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BROOME

Grown Local Foods Network:

the Kimberley's real food web

Australian Government

National Landcare Program

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Acknowledgement

We acknowledge the Elders and families of Australia's First Nations' people, the original custodians of this land.

We pay our respects to the Elders past, present and future - for they hold the memories, the traditions, the culture and hopes of Aboriginal Australia.

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Summary

Acknowledgement to responders

This project would not have been possible without the generous and open contributions of those individuals and businesses that responded to our initial appeal for contributors. Their time and willingness to participate cannot be underrated, sometimes divulging commercial-in-confidence information which I hope has been treated with due respect.

It should also be noted that the project direction has largely been guided by those that responded. That's not to say that those that didn't respond weren't willing to participate. In some cases it was simply that they were out of contact, dealing with personal issues, or complying with company policy. The results of the study though are inherently influenced by those that chose to respond.

This study has been commissioned by Incredible Edible Broome to map the supply chain around local food availability. From this exercise, the future objective is to address the challenges that inhibit maximum local food accessibility for locals.

The study is set in the Kimberley region of Western Australia. A geographically vast and sparsely populated area, it has a challenging climate, with a cool dry season from April to September and a hot humid wet season from October to March. Despite the challenges, an array of seeds and grains, fruits and vegetables, beef and seafood are produced. Fifty per cent of the population identifies as Aboriginal or Torres Strait Islander, and there have been other cultural influences through history such as Japanese, Malay, Filipino, Chinese, Timorese, and Koepanger.

The method for the study is been based on a toolkit developed in England, and adapted to suit. Local is defined as Broome, Derby, the Dampier Peninsula and Bidyandanga. The definition of food includes plant-based, organic or non-organic bushfood, fruit, vegetables, honey, and beef. A set of topics was documented to prompt consistency during an interview.

Suppliers and buyers of food were approached, and if agreeable, an interview

LOCAL =
BROOME
DERBY
DAMPIER PENINSULA
BIDYDANGA

20 INTERVIEWS
12 SUPPLIERS
7 BUYERS

MORE DEMAND
CONTINUITY OF SUPPLY

11 RECOMMENDATIONS

was conducted with responses noted. Responses were applied to an Excel spreadsheet and totalled. This has formed the basis of the study.

In total, 20 respondents were interviewed which included twelve suppliers and seven buyers across Broome, Derby, and The Dampier Peninsula. In all there were eight community-based enterprises, 14 commercial businesses, there were 122 full-time employees of which 90% are local. Of those respondents that answered the optional discussion point of annual turnover, the total was $3,747,500.

Suppliers

Suppliers provide to private locals, independent shops, local markets, wholesalers, volunteers and online. Farm shops and box schemes are not used.

SUPPLY
0 TO FARM SHOPS
0 TO BOX SCHEMES
3 TO LOCAL MARKETS

Produce sold locally varies between 0-40% and 81-100%.

Benefits of local marketing include educating the community, the joy on locals' faces, health benefits to locals, ease of marketing, receiving feedback from clients, no freight, keeping costs down, being your own boss, providing a different product, and providing a fresh product.

In terms of the challenges growers believe that consumers are unaware of what fresh food tastes like, that it can cost too much, that it lacks the convenience and is too seasonal for the general public.

Other challenges reported by suppliers consist of freight costs, seasonal challenges, distance, lack of government support and political will, providing large-enough quantities and continuity of supply.

Indirect benefits are categorised as environmental or community benefits.

A local environmental benefit from the bushfood suppliers is stated as inherent as they harvest native plants. Other benefits are that they are organic, attract fewer food miles, improving the local habitat by planting natives with their other fruit and veg.

Benefits to the community are around supporting local businesses, health benefits, proudly producing a handmade product, education on Kimberley plants and bushfood, education on food more broadly, talking to people about growing fresh food, and donations of product.

Future models include less corporatism and fewer

AS SINGLE PRODUCT ENTERPRISES GROW THEY SEEK MARKETS FURTHER AFIELD

costs; others report that it would only work if working with nature or the region had kinder weather. Some reiterate that customers require knowledge of what good food tastes like. Other ideas include a cheap distribution centre; one thought that alternative off-season / wet season income was very important.

Buyers

Buyers include produce retailers, distributors, restaurants, wholesalers, and those sourcing for box schemes.

Seven buyers were interviewed and all were from the Broome area. One buyer represents two different buyer organisations. Three buyers identify as distributor, one is a retailer, one is a wholesaler and two are in the restaurant / café trade. One supplier's secondary business is as a buyer.

Four buyers declare they are community organisations, whilst five identify as commercial. Two declare as both community and commercial.

There are no buyers officially certified as organic, whereas two have some form of quality assurance.

Two of the seven buyers buy bushfood or bushfood products. Six buyers require both fruit and vegetables, with those in the restaurant trade also seeking meat sources. One buyer does not source fresh produce at all, but does source organic.

Five buyers source their produce from Perth, whilst two source locally where possible.

All seven buyers say that they would prefer to source local and / or organic if possible

Produce was sourced locally most commonly 21 to 40% of the time or 81 to 100% of the time.

The buyers consist of 13 full-time employees (including owner / operators), four part-time employees and 18 casuals.

The employees were deemed 87% local. The estimated annual turnover of responding buyers was $3,225,000.

Consistent with the suppliers, benefits of local produce predominantly include freshness, however, no freight, less packaging, avoiding the supermarket and health benefits to locals also feature.

BUYER CHALLENGES=
FREIGHT COSTS
CONTINUITY OF SUPPLY
LACK OF COORDINATION

Freight costs, continuity of supply and lack of coordination feature as challenges to buyers.

The buyers acknowledge the environmental benefits of local produce.

Benefits to the community include support for local growers, providing options, health benefits and donations of product for community events.

Buyers want to see more buyers. They also want larger quantities, continuity of supply and they need

suppliers to be professionally run. A central place for information is emphasised. One thought storage might be an issue.

The produce landscape and supply chain has changed over the past 20 years from numerous smaller growers supplying local, to large-scale commercial growers producing for a broader domestic and international market. Produce of exacting standard goes to Perth to be freighted back to the supermarkets where product placement for locally-grown food is difficult to secure.

The medium-sized commercial growers have alternate marketing avenues including to the local Broome and Derby markets, online, and to wholesalers. Produce is sold locally between 0-40% and 81-100% of the time, indicating that suppliers just keep a small proportion for the local market, or rely entirely on local buyers.

The buyers' data shows that some buyers with larger turnover only source up to 40% locally, pointing to an opportunity for future increased local supply for mixed product particularly.

Suppliers want to see more people farming and more demand. Current growers do warn though of increasing costs for water and freight, with government support requested.

The dry season is the main tourism season in the Kimberley so there are opportunities for increased sales and more workers

Some suppliers have off-season income, whereas others provide produce throughout the wet season. One supplier interviewed finds it difficult to work with the seasons. Other supplier challenges include balancing work roles - tending the crop, marketing and selling the product, and maintaining or improving their business to meet their vision.

Employment numbers from respondents including full-time, part-time and casual jobs totals 192 people across Broome and Derby, and are 90% local.

There is over $3.5 million contributing to the local economy.

Other contributions of suppliers to the local community include supporting local businesses, donations of product, and supporting youth-at-risk. There is a tourism aspect to providing local food through educational opportunities on Aboriginal culture and bushfood.

Of course there are the physical health benefits of local, fresh food consumption and the opportunity to educate people on the taste and nutrients provided.

One buyer visits and talks with people who are largely housebound.

Environmental contributions include providing native food, providing organic food, fewer food miles, and improved habitat.

Freight costs concern both suppliers and buyers, as

does continuity of supply and cost of fresh produce for customers.

Lack of coordination concerns buyers.

Suppliers are concerned about rising costs of producing their products; freight, water and government audits.

The supplier concern of customer mindset includes that the general public do not know what real food tastes like.

Larger quantities and more demand are solutions shared by both the suppliers and buyers.

A central place for information is also shared by both suppliers and buyers.

The appeal for less corporatisation and more government support is reiterated by both suppliers and buyers.

A cheap distribution centre is requested by the buyer.

Suppliers are calling for buyers to understand good food.

Working with nature and kinder weather are the seasonal solutions offered by suppliers.

Storage is also perceived as a potential issue by buyers. This is a highly relevant point in any fresh food venture in the Kimberley. Refrigeration and refrigerated transport are vital in the extreme conditions throughout the study area.

Recommendations are based around a multi-pronged, scalable approach.

Recommendation 1
Survey the public appetite for local, fresh food

Recommendation 2
Ascertain both the large retail chains' and independent supermarkets' openness to place local products

Recommendation 3
Ascertain local and state government's policies on local food supplies

Recommendation 4
Investigate models that are successful including online tools

Recommendation 5
Investigate the cooperative model and possible affiliations with supporters of locally-produced food

Recommendation 6
Investigate freight costs

Recommendation 7
Explore online formats and tools

Recommendation 8
Interview larger suppliers and potential produce availability

Recommendation 9
Explore community gardens and potential produce coordination

Recommendation 10
Speak with the buyers to ascertain needs

Recommendation 11
Provide education on healthy food and confirm the food / health / wellbeing link

Introduction

Context, culture, climate

The Kimberley is Western Australia's (WA) most northern region, and is generally considered one of the most isolated places on Earth. Bordered by the Pilbara region to the south and the Northern Territory to the east, the Kimberley coastline is approximately 2,500 kilometres in length with the Timor Sea to the north, and the Indian Ocean to the west. (Rangelands NRM, 2018) The 424,517 square kilometre region is closer by air to the significant global markets of China, Singapore, Indonesia and Malaysia, than it is to Perth, WA. (Department of Planning Lands and Heritage, 2019). The Kimberley population ebbs and flows between wet season and dry season with its tourism, but in 2019 the Kimberley had an estimated residential population of 35,901. (Kimberley Development Commission, 2020).

The climate in the Kimberley varies from tropical in the north of the region, to savanna grassland in the central and west (using a modified Köppen classification system). (Bureau of Meteorology, 2016). There are two distinct seasons: wet and dry. The wet season from October to March is characterised by tropical rains, high humidity and the potential for cyclones. This results in access issues for people and businesses in the Kimberley with roads periodically impassable. The dry season, from April to September is a cooler and substantially less humid time of year and an opportunity for activity in the region's communities and industry including the pastoral and agriculture industries. (Kimberley Development Commission, 2020). In terms of cropping, the dry season timing aligns with the international markets and is an opportunity to provide produce that is out of season in more temperate zones, thus ensuring continuity of supply.

Arguably the foremost mainstream agricultural area in the Kimberley is the Ord River Agricultural Area in the East Kimberley. Sunflower, safflower, maize, chickpeas, soybean, chia, sorghum, quinoa and millet are just some of the seeds and grains produced. (Kimberley Development Commission, 2020). There, and more broadly throughout the region melons, mangoes, bananas, citrus, and niche market vegetables are grown successfully. (Buy West Eat Best, 2021). This array of produce can be grown in the harsh climate due to the introduction of intensive centre pivot and taped irrigated systems. (Kimberley Development Commission, 2020). These irrigation methods also support fodder production for the pastoral industry for which there are over 90 current leases. (Kimberley Development Commission, 2020). The seafood industry has expanded with the Kimberley Aquaculture Development Zone (KADZ) near Derby declared in 2014. (Department of

Primary Industries and Regional Development, 2020). The KADZ is the original site for the Cone Bay Barramundi farm managed by Marine Produce Australia. Other fish being considered for farms in this zone, which sits in the Buccaneer Archipelago, include thredfin salmon (or king salmon), cobia (black kingfish) and triple tail (jumping cod). (Marine Produce Australia, 2020). A rock oyster industry has also been mooted for the Kimberley with aquaculture production for human consumption expected to grow by more than 30 per cent this decade. (Government of Western Australia, 2020).

Native bush food from the region is becoming popular in the broader community with examples such as gubinge (also known as the Kakadu Plum) recognised as a Vitamin C superfood (Buy West Eat Best, 2021), and the green plum which has been found to have a high level of folate compared to commercially available sources. (ABC News, 2020).

There are four local government areas in the Kimberley: Broome, Derby/West Kimberley, Halls Creek, and Wyndham/East Kimberley. (Department of Planning Lands and Heritage, 2019). The Shire of Broome accounts for over 40 per cent of the region's population. The region is culturally rich with approximately half the population identifying as Aboriginal or Torres Strait Islander. (Department of Primary Industries and Regional Development, 2017). There are also Japanese, Malay, Filipino, Chinese, Timorese, and Koepanger influences. (Department of Planning Lands and Heritage, 2019). Since these areas share a climate similar to the Kimberley, and are geographically close, introductions of fresh produce associated with these cultures has occurred along with European influences.

Scope

Incredible Edible Broome

Incredible Edible Broome (IEB) is a community initiative that has been awarded a National Landcare Smart-farms Grant for their Grown Local Foods Network (GLFN) project.

IEB and the GLFN aim to strengthen, support and promote a local food network with public access to fresh produce, including value-added products. The grant awarded supports several activities toward this aim; one of these activities is to map the local food linkages; building a picture of local producers, suppliers, consumers and other relevant businesses. This not only illustrates where food grown locally is reaching locals, but also where challenges are presented, deterring maximum local food availability. Ideally all parties along the supply - demand continuum have the opportunity to participate.

Defining local

As outlined above, the Kimberley region of Australia is vast. Since IEB is Broome-based, it is logical the GLFN project concentrates on Broome, however other geographically adjacent West Kimberley areas are included. Consequently 'local' is defined as Broome including the Dampier Peninsula, Derby, and south to the Bidyadanga area (see Figure 2). This expanse encompasses both the Shires of Broome and Derby / West Kimberley. The Ord irrigation project near Kununurra requires a project tailored to its particular needs and is not included within this GLFN project.

Defining food

In this investigation, 'food' includes plant-based bushfood, fruit, vegetables, honey, and as the region has a well-established cattle industry, beef is also included. Seafood was not included.

Both organic and non-organic produce is included (see Table 1). Value-added or lightly-processed foods are also included if their main ingredient is a local product.

LOCAL =
BROOME
DERBY
DAMPIER PENINSULA
BIDYDANGA

There is a broader growing body of evidence connecting wellbeing and nature. This is known as biophilia. Although this perspective is addressed where respondents have cited it, this phenomenon is not discussed in any depth in this study.

Figure 1: Local bushfood products at Broome Natural Wellness

Prior research acknowledgement

The concept and the method of this project are loosely based on the Mapping Local Food Webs Toolkit by the Campaign to Protect Rural England (The Countryside Charity (CPRE), 2019). The Countryside Charity has generously made the toolkit freely

available for those that wish to use it.

The toolkit was developed for a relatively small geographic area where there is a large population and many paddock to plate industries. For this investigation, the method, and more particularly the categories have been adapted to suit Western Australia's remote and sparsely-populated large geographical area.

The broader steps of the toolkit have essentially been followed.

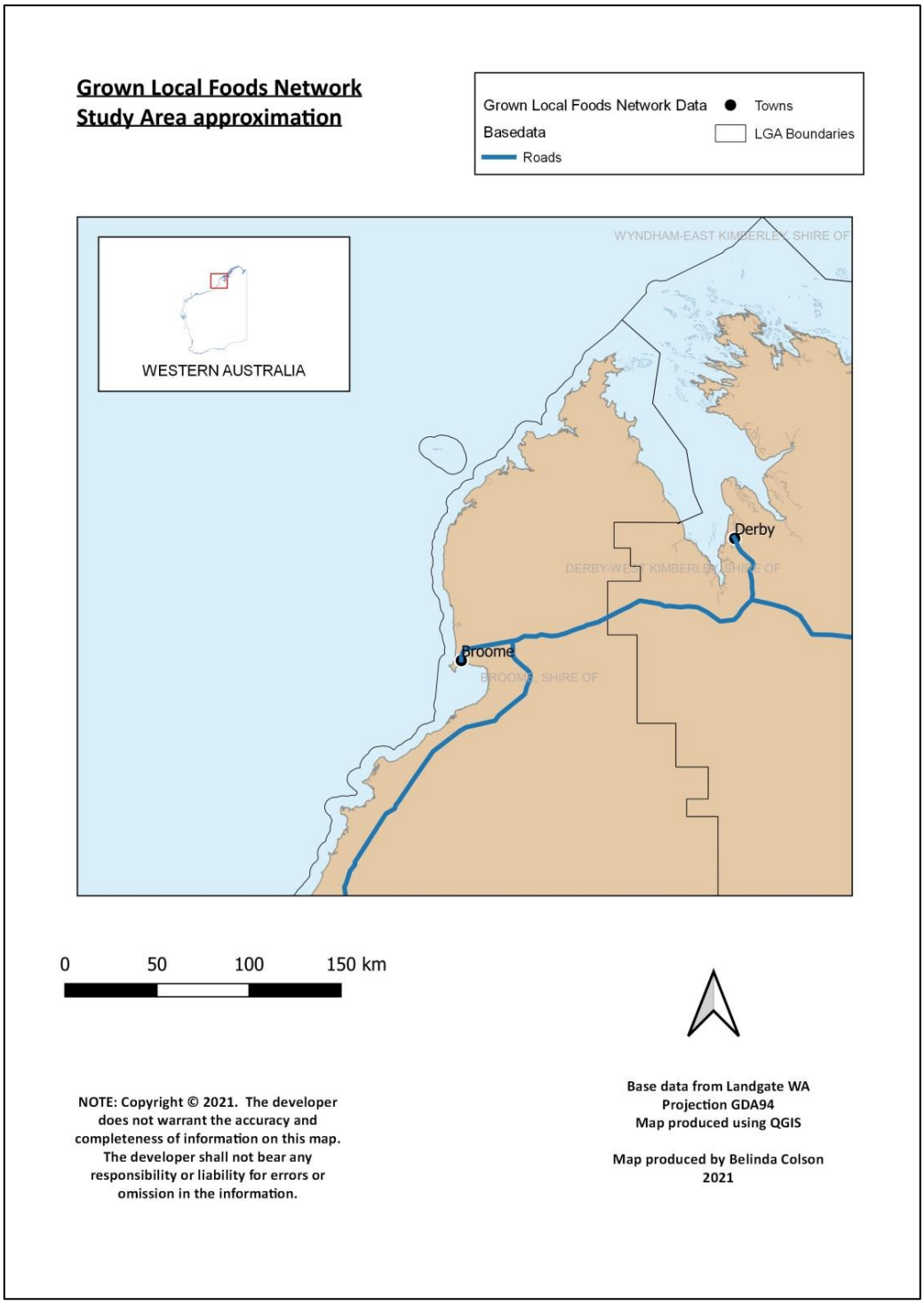

Figure 2: Grown Local Foods Network study area

Method

Determining potential interviewees and making contact

After defining both the 'local area' and 'food', the Chairperson of IEB and the author brainstormed local food producers and others along the supply chain.

Google, websites, Facebook, LinkedIn, word-of-mouth were all methods employed to gather contact details of potential interviewees. Some approaches were completely opportunistic. An introductory letter from IEB and permissions sheet was sent where email addresses or physical addresses were obtained. This outlined the scope and purpose of the project for prospective respondents. Cold-calling was employed if no written method was ostensibly available. If the respondent was positive about involvement, the letter and permission sheet were dispatched.

Information gathering

Using the Mapping Local Food Webs Toolkit as a guide, a questionnaire was developed as a prompt to ensure consistent topics were addressed.

A mutually agreeable time and place was determined for the interviews to take place. Occasionally, or due to geography, a phone interview was arranged.

If any interview was audio recorded, permission was sought from the respondent before the interview took place.

Depending on where the respondent sits in the supply chain, the questions were formed around whether they were a recipient (buyer) or a producer (supplier) of local produce, but the main topics were consistent.

Respondents were also asked if they knew of other potential interviewees that may wish to contribute to the project.

Two rounds of approaches to separate individuals were made in total as further funding became available and it became clear that a proportion of initial potential interviewees were not contactable, or unable to respond.

Data

Responses to the questions were then applied to an Excel spreadsheet where the consistent topics or 'Categories' were represented in the columns, and the respondents represented in the rows. Data validation settings have been applied so that like responses can be counted. New responses were added to the valid data list.

Like responses were then totalled.

It should be noted here, that this report is an investigation without scientific rigour. There are no statistical analyses conducted on the data.

Categories and discussion

After checking for correct contact details, information was gathered from the respondent. This information included their place in the supply chain, duration of activity, their products, if they'd seen changes over time, number of employees. Some of these 'Categories' are explained in Table 1.

Estimated annual turnover was an optional question. Discussion then centred around the benefits of producing or sourcing locally, along with benefits to the broader community and the environment. Respondents' greatest challenges were shared, and their ideas on a successful future model for local produce availability were noted.

Finally, they were asked if they had any other comments, if there were others that they thought should be interviewed and a good name for the project.

Figure 3: Locally-produced chutneys from Wallis Mangoes at Broome Courthouse Markets

Table 1: Selected Categories with explanations below.

Main and Secondary business					Community	Commercial	Organic	Quality Assurance
Producer	**Value-add**	**Packer**	**Distributor**	**Processor**	It should be noted that some commercial enterprises consider themselves both commercial and community. This stems from providing a fresh product which benefits the health of the community, provides the consumer with choices, and generally has fewer environmental impacts than mainstream products. For the purposes of this investigation these enterprises will only be categorised as commercial		Some producers follow organic practices although most of these producers did not have any official certification. For the purposes of this investigation these producers will be classed as organic	For the purposes of this investigation quality assurance standards are those that are officially recognised, and may include HACCP, ISO 22000 and SQF
Where food starts. A primary producer either producing livestock or crops for human consumption at any scale, e.g. mangoes, honey, beef	Where the product from the primary producer has had other ingredients added to it to create a new product, e.g. mango chutney	In no particular order, where product is cleaned, assessed, quality assured where applicable and packaged ready for distribution, e.g. fresh mangoes	Where a product in whatever its form is ready to be distributed to customers for consumption	Where the product from the primary producer has been processed in some way but still essentially retains its original identification and taste, e.g. dried mango	An enterprise which is based in community. May be not for profit and benefits the community. The term 'private' will come under community. Private has been defined as supplying a select few geographically close, and advertising no further than Facebook	An enterprise which sets out to make a profit		

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Bushfood	Mainstream			Sell produce direct		
	Veg	Fruit	Meat	Farm shop	Box scheme	Farmers' market
Bush food category includes those foods that are grown from native plants and have been in use by first nations' peoples for tens of thousands of years	The term mainstream is for want of an umbrella term for the widely consumed products of meat, fruit, and vegetables. The term traditional was not appropriate in this context			A farm shop could be one of two models. It could be where a member of the public enters the producers' property to purchase the primary produce or a product the producer has value added. Alternately it could be a small structure by the side of the road on the entrance to the property where commonly an honesty system exists where the public can purchase produce for cash	A box scheme is an operation that delivers fresh fruit and vegetables, often locally grown and organic, either directly to the customer or to a local collection point. Many schemes are run on a local or regional basis, delivering food direct from the producer to the consumer, avoiding any intermediate transactions	A farmers' market is a physical retail marketplace intended to sell foods directly from multiple farmers to consumers simultaneously. Farmers' markets may be indoors or outdoors and typically consist of booths, tables or stands where farmers sell their produce and value-added foods and beverages. For this project, the Broome Courthouse Market and the Derby Markets are considered a farmers' market even though they may provide other wares. It should also be noted that tourists have equal access to these wares so that any locally grown food may just as easily be bought by tourists as locals

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Results

A note on Covid-19

Since this project was explored in 2021, and Covid-19 erupted around March 2020, it should be noted that some responders found that Covid-19 worked in their favour by increasing their business, whilst others found Covid-19 detrimental to their business. This has not been taken into account. The results presented here are based on an average year for the respondents.

Overview

The main aim of this GLFN report is to interview those along the produce supply chain and map local food accessibility. As the project evolved, it became clear that some respondents are suppliers of products whilst others are buyers. Consequently, the terms 'supplier' and 'buyer' are identifiers for the report. Producer, Value-add, Processor and Packer are designated to supplier, whereas Distributors are recipients of products and are therefore classed as buyers. Restaurants, wholesalers, retailers, and those sourcing for Box Schemes also join the buyers. The term respondent is used is as a generic term for either supplier or buyer.

In total 33 different businesses or organisations have been contacted across Broome, Derby, the Dampier Peninsula and toward Bidyadanga.

A total of 20 interviews have been conducted. Twelve respondents are suppliers, and seven are buyers. Two suppliers are no longer in business however their contributions have been deemed valuable and they have been questioned as if they are still in business. One business identifies as supplier as their main business and the secondary business as buyer. One buyer represents two different buyer organisations. One respondent belongs to a government agency and their comments noted separately to the categories discussed (see A note from DPIRD).

Geographically all respondents are based around Broome or 12 Mile except for three from Derby and one from the Dampier peninsula.

20 INTERVIEWS
12 SUPPLIERS
7 BUYERS

8 COMMUNITY-BASED ENTERPRISES
14 COMMERCIAL BUSINESSES

122 FULL-TIME EMPLOYEES
90% LOCAL
$3,747,500 ESTIMATED ANNUAL TURNOVER

Eight respondents identify as community organisations whilst fourteen identify as commercial.

Three declare both community and commercial.

Employment numbers across the respondents in the Broome Derby

Peninsula and Bidyadanga area total 122 full-time employees, 5 part-time employees, and 69 casuals with a couple of organisations using volunteers. 90% of all employees are local. Owner/operators are defined as an employee. Estimated annual turnover equates to a respondent total of $3,747,500 for those that chose to share this information.

Figure 4: Michael Faint from Murringo Farms with its first table grape crop

Suppliers

See Appendix 1

Supplier features

Twelve suppliers have been interviewed. Most identify as producer, however one identifies predominantly as a processor, whereas another's main focus is around education. Of all the suppliers, as a secondary business the majority declare as value-adder, with a count of four.

Four suppliers identify as community-based with nine commercial - one identifies as both.

Three suppliers are from Derby, whilst one is from the Dampier peninsula. The remaining seven are from Broome and as far as Roebuck. This includes the productive area of 12 Mile see Figure 6).

Whilst four suppliers have official organic certification, eight are uncertified but identify as organic.

Five suppliers declare they have some sort of official quality assurance certification in their processing or food handling.

Three suppliers harvest bushfood as their main business whereas a further three suppliers use bushfood in value-adding or sell some bush food produce direct. One supplier identifying as bushfood produces honey.

In terms of mainstream produce, seven suppliers grow or provide vegetables, eight fruit; meat suppliers equal two, however only one is commercial.

Employment

For full-time employees 109 work for suppliers. Some of these are owner operators with two being private gardens, and of course two are no longer in business. There are around 50 casuals employed (see Figure 5).

Estimated annual turnover of suppliers totals $522,500 for those that shared this information. $200,000 of that supply across the study area is no longer in business.

Product destination

None of the interviewed suppliers have a farm shop although one had aspirations in that direction. Two of the suppliers had participated in box schemes but didn't any longer, and four supply to local markets. Two are no longer in business. One former producer also supplied to the Perth market. One has not supplied product as at all yet, but it is destined for Perth and the large retail chains.

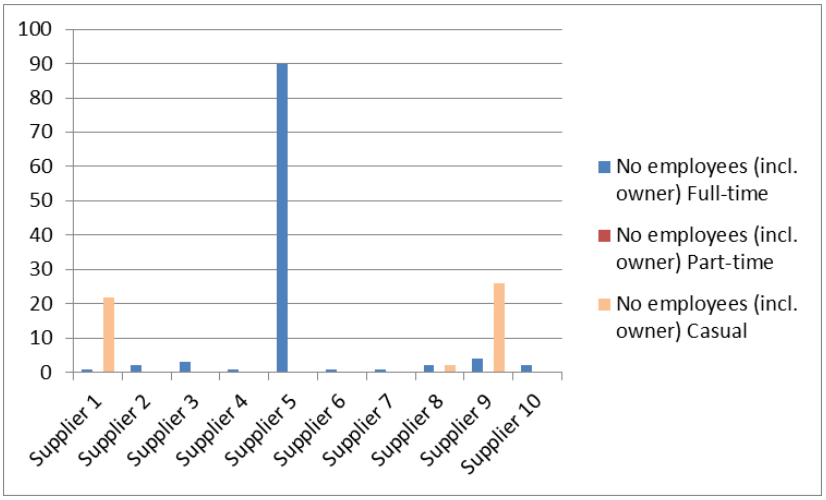


Figure 5: Supplier employment numbers

Two suppliers have standing orders from private locals, three sell to independent shops, one has volunteers take the produce, and one sells online.

SUPPLY
0 TO FARM SHOPS
0 TO BOX SCHEMES
3 TO LOCAL MARKETS

Regarding the proportion of produce sold locally, seven declare between 81-100% of their produce is sold locally, whereas five sell anywhere up to 40% locally. One business reports that when they were smaller they sold 100% locally, but now they have a broader domestic and international market.

Benefits of local supply

Responses are relatively evenly-spread regarding the benefits of local marketing. These include educating the community, the joy on locals' faces, health benefits to locals, ease of marketing, receiving feedback from clients, no freight, keeping costs down, being your own boss, providing a different product, and providing a fresh product.

"Food straight from the garden delivers a sense of vitality and satisfaction that spreads gently throughout the body"

Wendy Albert WINJANA WELLNESS

Challenges

In terms of the challenges for supplying local produce there is discussion over the customer mindset. This features strongly through the interviews; growers believe that consumers are unaware of what fresh food tastes like.

Some of the same producers also claim the cost of fresh food for customers as a challenge. They report that whilst there are cheaper and more convenient alternatives at the large retail chains it is difficult to attract customers to fresh food. Other challenges reported by suppliers consist of freight costs, seasonal challenges, distance, lack of government support and political will, and providing large-enough quantities for the demand. There is also concern over the continuity of supply which is a reflection of the North's relatively narrow dry growing season. When asked whether these challenges were the same years ago, up to 10 years ago the challenges were similar, but four suppliers commented that more than 10 years ago there were more growers around.

Indirect benefits

Indirect benefits are categorised as environmental or community benefits.

A local environmental benefit from the bushfood suppliers is stated as inherent as they harvest native plants and therefore avoid introducing exotic flora, pesticides and fertilisers. Other suppliers base their business on the organic model declaring that they are instrumental in waste management in recycling organic waste. One even collects organic waste from several participating businesses in their adjoining town. Yet

another declares fewer food miles, and others are improving the local habitat by planting natives with their other fruit and veg.

Benefits to the community are around supporting local businesses, health benefits, proudly producing a handmade product, education on Kimberley plants and bushfood, education more broadly, talking to people about growing fresh food, and donations of product.

It is emphasised by some growers that social, emotional and physical health can't be separated.

A way forward

When asked about a future model where local food would be more available to locals, suppliers have an even-spread of ideas. Whilst some desire less corporatism and fewer costs, others report that it would only work if working with nature or the region had kinder weather. Some reiterate that customers require knowledge of what good food tastes like. Other ideas include a cheap distribution centre; one thought that alternative off-season / wet season income was very important.

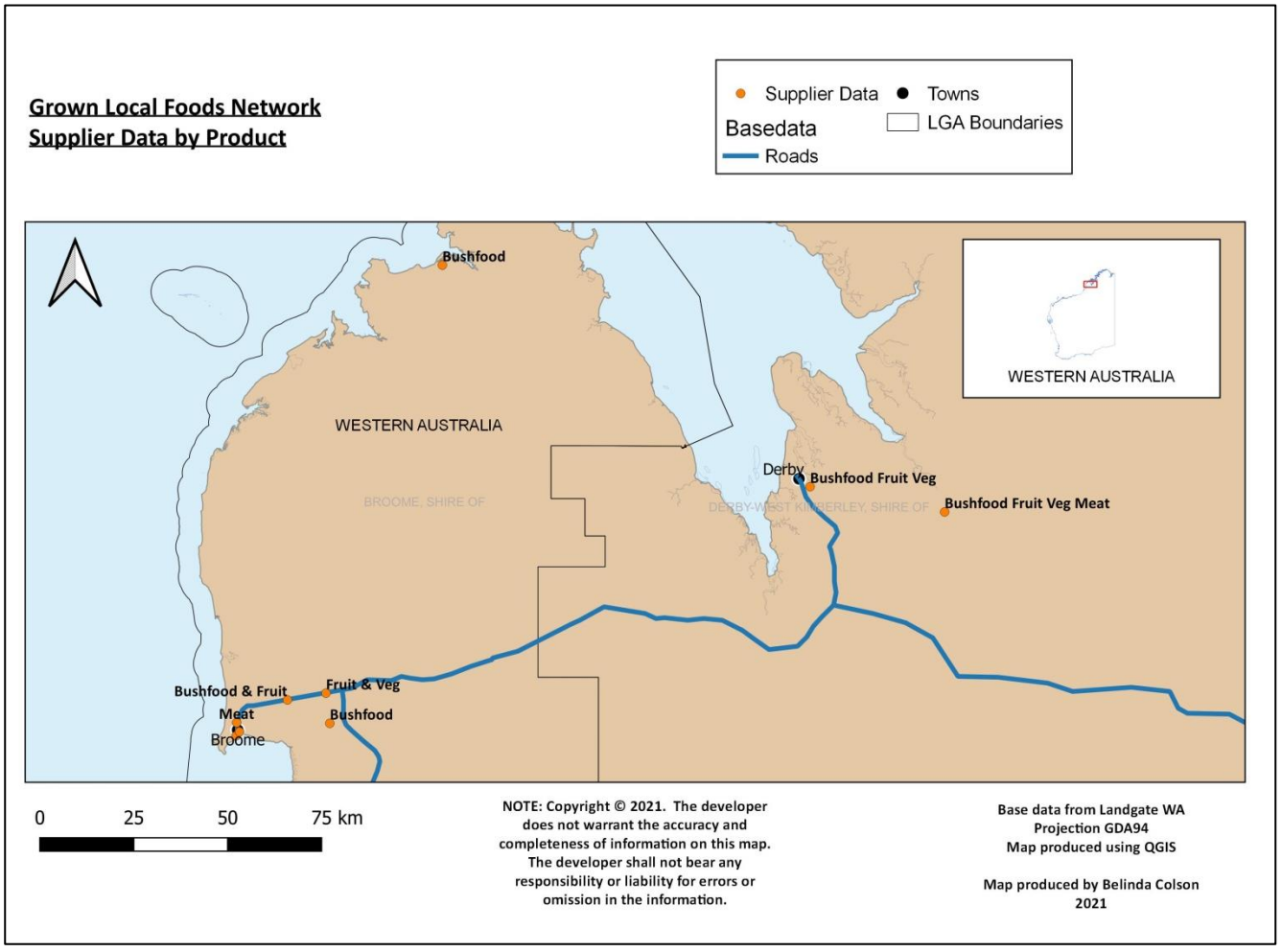


Figure 6: Supplier data by product

Buyers

See Appendix 2

Buyer features

Seven buyers were interviewed. One buyer represents two different buyer organisations. Three buyers identify as distributor, one is a retailer, one is a wholesaler and two are in the restaurant / café trade. One supplier's secondary business is as a buyer.

Four buyers declare they are community organisations, whilst five identify as commercial. Two declare as both community and commercial.

All buyers are Broome-based (see Figure 9 and Figure 10).

There are no buyers officially certified as organic, whereas two have some form of quality assurance.

Buyer sources

Two of the seven buyers buy bushfood or bushfood products. Six buyers require both fruit and vegetables, with those in the restaurant trade also seeking meat sources. One buyer does not source fresh produce at all, but does source organic.

Five buyers source their produce from Perth, whilst two source locally where possible. Of these two, both supplement heavily with Perth produce with ad-hoc access to local produce.

All seven buyers say that they would prefer to source local if possible in the first instance, and organic if possible in the second. For the restaurant trade, if local produce is to be supplied, it will require consistent quality and appropriate quantities. Restaurants report that they don't mind paying a little bit more because the shelf life and freshness outweighs the cost. A cautionary note though - there is a ceiling on what they will pay. One commented that they had experienced a local grower charging excessive amounts for their produce. It became prohibitive to buy because once cost and profit were factored into the production of a meal, customers would not pay the prices.

Produce was sourced locally most commonly 21 to 40% of the time or 81 to 100% of the time.

Two buyers indicated that there were more growers around between 5 and 20 years ago.

THE RESTAURANT TRADE WILL PAY MORE FOR LOCAL, FRESH PRODUCE OF CONSISTENT QUALITY IN APPROPRIATE QUANTITIES – PAY TO A POINT

Employment

The buyers consist of 13 full-time employees (including owner / operators), four part-time employees and 18 casuals (see Figure 8).

The employees were deemed 87% local. The estimated annual turnover of responding buyers was $3,225,000.

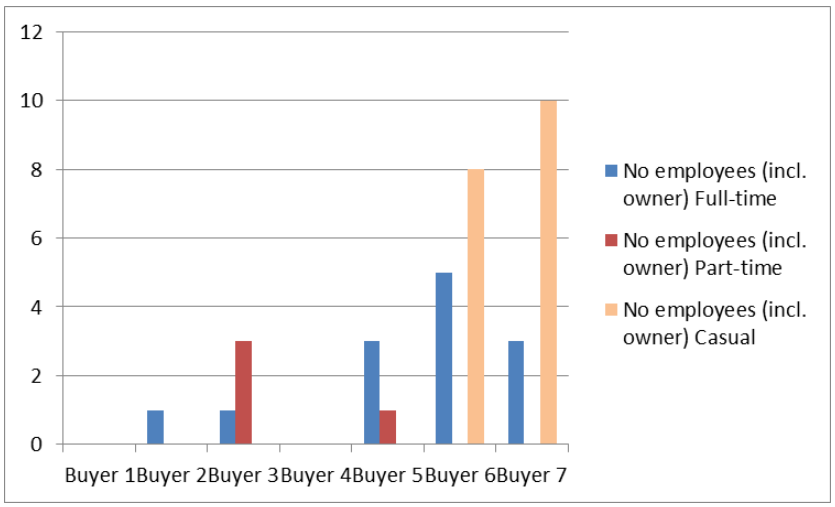


Figure 8: Buyer employment numbers

Benefits of sourcing produce locally

Consistent with the suppliers, benefits of local produce predominantly include freshness, however, no freight, less packaging, avoiding the supermarket and health benefits to locals also feature.

Challenges

Freight costs deeply concern some buyers because they're sourcing the majority of their produce from Perth. Continuity of supply weighs equally. Lack of coordination appears twice out of the seven buyers' responses. One buyer emphasised that having a coordinated approach to sourcing local produce is very important.

Indirect benefits

The buyers acknowledge the environmental benefit in fewer food miles, organically grown and environmentally friendly options for local produce.

Benefits to the community feature support for local growers. One buyer wants to provide options, one espouses health benefits and another donates product for community events.

A way forward

Buyers want to see more buyers. They also want larger quantities, continuity of supply and they need suppliers to be professionally run. A central place for information is emphasised. One thought storage might be an issue.

Figure 7: The Aarli Bar, Broome

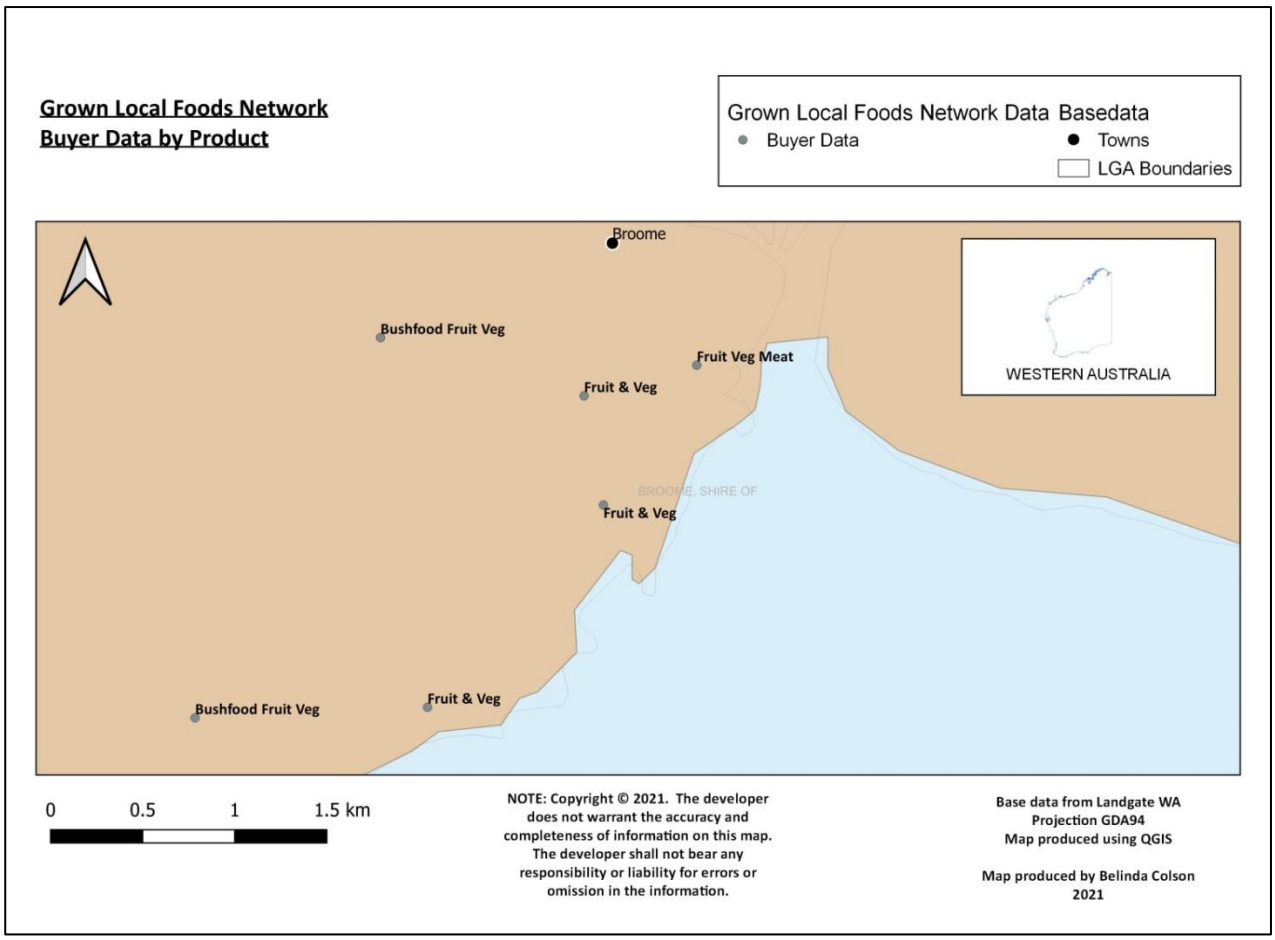


Figure 9: Buyers by product

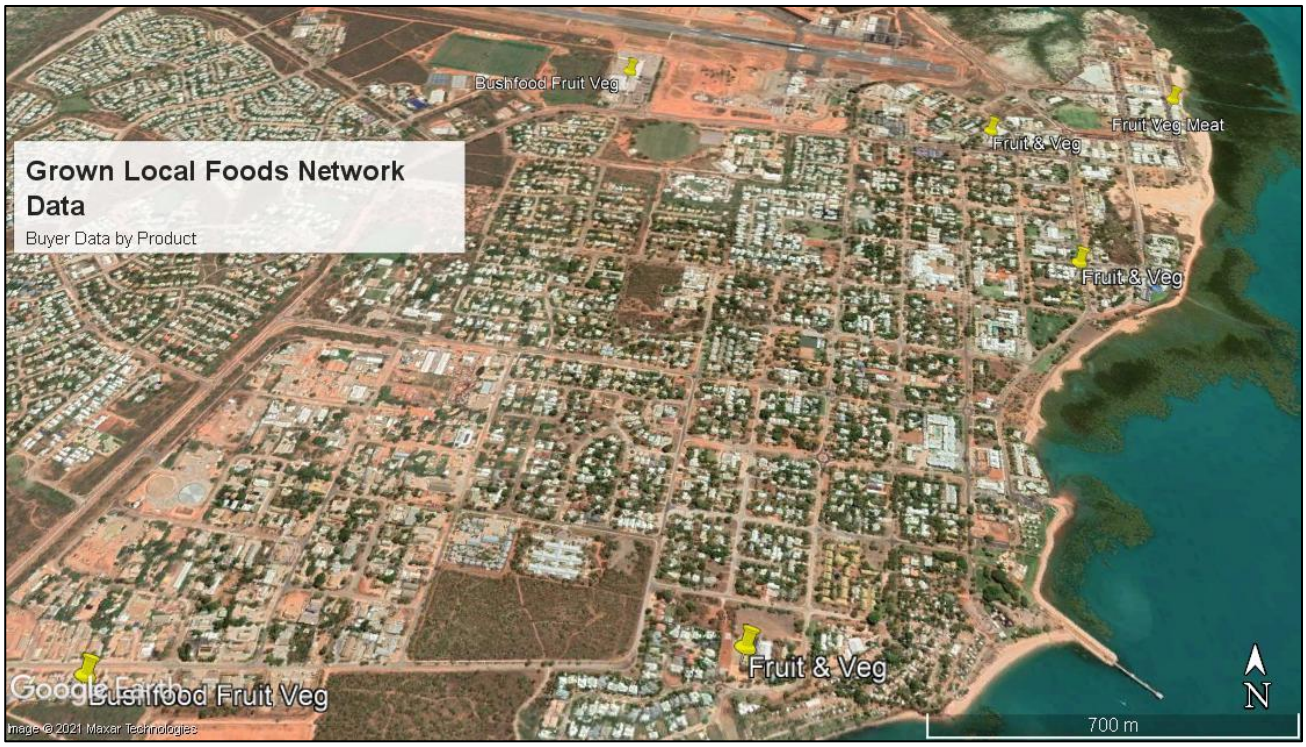


Figure 10: Buyers by product Google Earth view

A note from DPIRD

Department of Primary Industries and Regional Development Broome

Chris Ham from DPIRD was generous in providing his time, go on record and offer his professional perspective on agriculture around Broome since 2006.

Since Chris Ham joined DPIRD in Broome he has seen many changes in agriculture. He mentions at least five growers that have left the area since he joined DPIRD. Perhaps contrary to other respondents DPIRD reports that horticulture in the region has changed in 20 years, but that, in terms of crop volume and value, more is grown now than what was grown back then. Now, specific niche crops are grown in high volumes. They also attract a higher value. The sweet corn grown at Shelamar, and the table grapes and asparagus crops being trialled at Skuthorpe are examples of this.

Chris also spoke of the general public's shopping preferences, and marketing tactics adopted by the two big supermarkets. "As a generalisation, the majority of shoppers seek convenience and pre-packaged goods over freshness and good shelf life" he said. "The two supermarket chains have realised that Australian-gown produce is very attractive, and this is the key market for the niche crops grown in the West Kimberley. However, there are opportunities to tap into consumers that reject the major supermarkets and the concept of pre-packaged goods."

Chris has spoken with one of the independent remote community supermarkets and has a list of the produce they stock. It seems that there is a mismatch in produce and required quantities, making it difficult for a local grower to supply the range and amount of products desired. The type of fruit and vegetables is diverse and in varying quantities at different times of the year. Many of the plants are not suited to the tropics and aren't grown locally, and what does grow here they only want in small amounts.

"Shoppers seek convenience, often forsaking freshness and a longer shelf life"

Chris Ham DPIRD

In general, supermarket standards have become more and more rigid and product placement more competitive. Produce usually has to be checked in the larger cities before being sent out to the regions. There are exceptions, like Shamrock Garden watermelons that have been accepted locally by Coles, and historically, herbs were supplied from 12 Mile in the past. In general, however, the largest supermarkets are only interested in large commercial quantities of produce to their exacting standards, which doesn't necessarily mesh with the growing philosophy or practicalities of small niche businesses.

In terms of accessibility of fresh produce to locals, there is a small-scale model that works in Kununurra. An individual has created a business whereby seconds that are rejected from the main market are picked up and on-sold. It's possible that these seconds could also be trucked west from Kununurra to Broome.

In a similar vein, an opportunity exists where Broome could source seconds from the local large producers that are located south toward Bidyadanga. “It would have to be a stress-free process for the growers” says Chris. And it would all depend on timing and could be sporadic.

Chris also issued a note of caution - that picking produce up from the paddock does not meet food safety guidelines. The produce still needs to be treated and quality-assured before it can be consumed by humans.

Chris believes that social media will play a huge part in locally-available fresh produce.

Schools have also played a key role in teaching children about growing and cooking food, whether it is bushfood or cultivated fruit and vegetables.

He purports that it's possible that community gardens can also play a part in providing local fresh food to locals, however they require a great deal of dedication from the participants to maintain enthusiasm in the project.

Discussion

The market

Whilst there seems to be some conjecture around whether there were more local growers around 10-20 years ago, what isn't disputed is that the produce landscape and supply chain has changed from that time. It could well be that currently more food is grown in the study area as reported by DPIRD, but that originally there were greater numbers of smaller growers supplying locally, changing gradually to the current large-scale commercial growers producing for a broader domestic and international market. If that is the case, the respondent perception is that the system is now skewed toward the large retail chains providing produce that is freighted to Perth to be brought back again to the supermarkets. These food miles also apply to some locally grown food.

One former business that supplied a large retail chain, and DPIRD both report that product placement in large retail chains is almost impossible for local growers, and that twenty years ago it was easier to negotiate with the retail chains. One supplier that used to sell their single product to the large retail chains found the exacting standards, the requirement to use chemicals, and the freight costs no longer worth their while.

Perhaps because of the difficulty in placing product in the large retail chains, most of the commercial growers interviewed have found alternate avenues to market their wares. These include the local Broome and Derby markets, online, and to wholesalers. The data shows that produce is either sold locally between 0-40% and 81-100% of the time. This indicates that suppliers just keep a small proportion for the local market, or rely entirely on local buyers. Some emerging small businesses with small to negligible turnover are providing the most locally. As these single product enterprises grow, however, larger markets further afield either become necessary, or are the ultimate goal.

AS SMALL ENTERPRISES WITH SINGLE PRODUCT GROW THEY SEEK MARKETS FURTHER AFIELD

The buyers' data shows that some buyers with larger turnover only source up to 40% locally, pointing to an opportunity for future increased local supply for mixed product particularly.

Buyers want to see more buyers. According to most, local is more important than organic. Increased demand may result in increased supply, supporting economies of scale. Concerns from buyers over continuity of supply and provision of larger quantities may

diminish, and improved processes may result.

Suppliers want to see more people farming - and more demand. Current growers do warn though of increasing costs for water and freight. An opportunity for government support presents – whether it be at state or local level.

Government support for equipment has been sought by some suppliers looking to up-scale. Generally the government hesitates in funding sole beneficiaries. The opportunity here is to collaborate with others in the market with a similar product to attract funding.

This study is not currently investigating state or local government policy, support or otherwise for the local produces market, or the large retail chains.

The products and seasons

The array of products available in the study area is almost as vast as the study area itself. From meat to bushfood, value-added products to fresh fruit, vegetables and herbs; there is still more to explore within the study area, let alone beyond.

The fresh product variety is particularly rich in the dry season which is akin to a temperate summer. This is also the main tourism season so there are ample opportunities for sales of local product to tourists, tourism ventures, restaurants / cafes and locals alike. Additionally there are potentially more workers to support increased activity.

For some suppliers it is necessary to have off-season income, whereas others provide produce throughout the wet season; others still value-add during this time. There are definitely varieties of fruit and vegetables that can be grown in wet season. Depending on scale it may be a question of whether workers are available to support a harvest. There was more than one supplier interviewed who finds it difficult to work with the seasons.

A model that seems to work for two suppliers is a single wet season crop, some of which is processed and value-added and then on sold; one supplies to the broader domestic and international market, and one supplies to the tourism industry.

Contributions

The local produce industry contributes handsomely to the local economy, but there is scope for more. Employment numbers from respondents including full-time, part-time and casual totals 192 people across Broome and Derby. 90% of employees are local.

There is over $3.5 million contributing to the local economy. That's from nine respondents who chose to respond to the optional question. Another respondent is not-for-profit and at least one other

Figure 11: Walaja Broome Bush Honey at Broome Natural Wellness

respondent's business is in its infancy and income can't be predicted. Others are reinvesting in their enterprise, enabling them to become more productive into the future. There is great potential for increased contributions to the local economy.

Other contributions include to the local community. Examples comprise supporting local businesses. One supplier alone states that they support their nearby service station, auto-electricians, the bearing shop, tyre shop, refrigeration mechanics, plumbers, and motor mechanics. That's at least seven businesses benefiting from the one supplier.

Indirect financial contributions include donations of product. One large supplier regularly provides food donations to Feed the Little Children, a charity that cooks and delivers over 600 hot, healthy meals to Broome children every week.

Another supplier provides work on their farm for youth from the corrective services' system. This relationship can last for up to eight months and provides the participants with a variety of transferrable skills.

One buyer visits and talks with people who are largely housebound for various reasons. These residents may not always have the opportunity for personal interaction, so to have food delivered and a conversation may be a lifeline for them.

There is a tourism aspect to providing local food. For those supplying bushfood, there are educational opportunities on local Aboriginal culture and country. Locally grown food also highlights the Kimberley region and its diverse cultural history, enriching the tourism or newcomer experience.

Physical health benefits of local, fresh food consumption provide an opportunity to educate people on the taste and nutrients provided.

Environmental contributions include providing native food, providing organic food, fewer food miles, and improved habitat.

One supplier collects compostable materials from local businesses and composts them to cycle nutrients and grow stronger crops.

"If you change the environment you change the feel"

Wayne Howard BROOME ORGANIC GARDENS

Challenges and the future

Several of the challenges provided by the suppliers are shared with the buyers (see Figure 12). These challenges are opportunities that may inform any potential future model.

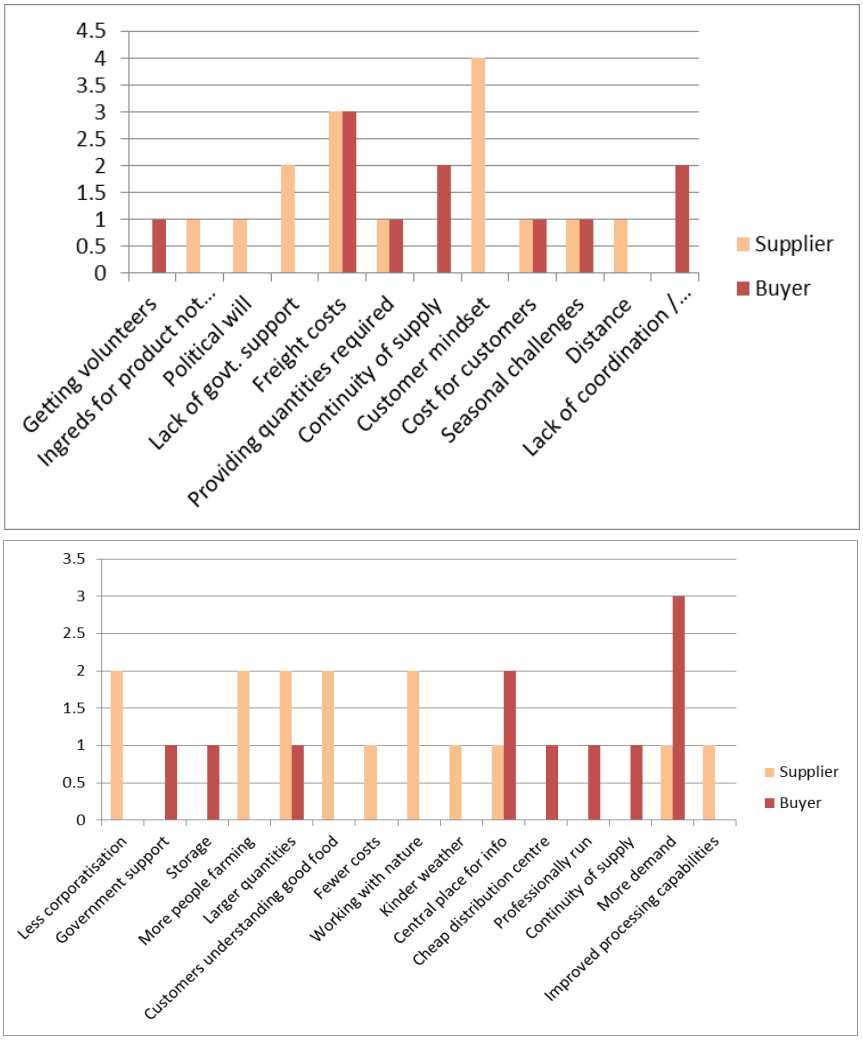


Figure 12: Challenges and a future model for suppliers and buyers

Freight costs concern both suppliers and buyers – it has been mentioned by each that these costs rise consistently, and that there are fewer operators than 20 years ago. Suppliers' products are freighted south to Perth, or ingredients and other consumables head north for value-adding of produce. Buyers transport produce where they're unable to source it locally.

Continuity of supply and seasonal challenges can be linked to a point. Buyers in retail or the restaurant trade require consistent and reliable supply, and quantities to satisfy customer demand. This will vary between dry and wet season with the greatest quantities required during the dry – the better growing season. Suppliers will still require income in the wet season however; and buyers produce in reduced quantities.

For some small to medium enterprises or single operators it is challenging to balance tending the crop, marketing and selling the product, managing the finances, and maintaining or improving their business to meet their vision. They either don't have the skills to cover all these areas, or simply do not have the time.

The buyers' concern of lack of coordination is reiterated. Potentially a coordinated approach to distribution could alleviate this concern if any adopted system does not require too much time away from the core business of growing produce.

Cost for customers is also a concern for suppliers and buyers alike. Buyers will pay more for fresh local products as the freight costs and greater shelf-life of the product render the investment worthwhile. However buyers will not pay prices where their profit margins are significantly reduced or the customers are unwilling to pay. For suppliers, they are

concerned about the rising costs of production; freight, water and government audits were all mentioned.

The supplier concern of customer mindset is the final challenge of note. Four of the ten suppliers broached the subject. These suppliers' comments included that the general public does not know what real food tastes like, that people want choices of product regardless of season, and that society is time-poor. That generally most consumers prefer convenience is supported by Chris Ham from DPIRD.

The future model as suggested by respondents involves managing at least some of the challenges above, and there are some further suggestions. Figure 12 represents both the challenges and suggested future model top and bottom, respectively, aligning specific points where possible.

Larger quantities and increased demand are solutions shared by both the suppliers and buyers. The assumption is that if there were more demand, suppliers would be confident in their sales and increase productivity. Additionally, those operators struggling to juggle the diverse aspects of their businesses would be relieved of the marketing and distribution requirements. Suppliers want to see more people farming.

A central place for information is the third solution shared by both suppliers and buyers. With access to the internet, a shared platform for both buyers and suppliers is a keystone to the future availability of local food. Robust discussion and consensus around its form is required.

Closely related to the former point, a cheap distribution centre is requested by the buyer. This reflects comments made previously around cost, convenience and, to some degree, choice.

The appeal for less corporatisation and more government support is reiterated by both suppliers and buyers.

Working with nature and kinder weather are the seasonal solutions offered by suppliers. It is important to recognise that the study area's conditions are challenging and working with nature will minimise suppliers' costs, with more chance of a successful production.

Storage is also perceived as a potential issue by buyers. This is a highly relevant point in any fresh food venture in the Kimberley. Refrigeration and refrigerated transport are vital in the extreme conditions throughout the study area.

Recommendations

The main recommendations for a future fresh food availability model are outlined below. This complex situation requires a multi-pronged approach with recommendations around government, the public, suppliers, buyers, online platforms, and working models. Any model established should be scalable to allow for future geographical expansion if desired.

Recommendation 1

Survey the public appetite for local, fresh food

This investigation has interviewed a small sample of people who are generally already interested in growing and eating local. An assumption has been made within that the general public are interested in purchasing local fresh food. This assumption should be tested with the following parameters ascertained:

- Cost considerations
- Specific foods / seasonality
- Accessibility – time / place
- Preparation
- Quantities
- Organic / non-organic
- Internet access and computing proficiency

It may be that no further action is taken if the public have no appetite for locally grown food. Alternatively, Recommendation 11 may be adopted, with an emphasis on education around the benefits of eating fresh food

Recommendation 2

Ascertain both the large retail chains' and independent supermarkets' openness to local product placement

During the course of this investigation, the challenges of product placement in supermarkets have been stated but not investigated. This should be confirmed or otherwise

Recommendation 3

Ascertain local and state government's policies on local food supplies

Speak with the Shire of Broome, the Shire of Derby / West Kimberley, and relevant state government agencies such as DPIRD to establish their current policies and opportunities. Confirm with DPIRD the regulations around food standards

Recommendation 4

Investigate models that are successful including online tools

The Pilbara Fish Truck currently delivers an array of seafood products from the boats to the public, to a number of regions from the Goldfields, through the Pilbara to Broome. This model's advantages and disadvantages should be established. It may be that the mobility of a refrigerated truck would be of more benefit than a static refrigerated storage space or retail space. In France vending machines containing fresh produce have been adopted for

consumers' convenience. Other than restocking and clearing of unwanted product, this model requires little staff involvement with all transactions being electronic. Reliable refrigeration in the study area's extreme environment would be vital.

The Kununurra model described by Chris Ham of DPIRD should also be considered.

Finally, effective southern WA and interstate models should be studied. Below are listed some WA cooperatives:

- The People's Market – Perth
- Breeze Organic Food Co-op – Perth
- The Real Food Revolution – Perth
- Bunbury Wholefoods – Bunbury area

Queensland also has successful paddock to plate models:

- Scenic Rim Farmbox
- Mary Valley Country Harvest

Recommendation 5

Investigate the cooperative model and possible affiliations with supporters of locally-produced food

Following on from Recommendation 4, if the cooperative model shows potential with the Kimberley's vast distances and smaller population, then there are several websites to visit in the first instance:

- DPIRD Cooperatives for small producers
- BCCM – the peak body for cooperatives and mutuals in Australia
- Cooperative Farming

Possible affiliations include:

- Buy West Eat Best
- Transition Australia

Recommendation 6

Investigate freight costs

Speak with freight companies between the study area and Perth to ascertain:

- Cost per quantity
- Refrigerated versus unrefrigerated
- Duration and frequency of service
- Backloading

Gain a fuller perspective from suppliers of produce sent to Perth, buyers of produce in the study area, and suppliers who buy ingredients or consumables in the course of their food production

Recommendation 7

Explore online formats and tools

Further explore online options for a full suite of formats and tools to support the supply and purchase of foods

Recommendation 8

Interview larger suppliers and potential produce availability

Factors to uncover include:

- Willingness to participate
- Variety of produce and seasonality
- Limitations of suppliers' time and resources
- Quality standards for particular produce
- Food standards, time and resources required for potential seconds pickup
- Distance / time analysis
- Freight and quantities required
- Online access, format and tools that may assist

Recommendation 9

Explore community gardens and potential produce coordination

There are four community gardens that Incredible Edible Broome supports in Broome. There are other public and potentially private gardens that could be utilised for produce in a coordinated approach across the study area. It should be noted however, that produce is not always the intended purpose for a community garden. It can instead be about the social aspect, sharing, connecting with nature, getting your hands dirty, or a combination of all. To emphasise the production aspect may detract from the other objectives and decrease participant enjoyment. Some incentives could be provided, for example, continued fresh produce at no charge, whilst the public and commercial entities pay.

Should it be determined that production is the goal, then each participating garden should be assessed for:

- Volunteer numbers
- Aspect
- Area
- Design
- Strategies for maximising production
- Perennial versus annual plants
- Single product versus mixed cropping

It is assumed that since they are already gardens, vital resources such as irrigation are already available. Additional staffing options may be considered if produce becomes the objective. Produce that is reliably grown in the north, dry season should be prioritised due to higher demand in the tourism season, more available labour, and weather conditions more pleasing for the labourer. Crops to consider may be high value, or those that are not available from participating larger suppliers, or crops whose growth across the season supports consistent labour requirements. Whatever the strategy they should be products desired by the public or commercial buyers. If the dry season model is successful, then wet season cropping could be explored.

Online formats and tools should be discussed with groups to determine the best fit

Recommendation 10

Speak with the buyers to ascertain needs

Factors to ascertain include:

- Varieties of produce
- Quantities of produce
- Quality of produce
- Level of preparation of produce required
- Time to source produce online
- Best online format and tool fit

Recommendation 11

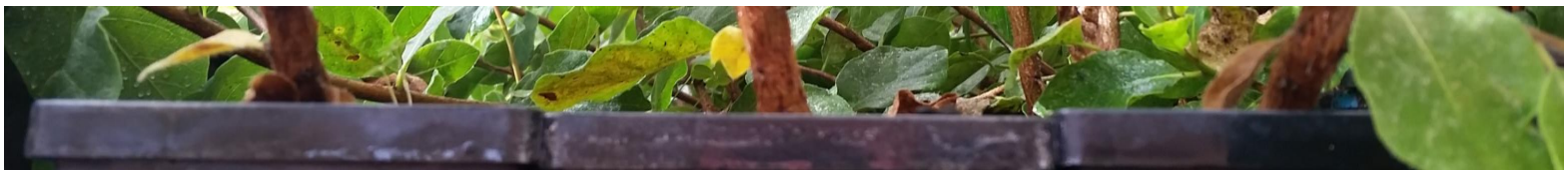
Provide education on healthy food and confirm the food / health / wellbeing link

Whilst perhaps not the main objective of this study, the views of the health / wellbeing link have been a recurring thread throughout. Incredible Edible Broome's vision is for people to access, produce and celebrate local foods through culturally diverse shared experiences. It follows then that education is inherent in this vision, whether it be in the sharing of growing and harvesting food, swapping

recipes or cultural experiences. Producers within this study understand the vitality and wellbeing that results in fresh food consumption. The GLFN has opportunities to collaborate with organisations that educate or promote this link. One such organisation is the EON Foundation. Part of its charter is to build edible gardens in remote Aboriginal schools and communities for a secure supply of fresh fruit and vegetables, and partner with those communities to deliver hands-on gardening and nutrition education. Visions like the EON Foundation's align well with the GLFN and would assist in its sustainability over time. The GLFN would assist in the provision of healthy food.

As the body of evidence linking mental wellbeing, gastrointestinal flora and diet grows, mental health agencies across the study area may become interested in collaborating with the GLFN.

Figure 13: Wayne Howard from Broome Organic Gardens at Broome Courthouse Markets



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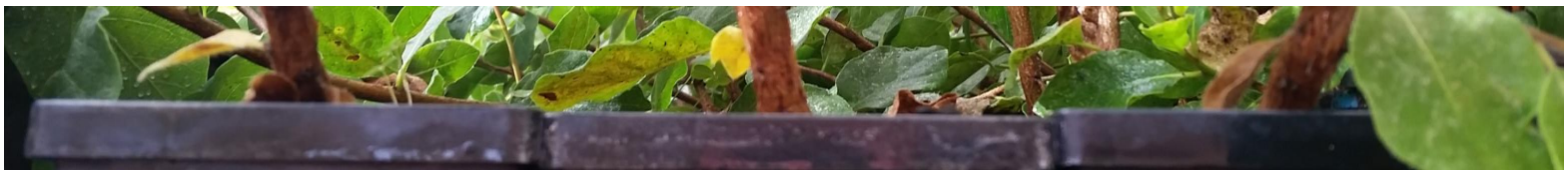

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Appendix 1 – Table of supplier information

	Main business						Secondary business						Community	Commercial	Organic	Non-organic	Quality Assurance	Bushfood	Mainstream			No employees (incl. owner)			% locals	Sell produce direct				% marketed locally					Same years ago where Yes	If No, what?	Main client							Same years ago where Yes	If No, what?	Main benefits of local	Main benefits of local	Greatest challenges 1	Greatest challenges 2	Same years ago where Yes	If No, what?	Future model1	Future model2	Local enviro benefit	Local communit y benefit	Other comments
	Producer	Value-add	Packer	Distributor	Processor	Other	Producer	Value-add	Packer	Distributor	Processor	Other							Veg	Fruit	Meat	Full-time	Part-time	Casual		Farm shop	Box scheme	Farmers' market	Other	0-20%	21-40%	41-60%	61-80%	81-100%			Large retail chains	Independent shops	Markets	Box schemes	Wholesalers	Food processors	Other															
	1							1					1	1	1		1	1				1		22	100				Online	1					6-10 ya						1		6-10 ya		Educating c	Health ben	Lack of gov	Providing q	6-10 ya		Larger quar	More peop	Native food	Education c	Think local
					1		1							1	N/C		1	1				2			100				Wholesale shop		1				0-5 ya	100% local						Health FS and Tourism worldwide		Ease of ma	Joy on loca	Nil	Nil	0-5 ya	Other local c	Improved p	Larger quar	Native food	Kimberley	No governn
	1							1					1		N/C				1	1		3			100				Volunteers take					1	6-10 ya							Local publi	6-10 ya		Health ben	Fresh	Customer r	Political will	More growe	Less corporatisation	Organic	Talk to peo	Can't separ
	1									1				1	1				1	1		1			100				1					1	16-20 ya				1				16-20 ya		Feedback f	No freight	Customer r	Freight cos	16-20 ya		Central pla	Less corpor	Environme	Education	Nutritional
	1									1	1			1	1		1				1	90		95				Wholesale	1					0-5 ya			1						Restaurant	Educating c	Feedback f	Seasonal ch	Distance	0-5 ya		More demand	Organic	Donations of product	
						Educati	1						1		N/C			1	1	1	1	1			100			1	Standing orders		1				0-5 ya						Local public				Ease of ma	No freight	Customer r	Cost for customers	More growe	Customers	Working wi	Waste man	Education	
	1											Education	1		N/C			1	1	1	1	1			100				Standing orders					1	6-10 ya						Local publi	6-10 ya		Keep costs	Providing a	Customer mindset		More growe	Customers	Working wi	Improved f	Donations of product	
	1													1	N/C			1				2		2	100				Wholesale shop					1				1		1				Feedback fi	Health ben	Nil	Lack of govt. support			More people farming	Native food	Health ben	Would like	
	1								1					1		1	1		1	1		4		26	25					1						1		1		1		Perth				Freight costs			Improved processing	capabilities	Supporting	local busine
	1							1						1	N/C		1	1		1		2			100				Tourism					1	16-20 ya			1	1					Be your ow	Joy on loca	Freight cos	Ingreds for product not	Freight was	Kinder wea	Fewer cost	Fewer food	Handmade	product
	1										1			1	1				1	1		2					1		Restaurant / café trade					1	6-10 ya	More growe	1					6-10 ya		Keep costs	No freight	Cost for cus	Customer mindset		Cheap distr	Less corporatisation		Supporting	History of F
	1													1	N/C				1	1		100					1		Restaurant / café trade					1										Providing a	Fresh	Cost for cus	Continuity of supply			Off-season income	Organic	Health benefits	
Subtotal	10	0	0	0	1		2	4	1	2	2		4	9	4	1	5	6	7	8	2	109	1	51	92.727273	0	2	5	0	3	2	0	0	7	0	0	2	3	4	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bushfood
Mainstream
Former business

Appendix 2 – Table of buyer information

	Main business						Secondary business						Community	Commercial	Organic	Non-organic	Quality Assurance	Bushfood	Mainstream			No employees (incl. owner)			% locals	Sell produce direct				% marketed locally					Same years ago where Yes	If No, what?	Main client							Same years ago where Yes	If No, what?	Main benefits of local	Main benefits of local	Greatest challenges 1	Greatest challenges 2	Same years ago where Yes	If No, what?	Future model1	Future model2	Local enviro benefit	Local community benefit	Other comments
	Producer	Value-add	Packer	Distributor	Processor	Other	Producer	Value-add	Packer	Distributor	Processor	Other							Veg	Fruit	Meat	Full-time	Part-time	Casual		Farm shop	Box scheme	Farmers' market	Other	0-20%	21-40%	41-60%	61-80%	81-100%			Large retail	Independent shops	Markets	Box schemes	Wholesalers	Food processors	Other														
				1					1				1						1	1				Volunteers	100		1							1																							
				1									1	1		1	N/C		1	1		1			100		1							1	0-5 ya	More growers around						Local public			Be your own boss		Lack of coo	Freight cost	0-5 ya					Talk to people		
						Retailer						Alternative	1	1		1	1	1	1	1		1	3		100							1										Local publi	6-10 ya		No freight	Fresh	Continuity	Customer mindset			Continuity	More dema	Organic	Options	
				1					1				1		N/C									Volunteers	100				Online	1											Local public			Avoiding su	Less packa	Freight cost	Getting volunteers			Storage	More dema	Environmentally-friend	Very hard t	
						Wholesaler			1					1		1		1	1	1		3	1		100									1	16-20 ya	More growers around						Government contracts					Continuity	Providing c	16-20 ya	More grow	Governmer	Professionally run	Donations of product	
						Restaurant / café	1							1			1		1	1	1	5		8	60				Wholesale shop		1				6-10 ya							Perth	6-10 ya		Fresh	No freight	Lack of coo	Seasonal ch	6-10 ya		Central pla	Larger quantities	Health bene	Need a cen	
						Restaurant / café								1					1	1	1	3		10	53.846154				Restaurant / café trade		1											Perth			Fresh		Cost for cus	Continuity of supply			Central pla	Continuity of supply			
Subtotal	0	0	0	2	0		0	1	3	0	0	0	4	5	0	3	2	2	6	6	2	13	4	18	87.692308	0	2	0	0	1	2	0	1	3	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Proud local fresh food producers and fresh food product supporters

Incredible Edible Broome	https://incredibleediblebroome.org.au/
Campaign to Protect Rural England	https://www.cpre.org.uk/
EON Foundation	https://eon.org.au/
Broome Circle	https://www.broomecircle.org.au/
PCYC	https://www.wapcyc.com.au/location/broome
Broome North Community Garden	Facebook
Agunya	www.agunya.com
Broome Recovery Centre / Wellness Centre	Western Australia Broome Health Services - Broome Community Recovery Centre
Broome Organic Gardens	Broome Courthouse Markets
Ancient Wisdom Remedies / Mayi Harvests	https://mayiharvests.com.au
Yeeda Freerange Meats	https://www.yeeda.com.au/
Janyba Liyan (nee Fresh Peddlers)	https://janybaliyan.org.au/
Fresco Broome	https://www.frescobroome.com/
Windjana Wellness Derby	www.windjanawellness.com.au
DPIRD	https://dpird.wa.gov.au/
Broome Food Co-op	www.bfco.cbbc.com.au
Twin Lakes Cultural Park	http://www.twinlakes.net.au/
Kimberley Wild Gubinge	https://www.kimberleywildgubinge.com.au/
Kimberley Development Commission	https://kdc.wa.gov.au/
The Mango Place	https://themangoplace.com.au/
Buy West Eat Best	https://www.buywesteatbest.org.au/
Walaja Broome Bush Honey	https://www.kimberleybushhoney.com.au

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