareness of food production within the region.</li> </ul>
4.2 Improved access to fresh local produce for all community members.	<ul> <li>4.2.1 Develop a strategy that considers opportunities to improve access to local produce, ensuring barriers and enablers for all community members are addressed.</li> <li>4.2.2 Explore opportunities to establish weekly produce markets in more localities.</li> <li>4.2.3 Establish a trial program to deliver fresh produce boxes direct to consumers at their workplaces.</li> <li>4.2.4 Encourage food retailers to stock local produce and to provide labelling that allows consumers to easily identify local produce.</li> <li>4.2.5 Support the on-going maintenance of the Mountain to Murray Local Produce Guide (www.localproduceguide.com.au) to ensure it is regularly updated and widely promoted.</li> </ul>
4.3 Increased use of local produce by cafes, restaurants and other food outlets.	4.3.1 Develop resources specifically for local chefs and food outlets that improve their capacity to access local produce.



# **THEME 5: WASTE REDUCTION**

### Aspirational Goal:

Waste is minimised through closed-loop food redistribution systems and initiatives that reduce the use of single-use packaging and support recycling.

### Rationale:

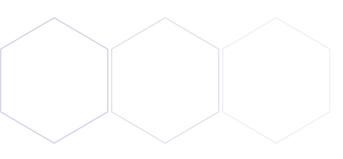
- Local governments deliver services to reduce landfill though recycling and composting, however there are many other opportunities to reduce food waste and food packaging.
- On-farm food waste can occur due to: damage during harvesting, produce not meeting retailer quality standards due to size, shape etc., or produce left unharvested due to poor mechanical harvesting or low commodity prices (Bagherzadeh et al., 2014).
- Much of the food packaging used in the globalised food system cannot be recycled.

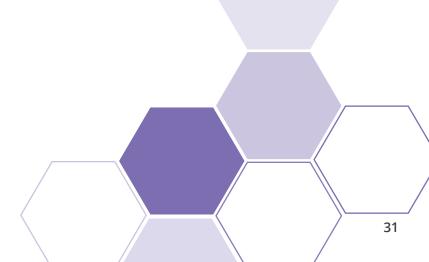
### Current regional initiatives:

- Albury Wodonga Regional FoodShare have been running a "Farm to FoodShare" trial program, with around 7000 kg of fresh produce donated by farms and redistributed in 2017.
- Halve Waste, a collaborative local government initiative that aims to reduce waste entering landfill by 50% in our region, is rolling out the three bin system for households. 2018 sees the launch of their commercial focus.

Strategic Directions (4-year)		Priorities		
5.1	An increase in the amount of unsold farm produce that is recovered from local farms and redistributed for human consumption.	5.1.1	Support the expansion of a coordinated system of food recovery and re-distribution between local farms and Albury Wodonga Regional FoodShare.	
5.2	An increase in the amount of undistributed rescued food that is utilised on farms.	5.2.1	Support Albury Wodonga Regional FoodShare to establish a program to send undistributed rescued food (no longer fit for human consumption) to farms, to either be composted to create organic fertiliser, or used as stock feed.	
5.3	Reduced consumption of foods with single use packaging.	5.3.1	Support initiatives that encourage consumers to purchase fresh, unpackaged foods.	







# **5. REFERENCES**

Aboriginal Health and Medical Research Council of New South Wales. Definition of Aboriginal Health. www.ahmrc.org.au/index.php?option=com\_content&view=article&id=35&itemid=37

Agriculture Victoria (2017) Agriculture Victoria Strategy

Albury Wodonga Regional Foodshare (2017) 2016 Annual Report.

Alden, J., Rose, N. and Ponomarenko, N. (2016) Wangaratta Community Food Hub Feasibility Study.

Aubrey, S. (2012) Indiana farms, Indiana foods, Indianna success: Central Indiana food hub feasibility study. Prosperity Ag and Energy Resources.

Australian Bureau of Statistics Census (2007) Agricultural Commodities, Australia, 2005-2006. www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/7503.02005-06?OpenDocument

Australian Bureau of Statistics Census (2017) Agricultural Commodities, Australia, 2015-2016. www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/7503.02015-16?OpenDocument

Australian Food and Grocery Council and EY (2015) Regional employment in the food and grocery processing sector.

Bagherzadeh, M., Inamura, M. & Jeong, H. (2014) Food Waste Along the Food Chain. OECD Food, Agriculture and Fisheries Papers, No. 71. OECD Publishing, Paris.

Barr, N. (2005) Understanding Rural Victoria - The Changing Social Landscape of Rural Victoria. Melbourne, Victoria: State of Victoria, Department of Primary Industries.

Bimbo, F., Bonannob, A., Nardonec, G. and Viscecchiad, R. (2015) The Hidden Benefits of Short Food Supply Chains: Farmers' Markets Density and Body Mass Index in Italy. International Food and Agribusiness Management Review, 18(1): 1-16.

Central Coast Council (2016) Central Coast Local Food Security Strategy: Growing Our Health, June 2016.

City of Melbourne (2012) Food City: City of Melbourne Food Policy. City of Melbourne, Melbourne.

Commonwealth of Australia (2009) Food production in Australia. Final report. Select Committee on Agricultural and Related Industries. August 2010, Canberra.

Commonwealth of Australia (2016) Working together to reduce food waste in Australia. Department of the Environment fact sheet. www.environment.gov.au/system/files/pages/25e36a8c-3a9c-487c-a9cb-66ec15ba61d0/files/ factsheet-food-waste\_0.pdf

Commonwealth of Australia (2017) National Food Waste Strategy: Halving Australia's food waste by 2030.

Committee on World Food Security (2017) Nutrition and food systems. A report by the High Level Panel of Experts on Food Security and Nutrition of the Committee on World Food Security, Rome 2017.

Curtis, A., Mendham, E., Groth, T., McDonald, S. and Sample, R. (2017) The social drivers of natural resource management: Wimmera.

Department of Employment (2016) Australian Jobs 2016.

Department of Health (2014) Healthy Food Connect: A support resource. State of Victoria, Melbourne.

Department of Health and Human Services (2017) Victorian Population Health Survey 2015, State of Victoria, Melbourne.



# **5. REFERENCES**

Diamond, A., Tropp, D., Barham, J., Frain Muldoon, M., Kiraly, S. and Cantrell, P. (2014) Food Value Chains: Creating Shared Value to Enhance Marketing Success. United States Department of Agriculture, Agricultural Marketing Service, May 2014.

Food and Agriculture Organisation (2009) World Summit on Food Security.

Goulburn Broken Greenhouse Alliance and Centre for Regional and Rural Futures, Deakin University (2016) Climate Smart Agricultural Development. http://www.gbga.com.au/climate-smart-agriculture-development.html

Hensgen, S. (2009) Planning and health – a study on the integration of health and planning in South Australia. South Australia Health.

High Level Panel of Experts on Food Security and Nutrition (2014) Food losses and waste in the context of sustainable food systems.

Hume Regional Management Forum (2010) Hume Regional Plan – The Hume Strategy for sustainable communities 2010-2020.

Lovell, N. and Bibby, J. (2018) What makes us healthy? An introduction to the social determinants of health. The Health Foundation, London.

McKINNA et al. (2015) Upper, Central and Lower Hume Sub-regions Food Opportunity Strategy and Action Plan 2015-2018. Report for Regional Development Australia and Regional Development Victoria.

Millar, J. and Roots, J. (2012) Changes in Australian agriculture and land use: implications for future food security. International Journal of Agricultural Sustainability, 10:25-39.

Mornington Peninsula Shire (2013) 2013 Local Food Strategy: Enhancing the identity of the Mornington Peninsula as quality, fresh and innovative food region.

National Aboriginal Health Strategy Working Party (1989) National Aboriginal Health Strategy. Canberra.

National Centre for Social and Economic Modelling (2013) Poverty, Social Exclusions and Disadvantage in Australia, October 2013.

Ng, M. and Fleming, T. (2014) Global, regional, and national prevalence of overweight and obesity in children and adults during 1980–2013: a systematic analysis for the Global Burden of Disease Study 2013, The Lancet.

North East Food Policy Working Group (2016) North East Victoria Local Government Food Policy and Strategy Discussion Paper 2016.

Productivity Commission (2005) Trends in Australian Agriculture, Research Paper, Canberra.

Regional Development Australia Gippsland (2014) Gippsland Food Plan.

Roots, J.M. (2013) The Future of Farming in Rural Amenity Landscapes: The role of planning and governance in a changing landscape. PhD thesis. Charles Sturt University, Faculty of Science, School of Environmental Sciences.

Roots, J., Millar, J. and Thwaites, R. (2013) Farming in Rural Amenity Landscapes: maintaining food productivity in a changing environment. In V. Higgins, J. Millar, & Q. F. Bowers (Eds.), Food Security in Australia: challenges and prospects for the future (pp. 325-338). Springer, United Kingdom.

Rosier, K. (2011) Food insecurity in Australia: What is it, who experiences it and how can child and family services support families experiencing it? Communities and Families Clearinghouse Australia Practice Sheet – August 2011, Australian Institute of Family Studies.



# **5. REFERENCES**

Schirmer, J., Peel, D. and Mylek, M. (2015) The 2014 Regional Wellbeing Survey - Farmers and Agriculture.

Sefton & Associates (2013) Blueprint for Australian Agriculture 2013-2020. Report for the National Farmers' Federation

Shewfelt, R.L. (1990) Sources of variation in the nutrient content of agricultural commodities from the farm to the consumer. Journal of Food Quality, 13(1): 37-54.

South East Food Project (2012) South East Food Plan: A plan for growing the regional food economy in South East NSW.

Spencer, S. & Kneebone, M. (2012) FOODmap: An analysis of the Australian food supply chain. Department of Agriculture, Fisheries and Forestry, Canberra.

Surf Coast Shire (2018) Local Food Program 2018-2021: Increasing the production and consumption of locally grown food through a sustainable food system.

Sustainability Victoria (2014) Food waste in the garbage bin 2013.

Tourism North East (2016) Tourism North East Strategic Plan 2016-17 - 2018-19.

Vermont Sustainable Jobs Fund (2010) Farm to Plate Strategic Plan.

Vermont Sustainable Jobs Fund (2016) Farm to Plate - Annual Report, Year 6, Fiscal 2016.

VicHealth (2005) Healthy Eating - Food Security Investment Plan 2005-2010.

Wollongong City Council, Shellharbour City Council and Kiama Municipal Council (2013) Illawarra Regional Food Strategy.

World Health Organization (2008) Closing the gap in a generation – Health equity through action on the social determinants of health.







# **APPENDIX 1**

Alignment of this Strategy with key strategic documents for North East Victoria.

Strategic document	Relevant goals, objectives or actions			
LOCAL GOVERNMENT & REGIONAL DEVELOPMENT				
Upper, Central and Lower Hume Sub-regions Food Opportunity Strategy and Action Plan 2015-2018 (McKINNA et al., 2015)	<ul> <li>Change the image of the agrifood sector and promote career opportunities</li> <li>Improve skill levels of small and medium sized enterprises in business and risk management</li> <li>Raise awareness of alternative small farm business models that could improve profitability and assist industry transition</li> <li>Capture the economic potential of the emerging gourmet food and beverage sector, to drive regional growth while enhacing liveeability</li> <li>Establish regional gourmet networking and industry development forums, engaging industry champions to lead them</li> <li>Support capacity-building activities in business fundamentals</li> <li>Support capacity-building activities in small farm fundamentals</li> <li>Facilitate better access to commercial processing facilities and pilot plans for small and medium sized enterprises</li> <li>Encourage collaborative and cross-marketing efforts</li> <li>Foster local pride in produce from the region</li> <li>Achieve better access to customers through improved logistic and digital connectivity</li> <li>Assess feasibility of forming a transport cluster, focused on freight consolidation and central collection points</li> <li>Build a tourism channel to market that maximises local sales of food and beverage and grows the profile of each district</li> <li>Clarify brand and identity in respect to food and beverage provenance at a regional and local level</li> <li>Build the profile of the region's food and beverage capabilities</li> </ul>			
Hume Regional Plan - The Hume Strategy for Sustainable Communities 2010-2020 (Hume Regional Management Forum, 2010	<ul> <li>Anticipating and adapting to the effects of climate change</li> <li>Harnessing renewable energy sources, reducing greenhouse gas emissions and pursuing innovative waste management approaches</li> <li>Adapting and diversifying agriculture in an environment of change</li> <li>Retaining productive rural land for agriculture and other compatible rural uses</li> <li>Supporting the next generation of agricultural opportunities</li> <li>Ensuring the future viability and adaptability of productive rural land</li> </ul>			
Council Plan 2017-2018 to 2020-2021 (City of Wodonga, 2017)	<ul> <li>Improve the health and social outcomes for all people in Wodonga to create a healthy, safe, equitable and inclusive community</li> <li>Work with key stakeholders to improve access and affordability of safe and nutritious food for all</li> <li>Promote sound and sustainable environmental practices through our policies, planning and delivery for the organisation, the community and the city</li> <li>Strengthen, develop and promote our visitor at tractions and destination experiences</li> </ul>			
Our roadmap for the future – Council Plan 2017-2021 (Rural City of Wangaratta, 2017)	<ul> <li>Our rural communities are supported and recognised as significant contributors to the economic and social character of the municipality</li> <li>Our tourism industry is promoted, valued and vibrant</li> <li>To assist the community to reduce their impact on the environment</li> <li>Opportunities to assist the community to adopt sustainable building and living practices and to reduce energy and water use</li> </ul>			

# **APPENDIX 1**

Alignment of this Strategy with key strategic documents for North East Victoria.

Strategic document	Relevant goals, objectives or actions					
	LOCAL GOVERNMENT & REGIONAL DEVELOPMENT					
Council Plan 2017-2021 (Indigo Shire Council, 2017)	<ul> <li>Our community members are physically and mentally healthy and active</li> <li>Pursue pathways for learning and job opportunities to retain our young people in the Shire</li> <li>Indigo Shire has a growing local economy</li> <li>Develop and implement a local food policy and support initiatives that strengthen the local food system and improve access to healthy food</li> <li>Indigo Shire has a thriving tourism industry</li> <li>We support reduction in community consumption of non-renewable resources</li> </ul>					
Council Plan – Incorporating Municiple Health and Well-being Plan 2017-21 (Alpine Shire Council, 2017)	<ul> <li>Improve healthy eating and physical activity</li> <li>Promote the benefits and availability of fresh fruit and vegetables</li> <li>Strengthen visitor attraction and experience</li> </ul>					
Council Plan 2017-2021 (Towong Shire, 2017)	<ul> <li>Assist all residents to attain a high level of health and safety, resilience and connectedness to their communities</li> <li>Integrate sustainable environmental management practices into all our activities</li> <li>Expand employment and economic opportunities whilst continuing to maintain and promote our natural environment and the lifestyle our municipality offers</li> <li>Work with local operators to facilitate the development of a farm gate trail in the Mitta Valley and replicate in other localities as appropriate</li> <li>Support the delivery of the North East Regional Dairy Growth Plan and Workforce Development Strategy through Alpine Valleys Dairy Pathways Group</li> <li>Investigate options to support/promote farmgate/ agribusiness opportunities</li> </ul>					
Council Plan 2017-2021 (Benalla Rural City, 2018) Mansfield Shire Council – Council Plan 2017-2021 (Mansfield Shire Council, 2017)	<ul> <li>With our community and key stakeholders address the priorities of the Victorian Public Health and Wellbeing Plan 2015-2019 with a focus on healthier eating and active living; improving mental health and preventing violence and injury</li> <li>Involve and inform the community on environmental issues, strategies and opportunities for reducing our environmental impact</li> <li>Work with our rural communities to support and enhance agricultural production</li> <li>In partnership with our community and various groups and agencies, such as the Goulburn Broken Greenhouse Alliance, protect an enhance our natural environment</li> <li>Attract, support and strengthen local business</li> <li>Strengthen and grow tourism across Benalla Rural City</li> <li>Develop a Paddock to Plate Agri-tourism Alliance Growth Plan in partnership with key stakeholders across the Shire</li> </ul>					
	HEALTH					
Central Hume Prevention Strategic Plan 2017-2021 (Central Hume Primary Care Partnership, 2017)	<ul> <li>Increase consumption of fruit and vegetables</li> <li>Reduce obesity and overweight rates (long-term 10 years)</li> <li>Promote and enable partnership work and collaboration between a wide range of community stakeholders</li> <li>Work within a collective impact framework</li> </ul>					
Upper Hume Primary Care Partnership Healthy Communities Catchment Plan 2017-2021 (Upper Hume Primary Care Partnership, 2017)	<ul> <li>Enable participation of a broad range of stakeholders, including community, to support system improvement within a Social Determinants of Health framework</li> <li>Enable planned approaches across the service system</li> <li>Facilitate a social determinants and outcomes focused approach across the UHPCP catchment</li> <li>Promote and build capacity in early intervention and prevention</li> </ul>					

# **APPENDIX 1**

Alignment of this Strategy with key strategic documents for North East Victoria.

Strategic document	Relevant goals, objectives or actions			
AGRICULTURE & ENVIRONMENT				
North East Regional Catchment Strategy 2013-2019 (North East CMA, 2013)	<ul> <li>Support agricultural industries in developing new land manager models that address barriers to entry (high capital costs) and succession of aging land managers</li> <li>Support agricultural industries in the promotion of succession / business plans to maintain land management capacity through transition of ownership and management</li> </ul>			
Goulburn Broken Regional Catchment Strategy 2013-2019 (Goulburn Broken CMA, 2013)	<ul> <li>Promote sustainable farming practices to ensure the improved productivity from irrigated and dryland agricultural level</li> <li>Adapt to climate variability risks</li> <li>Manage risks to agricultural production</li> </ul>			
North East Climate Ready NRM Strategy (North East CMA, 2016)	<ul> <li>Build the capacity of natural resource managers to plan for and respond to climate-related drivers and shocks through training and knowledge exchange initiatives</li> <li>Exchange knowledge with landholders and communities to support managing natural resources sustainably in a hotter, drier climate with changed seasonality</li> <li>Support farm-scale land use planning to improve site-level management and decision making around climate risk, including changed pastures, pasture management and crop suitability</li> <li>Implement programs to improve soil carbon/ organic matter levels in the North East as a measure to build resilience to climatic variability</li> </ul>			
TOURISM				
Tourism North East Strategic Plan 2016-17 – 2018-19 (Tourism North East, 2016)	<ul> <li>To lead innovation in the food, wine and beer space, creating a competitive differentiator for the High Country that drives tourism related visitation and yield opportunities throughout the region</li> <li>Work with industry to develop an offering that enables the High Country to take the lead in the agritourism space</li> </ul>			
Murray Region Destination Management Plan (Murray Regional Tourism, 2017)	• Improve the Murray's food and drink offer by encouraging primary producers to develop tourism infrastructure, promoting the use of local produce and the development of diverse and unique dining experiences			



# NORTH EAST LOCAL FOOD STRATEGY 2013 - 2022

Strengthening the local food system in North East Victoria