
# The Social and Economic Impact of the Whangarei Growers Market

NorthTec
TAI TOKERAU WĀNANGA

# + Whangarei Growers Market

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**April 2014**

# Contents

## Executive Summary

The Whangarei Growers Market is a community asset. Its turnover of $3.66 million creates an additional $5.84 million dollars of activity for the Northland economy. Ninety people are directly employed with a further 22 through downstream impacts. These economic impacts are perhaps less significant than the social impacts of the market.

Customers appreciate the quality of food on offer, including its freshness and the availability of spray free or organic produce. The “atmosphere” of the market is also appreciated. With the growing awareness of the contribution of fresh fruit and vegetables to health, the market provides a resource regarded as a vital component of the local health network.

Other social impacts identified in this report include the attraction of the market to the migrant community, the community building nature of the market as a social space and benefits for local retailers.

The market has enjoyed a steady trajectory of growth over the past 15 years, so this report also considers how that growth may be enhanced. The emergence of the Lifestyles of Health and Sustainability (LOHAS) market demographic is significant here. LOHAS aspirations are compatible with what the market offers. The market can be central to the more deliberate development of a local food movement and can support efforts to improve the diet and health of Northlanders.

The recommendations at the end of the report are:

1. That the WGM develops a plan to promote a local food movement.
2. That the WGM develop partnerships with stakeholders in the health sector and develop plans to increase the availability and consumption of fruit and vegetables by a specified percentage in five years.
3. That the WGM establish an online presence through the development of a website and greater social media presence, alongside a calendar of promotional events.
4. That the WGM pursue nearby facilities to enable expansion.
5. That the WGM maintain the current product mix.

If you would like an electronic version of this report go to www.northtec.ac.nz and either look through the news items, or search for the keywords Whangarei Growers Market.

We welcome your feedback on these recommendations. Complete our online survey at https://www.surveymonkey.com/s/WGM2014 .

## Introduction

The Whangarei Growers Market Association Limited has commissioned NorthTec to compile this report. Its purpose is to investigate the social and economic impacts of the market. The research team interviewed the market's retail and wholesale customers, stallholders and sought the input of stakeholders.

Part one of the report outlines the social and economic impacts. In addition to economic and employment benefits stakeholder feedback revealed a range of social impacts including value derived directly from produce, health and education impacts, community building impacts, the value of supporting the local economy and the value of the market to the wider community.

Part two moves beyond the original brief to explore growing the market. Limits to growth are investigated followed by an exploration of some parameters that shape the business model of the market. Opportunities for growth emerge from this section offered as a starting point for further discussion.

Part three provides a series of recommendations for the consideration of the market's directors, stallholders and interested stakeholders.

[1]

[1] image by courtesy of Terry Small, Freeze Frame Photography www.freezeframe.co.nz

# Part One:

# Socio-economic impacts

# Economic impacts

## Econometric analysis

Turnover at the WGM for the 2013 year was $3.66 million. An 88-sector model of the Northland economy has been used to estimate the broader impacts of this economic activity. When the multiplier effects are added, the total value of the markets to the region is estimated as $8.77 million as outlined in table 1.

| | Revenue ($ millions) | Net Household (Income $m) | Employment (jobs) | Value Added ($ millions) |
|---|---|---|---|---|
| | | | | |
| **Direct production activity from Table 1** | 2.93 | 0.55 | 19 | 1.12 |
| **Flow-ons to Backward Linked Sectors** | 3.27 | 0.42 | 11 | 1.13 |
| | | | | |
| **Total Direct & Backward Linked Impacts** | **6.20** | **0.97** | **30** | **2.25** |
| | | | | |
| **Flow-ons to Forward Linked Sectors** | 2.57 | 0.54 | 11 | 0.76 |
| | | | | |
| **Value of Total Impacts due to WGM** | **8.77** | **1.51** | **41** | **3.01** |
| | | | | |
| ***Backward Linked Multiplier (e.g. 6.20/2.93)*** | *2.12* | *1.76* | *1.58* | *2.01* |
| | | | | |
| ***Total Multiplier (e.g. 8.77/2.93)*** | *2.99* | *2.75* | *2.16* | *2.69* |

**Table 1: Total economic impacts for the Northland economy emanating from sales at the WGM**

The multipliers in Table 1 conveniently summarise the economic impacts of the WGM. For Revenue, $1 of produce sold at the WGM induces another $1.12 of sales revenue for supplying business units in the Northland region (multiplier 2.12). Another 87c of services is required to deliver this produce to final consumers (1 + 1.12 + 0.87 = 2.99 the multiplier including the forward linkages). Note that a fraction of this 87c could represent a contribution to the wages of casual staff in Northland restaurants for example. The Employment multipliers in Table 1 cannot be similarly interpreted because the WGM technology for growers and sellers is not the same as the production technology intrinsic to the economic model as outlined above.

Note that the full report *Whangarei Growers Market: The Economic Value for the Whangarei/Northland Economy* is in appendix one.

## Flow on to suppliers

Most stallholders buy as much of their production and marketing supplies through Northland suppliers as possible. While the research team did not attempt to quantify this spend, the existence of the markets supports primary industry suppliers. The 88-sector model reveals a $3.27 million benefit from the markets to supply sectors of the Northland economy. Seventeen of the twenty interviewed purchase between 80 and 100% of their supplies in Northland.

## Health impacts

In addition to the economic benefits outlined above, there are many social benefits identified in this report. Health impacts are one example.

Later in the report the health impacts for market customers are discussed. Given that the health vote received $15 billion (20%) of the $72.4 billion budgeted by the Government for the 2013-2014 budget year[1], health is a significant cost to the community. This report does not attempt to quantify the value of the dietary changes encouraged through the consumption of more fruit and vegetables. We assume these to be significant, both in direct savings to the health sector and indirectly by delivering a healthier workforce.

## Business viability

Twenty stallholders, selling a diverse range of produce were interviewed. Of these four have been stallholders for up to five years, six, between five and ten years and the remaining ten, between ten and fifteen years. All those interviewed agreed that the market has “helped you to grow your business or improve its viability?”

Six of the twenty interviewed stated that they would not be in business if it were not for the market. Comments include “it has been a lifesaver at time”, “we were going broke, the market saved the business” and “it kept us going through the bad years”. Half of the interviewees acknowledged the market had enabled growth of their business. One long established stallholder reported that business had doubled over the last year.

For six stallholders, their market activity complements other marketing channels.

## Employment impacts

Northland has for decades had among the highest unemployment rates in New Zealand. From December 2009 to December 2011, unemployment rates have ranged between 7.3 and 9.8%.[2] While the national unemployment rate was 6.3% in the December 2011 quarter, the Northland unemployment rate was 8.3%.

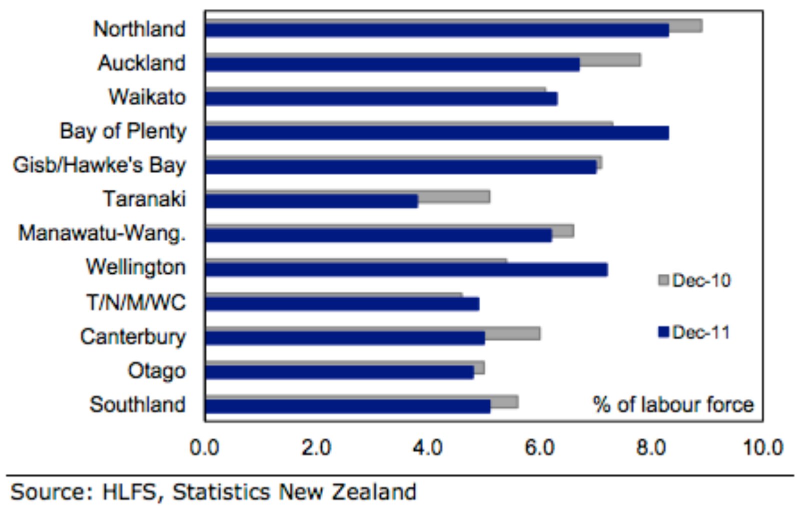


**Figure 1: Unemployment rate by region[3]**

At 29% (for the December 2011 quarter) the national youth (15 to 19 years) unemployment rate is a mounting concern. In June 2011, 48% of Northland's working age Mäori were estimated to be on welfare payments.[4]

Decades ago, the bulk of fresh produce in Northland would have mostly been secured locally. Now, a large quantity of produce is trucked in from outside the region. This has a negative impact on employment. Any initiatives to generate more economic activity locally will support employment.

The WGM provided employment in 2013 for 90 full time equivalents (ftes). Our economic analysis reveals a further 22 ftes are employed through backward and forward linkages.

## The value proposition

What is the value proposition for WGM customers? Value can be regarded as benefits minus costs. Customers experience costs that they will not experience with most other shopping options. There is not the convenience offered by the market's competitors – the market is only open on Saturday mornings. Shoppers are exposed to the weather and electronic funds transfer is in most cases not available. Due to the popularity of the market, nearby parking can be hard to find. Those wanting a week-end sleep-in will probably not get to the market. Taking these costs into account, they have to be offset by perceptions of greater value.

There are three main categories of value identified.

1. ***Reasons for shopping*** (identified below as freshness, organic or spray free, social contact and the atmosphere).
2. ***Price*** – while 20% of those interviewed stated the price is not important, 38% stated that prices at the WGM are cheaper.
3. ***Contact with producers*** is important to WGM customers. 60% identified that supporting local growers is important.

value = benefits - costs

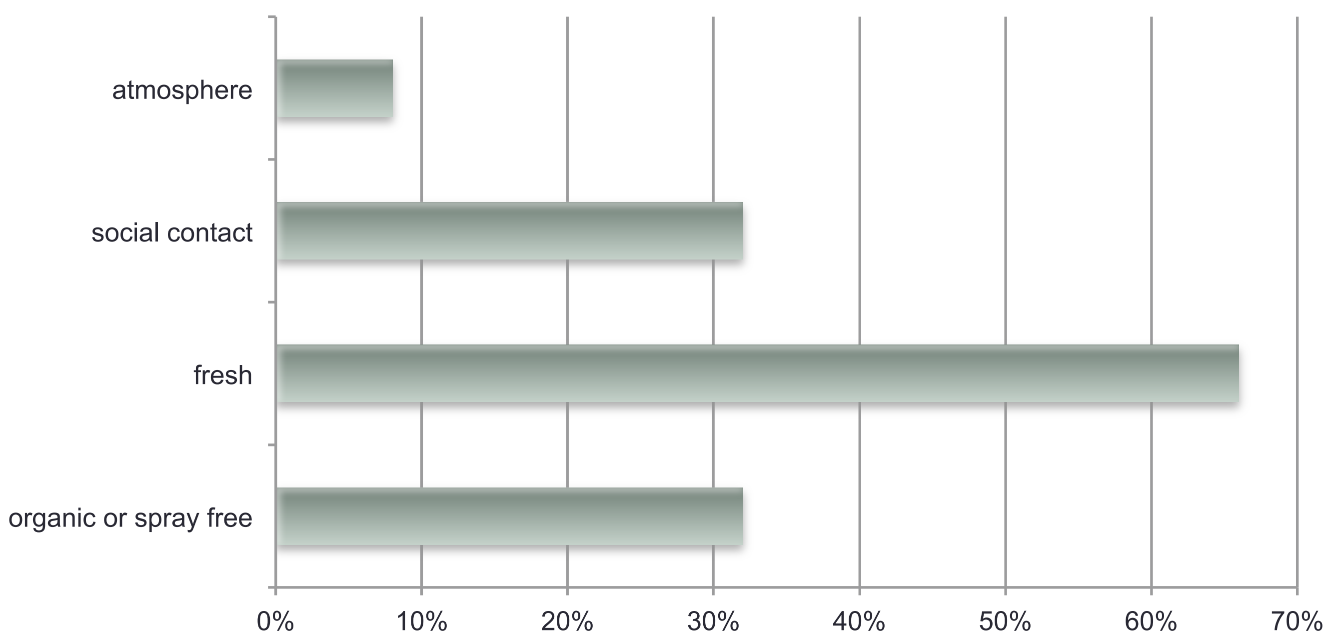


**Figure 2: Why customers like shopping at the market**

## Quality of produce

When asked ***what do you like about shopping here?*** 66% identified the freshness of the produce a deciding factor. Some claimed that the produce was still fresh a week after purchase. The availability of organic or spray-free produce was another draw card for 34% of customers. Thirty two percent nominated social contact with 8% mentioning "atmosphere" as the reason for shopping.

Customer ranking of freshness (quality) aligns with the findings of research into 11 farmer's markets in New Zealand in 2008-2009: "The paper finds that product quality is the key motivator for patronage, with price not a significant barrier to purchase or visits to farmers' markets"[5].

The WGM has a number of wholesale customers, mainly from restaurants, fast food outlets and grocery retailers. These customers are also enthusiastic about the quality of produce and have developed solid business relationships with stallholders. One restaurant owner reported purchasing 250 kgs of onions a week. His supplier would drop off more if required during the week.

## Loyal customers

WGM customers are loyal with 60% of those surveyed shopping at the market weekly. An additional 23% shopped fortnightly. These numbers may drop by up to 20% in adverse weather, but loyalty remains high despite the relative inconvenience of market-style facilities, parking issues and the potential discomfort of shopping in the open air.

60% shop weekly

The market draws its customers from significant distances with 32% driving more than 10 km.

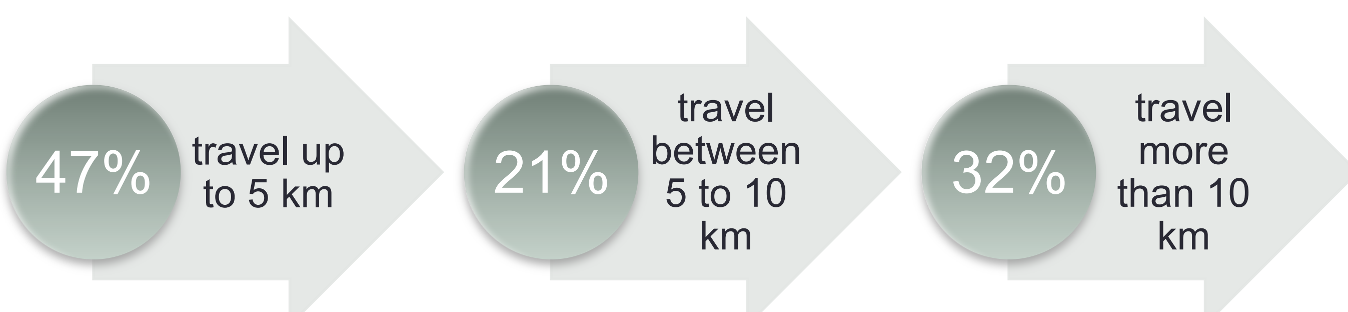


**Figure 3: Distances travelled to shop at the market**

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## Purchasing habits and variety

Given that 83% of the market's customers are regulars, it is not surprising that 81% come to the market with a clear idea of what they want to purchase. 60% make impulse purchases. Customers enjoy the variety of produce available.

## Layers of value

Some markets target specific demographics, for example fashion foodies. The WGM attracts a diverse customer demographic. A large segment of survey respondents did not appear to be motivated primarily by price. Thirty eight percent believed prices at the market were cheaper than elsewhere, but a greater number, 43% regarded prices as similar to other outlets. For 20%, price was not important, often adding that the quality was more important. Four percent judged prices to be more expensive. Thus the market can appeal to those seeking value in cheap produce, product variety, elite products, organic or spray free produce, simply enjoying the ambiance or a combination of these.

This is reflected in stallholders pricing strategies. Many sell widely available fruit and vegetables at competitive prices. Others have less common produce such as blueberries, olive oil or hand made cheeses that fetch higher prices. Some of produce at the market will be cheaper than can be obtained elsewhere, while produce such as the hand made cheese may retail at twice the price of its bulk-manufactured counterpart.

## Customer perceptions of the benefits of the market to the community

Survey respondents generally spoke enthusiastically about the contribution of the market to the community. The word "local" was often cited – 60% liked that the market "keep it local" and 55% appreciate that the market supports the local economy and local growers, with 30% mentioning employment benefits. Respondents also emphasised the social value of the market. The health benefits related to consuming fresh produce was noted by 11% of those surveyed.

## Health and education impacts

There is a growing body of research confirming the importance of fruit and vegetables as a large component of a healthy diet. Pearson and Wilson of Otago University referenced some weighty studies including meta-studies in a paper linking health outcomes to increased access to fruit and vegetables through farmers markets[6].

> *The adequate consumption of fruits and vegetables (FVs) is an important way to prevent a wide range of health problems, including lung cancer[7], colon cancer[8], breast cancer[9], type 2 diabetes[10], stroke[11], coronary heart disease[12], and cognitive decline and dementia[13]. In fact, inadequate FV consumption were ranked as the fifth and 17th highest risk factors for disease, respectively, in the 2010 Global Burden of Disease Study[14]. Differential intake of FVs by social groups may also contribute to health inequalities.[15 16 17].*

### Food For Life

As the market prepare to close near 10 a.m., staff from the Hare Krishna Food For Life across the road call around the stalls and collect unsold fruit and veges. This food provides the bulk of ingredients required to provide 500 meals free of charge. Most of these meals are supplied to children at Manaia School.

> *Food insecurity and its consequences of poor nutrition, obesity, and nutrition related health conditions are affecting families on low incomes. One of the factors contributing to our obesity epidemic is simply that families cannot afford good healthy nourishing food.*

Clair Mills, Medical Officer of Health,
Northland DHB[18]

The Food For Life project featured on Campbell Live. [19] Here is Manaia View School's perspective.

> *The Food for Life Hot Lunch Program has run in our school now for the past 1 1/2 years. This is an amazing project which has had a multitude of benefits across the school and community. Addressing child poverty and associated child hunger has been widely discussed in the media recently. This Food for Life initiative not only addresses this need but has provided a platform for students learning. Classroom teachers have been able to focus on nutrition and healthy eating messages that are shared with family and friends. Students have all been exposed to new foods, particularly vegetables and spices, that they may not have previously encountered.*

Wendy Rudolph
Manaia View School [20]

### Retail customers

Eleven percent of retail customers interviewed nominated "health" as a beneficial social impact of the market. Some come for the A2 milk and its benefits[21]. Thirty four percent of customers nominated the availability of organic or spray-free food as a reason to shop at the market.

Rachel Watts of Northland Nutrition is one of a small number of nutritionists who meet clients at the market to talk through food choices and guide their purchasing decisions.


**Figure 4: Rachel Watts talking with client Michelle Grant about food choices**

## Primary health

The Manaia PHO oversees the provision of health services for 93,000 Northlanders. CEO Chris Farrelly is a customer of the market. He is enthusiastic about the market regarding them as a “health provider” and an “important part of the health network of our community”. A challenge for health providers is promoting increased consumption of fruit and vegetables to more deprived segments of the community. Mr Farrelly has noticed a broadening of the demographic using the market, compared, for example, to other markets that target fashion foodies. This encourages him that, in some households at least, the consumption of fruit and vegetables is increasing.

In addition to the capability of the market to increase the consumption of healthy food, he regards the community building aspect of the market of equal importance, stating that “social connectivity is incredibly important for health”. For example, young people who busk at the markets get opportunities to display their talents and feel a part of the wider community.

Increasing fruit and vegetable consumption is an important primary health initiative. Manaia Health’s public health role is about “keeping people healthy and improving the health of populations rather than treating diseases, disorders and disabilities in individuals”.[22] Health Promotions manager Ngaire Rae is enthusiastic about promoting better dietary habits and sees the market as an important community resource. She also acknowledges the markets' support for advocacy groups seeking to promote well-being initiatives and community development.


[2]

## Education impacts

Education and health impacts are closely aligned. From the perspective of Manaia View school staff, the Food For Life project enhances student learning.

> *We are very aware that health issues do impact on our student's attendance, ability to focus in class and overall positive attitude towards learning, removing these barriers allows us, as teachers, to concentrate on raising student achievement.*

Wendy Rudolph and Ian Bird
Manaia View School[23]

Retail customers and stallholders learn from one another. Customers are able to talk directly with the grower and learn about how to best store produce, the nutritional values of the produce and growing tips for fruit and vegetables. Some growers have a strong sense of mission about growing and promoting healthy food options.

[2] image by courtesy of Terry Small, Freeze Frame Photography www.freezeframe.co.nz

Research into farmers' markets in the U.S. revealed that the learning gleaned from customers supported innovation by stallholders. Thus, social learning in the context of the market reciprocates between the vendor and the customer.

> *Social learning through engagement with customers contributed to more innovative marketing by vendors, while social learning through engagement with customers and fellow vendors increased the likelihood of vendors diversifying to additional markets beyond the farmers' market*.[24]

## Anticipated impacts

The positive role of the market in promoting and enabling healthier eating will only increase. There is increasing advocacy to address the issue through public policy. The Fight the Obesity Epidemic website states candidly:

> *Many of us are eating too much junk food, not getting enough exercise, and are getting fat. Obesity contributes to premature death, serious diseases and increasing health costs. The solution is to change features of the environment that lead us to eat too much of the wrong foods and reduce our physical activity opportunities.*[25]

Gareth Morgan's 2013 book Appetite for Destruction, also points to importance of changing the environment:

> *What can be hard to change is your community; if you live in a neighbourhood brisling with fast food joints, then you are likely to eat it. If, on the other hand, we live in an area with cycle lanes, foot paths, fruit trees growing on grass verges, communal gardens and farmers' markets, then we are more likely to exercise and eat well. These sorts of communities are blossoming all over the country…*[26]

As an economist, Gareth Morgan offers a policy-based solution with a number of government costs totalling $321.75 million. These include nutrition and activity in schools, voluntary food programmes in schools, healthy eating prescriptions and healthy eating $5 vouchers for children. This cost is offset by a billion dollars of tax on unhealthy foods.

We can regard the unhealthy food industry as in a similar place the tobacco industry was in decades ago. It will, sooner or later be subject to increasing scrutiny for the damage it is doing and inevitably face regulation.

The WGM is aligned to prosper when the environmental changes outlined above eventuate. The recognition of its role now as a community asset, can only be enhanced.

## Community building

Customers and stallholders at the WGM appear to share a sense of community that creates another layer of value beyond the commercial exchange. New Zealand research into farmers' markets identifies this added value:

> *In doing this we have drawn away from the traditional view of a dyadic exchange process between buyer and seller as the only way in which value may be created to include the idea of value being generated at a community level.*[27]

Growers, or farmers markets are recognised for creating social spaces and fostering a sense of community. [28]

Eight percent of retail customers volunteered "atmosphere" as a reason for shopping at the market. Thirty two percent nominated "social contact" as important. Social contact infers interaction, whereas customers can enjoy the atmosphere without necessarily socialising.

Buskers lend to the atmosphere. At any market there will be at least 3 buskers, sometimes several more.

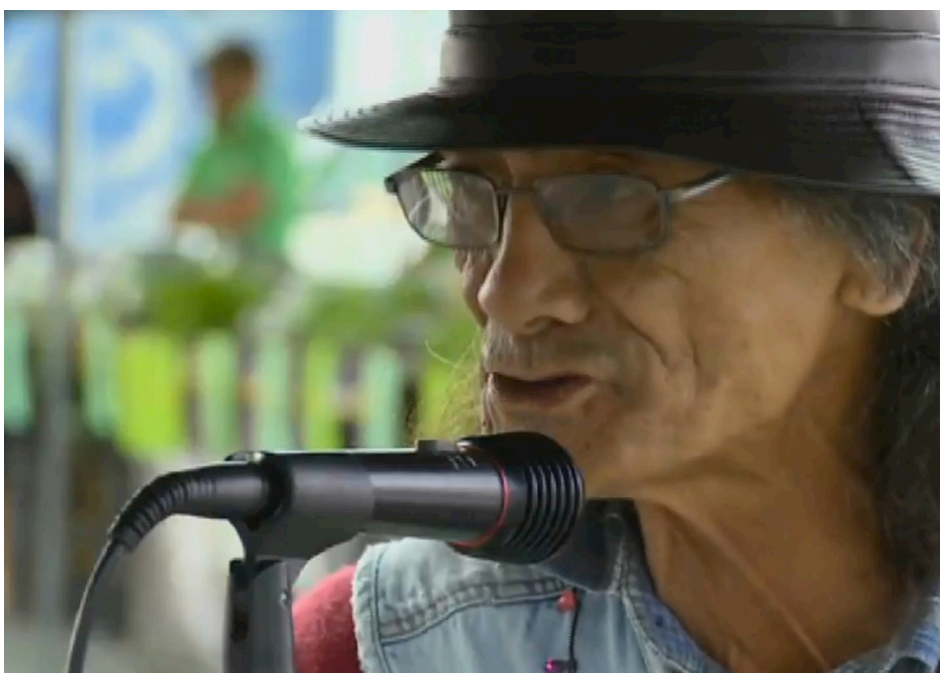

**Figure 5: "Adam the busker" is a regular at the market**

Stallholders compete with others but also enjoy a sense of community. Their generous support of the *Food For Life* initiative increases their sense of community.

## Impact for migrants

Farming and growing have been used to gain an economic foothold in New Zealand for successive waves of migrants. A downstream enterprise also popular with new migrants, is the grocery and restaurant industry – the wholesale consumers of primary production. Four of the 20 stallholders interviewed were migrants. For one stallholder, the market has supported the development of the family business. Relying on conventional marketing channels would not have enabled the reinvestment required to build the business.

Several wholesale customers come from countries where markets are commonplace. For one wholesale customer, the market creates a cultural reference point. She stated that in the places she was familiar with in Asia, markets were an integral part of daily life.


**Figure 6: Wholesale customer Jas Singh with his father and son are regulars at the market**

# Retail sector impacts

## Impacts from market customers

The market averages an estimated 4,500 customers every Saturday morning. Of those surveyed, 69% shop elsewhere in town before going home. Some of these (15.5%) visited supermarkets. We can assume that if they did not visit the supermarkets on a Saturday morning they would probably visit some other time during the week. But 13.5% of those surveyed stated they would purchase coffee or breakfast before going home. Unlike their supermarket spend, it is more likely that this is discretionary spending. For one nearby café, Saturday morning was their busiest morning. She stated that she would be devastated if the market went. As with other local businesses, the café opens early on Saturdays, a morning when shops typically open later.

“I would be devastated if the market went”.

Town Basin retailers were less certain whether or not their customers came from the market. If we extrapolate the 13.5% of those that stated they would shop elsewhere to buy coffee or breakfast across an average market attendance, approximately 600 people are visiting local cafés.

## Developments for wholesale customers

A number of businesses throughout the Whangarei District purchase supplies through the market. Primarily these are restaurants, fast food outlets and produce resellers. The initial contacts were made at the markets and relationships have developed over time.

### Tutukaka General Store

The Tutukaka General Store is a regular customer. Customers know that the store’s produce comes from the market and many turn up on Saturday morning to buy produce that has been transported from the market. Business peaks in summer with regular holiday makers also appreciating the fresh produce from the market. From the store’s perspective the quality of the produce attracts a lot of customers. They also supply produce for dive boat operators. Tutukaka also has a Saturday morning fish market.

### Fresha Valley

Fresha Valley is an independent dairy processing company based at Waipu. In 2005 it started selling milk and cream at the market and has developed a loyal customer base evidenced by the length of their queues. Customers like Fresha Valley’s competitive pricing and their A2 milk. Their presence at the markets has helped them grow their customer base throughout the district. There is an obvious synergy between the company, its customers and its retail outlets in establishing the brand. The eight small outlets they sold milk to when they started at the market has grown to 50 - 60 now. Signage at the Fresha Valley stall informs customers of these outlets.


Figure 7: Early morning customers queuing for milk

### Shiraz Restaurant

Jas Singh immigrated to New Zealand in 1996. He has established a chain of 5 restaurants and is now a keen customer of the market and sources 80 to 85% of his produce there. He appreciates the quality of the produce and has a high degree of trust in the stallholders he deals with. Jas has signs in his restaurants informing customers that most of the produce is sourced locally. For Jas, and especially his father, shopping at market is a familiar reminder of life in India.

## Brand Whangarei

From its humble beginnings in 1998, the WGM has become a community asset and is well woven into the fabric of the community. Any promotions of Whangarei would be enhanced by featuring the market. Unlike many other community assets, the market has been self-funding, enhancing their value to the region.

### National profile

The 100% Pure New Zealand website identifies the market as a tourist attraction:

> Northland's only city, Whangarei, has plenty of accommodation and is an excellent place to enjoy the Northland lifestyle. Sit at a quayside café and watch the yachts or visit the farmers' market on a Saturday morning and stock up on the freshest local food[29].

WGM directors have featured on national media including Country Calendar and Te Kaea.

### A tourist attraction?

A small number of customers interviewed were from Auckland or further afield. A typical Auckland visitor has friends or family to visit in Whangarei. One interviewee spoke of how they would schedule another night in Whangarei to enable time to visit the market when coming north. Other Auckland visitors have holiday homes in Northland and factor a visit to the market into their weekend schedules.

In summer customer numbers swell, with December being the month with the highest turnover. Many of the customers in the holiday period are visitors to the district or region. As Northland is the northernmost region in New Zealand, the market can feature produce not grown in other regions, such as cherimoya. According to Paul Davis, District Promotions and Tourism Manager for the Whangarei District Council, the marketing of produce unique to the region builds the attraction of the market to visitors.

### A community asset

Some survey respondents see the market as a draw-card to Whangarei. A family group related how the market was one factor that helped them to choose Northland as a place to live. Quantifying the value of the market to Northland as tourist attraction and contribution to the quality of life here warrants further investigation.

## Sustainability

The Lifestyles of Health and Sustainability (LOHAS) demographic has emerged in marketing discourse only this century[30]. In 2006 a survey estimated 26% of New Zealanders are part of the LOHAS demographic[31].

The customer survey revealed that 34% shopped at the market for organic or spray free produce, but the LOHAS demographic is broader than including those that might consider themselves “green”. Comments from participants revealing aspects of LOHAS aspirations can be segmented into the three dimensions of sustainability.

| Economic | Environmental | Social |
| --- | --- | --- |
| • supporting local growers<br>• local employment<br>• retaining revenue in the local economy<br>• revitalisation of the CDB<br>• support of small business | • organic or spray-free produce as an environmental benefit<br>• less packaging<br>• the local food movement and "food miles" | • organic or spray-free produce as a health benefit<br>• the consumption of more fresh or unprocessed food as a health benefit<br>• the creation of social spaces<br>• social contact<br>• support and enjoyment of local musicians<br>• direct contact with the food producer |

**Figure 8: Benefits of the markets for the LOHAS demographic**

Those in the LOHAS demographic do not necessarily pursue all of these aspirations, but the markets tick a lot of boxes for those in this growing demographic.

### The significance of the LOHAS demographic for the future of the markets

Based on the 2006 Branz survey mentioned before, 26% of the population can be segmented as LOHAS. Statistics New Zealand estimated the Whangarei District Population as 56,360 (excluding 0 to 15 year olds) in 2012. The over 15 year old LOHAS demographic for the Whangarei District is approximately 14,653[32]. This demographic will grow. See appendix two for more information on the LOHAS demographic.

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# Part Two:

# Growing the market

Since its inception in 1998, the market has experienced a steady growth trajectory. What further developments might accrue over the next 15 years? The market has created benefits for the community and can create further synergies for community initiatives. How can additional economic and social benefits be developed?

# Growing the market

## Limits to growth

Given that the market has experienced sustained growth further growth can be anticipated. This section discusses how growth might occur by first identifying limits to growth. Rather than offering solutions, the intention is to open up the dialogue.

### Space

The space occupied by the market at present is leased from the Council. Space is becoming an issue. When the market is very busy, space for customers is constricted and queues are commonplace. Nearby car parking is now at or near capacity during the markets. A doubling of current customer numbers would severely overload nearby parking. The market will require more room or more parking options soon.

### The time slot

The markets are open for approximately 4 hours a week. This may well be a barrier for many potential customers. Many customers appreciate the 6 a.m. start, and some arrive even earlier. Others complain about the early start, but a notable reduction in customers is apparent between 9 a.m. and 10 a.m. Is another time slot or alternate marketing channels practicable?

### Market channels

Currently, most market produce is sold directly to customers at the market with some being sold through wholesale customers. Are other outlets possible? Can the market create other marketing channels?

### Political will

The market has competitors that have worked actively against them. Do decision-makers in local government see the clear benefits that the market provides for the community?

## New market channels

Is it possible to develop market channels for the WGM stallholders that will supplement Saturday sales while not competing with them?

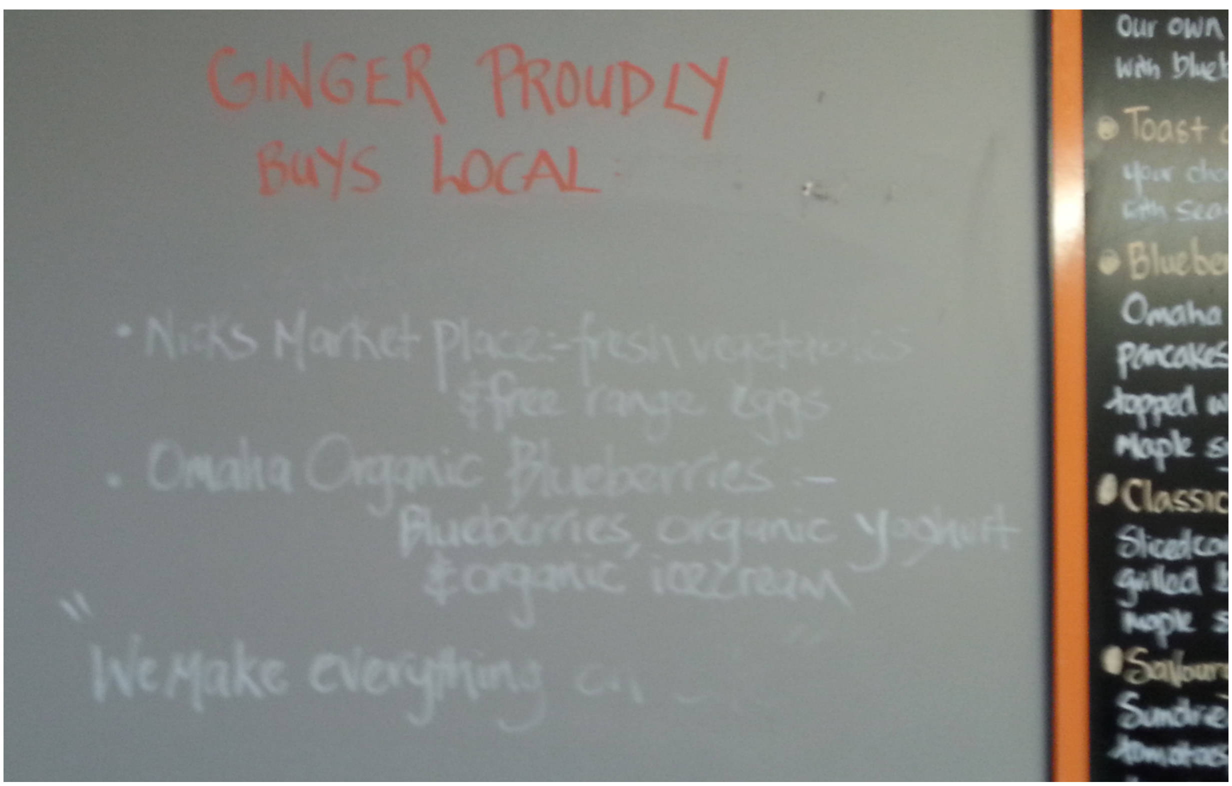
In recent years, market stakeholders approached Northland Hospital about the possibility of provisioning the their kitchens with fresh, locally grown produce. Based on the experience of the market's customers and other groups, such as the Food For Life project group, this would be beneficial for patients. The hospital was unable to progress the concept as it was apparently locked into a government supply agreement. Following this approach, the Ministry of Health announced plans to downsize hospital kitchens. Northland hospitals will be supplied with processed meals from a large central facility in Auckland.[33] If a supply agreement could be achieved between the hospital and the WGM, it would provide a significant boost for the development of the horticulture industry in Northland.

Other options for new marketing channels include contract caterers and community groups wanting to deliver health benefits and financial savings to their stakeholders.

## A reseller network

The business model exemplified by the Tutukaka General Store could be replicated throughout the district to provide locals with access to fresh produce and to provide further marketing channels for stallholders. Tutukaka Store customers are aware that produce originates at the market and have developed strong loyalty to the store and the market.

A parallel opportunity exists for local cafes and restaurants. “Ginger” café in Walkworth announces its support for local growers on the café wall.




Several café’s in Whangarei advertise their support for Fair Trade products. This targets, consciously or not, the LOHAS demographic. Why not also source produce locally, thus supporting local growers and proclaim that too?

Judy Wicks, has created a local food movement in Philadelphia. She started with her café, the White Dog Café, and extended it to create strong partnerships with local suppliers. The YouTube video referenced here elaborates how the local food movement developed. Could it be replicated here?[34]

Robert and Amy Moretto of Fresh Café in James Street source produce from the market every week. Robert is a passionate advocate of using locally sourced produce.

**Figure 9: Robert and Amy Moretto stocking up from the market.**

Robert buys at the market because “the quality is second to none – everything is awesome”. He sees the produce as a point of difference for his café. The produce retains its freshness, for examples the berries he purchases are “sweet, ripe and juicy”.

## The social business model

Professor Muhammad Yunus, Nobel Prize winner and the developer of micro-credit developed the social business concept. He claims that social businesses, businesses that run alongside commercial enterprises, can solve many social problems[35]. The concept is being adapted to a New Zealand context. A report by Mary Jo Kaplan of Brown University outlines social entrepreneurship in New Zealand and anticipates its development. Trends she identifies in social enterprise are reflected in some of the initiatives developing at the WGM.

> *Boundaries between public, private and non-profit sectors are blurring in the quest for better, faster, cheaper solutions. Government has a critical stake in new business models that provide public benefits. Not-for-profit organisations are becoming more market-oriented while businesses are working harder to benefit communities as well as stockholders. Scholars and practitioners are observing the convergence of market and mission throughout the world and are trying to find a common language to describe this burgeoning area of activity so it can be better understood and harnessed.*
>
> *Bill Gates, founder of Microsoft, called this shift, ‘creative capitalism.’ He stated, “We can make market forces work better for the poor if we develop a more creative capitalism – if we can stretch the reach of market forces so that more people can make a profit, or at least a living, serving people who are suffering from the worst inequities.” Harvard Business School professor Michael Porter*

*advocates that capitalism has betrayed its promise by focusing on a narrow equation of value with short-term economic returns. Businesses should pursue "shared value," generating both economic value and creating a value for society by addressing its challenges.*[36]

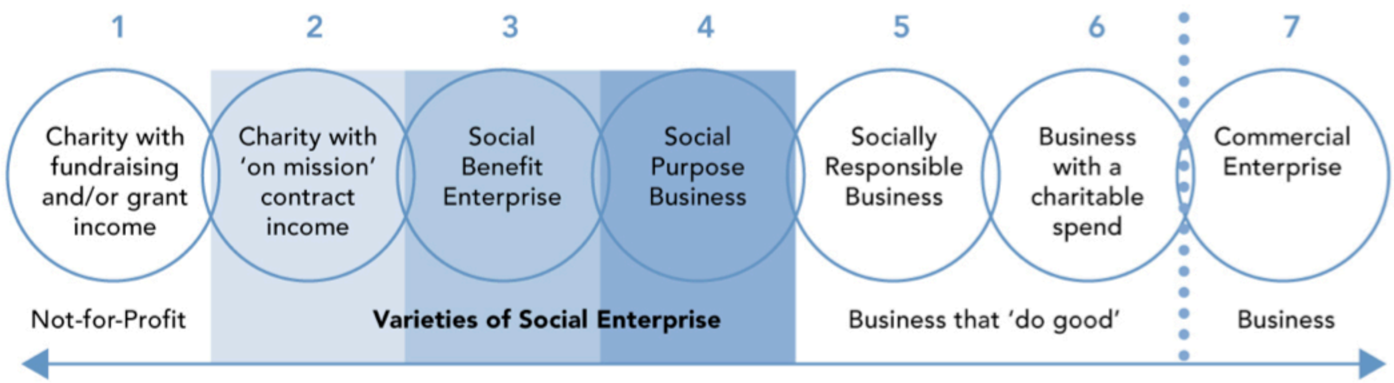



**Figure 10: The continuum from not-for-profit to business enterprise models**

This diagram from Mary Jo Kaplan's report identifies a range of enterprise models. Considering the market's support of the Food For Life project and the sense of mission exhibited by several stallholders, the WGM already spans numbers 5, 6 and 7 and arguably can also be regarded as a social purpose business (number 4).

Creating further synergies with other businesses, not-for-profits and local and national government agencies should enhance, rather than detract from those who aspire to run a profitable business.

At present Work and Income (WINZ) provide food vouchers to beneficiaries. Would it be possible to have these redeemable at the WGM?


[3]

[3] image by courtesy of Terry Small, Freeze Frame Photography www.freezeframe.co.nz

## The horticulture supply chain

Powerful armies have failed due to overstretched supply lines. The military is an innovator and many of the products and processes they develop migrate to the commercial world. Over the last century, especially with the intensification of competition, business has also sought to make supply chains more efficient. But the concept of the supply chain itself has embedded limitations. Participants tend to see themselves as competing with others in the chain, often manifested in predatory behaviours. Michael Porter articulates this malaise.

> The legitimacy of business has fallen to levels not seen in recent history. This diminished trust in business leads political leaders to set policies that undermine competitiveness and sap economic growth. Business is caught in a vicious circle.
>
> A big part of the problem lies with companies themselves, which remain trapped in an outdated approach to value creation that has emerged over the past few decades. They continue to view value creation narrowly, optimizing short-term financial performance in a bubble while missing the most important customer needs and ignoring the broader influences that determine their longer-term success. [37]

Over the last three decades many businesses have moved to develop the value chain. Participants in the chain, from the producer through to the retailer strive to create value, by finding economies in the value chain and delivering greater value to customers. Some of the created value can be shared among value chain partners. To achieve this, parties in the value chain need to develop trust, learn to collaborate and be more transparent. Purchasers tend to develop longer-term relationships with suppliers rather than pursue the cheapest price. This has been achieved in some industries, but struggles in others. For example in New Zealand, Sir Stephen Tindell embedded value chain thinking in his business from the start. For example, when an item is scanned at checkout, that information, through The Warehouse's extranet is available to suppliers. Those suppliers can better manage their inventory thus making savings that can benefit both The Warehouse and customers[38].

In New Zealand, horticulture industry supply systems resemble a supply chain, rather than a value chain. The supermarket duopoly embeds power that enables them to set high prices, but also dictate prices to producers.[39] Rather than the voluntary initiatives to implement a value chain ethic as we see in other industries, some governments are looking to regulation. In Australia, the Australian Competition and Consumer Commission is investigating the Australian supermarket duopoly[40]. In the U.K. Christine Tacon is the supermarket ombudsman. Her role is to resolve disputes between supermarkets and suppliers.[41] In New Zealand, the Green Party is promoting a bill to restrict supermarket power. Here is an introductory statement from the bill.

> This Bill amends the Commerce Act to require that a Code of Practice for Supermarket Grocery Suppliers is developed, to prevent or mitigate restrictive trade practices, and unfair dealings, in the

> supply of groceries to supermarkets, and to ensure that suppliers and consumers are treated fairly. It requires that designated supermarket chains comply with a code of practice that regulates grocery supply practices and promotes fair trade practices for the long term benefit of suppliers and consumers. It also requires that a Supermarket Adjudicator is established, once the code is in place, to implement the code of practice and resolve any disputes between supermarkets and suppliers.[42]

The WGM has provided growers with an avenue to shortcut the supply chain and deal directly with customers, but is there the will and the means to create a wider horticulture value chain?

## Relationship with supermarkets

WGM growers are able to run viable businesses because they sell direct to customers. Margins are much tighter if dealing with supermarkets. From the supermarkets perspective, they require reliable quantity and continuity of supply that smaller growers are usually unable to deliver.

When asked to identify benefits generated for the community by the market, 60% of those identified the support for locals or the local economy (55%).

This contrasts with Countdown Supermarkets, owned by Progressive Enterprises, owned by Woolworth's in Australia. According to its 2013 Annual Report, Woolworths returned $2.2 billion in dividends to shareholders[43]. We can assume that very little of this went to Northland shareholders.

Foodstuffs by contrast is New Zealand owned. Could Pak'n Save and New World enhance their brand by establishing and marketing a relationship with WGM growers?

### Value chain technology

Value chain efficiencies are often effected with new technology. For example customers execute the transaction in ecommerce websites, reducing or eliminating the need for salespeople. There could be an opportunity for a number of WGM growers to collaborate with each other using technology to co-ordinate harvest dates to assure continuity of supply to large customers such as supermarkets.

## The business model

A large part of the success of the WGM is its business model. It is a limited liability company with two major shareholding directors, Robert Bradley and Murray Burns. The constitution of the Whangarei Growers Market Association Limited outlines the market philosophy[44].

> The market philosophy is founded on the following principles:
>
> The market is to be a place where growers and final consumers meet and deal directly with one another.
>
> The market must be run in such a way that relations between the growers and final consumers are open, honest and display integrity of purpose of the market.
>
> The market is for growers who grow produce in the local Northland area. It is to be a market that allows local people to buy local produce.

Of the 20 stallholders interviewed there was a strong endorsement of the management of the market. Both directors were appreciated, but especially Robert Bradley who has frequent contact with stallholders on market mornings. When asked “has this market helped you to grow your business or improve its viability?” all responded “yes” and most agreed emphatically typically saying “definitely”.

The limited liability company structure provides clear leadership and management with decision-making embedded in the above principles. The directors do not actively pursue additional stallholders and are always prepared to disqualify a stallholder where there is a clear breach of these principles. Thus some of the interpersonal and political problems that can beset growers or farmers markets are avoided.

### The market mix

The retail customer survey asked customers “what would you like to see added to the market?” 53% expressed satisfaction with the market as is, or did not comment. A further 23% wanted incremental additions – an extension of the range of what is already on offer. A significant 24% wants additional offerings. When these are further categorised these are:

- more options for prepared food, e.g. breakfast foods (6%)
- infrastructural changes (seating, parking etc, 3%)
- bread (4%)

- arts and crafts etc (5%)
- changes to market hours (2%)
- a range of other options (4%).

Conversations with other stakeholders have also surfaced the desire to extend the range of products on offer, such as running the markets alongside the WGM. The current directors prefer to retain the existing market mix, in line with the WGM Constitution. A major downside of any expanded product range is space, both for customers in the market and their parking.

The market supports local businesses. Earlier in this report it was stated many customers frequent cafés after shopping at the markets. Extending the range of foods available will erode their Saturday morning customer base. In recent months the Hare Krishna Food for Life has started selling bread – another opportunity created by the markets.

## Succession

The research team notes that the main directors are highly regarded for their integrity and passionate support for the market. While the constitution and market rules provide a strong foundation for the markets, as with many small and medium sized enterprises (SMEs) the sustainability of the market very much depends on the current directors. How can their knowledge and qualities of character be replicated to ensure the continuity of this community asset?

Younger growers are under-represented at the markets. As existing growers retire or move on, how can more younger growers be encouraged to replace them? According to Murray Burns, in 1980 there were 27 commercial tomato growers in Whangarei, now there is one. Many existing growers struggle with the viability of the horticulture industry. Their children see their struggle and hard work and are not attracted to the industry. Many growers have survived through optimising production in an environment where there is little margin for error. This skill and knowledge is not being passed on to a new generation of growers.

A failure to resolve this issue is a significant threat to the continuation of the market.

## Participation of Māori

In her book *Trading Cultures,* Adrienne Puckey asks "How did New Zealand's north start out as a bread basket in the late 1700s and become an economic basket case by the 1990s?"[45] In the early days of the encounter of Māori and Pākehā, Māori adapted to the new crops bought by Europeans with remarkable adaptability and skill. Iwi and hapū structures provided the labour and organisation to successfully grow a number of crops.

At the market there is very little evidence of this entrepreneurial and horticultural skill with few Māori faces amongst stallholders.

The research team did not gather demographic data, but from frequent observations at the market, the number of Māori faces amongst the customers is not representative of Māori as 24.3% of the Whangarei District population.[46] However Māori are well-represented amongst the entertainers at the market, notably the Martin girls playing classical string music and "Adam the busker". Kawiti Waetford's opera career was supported by his busking at the market.

Given that the market can improve health outcomes through increased consumption of fruit and vegetables, it is notable that Northland Māori have relatively poor health outcomes. For example, the Northland District Health Board's Māori Health Annual Plan 2013/2014 (page 3)[47] identifies that:

> Maori have about three times the avoidable mortality rate than non-Maori (308.3/100,000 compared with 106/100,000). Leading causes of death are ischaemic heart disease, lung cancer, diabetes, motor vehicle accidents, and suicide and self-inflicted injuries.
>
> In 2009, 48% of all Maori deaths occurred before age 65, compared to 18% for non-Maori.

Amber Pearson and Nick Wilson's research into the location of farmers markets reveals that improved access to markets increases fruit and vegetable consumption for both Māori and non-Māori.[48]

How can the WGM foster more Māori participation in the markets? Can other distribution channels improve access for Māori?

# Part Three:

# Conclusion and recommendations

## Conclusions

The Whangarei Growers Market is a community asset. The operation is based on a set of sound principles and "market rules". It is expertly run and has enjoyed a steady growth trajectory over the 15 years of its operation. It has loyal customers who appreciate the product quality, choice and contact with producers. The range of options available meet the needs of different customer drivers – seeking bargains, spray-free or organic produce or specialty items. The stallholders appreciate how the market operates and are able to build their operations over time.

While the economic performance of the market is impressive, some of the social impacts are perhaps even more important. Customers appreciate the atmosphere of the markets and it contributes to improved social cohesion. The market's impact on health and potential impact can create further value for the Whangarei District and Northland.

Broader environmental factors shaping the operating environment for the market has it primed to grow further and develop tighter partnerships with stakeholders. Some of these opportunities are captured in the recommendations that follow.

## Recommendations

These recommendations are offered as avenues to further grow the market. It must be acknowledged that the primary concern for many growers is to make a living from their enterprises. Any development cannot distract from core business, so community support will be required to realise this growth.

The WGM operates with lean infrastructure to minimise costs to stallholders. They do not have current capacity to implement all of these recommendations, which, if implemented will create significant benefits for current and potential stallholders, customers and the wider community. The WGM hopes these recommendations will be widely read, will generate further discussion and may surface additional associates who identify mutual interest in their achievement.

1. That the WGM develops a plan to promote a local food movement.

> *Local cafés, restaurants and grocers could replicate the distribution system pioneered by the Tutukaka General Store and Fresh Café. This may require an enhanced distribution service with participating producers. If both the participating outlets and market have a co-ordinated marketing plan, business growth and enhanced brand awareness should follow.*
>
> *Customers will know where to access market produce on the occasions that they are unable to get to the Saturday market and replenish supplies during the week.*

2. That the WGM develop partnerships with stakeholders in the health sector and develop plans to increase the availability and consumption of fruit and vegetables by a specified percentage in five years.

> *Inevitable movements in health policy are set to advantage the market. Improving the access for Northlanders to fresh produce has known potential to improve health. This presents a win-win for the market, growing demand for produce and delivering health benefits for the community. There are health practitioners now ready to work with the markets to promote better food habits. These partnerships have great potential to grow the markets and enhance their mana.*
>
> *A partnership with an appropriate registered charity could provide an opportunity to raise funds from customers and the wider community to initiate a voucher system, redeemable at the markets, distributed to disadvantaged communities.*

3. That the WGM establish an online presence through the development of a website and greater social media presence, alongside a calendar of promotional events.

> *A website and enhanced use of social media will support promotion of the WGM and share the good news stories that this research has provided. It may also create a platform for promotion of market produce.*

4. That the WGM pursue nearby facilities to enable expansion.

   *The present facilities are stretched, and may limit the ability of the WGM to grow.*

5. That the WGM maintain the current product mix.

   *A strength of this market is the provision of fresh, locally grown or harvested produce. Some stakeholders have advocated having more food and crafts, but the current model is working well and continues to grow in popularity. Those that want breakfast currently support local café creating good synergies between local businesses and the markets.*

If you would like an electronic version of this report go to www.northtec.ac.nz and either look through the news items, or search for the keywords Whangarei Growers Market.

We welcome your feedback on these recommendations. Complete our online survey at https://www.surveymonkey.com/s/WGM2014 .

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Appendix one: Economic Analysis

# WHANGAREI GROWERS MARKET:

## THE ECONOMIC VALUE FOR THE WHANGAREI/NORTHLAND ECONOMY

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# INTRODUCTION

The following economic analysis attempts to value the annual operations at the Whangarei Growers Market (WGM or the Market). The Market operate with Northland growers and stall-holders selling their produce and goods directly to the public in Whangarei. There are gains to both buyers and sellers. Buyers gain access to fresh, more varied and in some cases unique (i.e. unobtainable elsewhere as in organics) produce at possibly lower prices than similar produce etc. purchased at traditional retail outlets. Sellers gain higher prices for their produce and goods than they would receive from traditional wholesalers and retailers as in supermarkets and similar. Intangible non-measurable gains to both sides may also be realised such as the urban/rural interaction not experienced with traditional retailing. In addition, markets such as these provide opportunities for social discourse with diverse buyers (e.g. families together) transacting business they do not normally engage in.

# ESTIMATING THE ECONOMIC GAINS FROM THE WGM

Measuring these economic gains is problematic. First, we limit our analysis to tangible economic gains that can be estimated using orthodox economic models. In this case, an 88-sector economic model of the Northland Regional Council economy (individual sectors of which are *italicised* in the following) for the year ended September 2013. Non-tangible gains (and losses) such as noted above cannot be estimated here. Secondly, certain assumptions need to be made on pricing and employment that could be better estimated using more detailed primary data than what is currently available. For example, what is the premium sellers receive at the market exchanges over and above what they would receive from traditional wholesalers and retailers in the supply chain? A range of 15 – 25% is assumed here with a base discount of 20%. That is, sellers would receive 20% less for their produce if the WGM sales were made through the traditional produce supply chain. Alternatively, sellers receive 17%, 25% (base case) or 33% more from produce sold at the WGM than they would receive from wholesalers etc. in the traditional marketing system. Base case only values are shown here, but approximations for 15% and 25% discounts can be derived by multiplying values shown by 20/15 (gives higher values for a 15% discount) or 20/25 (gives lower values for a 25% discount).

Total annual sales at the WGM over the past year to December 2013 were $3.66 m. Produce covers horticultural (includes flowers) and fruit, meat and dairy produce as well as fish. Using a 20% discount from this figure, the estimated value of this produce if it entered the traditional supply chain system is $2.93 m. The value to the Whangarei economy of $2.93 m in wholesale produce sales can be explained using two types of linkage to WGM grower activity. First, the backward linkages estimate the value produced by suppliers to these growers for inputs such as *Agricultural Services*, *Fertiliser Petroleum & Chemicals*, *Industrial Machinery*, *Paper & Containers*, *Road Transport* and inputs from similar sectors. The economic model utilised here objectively estimates the value of these inputs which are designated as backward flow-ons from the initiating growing, harvesting, processing, manufacturing and distribution activities of these growers. In this case, it is the production of horticultural, food and fish produce. Secondly, the forward linkages value the outputs required to get this primary produce to the final consumer. Typically these sectors include *Road Transport*, *Supermarkets & Groceries*, Re*staurants & Bars* and similar using sectors. In the present study, these traditional forward linkages are replaced by WGM sellers who effectively transport to the market and sell directly to final consumers. These buyers could be households or (for example) *Restaurant & Bar* proprietors, *Community Care* providers and similar.

Although these traditional forward linkages are now superseded by WGM operations cutting out the middle-men so to speak, the **value** to the community of these replaced operations can be estimated using our economic model. In actuality, this traditional **value** will be split between the sellers at the WGM who gain higher prices and buyers at the WGM who secure (probably) lower prices than they would pay at their local supermarket for similar produce. In fact, the forward linkage gains estimated by our model almost certainly underestimate the true community gain since at least some buyers of the produce at the WGM would pay higher prices if they had to. In a survey of the Market, 20% of potential buyers said prices did not matter and 38% responded that prices at the WGM were cheaper than at the supermarkets etc. Of course, supply and demand will determine the actual final prices paid and at the same time the respective supplemental gains to sellers and buyers. In economic jargon, the total value of these foregone gains to sellers from the lower than feasible prices is known as the "consumer surplus".

A summary of all such values for the latest year of WGM operations is shown below in Table 2. Note that total annual sales at the WGM for the past year was $3.66 m. The cost of production or wholesale value is estimated at 20% less (i.e. 80% of $3.66 m) or $2.93 m which allows for an average mark-up of 25% to the final consumer (i.e. $2.93 m x 1.25 = $3.66 m). The $2.93 m production cost or wholesale value is the initial stimulus from which all other economic impacts are derived. First, however, Table 1 shows the allocation over the model sectors for WGM sales.

**TABLE 1: Allocation of Total Production Cost or Wholesale Value Over The Direct Producing Sectors**

| Sector from 88-Sector Economic Model | $ millions | Percentage |
|---|---|---|
| | | |
| Horticulture & Fruit Growing | 2.373 | 81% |
| Dairy Sheep & Cattle Farming | 0.440 | 15% |
| Fishing | 0.117 | 4% |
| | | |
| **TOTALS** | **2.930** | **100%** |

The above three sectors comprise the so-called direct production sectors in the 88-sector economic model used to derive the economic impacts of the WGM. From the growing and producing activity in the sectors in Table 1, other flow-on activity and values (backward and forward) emanate and can be estimated by the economic model for the Northland economy.

**TABLE 2: Total Economic Impacts for the Northland Economy Emanating from Grower Sales at the WGM**

| | Revenue | Net Household | Employment | Value Added |
|---|---|---|---|---|
| | **$ millions** | **Income $m** | **Jobs** | **$ millions** |
| | | | | |
| Direct production activity from Table 1 | 2.93 | 0.55 | 19 | 1.12 |
| Flow-ons to Backward Linked Sectors | 3.27 | 0.42 | 11 | 1.13 |
| | | | | |
| **Total Direct & Backward Linked Impacts** | **6.20** | **0.97** | **30** | **2.25** |
| | | | | |
| Flow-ons to Forward Linked Sectors | 2.57 | 0.54 | 11 | 0.76 |
| | | | | |
| **Value of Total Impacts due to WGM** | **8.77** | **1.51** | **41** | **3.01** |
| | | | | |
| *Backward Linked Multiplier (e.g. 6.20/2.93)* | *2.12* | *1.76* | *1.58* | *2.01* |
| | | | | |
| *Total Multiplier (e.g. 8.77/2.93)* | *2.99* | *2.75* | *2.16* | *2.69* |

Recall that the value for the backward linkage flow-ons estimates the value of inputs supplied to WGM growers from sectors such as *Agricultural Services*, *Paper & Containers*, *Road Transport* etc. In reality, there are many cases where the growers themselves will supply the labour involved in spraying, applying fertiliser and perhaps other inputs so that the above money values above will not be exchanged between grower and supplier. Nevertheless, the economic value of these services can be estimated by our model and this is done by the values shown in Table 2.

A similar argument applies to the forward linkage flow-ons in Table 2 as noted above. For example, transport to market of the produce sold there. Again, an objective value of these services that would be realised in the traditional supply chain can be calculated via the economic model. The sum of all direct, backward and forward linkages as shown in Table 2 represent objective values (but see below) to the Northland community of the operations at the WGM, even though money will not be exchanged for some of the linked activities. The growers and stall-holders themselves will undertake much of this work.

Some comments on the values in Table 2 are necessary to fully appreciate how these values apply in the present study. As shown in Table 2, an estimated 19 persons are required to directly produce the $2.93 m of horticultural etc. produce. The model is using the technology associated with large scale production of horticultural, dairy, meat and fish produce using capital intensive equipment in planting, harvesting and manufacturing these goods. The labour input at 19 persons is correspondingly low. In contrast, the WGM technology will use less capital and more labour. Many more than the 19 persons shown in Table 2 will be involved in this production and eventual sales. On the other hand, less than the 11 backward linked persons will be employed since the growers themselves will, in many cases, apply spray and fertiliser etc. and transport the resulting produce. Overall, however, the direct and backward linked employment of 30 in total will be much exceeded, perhaps to as high as 90 persons.

The model technology summarised in Table 2 suggests that the gross annual salary of the 19 employees involved in producing \$2.93 m of produce in the conventional manner is given by \$0.55 m/0.7/19 or approximately \$41,000 (the 0.7 parameter converts net household income into gross household income before deductions such as PAYE, super, and after other labour costs such as ACC charges are added on). Remuneration of the WGM sellers on the other hand is best estimated by the \$3.01 m figure for Value Added or Gross Regional Product GRP as in Table 2. GRP shows the total of gross wages and business profits before taxation such as PAYE, excise and GST. The returns to growers and stall-holders will include both wages and business profits. Using the \$3.01 m estimate (and assuming 80% of this accrues to growers/sellers etc.), the average grower/seller return per worker for say 90 persons involved comes out to 80% of 3.01 m/90 or about \$27,000. Recall this is a before-tax return, so income tax for example would reduce this grower/seller return somewhat. This value is significantly less than the median income of \$36,500 for men and \$23,100 for women as reported in December 2013 by **Statistics NZ**. Obviously this estimated annual grower/seller return per person will alter with the 90 worker and 80% assumptions. For example, if 60 full-time persons are involved with WGM operations down from the 90 assumed above, the annual average grower return increases to about \$40,000 per person if we retain the 80% assumption on grower/seller share.

If the WGM ceased operations, the loss to the Northland community would be the direct plus backward linked values in Table 2. That is, there would be a \$6.2 m Revenue loss for example. Of course, the Employment loss would be greater than the 30 shown and possibly as high as 90. The reduction in GDP for the Northland region would be \$2.25 m. We can take this \$6.2 m potential Revenue loss as the gross value of the Market to the Northland economy. Furthermore, if the WGM did not exist about 90 persons would be out of a job and possibly adding to the list of beneficiaries in Northland.

The forward linkages would not be lost to the Northland community since produce from elsewhere in Northland or from outside the Northland region would replace that currently supplied by the WGM growers. Accordingly, an estimated 11 jobs involved in delivering this \$2.93 m wholesale value of produce to final consumers would continue to be needed as before. For the purposes of regional GDP loss (or GRP loss), however, the \$3.01 m value in Table 2 (including the forward linkages) can be taken as the current Value Added or GRP of the Market to the Northland region. As noted above, the forward linkage flow-on of \$0.76 m will be divided between stall-holders receiving higher prices and buyers paying lower prices than in traditional markets.

The multipliers in Table 2 conveniently summarise the economic impacts of the WGM. For Revenue, \$1 of produce sold at the WGM induces another \$1.12 of sales revenue for supplying business units in the Northland region (multiplier 2.12). Another 87c of services is required to deliver this produce to final consumers (1 + 1.12 + 0.87 = 2.99 the multiplier including the forward linkages). Note that a fraction of this 87c could represent a contribution to the wages of casual staff in Northland restaurants for example. The Employment multipliers in Table 2 cannot be similarly interpreted because the WGM technology for growers and sellers is not the same as the production technology intrinsic to the economic model as outlined above.

# CONCLUSIONS

The economic impact results for the WGM derived from the economic model of the Northland region can be summarised as follows:

- Stall-holder sales in the latest year to December 2013 totalled \$3.66 m.
- After flow-ons, the total Sales Revenue impact for the Northland economy annually is estimated at \$6 m.
- The Value Added or GRP impact for the Northland economy has been estimated at \$3 m annually.

- Direct employment of growers and stall-holders has been estimated at 90 persons.
- Annual returns to stall-holders before tax have been estimated to average $27,000 per person.

Currently, business practices in NZ's supermarket sector are under investigation. Best practice for the government related to **any** sector is to encourage as much competition as possible. The objective for both central and local government must be to facilitate operations such as the WGM to ensure efficient, diverse and cost-effective supply of agricultural and similar produce to final consumers. Regulation of supermarket practices should be a **last** resort. The WGM and similar markets around NZ have clearly demonstrated their utility in fulfilling consumer demands to some degree. Needless bureaucracy and regulation should be trimmed to a minimum in order to maximise sales at such markets. This could involve relaxing parking regulations on weekends and similar measures as well as creating areas for such markets to increase in scale and diversity. School grounds and parks could be made available for this purpose with obvious precautions put in place for property protection, waste removal etc. Intangible gains such as keeping supermarkets and traditional business units somewhat competitive on price and community gains from enhanced interaction between city buyers and country growers all help to make living in Northland more enjoyable. Taking account of such factors, the annual value of these markets to the Northland economy exceeds the $6 m of tangible gains noted above.

# Dr WARREN R HUGHES - AUTHOR PROFILE

The author is Cambridge, NZ born and a graduate of the University of Auckland and Indiana University in the USA, where he completed his doctorate in Business Economics and Public Policy in 1970.

Since that time, he has taught in the areas of econometrics, forecasting, financial economics and managerial strategy at The University of New South Wales in Sydney (1970 – 1978) and most recently at The University of Waikato (1978 – 2007). At various times, he has taught in MBA programmes at the University of Florida in Gainesville and in the Graduate School of Management at the University of California at Irvine. Dr Hughes retired from the University of Waikato in 2007 and was appointed an Honorary Fellow in Economics in 2008. At the present time, he works as an independent economic consultant based in Auckland.

The author has published extensively, mainly as single-authored articles in international journals such as *Decision Sciences*, *Theory and Decision*, *The Journal of Business*, *Mathematical & Computer Modelling*, *Environment & Planning*, *Australian Journal of Management*, *Forest Science, Australasian Journal of Regional Studies* and, most recently in April 2009, *OMEGA*, the international journal of management science and again in September 2010 in the *Chinese Business Review*. Other articles on theoretical and applied economics have been published by the author in *NZ Economic Papers* and Australia's *Economic Record*. He is a member of the Advisory Board for the Wiley journal *Managerial and Decision Economics* and maintains a continuing interest in the latest developments in economic theory as it relates to management and business. The author has developed a particular expertise in the area of impact and regional analysis. He was the Editor/Manager of the *Regional Economic Bulletin*, which focused on topical issues relevant to the business and wider communities, mainly but not exclusively, in the Waikato and Bay of Plenty regions. The *Bulletin,* which was a complimentary publication of the University of Waikato, ceased publication in 2008.

The author has acted as a consulting economist for *Economic Solutions Limited*, *Environment Waikato, Carter Holt Harvey Limited, Contact Energy, Norske Skog Tasman Limited, Port of Tauranga Limited, Port of Napier, Feltex Carpets*

*Limited, Man'O War Farm Limited, Refining NZ Limited, Zespri International, Waikato Innovation Park, Property Council of NZ, Creative Napier*, *Katolyst*, *Priority One BOP*, *Vision Manawatu, Enterprise Franklin, Venture Taranaki,* various District Councils in the Waikato, Bay of Plenty, Hawkes Bay and other regions and for events such as Tauranga's *Montana Jazz Festival*, Hamilton's *Balloons Over Waikato* and Napier's *Art Deco Weekend.*

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# Appendix two: The LOHAS demographic

Estimates of the proportion of populations that fit the Lifestyles of Health and Sustainability (LOHAS) demographic vary from 13 to 19%[4] to 30%[5]. The Branz report in New Zealand[6] and the Living LOHAS report from Australia[7] quantify the demographic as 26% of the population. According to the Branz report this market segment has an estimated global value of $500 billion annually.

A recent U.S. report[8] reveals continuing growth in LOHAS markets. For example:

- Between 2002 and 2011 the organic food grew 238% compared to 33% for the overall food market.
- Projected sales for organic food in 2014 is $US42 billion, growing to $US78 billion in 2015.

What motivates LOHAS consumers? According to the Living LOHAS report (page 4):

> LOHAS aligned consumers look behind products and services to an organisation's philosophy, practices, people and impact on the planet in assessing whether they should buy a given product or service. They probe for alignment of organisational intent. Authenticity of the offer is mandatory and the company is mandatory. LOHAS consumers want to know "where does it come?", "how is it made?", "what is it packaged in?" and "what will happen when I dispose of it?".

This statement aligns nicely with some of the aspirations expressed by Whangarei Growers Markets customers, especially their desire to support local business and to deal directly with those who grow or catch their food.

## LOHAS sub-segments

The LOHAS segment is diverse. Some will be motivated by economic, considerations, some by environmental considerations, others by social considerations, or a combination of these. The Green America report identifies six main segments:

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[4] LOHAS (2010) *About: Lohas background.* Retrieved from http://www.lohas.com/about

[5] Wikipedia (2013) *LOHAS* Retrieved from http://en.wikipedia.org/wiki/LOHAS

[6] Branz (2006) *Sustainable foundations: Helping Kiwi builders run a sustainable and profitable business*. Retrieved from http://www.branz.co.nz/sustainablefoundations/files/Background2.htm

[7] Mobium Group (2007) *Living LOHAS: Lifestyles of Health and Sustainability in Australia.* Retrieved from http://www.theage.com.au/ed_docs/LivingLOHAS2007Overview.pdf

[8] Green America (2013) *Small business sustainability report, 2013: The big green opportunity for small business in the U.S.* Retrieved from http://biggreenopportunity.org/wp-content/uploads/2013/05/Big-Green-Opportunity-Report-FINAL-WEB.pdf

- Fair Trade food
- organic food
- organic non-food
- social investing
- green building
- renewable energy.

The only segment directly related to the markets is organic food, but other relevant aspects of the LOHAS market are:

- local foods
- supporting the local economy.

## Local foods

Locavores are people who prefer to eat local food, or food that is produced within a 100 mile (160km). For us in Northland that includes most of the region and a generous amount of seafood. Northland is a superb habitat for locavores, given that produce can be accessed from subtropical to deciduous fruits, a wide range of vegetables, seafood, meats and dairy products. Alisa Smith and J.B. MacKinnon's book *The 100 Mile Diet,*[9] relates their story of their year-long attempt to eat foods grown with 100 miles of their apartment.

The brisk year-round trade in vegetable seedlings also supports customers aspirations to eat local food.

The concept of local food is problematic for Northland, a region that relies heavily on exports of primary produce.

## Supporting the local economy

Supporting the local economy is relevant to all three dimensions of sustainability, financial, environmental and social. There is a web of mutually reinforcing benefits derived from supporting the local economy. The market provides a direct link between growers and consumers, removing middle-men out of the supply chain. This has potential to reduce prices to the consumer and increase margins for the grower. More of the revenue is likely to remain in the region. Food producers live mainly in rural areas, and these can only be enhanced by increased employment opportunities and the circulation of cash.

[9] Smith, A. & MacKinnon, J (2007). *The 100 mile diet: A year of local eating.* Canada: Random House

# Appendix three: Research methods

This is an applied research project funded by the Whangarei Growers Market with support from NorthTec and volunteers.

The research question was *What are the social and economic benefits of the Whangarei Growers Market?* The diverse data required to answer this question requires a mixed methods[10] research approach. Here is a brief description of the main types of data collection and analysis.

## 1. Surveys

An early step in research design was a desktop exercise to identify data-sources. The primary stakeholders identified were retail customers, wholesale customers, stallholders and the community. The first three are easily identifiable.

### Retail customer survey

***Method*** - The research team, assisted by NorthTec students interviewed 155 retail customers on two different timeslots on two Saturdays. The survey team was diverse on measures of gender, age and ethnicity. The survey data was processed quantitatively, and themes were surfaced through survey team analysis and consultation. Participant names and contact details were gathered to enable dissemination of the report. This data was recorded separately to survey responses.

***Participants*** - Participants were selected randomly, but researchers reported responding to subtle messages about receptiveness for interviewing.

### Stallholder survey

***Method*** – Data sought from suppliers was economic (see below) and qualitative. The research team leader interviewed 20 of approximately 58 stallholders using a semi-structured survey. Data gathered was collated and analysed both quantitatively and qualitatively through the emergence of themes.

***Participants*** - These were selected to represent the range of produce available. Diversity of the stallholders was reflected in the number of years of participation in the market and the size of their operation.

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[10] Brannen, J. (2005). *Mixed methods research: A discussion paper.* Retrieved from http://eprints.ncrm.ac.uk/89/1/MethodsReviewPaperNCRM%2D005.pdf

### Wholesale customer survey

***Method*** - The research team leader interviewed ten wholesale customers. The interviews were based on a survey form, but tended to be less structured. Some were interviewed at the market and others in nearby shops. Rather than attempt to identify themes in a small sample, the lead researcher looked for some consensus and compared findings with the large amount of data already gathered. The interviews were held over a period of two months.

***Participants*** - These were selected by loitering around their designated parking area and from leads from stallholders. Seven of the ten interviewed owned restaurants of cafés, with the remaining three reselling produce.

## 2. Observations and discussions

***Method*** - While others stakeholder populations were easily identified, the research design deliberately avoided assuming the elements of the community that might be impacted by the market. Thus a grounded theory approach[11] was adopted – seeking out leads through conversations with other stakeholders. This led to diverse community members and organisations impacted by the markets. This research was iterative in that one interview often led to another. Rather than anticipate research themes through literature reviews, the themes were allowed to emerge and primary data collection was analysed alongside secondary data.

***Participants*** – Potential interviewees were identified through prolonged and regular attendance at the market, observing and having conversations with people. This led to unexpected outcomes and the discovery of some key data.

## 3. Economic analysis

One of the market directors gathered financial data and equivalent full time (EFT) staff numbers. This data was gathered to guard confidentiality as the stallholders both collaborate and compete with one another. The raw data was compiled and passed on to Dr Hughes for economic analysis. His methods are outlined in appendix one.

## 4. Secondary research

Any pre-determination of research themes by an initial literature review were avoided. As themes emerged through primary data collection, follow up using research databases and the Internet revealed relevant information sources.

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[11] Grounded Theory Institute (2011). *What is grounded theory?* Retrieved from http://www.groundedtheory.com/what-is-gt.aspx

### Research dissemination

The research is represented in this report. It will be distributed to key stakeholders including the Whangarei District Council and stallholders. Pdf copies will be emailed to those retail customers opting to provide an email address. The pdf will be distributed though stakeholder websites, email lists and social media outlets and media outlets.

### Report feedback

The report is based on data from a range of stakeholders, analysed with a variety of research tools. Seeking feedback from report readers provides another layer of rigour to the report process and enables a wider range of perspectives to surface. When distributed, a covering letter or email will direct readers to an online survey to seeking feedback about the report, focussing primarily on the recommendations.

### References

The report uses endnotes and footnotes rather than in-text citations, as the latter are intrusive for the reader. Endnotes and footnotes also automatically hyperlink in electronic versions of the document.

### Reflections on the research process

The research design was initially based on learning from successful projects commissioned by Refining NZ. The most recent of these was The Social and Economic Impact of the Proposed CCR Project.

It is significant the research team are members of the community and market customers. As lead researcher, I was a customer of the market before the research began, and shopped at the market regularly before the project began and weekly since the project was initiated. I would gather both data and produce. This expanded the time I spent in the market environment and enabled me to discover leads that may have been overlooked by a more remote research team.

I believe this to be a strength of this project and has parallel in other research contexts. Māori researchers state that those researching Māori should be Māori and preferably of the same Iwi[12]. Thus the researcher is a member of the local community rather than an "objective" outsider. 'Māori are wary of researchers objectifying Māori "in the same way a scientist looks at an insect'".

[12] Smith, L. (1999) *Decolonizing methodologies: research and indigenous peoples.* London: Zed Books. quote from page 58.

The counter to this advantage is research bias. I contend that very rarely is research free of bias. All researchers come with diverse world-views. Over the duration of this project, my appreciation for the value of the markets to the community has increased, and this will inevitably create some bias. However, stakeholders will have a further opportunity to provide their perspectives on the market through ongoing discourse.

## Research team

***Peter Bruce*** is a researcher and lecturer for the Business Management degree and diploma programme at NorthTec. He led the research team that produced *Our Contribution* and *The Social and Economic Impact of the Proposed CCR Project* for Refining NZ in 2008 and 2012. Peter is the author of *Better Business for a Better World, published* in 2000. He was born in Northland, lived in the region most of his life and is a regular customer of the Whangarei Growers Market. Peter's first career was in horticulture. His Stakeholder Engagement blog is www.engagementedge.com. To contact Peter email pbruce@northtec.ac.nz.

***Anne Patrick*** is a lecturer for the Business Mangement degree and diploma programmes at NorthTec. She worked in the USA for over 25 years and has a background in Research, Accounting and Auditing. Her current focus is Research Methodology, Economics, Consumer Behaviour and Business Communication.

***Sheila Romer*** is a lecturer for the Business Management degree and diploma programmes at NorthTec. She is from the UK with a background involving over 20 years of retail and tourism business ownership. Her current focus is business management, human resource management and marketing.

***Dr Warren Hughes*** is a nationally renowned economics researcher and academic with extensive experience in econometric analysis. He engages in all types of economic analyses for businesses, cities and regions with clients including a wide range of local authorities, government agencies and businesses. His website is www.hugheseconomics.co.nz.

The research team thanks students of Anne's *Research Methods* paper of the Bachelor of Applied Management for helping with customer surveys, data entry and analysis and survey design. Thanks to Alan Gordon, Sahil Goyal, Pratish Gudur, Anna Halaapiapi, Alyse Hildreth, Michelle Hudson, Jinyong Park, Deidre Pukeroa, Chavaune Samons, Marie Stratford, Nancy Te Whata and Apikera Thomas.

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