









Acknowledgements



We acknowledge the Traditional Owners of the Country on which we live, and play, Gumbaynggirr people of the Gumbaynggirr nation. recognise their continuing connection to land, waters and culture and we pay our respects to their Elders past, present and emerging.

We would also like to acknowledge and express our sincere gratitude to Bellingen Shire Council and the Australian and NSW Government for enabling the creation of this vision through the Commonwealth Disaster Recovery Funding Arrangements and extend our heartfelt thanks and appreciation to the 70 plus community members who contributed to creating this food resilience vision for Bellingen Shire. The aspirations and actions outlined in this vision represent a diverse cross section of our wonderful community and are both reflective and insightful.

At OzGREEN, we believe that informed, local people are best equipped to create solutions to the challenges they are experiencing.





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Executive Summary

The recent COVID19 pandemic has demonstrated that disasters can disrupt vulnerable food supply chains and impact a community's ability to access safe and affordable food. As disasters become more frequent, it is essential that people of Bellingen Shire work together to create a local food system that is flexible and strong enough to withstand and recover from disasters in a way that ensures acceptable, accessible and continuous supply of food for everyone in the community.

This report outlines eight food resilience themes identified by the people of Bellingen Shire including the urgency of climate change, the need to strengthen the local food system. the reasons for building a circular food economy, the desire to embrace regenerative farming practices, the incorporating importance of Gumbaynggirr food values into the local food system, the responsibility for ensuring that all local people have food security, the importance of community education and the need to establish and develop some coordinated and collaborative local food networks



The purpose of this report is to communicate Bellingen Shire's food resilience aspirations and to provide a set of priority actions, for the next ten years, that are both realistic and achievable. Ultimately, the vision aims to act as a guide to motivate and empower community members to get involved in a variety local food system activities that will contribute to building local food resilience.

We are highly optimistic about this vision and believe that if we work together as a community, we can create a resilient and sustainable food system for Bellingen Shire.



Methodology

The identified themes, aspirations and actions outlined in this food resilience vision are the direct result of an extensive community engagement process involving a diverse range of people living and working in Bellingen Shire.



The community engagement process applied the United Nations Food and Agriculture Organisations Sustainable Food Systems Framework and a variety of OzGREEN's participatory leadership community engagement tools.

Using the United Nations Sustainable Food System Framework and OzGREEN's award winning community engagement process, participants were encouraged to explore each component of the food system and reflect upon whether it was socially, environmentally and economically sustainable. Some of the food system factors examined included production, aggregation, processing, distribution. consumption, waste disposal, food support services, laws, regulations, socio-cultural norms, infrastructure, community assets and environment.

Opportunities to participate in the creation of Bellingen Shire's food resilience vision were advertised and promoted via social media, posters, flyers, local newspapers and email distribution networks and people were supported to contribute in a variety of ways including via surveys, telephone interviews, community workshops and written submissions. Each engagement method was designed to give food workers and community members the opportunity to express their local food system concerns, generate a vision for the future and develop actions that would help build future food resilience in Bellingen Shire. The identified themes, aspirations and actions outlined below represent a diverse group of people living and working in Shire who are motivated. empowered and committed to building a resilient local food system.



Local Food System in 2022

Strengths

Bellingen Shire is rich with clean, productive, fertile land. It has three diverse microclimates and good rainfall which supports large number of small to medium farms. production Agricultural important contributor to the local economy and our beef and dairy industries are our two biggest commodities. There are commercial kitchens located across Shire and a number the community halls that could be utilised for food related activities. There are also community gardens, local produce markets, community supported agriculture initiatives and informal food cooperatives operating within the Shire.

There is a strong interest in regenerative agriculture and local Gumbaynggirr people are informed, knowledgeable and actively engaged in a diverse range of community activities.



In general, residents are passionate and highly motivated to strengthen the local food system and there is a solid group of competent volunteers, charities and community groups who are committed to servicing local people experience frequent food insecurity. Currently there is significant public funding available to establish and develop innovative projects that a circular local food support economy and government agencies at all levels understand the urgent need to advance local initiatives that encourage future food resilience.



Challenges

Despite our strengths, Bellingen Shire is still highly reliant on a centralised and environmentally destructive global food system that supports monoculture, big business and highly industrialised agricultural practices.

There is significant loss and waste across the local food system and there is little coordination and collaboration between producers. processors, and consumers. Foods distributors produced in Bellingen Shire lack diversity and are unlikely to remain as viable in the future as temperatures increase, rainfall decreases and extreme weather events. like hailstorms, become more frequent. Food production inputs such as fertilisers and machinery often need to be purchased beyond the Shire and there is limited infrastructure to process and distribute food products locally. This makes operational costs high across all components of the food system, which are further exacerbated by frequent labour shortages. Local farmers are also aging and land prices are extremely high, forcing young people to move away in search of higher paid work beyond the food sector. Food legislation is bureaucratic and complicated, which discourages and disempowers people from land sharing, producing, processing and selling local food.









Concerns

Social

- Local food is too expensive for low socio economic groups
- Farmers are ageing
- Young adults are migrating to urban areas
- There are frequent labour shortages
- Farmers are reluctant to seek government funding and support
- There are limited mixed small scale farms.





- Food legislation and regulations are unfair and unhelpful
- Sharing or leasing land is difficult
- Local food supply is inconsistent
- Access to food is inequitable
- Low income earners experience regular food insecurity
- There is a lack of expertise and education related to food growing and food consumption
- Just in time supply chains are fragile and vulnerable
- There are not enough women farmers

Concerns

Economic

- Capitalist economic system is unfair and disadvantages small scale farmers
- Local food system infrastructure is inadequate
- Land prices are too high
- Food transport is expensive
- Labour is expensive
- Operational costs are high
- Marketing costs are expensive
- Organic food certification is expensive
- Competing with large industrialised food producers and multinational food companies is extremely difficult
- Many farms aren't viable
- A lot of agricultural land is underutilised for food production





Environmental

- Climate change
- Food waste
- Food loss
- Invasive plants
- Synthetic herbicides and pesticides
- Food miles
- Misuse of water
- Local water licenses are managed by State government who have no local knowledge
- Water scarcity
- Soil erosion
- Nutrient loss
- Loss of biodiversity
- Bio security and the introduction of new species and disease
- Drought
- Flood
- Hail
- Rising temperatures
- Insect loss
- Food packaging
- Monoculture



Change Ideas

Social

- Establish a local food council
- Develop a local food skills register
- Secure tenure and expand the local community gardens in Dorrigo,
 Bellingen and Urunga
- Operate a commercial garden with cafe and education hub attached
- Organise a festival with local producers and chefs to showcase local food.
- Explore Indigenous food resources and land management practices
- Establish a group of local food educators and develop an annual food education program that covers a range of diverse food related topics.





- Set up a mentoring program to educate and train people how to grow their own food
- Establish a program that encourages food farmer succession planning
- Provide young people with local pathways into agriculture
- Run regular farm tours
- Recognise and acknowledge local farmers through a community awards program or festival
- Encourage and allow farmers with large properties to lease land for food growing
- Establish a mobile bus food distribution program that incorporates additional services
- Expand the local food banks
- Allow people to grow fruit and vegetables on Council verges



Change Ideas



Economic

- Establish a food hub
- Establish supply agreements between local producers and restaurant
- Support group certification for organic farmers
- Establish supply agreements between local producers and restaurants
- Provide incentives to local businesses to purchase food from local farmers
- Preserve prime farming land for food production
- Construct a multi species abattoir or provide access to a mobile abattoir
- Establish and/or increase the frequency of produce markets in Dorrigo and Urunga
- Establish a local quality assurance system for local organic farmers (participatory guarantee system)
- Develop a local food brand for Bellingen Shire that showcases and demonstrates that the product has been made locally from local ingredients.

Environmental

- Use less packaging and explore sustainable packaging solutions
- Make bulk compost locally and redistribute back to the community to improve soil health
- Research how many farmers are in the Shire, what they are growing and where it is going
- Partner with local universities and encourage local farmers to participate in research opportunities
- Support farmers to develop and establish pilot projects that encourage diversification in food production.
- Set up a range of trial sites for growing food that may be more suitable climate change and create a system for farmers to track data.
- Govern water licenses at the local level
- Encourage food producers to participate in carbon farming initiatives

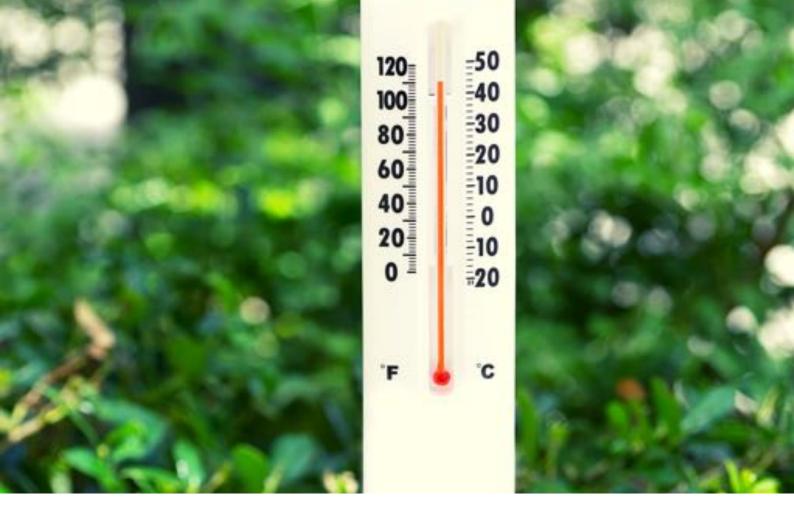






Key Themes





Climate Change

The impact of climate change on agriculture could result in problems with food security and may threaten livelihood activities upon which much of the population depends.

Ian Pearson (Futurist)



Background

It is becoming increasingly evident that Bellingen Shire's current food system cannot flourish and thrive in a world where temperatures and extreme weather events are predicted to increase and precipitation is forecast to decrease.

According to the NSW Office of Environment and Heritage (2014). average temperatures on the NSW North Coast have been steadily rising since around 1970 and are predicted to increase further into the future. In conjunction with the rise temperature, precipitation is projected to decrease during winter. These two factors will significantly impact local food production in Bellingen Shire.

In 2015/16, the total value of agricultural output in Bellingen Shire \$17m and the largest was commodity produced was milk, which accounted for 47.9% of the output followed by beef which accounted for 39.5% (Informed Decisions 2016).

The Intergovernmental Panel Climate Change (2019) states that climate change is highly likely to negatively affect food security by impacting food availability, food access, food nutrition and food stability. Climate change factors contributing to future food insecurity include reduced crop and livestock productivity, lower yields, poor crop viability, loss of livelihoods, reduced pollinators, more pests and disease, decreased food supply, increased food prices and disrupted food supply chains, including transport networks and storage facilities.





Research indicates that higher temperatures are likely to negatively affect both of these industries for a number of reasons including, but not limited to, less pasture growth, decreased access to quality feed, scarce water and limited access to shade which will in turn increase heat stress and susceptibility to disease and also lower reproduction rates (Hennessy et al. 2016).

It is therefore imperative that Bellingen Shire implement climate change adaptation strategies to ensure the beef and dairy industries remain financially sustainable and resilient while also identifying new opportunities to diversify the agricultural market by exploring other food crops and livestock that are more suitable to a warming region.







Our Vision Our local farms are viable and our food systems are resilient to the impacts of climate change. Our food systems and infrastructure are sufficient and adapted for the impact of severe weather, heat, storms and droughts. Our local food is healthy, accessible and affordable. We produce and consume food that has a low ecological footprint. We have a range of trial sites growing diverse species and the community is engaged and sharing information and observations. We produce food that is appropriate, clean, safe, sustainable and site specific for a changing climate

Climate Change Actions

2022 - 2032

- Run a local campaign to encourage local farmers to join the Farmers for Climate Change movement. See: <u>Farmers for</u> <u>Climate Change</u>
- Provide opportunities for farmers to access climate information. See:
 <u>Department of Agriculture</u>



 Seek out opportunities for local farmers and organisations to become involved in climate change research and development opportunities. See: DPI Climate



- Support farmers to develop and establish pilot projects that encourage diversification in food production. See: <u>Agrifutures</u>
- Create a system for local farmers to track data about food production trials. See: <u>Farm Trials</u>







A Local Food System

A local food system is place based, community centred, connected, inclusive, participatory, healthy and supportive of the local economy.

Anna Juodvalkis (Bellingen resident)



Background

A local food system encourages a collaborative approach to all components of the food chain, including sustainable food production, processing, distribution, consumption and waste management, with the aim of improving environmental, social and economic outcomes for a particular area.

To build food resilience, many communities are choosing to establish local food hubs that incorporate a physical building and a business management structure that oversees the aggregation, storage, processing, distribution and marketing of local food.



According to Community Wealth (2012), developing a strong local food system and establishing a local food hub will create jobs, enable direct marketing channels between food producers and consumers, increase income for farmers, keep money in the community, improve well-being and create new enterprises that turn vacant land into productive income earning spaces.







Local Food System Actions

2022 - 2032

- Research existing food hub models in Australia and overseas.
- Keep informed about the food innovation agri business and logistics hub project in Coffs Harbour. See Coffs Harbour Food Hub.
- Conduct an audit of what's produced locally, how it's produced, where it is processed and where it is distributed.
- Seek funding to establish a physical food hub that integrates all of the stakeholders identified in the audit.



- Investigate opportunities to establish community gardens on crown land and seek funding to establish gardens through the Crown Reserves Community Fund and/or continue to develop existing community gardens in Urunga, Bellingen and Dorrigo, ensuring that the land has long term tenure and security.
- Establish a local food cooperative for all members of the public.

 Develop a local food directory to raise the profile of Bellingen Shire food producers with wholesalers and consumers.



- Create a local farm gate food trail map of food producers.
- Seek funding and development approval for food processing infrastructure such as a mobile multi species abattoir, a bulk freeze drying facility, a pasteurising facility, a local abattoir and community supported agriculture.
- Create and compile a resource library for all things related to building a local food system.
- Investigate the feasibility of establishing local food procurement programs with social institutions like hospitals, schools and prisons.





Circular Food Economy

Food waste is an atrocity that is reducible, if not completely avoidable.

Stephen Haugh



Background

Our current food system generates significant waste and encourages people to extract and use resources without replacing them. The system also creates inequities in production and consumption which has negative social and environmental impacts. According to the Platform for Accelerating to a Circular Economy (2021), global resource use has tripled since 1970 and could double again by 2060 if we continue on the current trajectory. Currently we produce, process, distribute and consume food within an economic system that relies on infinite growth on a finite planet and this system is not sustainable, resilient or robust. A circular food economy, in contrast, aims to build a food system that regenerates resources and minimises waste. There are many benefits to transitioning to a circular food economy, some of which are outlined briefly below.

A circular food economy encourages regenerative farming which improves the environment, produces healthier food, creates higher skilled jobs and builds resilience to economic shocks such as price fluctuations and drought.

A circular food economy also prevents food waste and enables food byproducts to be which generates efficiencies, creates new enterprises and contributes to addressing inequity by finding solutions to redistribute surplus food. In order to develop a circular food economy it's important to first identify where food is being wasted and to reframe food waste and food byproducts as valuable resources. It is also important to invest in food waste reduction solutions and enable businesses to enhance their food value chains by accessing new and different markets.









Circular Food Economy Actions

2022 - 2032

- Research and document the local hotspots of food loss and waste
- Integrate food loss and waste into Council's policies and procedures.



- Seek funding for food loss and waste reduction solutions.
- Reframe wasted food and byproducts as valuable resources.



 Research and facilitate value add enterprises for food waste and farming byproduct.





Regenerative Agriculture

Regenerative agriculture provides answers to the soil crisis, the food crisis, the health crisis, the climate crisis and the crisis of democracy.

Dr Vandanva Shiva (Scholar)



Background

Regenerative agriculture is a system of farming principles and practices that increases biodiversity, enriches soils, improves watersheds and enhances ecosystem services (Wide Open Agriculture 2022).

Regenerative farming is holistic, interdependent, transformative, adaptive, evolving and appropriate to place.

Ultimately it aims to regenerate and restore that which has been lost and improve that which is still there. There are many new and old agriculture activities that constitute regenerative farming and fortunately many farmers in Bellingen Shire are already practicing some regenerative agriculture including, but not limited to, the more common practices listed below:



No-tillage or zero tillage

No tillage puts seeds directly into untilled soil and the residues of the previous crop are retained for mulch. The aim of this practice is to move as little soil as possible so that weeds are not brought to the surface to replicate and/or spead diseases.



Composting

Organic composts, fertilisers and bio amendments are used to encourage natural biological cycles and nutrient transfer. The aim of composting is to rebuild depleted soils and reduce reliance on synthetic chemicals.



Cover cropping

Cover cropping uses plants to protect and enhance the soil. It is sometimes grown specifically to be dug back into the soil as green manure. The aim of a cover crop is to increase soil quality, improve water retention, increase biodiversity and reduce soil erosion, weeds, pests, and diseases.



Managed grazing

Managed grazing incorporates time controlled rotational and holistic grazing methods that regularly move animals across the land to shave the ground cover, thereby encouraging photosynthesis, root growth and carbon sequestration.



Silvopasture

Silvopasture seeks to integrate trees and grazing livestock operations and enterprises on the same land.



Water mangaement

Regenerative water management methods include constructing interventions to slow the flow of water, fencing off waterways, implementing water reticulation systems for stock, rehydrating wetlands and investing in revegetation.

Regenerative farming has numerous ecological, economic, social and personal benefits including, but not limited to, improved soil health, increased biodiversity, better water quality, increased water retention, reduced farm overheads, more consistent returns, strengthened connections with the community and a joy and happiness that comes with the realisation that humans and nature are deeply interconnected.







Regenerative Agriculture Actions

2022 - 2032

- .Promote regenerative agriculture education opportunities at Southern Cross University. See <u>Southern Cross</u> <u>University Regenerative</u> <u>Agriculture.</u>
- Work with Southern Cross
 University to conduct local short courses in regenerative agriculture.
- Provide young people with opportunities to participate in activities such as local regenerative agriculture summer schools and local farm tours and field days.
- Encourage and subsidise Farmers to join Savory Institute. See:
 Savory Global
- Work with Inside Outside
 Management to run community education programs on regenerative farming. See: <u>Inside Outside Management</u>
- Encourage regenerative farmers in Bellingen Shire to join Land to Market and seek ecological outcome verification. See: <u>Land</u> <u>to Market</u>





- Develop a Sustainable Agriculture Strategy similar to Tweed Shire.
 See <u>Sustainable Agriculture</u> <u>Strategy</u>
- Develop a list of carbon farming consultants or aggregators to help farmers sequester carbon and navigate carbon farming administration and bureaucracy.
 See: <u>Aggregators</u>.
- Investigate carbon sequestration opportunities and encourage farmers to explore the feasibility of establishing an aggregate to secure new income streams through the carbon market. See:
 - <u>Cattle and Herd Management</u>
 <u>Carbon Farming Methods</u>
 - Feeding Nitrates to Beef
 Cattle Carbon Farming
 Method
 - Animal Effluent Carbon Farming Method
 - <u>Dairy Dietary Additives</u>
 <u>Carbon Farming Method</u>
 - Video





Gumbaynggirr Food Values

Australia has the oldest and most nutritious foods on Earth, Why are we not eating them?

John Newton - Author



Background

Most foods consumed in Bellingen Shire are those that were introduced by British settlers or immigrants from Europe and Asia. However, there is a growing awareness that native bush foods and Indigenous food systems are critical for building a local food system that is secure and resilient to the negative impacts of climate change as they do require the not amount of cultivation and irrigation that modern agricultural crops do.

As a Shire, it is therefore vital that Indigenous food sources and land management practices are incorporated into the local food system and that ancient local knowledge is captured and documented.

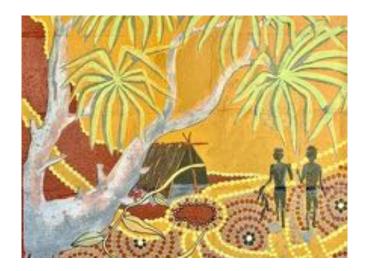


Image: Yarrawarra Cultural Centre

In order to achieve a local food system that includes and applies Gumbaynggirr foodways, it is important that non-Gumbaynggirr people first acknowledge and understand the devastating impact of colonisation and accept that some Gumbaynggirr food knowledge has likely been lost forever. It is also important that non Gumbayngirr people understand and appreciate that Gumbaynggirr culture is not fixed or static and is therefore subject to change and development, just like every other living culture. Lastly, non-Gumbaynggirr people need to be mindful not to expect Gumbaynggirr people to impart their knowledge to the broader community and that any information conveyed is a gift and something to be cherished.

Fortunately, the Gumbaynggirr people of the Gumbaynggirr Nation retain a strong and thriving culture and there are numerous resources that have already generously been shared.





Image:Lemon Myrtle



Gumbaynggirr Food Value Actions

2022 - 2032

- Meet with Gumbaynggirr Elders to discuss their interests and vision.
- Work with Elders to design systems that are run by local Gumbaynggirr people.
- Create opportunities for schools to work with Gumbaynggirr people to establish Indigenous food gardens.
- Learn from existing national resources and initiatives including, but not limited to:
- Establish and promote a local resource library including, but not limited to the books recommended by Australian Native Food and Botanicals. See <u>Books</u>
- Promote existing bushtucker and medicine tours and educate the community about local bushtucker
- Work with Gumbaynggirr organisations to run Cultural burning and Caring for Country workshops

Australian Native Food and Botanicals

Australian Native Food and Botanicals is the peak national body which represents all interests in the rapidly-growing Australian native food and botanical sector. The organisation supports sustainable development of the sector by facilitating research and innovation, engaging ethically with Traditional Owners. See Australian Native Food and Botanicals

The Orana Foundation

The Orana Foundation seeks to protect and preserve thousands of years of food knowledge and cultural heritage through research, innovation and enterprise. See: The Orana Foundation

Black Duck Foods

An Indigenous social enterprise committed to traditional food growing processes that care for Country and return economic benefits directly to Indigenous people. See Black Duck Foods



Image Finger lime

- Work with the Gumbaynggirr community and local food retailers and restaurants to incorporate Gumbaynggirr language into local food products and menus
- Establish bush tucker gardens within existing community gardens and secure additional public spaces to create bushtucker gardens





Food Security & Equity

There's enough on this planet for everyone's needs, but not for everyone's greed.

Mahatma Ghandi



Background

There structural are many inequalities across society, including in Bellingen Shire, that make some groups more susceptible to food insecurity than others. Vulnerable groups include the unemployed, single parent households, low-income earners. rental households. Indigenous people and young people. Food insecurity exists when safe and nutritious foods are unavailable, and/or when people are uncertain or unable to access food in socially acceptable ways (Rosier, 2011).

"Food security exists when all people have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life"

(FAO 2003)



According to the FAO et al (2021) there are many reasons why some people may not be able to acquire and consume a nutritious diet. Some of these reasons include lack of money to buy food, lack of access to public or private transport, limited home storage, inadequate cooking facilities, scarce preparation space, poor food knowledge and skills, limited time and suboptimal mobility to shop for and prepare food. Other factors that contribute to food insecurity include the location of food outlets as well as the price, quality and variety of foods within stores. (Nolan et al. 2006).







Food Security Actions

2022 - 2032



- Work with the Neighbourhood Centres of Bellingen Shire to become a drop off point for surplus food.
- Work with OzHarvest to distribute food locally.
- Seek funding for a mobile van with food donations, showering and laundry, facility and counseling services to reach all areas of Bellingen Shire.
- Seek funding to establish and support a local fruit squad to harvest and distribute surplus clitrus.





Community Education

The first step towards change is awareness.

Nathaniel Brandon



Background



Establishing and implementing a broad education and awareness program related to the production, processing, distribution and consumption of local food has the potential to empower communities, industries and individuals to undertake actions that build food resilience in Bellingen Shire.

Based on extensive consultation with the community, local food education initiatives should seek to educate community members about the impacts of climate change in relation to the food supply chain and highlight the benefits of a local food system, a circular food economy, regenerative agricultural practices, Gumbaynggirr food values, food security and food networks.







Community Education Actions

2022 - 2032

- Present local agricultural research to local farmers in clear easy to understand language
- Provide opportunities for local farmers to engage in agriculture extension and education activities
- Run a unified campaign to educate people about the benefits of buying and consuming local food.



- Seek funding to run a series of experiential events such as seasonal food fairs, harvest festivals and long lunches to encourage people to understand where food comes from.
- Establish school based programs that link students with producers.



- Create and promote a shire wide food communication social media page to share food recipes, storage, methods, fermentation.
- Educate people about the local food system and local food chain.
- Run regular educational farm field days and tours.



Local Networks

If you want to go far, go with others.

African Proverb



Background



The creation and formation of food networks at a local, regional, state and national level is critical for both building and maintaining a resilient local food system.

There are many types of initiatives that encourage the formation of networks including, but not limited to, farmer and producer networks, community supported agriculture networks, urban agriculture networks, direct farm to retail networks, food cooperative networks and online networks.

Establishing local food networks across Bellingen Shire will encourage the sharing of local knowledge and information, strengthen connections and raise the profile of various food producers, processors, distributors and retailers.







Local Network Actions

2022 - 2032

• Establish an agrifood/producer network to enable greater connection and knowledge.



- Establish a local marketing cooperative to help lower costs associated with marketing local food.
- Establish a network for regenerative and organic farmers.



- Establish a local farm to school network where local schools buy and feature locally produced, farm-fresh foods such as dairy, fruits and vegetables, eggs, honey, meat, and beans in their canteens and also provide opportunities for families to purchase local foods.
- Facilitate workshops to enable different stakeholders in the food chain to understand each others challenges and barriers and to encourage mutual collaboration.



Existing Food Related Resources and Assets in and near Bellingen Shire



Climate Change

The Bellingen Shire Climate Emergency Program and Climate Emergency Response Framework 2020 - 2030

On 27th March 2019, Bellingen Shire Council formally declared a climate emergency. The declaration serves as a call to take urgent action in rapidly reducing our carbon emissions locally and globally. See <u>Climate Emergency Response</u> Framework

Development of a Bellingen Shire Community Climate Action Plan

Bellingen Shire Council is developing a community climate action plan during the year of 2022. For more information contact the Council's Manager - Sustainable Environment & Waste on 02 6655 7300





A Change Model for Food and Agriculture

Adapt NSW have worked closely with NSW North Coast communities to develop the following food and agriculture change model. See page ?? of Adapting to Climate Change Regional Vulnerability and Assessment/North-Coast

NSW Primary Industries Climate Change Research Strategy

The NSW Primary Industries Climate Change Research Strategy outlines a number of opportunities for local farmers to become involved in climate change adaptation and mitigation projects. See Strategy



A Local Food System

Bellingen Community Markets

One of the oldest, largest and most diverse markets on the mid north coast of NSW selling variety of local fresh produce every third Saturday of the month at Bellingen Park. See <u>Bellingen Community Markets</u>

Bellingen Farmers Markets

A weekly Wednesday afternoon market at Bellingen Park selling a variety of local produce. See <u>Bellingen Farmers Markets</u>

Bellingen Seed Savers

A group of edible garden enthusiasts that organise local garden visits and seed saving working bees. See <u>Bellingen Seed Savers</u>





Bellingen Showground Commercial Kitchen

A commercial kitchen located in the luncheon pavilion that's available for hire for \$30 per hour: See <u>Bellingen Showground Commercial</u> Kitchen

Bello Food Box

A local food initiative that delivers boxes of fresh organic food to people living on the Mid and North Coast of NSW on a weekly basis. See <u>Bello Food Box</u>

Buy Local Card

A local gift card that can be used at many cafes, restaurants and food retailers in Dorrigo, Bellingen and Urunga. See <u>Buy Local Card</u>



Coffs Coast Harvest

A local resource that showcases local food producers and publishes local food seasonal guides. See <u>Coffs Coast Harvest</u>

Dorrigo Saleyards

A livestock auction for cattle sellers and buyers in Bellingen Shire. Run every second Wednesday. For more information contact the livestock managers at Elders Real Estate on 6692 5000 or Ray White Real Estate on 6657 1777.

Dorrigo Showground Commercial Kitchen

A commercial kitchen located in the luncheon pavilion that's available for hire for \$20 per hour or \$80 per day plus power and water.



Made in Dorrigo

An artisan and produce market held three times a year in Dorrigo. See <u>Made in Dorrigo</u>

Newlife Farm

A regenerative farm in Sapphire Beach that grow seasonal produce and sell it direct to the community. See <u>New Life Farm</u>

North Bank Community Gardens

A five acre community garden containing an abundance of food and a variety facilities and services to grow food and run community workshops. See: North Bank Community

Gardens

North Arm Farms

Three organic small scale farmers in the Nambucca Valley who sell and deliver food to the local community. See <u>North Arm</u> Farms

Synchronicity Farm

A social enterprise involved in a range of micro enterprises centred around growing food, sharing knowledge and feeding people. See <u>Synchronicity Farm</u>

Urunga Riverside Markets

A local market on the second Sunday of every month. See <u>Urunga Riverside Markets</u>

Valley Ag and Organics

An agent for organic producers that help farmers get their produce to market by negotiating prices, arranging transport, administering accounts and providing packaging advice. See <u>Valley Ag and Organics</u>



Circular Food Economy

Biomass Solutions

An innovative waste treatment facility which processes organics (green waste and food waste. The compost made is available for purchase from the facility. See <u>Biomass Solutions</u>

Food Smart Program

A family friendly program that enables households to look at their food waste habits. See <u>Food Smart Program</u>

Let's Go Composting Coffs Coast



An educational initiative between, Coffs Harbour, Bellingen and Nambucca Council's to encourage green bin use including free food waste caddys for residents. See <u>Lets Go</u> <u>Composting Coffs Coast</u>





Scraps to Soil

A program that offers composting community workshops and online composting tutorials. See <u>Scraps to Soil</u>

Your Business is Food

A free program providing information, advice and resources to reduce the amount of food you throw away in your business. See <u>Your Business is Food</u>

Green Leaders Program

A mentorship program that supports students, educators and schools to develop a student-led waste reduction project. See <u>Green Leaders Program</u>



Regenerative Agriculture

Biodynamics Agriculture Australia Ltd

Biodynamics is practical and holistic technique that regenerates soil and supercharges growing. Based in Bellingen this enterprise offers a wide range of products for home gardeners and farmers. including soil activators, specialised pastes, liquid blends and kits for home gardens and compost making. See <u>Biodynamics</u>
<u>Agriculture Australia Ltd</u>



Based in Dorrigo, biodynamics2024 runs regular biodynamics workshops. See Biodynamics 2024

Regenerative Agriculture Alliance

A collaboration of Australia's leading researchers and practitioners in regenerative agriculture, whose aim is to improve the holistic health and wellbeing of Australian landscapes, farmers and communities through regenerative agricultural research, education and practice founded by Southern Cross University. See Regenerative Agriculture Alliance





Regenerative Agriculture Mentorship Program (RAMP)

A mentoring program aims to facilitate and support farmers to make the transformational change from traditional to regenerative agricultural principles and practices. See Regenerative Agriculture Mentorship Program

Southern Cross University Bachelor of Science (Regenerative Agriculture)

A unique first of its kind degree that examines human ecology, agroecology, regenerative agricultural practices and soil management. See <u>Regenerative Agriculture Courses</u>



Gumbaynggirr Food Values

Arrawarra Sharing Culture

An educational initiative managed by Garby Elders that seeks to educate future generations of Gumbaynggirr people as well as the wider community about traditional foods and harvesting methods. Although the information is primarily focused on Moonee to Wooli and inland to the east bank of the Orara River, the methods and sustainable principles that are described are relevant to the broader region. See Arrawarra Culture Project Fact Sheets

Backarindi Bushfoods

Owned by Mudyala Aboriginal Corporation, Bakarindi Bushfoods grows finger lime trees, riberries, Davidson plums and lemon and aniseed myrtle. See Bakarindi



Image Warrigal greens

Barbushco

A certified organic farm located 40km south-west of Port Macquarie. Barbushco cultivates a diverse range of organically grown indigenous foods, including bush dukkah, lemon tea tree oil, and a large selection of lemon myrtle products. See Barbushco



Boggy Creek Natives

A Bellingen based Australian native plants business that grows and sells a vast array of bush tucker plants. The owner is extremely knowledgable about what can and can't be eaten and his pllants can be bought at Bellingen Community Markets every third Saturday of the month. See <u>Boggy Creek Natives</u>

Clayton Donovan

Clayton Donovan grew up on Gumbaynggirr Country and started learning about native foods when he was just four years old. He has run restaurants in the region and is an internationally acclaimed chef who starred in the 2014 ABC series, Wild Kitchen. This highly engaging and informative series can be accessed on Apple TV. See Wild Kitchen





Coffs Harbour Local Aboriginal Lands Council

A local organisation that run a variety of programs and have plans to make a bush tucker video and establish a community garden of Gumbaynggirr foods. See <u>Coffs Harbour LALC Business Plan</u>

Dandarrga Native Nursery

Run by Landcare and based in Dorrigo, the nursery runs regular community education workshops and supplies a range of native bushtucker foods including Black Apple, Tamarind, Rose Myrtle, Daisy Yam and Sandpaper Fig. See <u>Dandarrga Native</u> <u>Nursery</u>



Dorrigo Plateau Aboriginal Lands Council

A local organisaiton representing the interests of Gumbaynggirr people on the tablelands who are interested in exploring partnership opportunities that build food resilience and security for those in their community. See Dorrigo Plateau Aboriginal Lands Council



Garambirla Creek Walk at North Coast Regional Botanic Gardens

A signposted, self guided 1.5km
Garambirla Creek walk at the North
Coast Botanical Gardens in Coffs
Harbour showcases plants used by
Gumbaynggirr peoples for food, drink
and medicine. See North Coast Regional
Botanic Gardens

Gumbaynggirr Jagun Aboriginal Corporation

A community group that aims to maintain the integrity of the Gumbaynggirr Dreaming and its place in the world while strengthening cultural practice in a way that is relevant for today. The organisation offers a range of services including Gumbaynggirr bush ranger training that involves creating and maintaining a garden that produces Gumbaynggirr Jagum Aboriginal Corporation

Gumbaynggirr Market Place: Eating the Rite Way

A Facebook page where people can share information about Gumbayangirr food values. See: <u>Gumbaynggirr Market Place</u>



Gumbaynggirr Rainforest Tours at Dorrigo National Park

Gumbaynggirr led tours that focus on traditional foods. The aim of the walks is to teach people how to sustainably care for our rainforests' rich resources. See Dorrigo Rainforest Centre



Image Davidson plum

Muurrbay Aboriginal Language and Culture Co-operative

Supports Gumbaynggirr people to revive and maintain their language and culture. They have a publication titled Gumbaynggirr Bijaarr Jandaygam, Ngaawa Gugaarrigam Gumbaynggirr Dictionary and Learner's Grammar which enables people who work with food to incorporate Gumbayngirr language into their material. See Muurrbay Aboriginal Language and Culture Co-operative

Pipers Creek Grove

A certified organic bushfood plantation situated near Kemspey that specialises in Australian Blood Limes, Davidson Plums, Illawarra Plums, Aniseed Myrtle, Lemon Myrtle and Cinnamon Myrtle which are harvested fresh to order. See <u>Pipers Creek</u> Grove



Yarrawarra Aboriginal Cultural Centre

Bushtucker, Medicine and Tasting tours where participants can learn about local native foods and ancient medicines. See <u>Yarrawarra Aboriginal Cultural Centre</u>



Image Kangaroo meat



Food Security

Bellingen Lifehouse Pantry

located at the rear of the Lifehouse Op Shop on the main street of Bellingen, open from 10am-12pm each Tuesday and Friday. The pantry provides a variety of high quality, affordable grocery items for those who are pension or healthcare card holders. Complementary bread, fruit and vegetables are provided with all purchases over \$10.

Neighbourhood Care Network

A network of neighbours helping neighbours including delivery of food to those who are unable to access it easily. See Neighbourhood Care Network

Dorrigo Life Springs Op-Shop and Pantry

Located at 71 Hickory Street, open every Thursday from 10am to 1pm,





Neighbourhood Centres of Bellingen Shire

The Centres are located in Urunga,
Bellingen and Dorrigo and offer a range of
services including the Cupboard of Plenty
in Bellingen which is a small self serve
pantry made up of donations by the
community and the Bowl of Plenty which
provides a free lunch for community
members in Bellingen on the second and
fourth Wednesday of the month in the
Senior Citizen Room and the first
Wednesday of the month at Urunga
Neighbourhood Centres of Bellingen Shire

Urunga Lifehouse Pantry

Located in the arcade next to the laundromat, open most of the day on Thursday and also Friday morning.



Community Education

Coffs Coast Food & Wine Festival

An annual festival that runs food related workshops and showcases local produce and restaurants. See <u>Coffs Coast Food & Wine Festival</u>



TAFE Courses

TAFE offers a range of food growing and food production and processing courses. See <u>Agriculture Courses</u> and <u>Labratory</u> and Food Science Courses

Our Living Coast

A joint project run by Coffs Harbour, Nambucca Valley and Bellingen Shire Councils that develops local resources and lists local activities that encourage people to live and eat sustainably. See <u>Our Living</u> <u>Coast</u>





Community Networks

Bellingen Fresh Food Exchange

An online group where people can share their surplus produce with other people in the community. See <u>Bellingen Fresh Food Exchange</u>

Bellingen Organic Gardening Group

An informal group that meets on the first Friday of every month to visit gardens, swap plants, and share knowledge with each other. See <u>Bellingen Organic Gardening</u> <u>Group</u>

Bellingen Valley Surrounds Poultry

An online group to buy, sell, swap and discuss poultry. See <u>Bellingen Valley</u> Surrounds Poultry



Farming Together Program

A Southern Cross University program that encourages collaboration to address the social, environmental and economic challenges faced by Australian rural and regional communities. See <u>Farming</u> <u>Together Program</u>



Professional Fishers Association

A cooperative based in Coffs Harbour that represents a voice for members of the professional fishing industry in NSW. See <u>Professional Fishers Association</u>

Urunga Growers

An informal group where gardeners and farmers can show, sell, swap and trade, their seeds, herbs, vegetables, fruit and plants with others in the area. See <u>Urunga Growers</u>



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Food can be a vehicle for social change. It brings people together in a way that very few other activities can.