From Policy to Plate: A Critical Analysis of Council Engagement with Local Food Initiatives in Aotearoa

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ABSTRACT

There is no agreed upon definition of local food, yet it is often uncritically assumed to be a beneficial way to consume. Local government in Aotearoa New Zealand is no exception. This dissertation critically analyses Auckland, Wellington, and Christchurch City Councils' engagement with local food initiatives. These councils were selected based on their leadership in food strategy and because they are the largest three cities in Aotearoa. The study explores to what extent the three most populous city councils in Aotearoa prioritize and invest in local food, and considers what critical insights can be derived from analysing their initiatives in the local food space. The study presents a thematic analysis of the food plans and policies of each council, as well as of the 'about' descriptions of organisations with council funding working in the local food space. The main theme that was identified from the data was '*The pursuit of a food system centred around social, individual, economic, and environmental wellbeing'*. These four wellbeing focus areas were then used as a guide for a critical discussion of the councils' engagement with local food and localised food systems. A critical lens was applied to the claims that the councils make about local food using findings from the literature review. The findings suggest that Auckland, Wellington, and Christchurch City Councils may have been susceptible to "the local trap", the assumption that local food is inherently good.

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ATTESTATION OF AUTHORSHIP

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Signed:

Name: Chloe Eberly

Date: 30th August 2023

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Chapter 1. Introduction

1.1 Introduction

As political, social, cultural, and environmental issues arise from the global industrial food system, localised food systems are presented as a solution. In modern society, it is normal to procure food from the supermarket, where it arrives from many different avenues connected to systems the world-over. The global industrial food system provides us with a convenient variety of ingredients and products. Though these items may be affordable, there are concerns about the negative environmental and social impacts of the globalisation of our food. Control of the largest markets falls into the hands of a few corporations, giving them excessive power. Many people face food insecurity in a world where obesity is an epidemic. The environmental impact of the global food industry is another area of concern as mass food production has been shown to emit large volumes of planet-warming greenhouse gases, cause water pollution, and reduce biodiversity. It is out of these many worries that local food movements have grown, promoting a 'better' way of consuming.

In 2019, the EAT-*Lancet* scientific report on healthy diets from a sustainable food system noted that "food systems have the potential to nurture human health and support environmental sustainability; however, they are currently threatening both" (Willett et al., 2019, p. 447). This suggests that human and planetary health are not two separate issues. The World Health Organisation has called climate change the "single biggest health threat facing humanity" (2021a, n.p.). Local food is positioned as a solution to issues related to global industrial food. It is small scale and often associated with best practices for people, animals, and the planet. Words like 'healthy', 'fresh', and 'nutritious' can be found describing it, and popular food literature such as Pollan's *The Omnivore's Dilemma* (2006) or Nabhan's *Coming Home to Eat* (2002) promote locally sourced food as an ethical way to consume.

I grew up alongside climate change, in a way. When I was a baby, our warming planet was not a concern for most people. In fact, where I am from in the United States, most people have denied it exists at all up until this past decade. It is a global threat that has escalated speedily, and with it comes

a great sense of urgency to do *something*. My children will be born into a different world, which has been the driving force behind my interest in food systems. As a consumer, I have anxiety every time I fill my shopping cart – am I making the right choices? Will how I fill my plate cause harm or healing? I question how much impact a single consumer can have through their day-to-day actions. Is one person's dietary choice going to save the planet? Though I believe in the positive impact an individual can have in this world, this seems unlikely without collective engagement and action.

One way that consumption habits can be influenced on a larger scale is through government involvement. In the absence of a national food strategy, this research examines the discourse that surrounds localised food systems in Aotearoa New Zealand at a local government level. A critical analysis is undertaken on the engagement of Auckland, Wellington, and Christchurch City Councils with local food initiatives. The following research question guides this dissertation: To what extent do the three most populous city councils in Aotearoa prioritise and invest in local food, and what critical insights can be derived from analysing their initiatives in the local food space?

1.2 Overview of the Dissertation

This chapter (**Chapter 1**) serves as an introduction to the dissertation topic, explaining the research question and why it is important. It helps the reader to understand why this topic is of importance to me, the researcher, and how it fits within a wider scope. **Chapter 2** features the literature review, where the existing academic work on the topic of local food is explored. This includes looking at the concept of local food both globally and in Aotearoa as well as at how it fits within the field of gastronomy. The relevance of the research question is discussed with reference to the gaps in the existing knowledge identified in the literature review.

In **Chapter 3**, the research methodology and my positionality as the researcher are explained. The rationale is given for approaching this dissertation with a relativist ontology, constructivist epistemology, and a paradigm of constructivism. Moreover, the use of systematic qualitative review, purposive sampling, and thematic analysis research methods are described. **Chapter 4** focuses on the

analysis of the data, including a detailed explanation on the use of thematic analysis. The research findings and discussion are in **Chapter 5**. This chapter represents the core of the dissertation as it explores the analysis outcomes in detail and with examples using learnings from the literature review as the basis for critical discussion.

Chapter 6 is the final chapter and the conclusion of the dissertation. It includes a summary of the findings, a discussion on limitations, and recommendations for further research.

Chapter 2. Literature Review

2.1 Introduction

This chapter critically reviews literature around gastronomy, local food movements, and understandings of the term local food. Specifically, this literature review explores the most prominent academic work around local food in Aotearoa and positions it within the global discourse on the topic in order to gain an understanding of the concept. With this understanding, the New Zealand government's involvement in local food systems will be examined, first at a national level and then at a local level.

Firstly, gastronomy and the politics of food choice are considered. Then, local food as a concept is explored, from its origins to its attributes and critiques. The existing academic work around local food in Aotearoa is discussed followed by a review of national and local government policy and initiatives centred on local food. The chapter concludes with a summary of the literature and identifies a gap in research that this dissertation aims to address.

2.2 Gastronomy and the Politics of Food Choice

The etymology of the word 'gastronomy' can be traced to Ancient Greek, where it is literally translated as "the knowledge (*nomos*) of the stomach (*gastros*)" (Blackley & Reid, 2022). In 1825 lawyer and politician Brillat-Savarin published his book *La Physiologie du goût*, which is considered the foundational work of the field. Gastronomy, he wrote, is "the intelligent knowledge of whatever concerns man's nourishment" (Brillat-Savarin, 1949, p. 61). To eat is a biological necessity, yet it is an act that is laden with additional meaning. How humans eat is socially, culturally, economically, and politically determined (Blackley & Reid, 2022; Pollan, 2006).

Traditional gastronomy focused heavily on the aesthetics of food (Blackley & Reid, 2022), whereas modern gastronomy requires that a more critical lens be applied. Carlo Petrini (2013), founder of the Slow Food movement, famously quipped "a gastronome who is not an environmentalist is surely stupid, but an environmentalist who is not a gastronome is merely sad!" (p. 27). Today, food is viewed as a powerful political tool that can have significant ethical and environmental implications (Blackley & Reid, 2022; Thompson, 2016). Food choices can have a profound impact on the well-being of species, human and non-human, and the planet; it is at this crux that the ethics of eating develops.

Food ethics has emerged as "an international social movement aimed at reforming the global food system" (Thompson, 2016, p. 61). Consuming ethically is to make dietary decisions based on what will have the most desirable consequences (Thompson, 2016). Examples of this may be a desire to limit environmental impact, reduce harm to animals, or protect worker rights. Kaplan (2019) argued that humans have food obligations to themselves and others. An individual has an obligation to eat enough to be healthy, as well as to improve the quality of one's own life. In obligation to others, one must not starve people and should help others to eat well. Further obligations are to protect the best interests of the environment, other living beings, and future generations (Kaplan, 2019, p. 99). Personal ethics can be enacted through food choices; one such choice is to consume local food or participate in localised food systems. Therefore, this research takes a contemporary gastronomic approach, requiring critical engagement with the politics of food, to explore the concept of local food and localised food systems in Aotearoa.

2.3 Defining Local Food

Despite a growing body of academic work on the topic globally, local food has "multiple and conflicting meanings" (Allen et al., 2003, p. 63) and its definition continues to be debated among scholars and activists (Ostrom, 2006). Eriksen (2013) argued that three main aspects to the taxonomy of local food can be found in the literature: geographical proximity of food production; relationship

building between producer and consumer; and positive perceptions about the qualities of the product. The following discussion of definitions of local food follows Eriksen's (2013) taxonomy, focusing on definitions based on first geography, then relationship building, and finally, positive attributes.

The most common understanding of local food in the literature is based on geographical proximity (Eriksen, 2013; Hiroki et al., 2016; Martinez et al., 2010; Ostrom, 2006). In this case, local food refers to what is locally produced. Geographical scale for this definition varies, ranging from neighbourhood to regional to national (Ostrom, 2006). The United States Department of Agriculture defined local food as "food produced, processed, and distributed within a particular geographic boundary that consumers associate with their own community" (Martinez et al., 2010, p. 51). Here, the term food miles is often used to measure how far a food item has travelled. Some academics argue that this focus on distance can mean that other values and meanings of local food can be overlooked (Cleveland et al., 2015; Schnell, 2013).

Some definitions of local food are based on the French term *terroir*, referring to "an area or terrain, usually rather small, whose soil and microclimate impact distinctive qualities to food products" (Barham, 2003, p. 131). Take for example the French *appellation d'origine contrôlée* or the Italian *denominazione di origine controllata*. These labels specify the exact origin of the products bearing them. Thus, the products can be consumed anywhere globally and may still be considered a local food. Specific characteristics of a certain terroir are connected with these products, denoting environmental and social benefits (Allen et al., 2003, p. 64). However, this understanding of local food is less common as local food is often equated with low food miles, meaning a shorter distance it has travelled (Eriksen, 2013). Local food could also be classed as that which is distributed through local market channels. For example, in the United Kingdom, one study reported that one third of consumers interviewed felt that local food was that which was sold at a local shop (Khan & Prior, 2010).

Relationship-based understandings of local food entail that consumers can buy straight from the producer (Hinrichs, 2003; Hiroki et al., 2016). An example of this is markets where farmers sell produce straight to customers. This direct transfer is "assumed to enable relationships of aid and trust between producer and consumer, eliding the faceless intermediaries hidden within commodity chains and industrial foods" (Allen et al., 2003, p. 64). The relational proximity of local food is about building the face-to-face connections that are missing in the global industrialised food system (Eriksen, 2013, p. 53). Local food, in this way, may foster a sense of responsibility and care toward others and the environment (Eriksen, 2013, p. 52).

The final way of understanding local food as found in the literature is through its assumed positive attributes (Eriksen, 2013). Often, the local food label is associated with positive qualities, such as fresh and nutritious (Ostrom, 2006). Other values often connected with local food may include seasonal eating, environmental sustainability, social justice, organic methods, and supporting local producers and economy (Duram & Oberholtzer, 2010).

Allowing understandings of local food to differ "can have practical consequences, such as frustrating further developments in the sector, preventing local food system development and responding inefficiently to customer desires" (Eriksen, 2013, p. 48). It is important to have a shared understanding of local food for promoting transparency, consumer trust, economic development, and environmental sustainability. Without a common definition, it remains difficult to evaluate the impacts of local food initiatives (Rossano, 2022). Consumers of local food are also left confused (Rossano, 2022); this suggests that there may be a disconnect between the assumed impact of buying local food and the reality.

2.4 Global Local Food Movements

It was just over a century ago that most food was, by default, locally sourced. With the invention of better ways of refrigerating cargo and cheaper as well as more efficient transportation costs, the transition to non-local food systems became viable and expansive (Martinez et al., 2010). Food

production became specific to regional areas, determined by the climate and available technology (Martinez et al., 2010). Local food movements have emerged, in part, as a response to concerns about the negative social and environmental impacts of the global industrial food system. These include societal issues such as corporate control and power over food supplies, concerns about a loss of knowledge about growing and preparing food, and a lack of social relationships through food (Allen et al., 2003). Environmentally, there are concerns about land-loss, biodiversity loss, water and soil quality, the use of genetic modification and pesticides, as well as greenhouse gas emissions (Allen et al., 2003).

The specific term local food can be traced back to origins in North America. Its emergence followed the back-to-the-land movement of the 1960s, which encouraged self-sufficient and sustainable communities. Localised food systems were a key part of this movement (Sale, 1995). In the 1970s, California cuisine became popular. This is often credited to Alice Waters and the opening of her restaurant Chez Panisse. Her cuisine emphasised locally sourced ingredients and sparked the farm-to-table movement which encouraged direct producer to consumer consumption (Fairfax et al., 2012). Then, in 1986, Carlo Petrini founded the Slow Food movement in Italy in direct protest of the arrival of a McDonald's restaurant in his hometown (Slow Food Foundation, 2023). American fast food had come to symbolise globalisation, defined as the "deterritorialization of goods, services, and ideas, and their spread around the world" (Beriss, 2019, p. 64). Slow Food encouraged a return to local food and traditions. In 1989, Eliot Coleman released the first edition of *The New Organic Grower*, becoming one of the first writers to refer to the concept of local food systems and discussing the benefits of sourcing food from nearby producers (Coleman, 1995).

Globally, there are several well-established local food movements. The most recognised may be the international Slow Food Foundation, which promotes "good, clean and fair" food, defining "good" as "a fresh and flavorsome seasonal diet that satisfies the senses and is part of our local culture" (2022). The organisation's values are positioned in direct opposition to the global industrial food system, and it is committed to the preservation of local foodways (Beriss, 2019, p. 64). After a book of the same

name was released by Smith and Bernard (2008), the 100 Mile Diet gained in popularity. The book chronicled the authors' self-assigned challenge of eating food that came from within a one hundred mile radius of their home in Vancouver, Canada. While eating only locally produced food was not a new concept, the book's release timed well with the increasing popularity of farmers' markets and the locavore movement. The term locavore was first used in 2005 and means "one who eats foods grown locally whenever possible" (Merriam-Webster, 2023). In 2007, it was named Oxford Dictionary's Word of the Year (Civil Eats, 2022). The local food movement gained more momentum with the publication of Pollan's *The Omnivore's Dilemma* in 2006, a bestseller book that challenged readers to consider their food choices. By 2014, there were more than 8,000 farmers' markets in the United States, up from only 340 in the 1970s (Hesterman, 2016, p. xi).

Farmers' markets are spaces where products move directly from producer to consumer. Another example of this is Community Supported Agriculture (CSA). According to the United States Department of Agriculture, a CSA is "a community of individuals who pledge support to a farm operation so that the farmland becomes, either legally or spiritually, the community's farm, with the growers and consumers providing mutual support and sharing the risks and benefits of food production" (2023). The concept for CSA was born in Japan and Switzerland in the 1960s (Martinez et al., 2010) and the first CSA farms were introduced in North America in 1986 (McFadden, 2004). CSAs are an interesting model, as consumers pay up-front and assume some of the risk associated with agriculture, such as crop loss due to unfavourable weather. As such, they may demonstrate a more community-oriented idea of local food where all members are stakeholders. CSAs, like farmers' markets, are suggested as ways to grow relationships between people from the same area (Beriss, 2019).

In 2003, the *New Nordic Cuisine Manifesto* was introduced. The invention of this new cuisine is credited to Claus Meyer, co-founder of NOMA - a restaurant voted the world's best in 2010, 2011, 2012, 2014 and 2021 (William Reed, 2023). A key consideration of the cuisine is sustainability, and within this there is a "focus on locally grown foods to minimize the transport of foodstuffs, thereby

minimizing the negative impact of transportation on the environment" (Mithril et al., 2012, p. 1943). With this manifesto, the concept of local food infiltrated the ethos of the fine-dining industry.

Recently, the COVID-19 pandemic renewed an interest in local food as global supply chains were disrupted. This prompted discussion among consumers, producers, and policymakers about localised food systems as larger food systems failed (Rossano, 2022). The pandemic caused a turn to local sources; in the United States, food sales directly from farmer to consumer reached all-time highs (Rossano, 2022). In Europe, some countries organised virtual platforms to connect local food producers to consumers (Stein & Santini, 2021). Shortening supply chains was promoted as a way to ensure food system resilience (Stein & Santini, 2021).

As can be seen from the examples discussed above, local food movements can be found around the globe. They exist in contrast to the industrial food system which has raised concerns for the wellbeing of people and the planet due to its association with environmental degradation and failure to ensure food security. Often, consuming local food is suggested by activists to be a 'better' way to eat than participating in the global supply chain. However, a critical approach is required to understand the true impact and various meanings of local food.

2.5 Local as Better

Local food has many claimed benefits. It is heralded as a sustainable, environmentally friendly way to eat that encourages consumption based on seasonality (United Nations, 2023). It is promoted as beneficial for the community and local economy (Macias, 2008). Even with a lack of clarity around what local food is, it is widely assumed to be a positive concept and a good way to aspire to eat. It is commonly allied with organic and artisanal food, and it tends to be characterised as being tasty, fresh, and nutritious (Philippon, 2015). To eat local food is a call-to-action among grassroot movements to counter large-scale, industrial agriculture (Ostrom, 2006) as localised food initiatives "resist the ecologically and socially destructive practices of the contemporary global agrifood system" (Allen et

al., 2003, p. 63). For some scholars and activists, the promotion of local food has become a way to challenge systems of injustice (Beriss, 2019).

Some proponents of local food systems see them as key parts of an environmentally friendly and sustainable way to live. Wendell Berry, American farmer and environmental activist, wrote that eating "is inescapably an agricultural act, and that how we eat determines, to a considerable extent, how the world is used" (1990, p. 149). The global food system is a leading cause of biodiversity loss, deforestation, and depletion of soil and water health (Granvik et al., 2017). There is consensus that the role of the global food system in progressing the effects of climate change is significant (United Nations, 2023). In 2015, a report found that thirty-four percent of greenhouse gas emissions came from the global food system (Crippa et al., 2021). Some organisations argue that the culpability of agri-business in dangerously warming the planet is not being highlighted enough, and that policy changes are not being implemented in a timely fashion (Nierenberg, 2022; World Wildlife Foundation, 2022). The 2019 EAT-*Lancet* report, produced by thirty-seven experts in nutrition, agriculture, and environmental sustainability, outlined recommendations for a healthy and sustainable food system. It called for radical change to the current global food system, deeming it unsustainable and advocating for a shift toward more sustainable agricultural practices (Willett et al., 2019). While the report does not explicitly advocate for local food, it does recommend that food systems should be designed to support local and regional food production (Willett et al., 2019).

Within environmental activism, it is a "well-established mantra" (Beer, 2015) that local is good. Eating local food is suggested as a solution to curb environmental destruction and the effects of climate change. Environmentally conscious consumers want to limit their negative impact by minimising food miles, packaging, and food waste (Stein & Santini, 2021). With the global transportation sector being the largest contributor to greenhouse gas emissions, it seems desirable to consume foods that have travelled shorter distances (Rossano, 2022). Less packaging may be required in a shorter supply chain, and food waste may be reduced by eliminating production and retail stages (Stein & Santini, 2021). Consumers may hope that their food choices support biodiversity, water

health, and soil health in alignment with their personal values. There is some association of local foods to organic foods, in the assumption that they are grown using more sustainable agricultural practices, and similarly, consumers may consider local meat to be produced according to certain animal welfare standards (Rossano, 2022). Thus, local food systems are generally viewed as a way to ensure ethical consumption, in contrast to the harm caused by the industrial food system (Eriksen, 2013).

Another perceived benefit of local food is that it is considered to be "tastier and more nutritious" than that which comes from a long, industrialised food chain (Pollan, 2008, p. 159-160). One of the arguments is that a shorter travel distance means less processing is needed, resulting in less added sugars or preservatives (Rossano, 2022). The product may also be fresher and therefore have better nutrient retention (Rossano, 2022). Research has shown that many consumers of local food feel that it is of good quality and healthy (Granvik et al., 2017; Martinez et al., 2010; Weatherell et al., 2003).

Many people in contemporary society are estranged from the origins of the products they consume, and this notion has moved beyond early sociologists' concerns about urbanisation weakening community and into mainstream culture (Beriss, 2019). Localised food systems are thought to be a way of building community and generating wider societal benefits (Macias, 2008; Waters et al., 2021). More direct producer to consumer methods, such as CSAs and farmers' markets, are suggested to reduce alienation between consumer and product origins (Beriss, 2019). Farmers themselves gain professional recognition with shorter supply chains (Stein & Santini, 2021). To visit a farmers' market can be more than just a recreational shopping experience. Allen et al. (2003) argued that social interaction helps to build a "moral economy" (p. 68) which facilitates social and environmental concern. It is suggested that a local food ethos develops within a community once consumers are more aware of the benefits of local agriculture (Macias, 2008).

Reliance on global trade for food supplies comes with "legitimate concerns" about the associated risks (Stein & Santini, 2021, p. 83). Natural disasters, global events, and global market fluctuation can

threaten food access, but well-connected communities can "maintain stability and community health amidst challenges" (McDaniel et al., 2021, p. 1375). Contributions to community resilience, such as the establishment of social spaces, information sharing, learning, rural-urban networks, and small business opportunities, are associated with local food initiatives like farmers' markets or community gardens (King, 2008). Producer to consumer marketing initiatives provide the chance for face-to-face interactions (Farmer et al., 2011). Such opportunities for community connection are a critical component to the building of social capital (Macias, 2008) and help to create a sense of belonging (McDaniel et al., 2021). For these reasons, local food is considered to be part of a resilient food system that can withstand natural or man-made disasters.

Local food is often considered to be more socially just, with notions of equity, fairness, and safety for all people (Duell, 2013). Industrial food production is "intimately bound up in the processes and structures" (Duell, 2013, p. 130) of unsustainable social systems. Some academics have suggested that the long distances food tends to travel is used to hide problematic labour conditions (Beriss, 2019, p. 67). Fair labour practices, equitable food access, and food safety are all important social concerns in food systems (Duell, 2013). Small scale food initiatives are thought to increase the agency of oppressed individuals (Thompson, 2016, p. 72) and foster civic engagement as well as beneficial social relations (Feenstra, 1997, as cited in Born & Purcell, 2006).

Petrini argued that local food is a way to achieve food sovereignty (2009). The Nyéléni Declaration defines food sovereignty as "the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agricultural systems" (Nyéléni Forum for Food Sovereignty, 2007). Central to this definition is the notion that achieving food sovereignty means having localised food systems. Similar to food sovereignty is the concept of food security – however, considering that food security is about ensuring access to food, making it more about quantity and affordability than quality, the industrial global food system may seem to be the key provider as it is helping by increasing yields and advancing agricultural technologies (Ritchie, 2021). Even so, local food can also be seen to contribute to food

security as it retains local production capacity and has the potential for a smaller resource footprint (Kirwan & Maye, 2013). In the United States, some local food programmes explicitly seek to address economic disparities and improve access to healthy food within communities (Rossano, 2022).

Finally, consuming local food is thought to be beneficial for local businesses and economies (Rossano, 2022). The idea is that local consumers pay local producers, keeping money within the community, which grows the wealth of the area. Farmers may be able to benefit financially from direct marketing to consumers whilst removing the corporate dependence involved in industrial agriculture (Macias, 2008). Local food production can revitalise rural areas and create new jobs (Stein & Santini, 2021). All of this can have a positive multiplier effect on local economies, which in turn can interact with the tourism sector to bring additional money (Stein & Santini, 2021). Seeing as food and beverage spending is a significant tourist expenditure, linking local food with tourism can ensure that money generated from visitors remains within the local economy, rather than being spent on imported products (Berno, 2011).

Many mainstream food writers and activists have suggested localised food systems as a panacea to all the issues facing the global industrial food system. A classic example is Michael Pollan's *The Omnivore's Dilemma* (2006), which exposed major issues in the US industrial food system to the general public. Pollan advocated for a return to localised food systems as a way for people to reconnect with what they eat. The implication is that local food is more sustainable and healthier (Pollan, 2006). Similarly, in *Coming Home to Eat*, Gary Paul Nabhan (2002) encouraged people to reconnect with their food sources, suggesting that supporting local food systems can be more culturally meaningful and an act of community resilience and environmental sustainability.

As this section has shown, many attributes of local food are positive. It is linked to ideas of ensuring food sovereignty, security, and justice as well as credited with strengthening communities and producing more nutritious food with a smaller environmental impact. For these reasons, local food might be considered an ethical food choice.

2.6 Critiques of Local Food

Despite its many assumed benefits, local food also has a number of critics, and there are some issues that need to be borne in mind. There is criticism of the claim that local scale is most desirable. Born and Purcell (2006) identified a problem that they called *the local trap.* The local trap is in the assumption that a localised food system is inherently more socially just than larger-scale systems, an attitude they found to be prevalent in the literature (Born & Purcell, 2006). While not suggesting that local food is undesirable per se, they argued that all outcomes of a food system must be considered within their context. Across the literature reviewed in this chapter, Born and Purcell's (2006) critique is the strongest and clearest warning to approach local food systems critically.

Hinrichs argued that "moving society towards more sustainable food systems requires empirical study of current problems in the agricultural and food system, as well as critical scrutiny of potential and proposed improvements or solutions" (2010, p. 9). The suggestion is that more research on localised food systems is needed as local food cannot always be assumed to be the best option. Another issue of the local food preference is that it has been romanticised; one of the critiques of the Slow Food movement is that "it is nostalgic for a mythologized 'local'" (Philippon, 2015, p. 10).

The concept behind food miles is that the less distance a product travels, the more environmentally friendly it is – a claim academics have rebuked (Beer, 2015; Ritchie et al., 2022; Saunders et al., 2006; Schnell, 2013; Stein & Santini, 2021). Using food miles as the only measure fails to take into account other factors in the food's life cycle. For example, as per research by Cleveland et al. (2015), food miles may be calculated while ignoring problematic growing conditions or labour issues. There is evidence that not all modes of transport can be considered equally; there are considerably less emissions from a product that was shipped than from one that was air-freighted (Beer, 2015; Schnell, 2013). Moreover, if a consumer is driving themself to local producers, they may be increasing the carbon emissions attached to their food (Stein & Santini, 2021). Land use, production stages, and storage may also increase a product's greenhouse gas emissions (Ritchie et al., 2022; Saunders et al.,

2006). Additionally, produce grown in heated greenhouses may have a higher carbon footprint than produce imported from a warmer country (Allen, 2023). When it comes to environmental sustainability, some argue that it is not about how nearby food was produced at all - instead it is about what is eaten as some foods require more resource input than others (Beer, 2015; Monbiot, 2022; Ritchie, 2020; Stein & Santini, 2021). Thus, local foods cannot be deemed to be the lower-emission option based on their geographical distance alone (Stein & Santini, 2021).

If local demand for a product is high, local food systems may result in more intensive farming, using more fertilisers and pesticides for example, which can cause environmental damage (Stein & Santini, 2021). Locally produced food can also diminish biodiversity when farmland is increased to meet demand (Stein & Santini, 2021). In short, localness alone is not a good determinate of environmental impacts of food systems.

In the United States, there are eighteen state branding programmes which allow a product to be called 'local' so long as it was manufactured within the state boundary; however, the main ingredients could come from a different country (Rossano, 2022). Meanwhile, just over 50% of foods with labelled terroir origins are sold in the same country where they are produced (Stein & Santini, 2021, p. 84). This shows that without a common definition of what local food is, the assumptions around beneficial attributes of local food needs to be viewed through a critical lens.

Hinrichs (2000) cautioned that for direct producer to consumer markets to be transformative and successful alternatives to the global supply chain, "sentimental assumptions about face-to-face ties must be tempered. Social ties, personal connections, and community good will are often appropriately seasoned by self-interest and a clear view of prices" (p. 301). Some researchers propose that local food initiatives can perpetuate structural inequality. As Duell (2013) argued, "localism initiatives often express white/Pākehā cultural histories of agricultural development and, therefore, exclude or deny the violent and exploitative colonial histories of indigenous people or people of colour" (p. 138). Furthermore, the food that localised systems produce is not always culturally appropriate, and the

language used in these spaces is often educated, privileged, and white (Duell, 2013). In Guthman's research (2008), there was a lack of diversity among those who were participating in farmers' markets and CSAs. The study further showed that the assumption from the primarily white participants was that those who did not participate in localised food systems did not have the 'correct' set of values (Guthman, 2008). Similarly, in Paddock's (2016) research at a farmers' market, consumers of local food who were interviewed negatively judged those who did not shop at the market. These prejudices among local food consumers thus seem to reinforce social divides along lines of class and ethnicity (Duell, 2013) and thereby refutes the idea that local food necessarily leads to food sovereignty, food security, and more socially just food.

Like organic food, some argue that local food has become an expensive and inaccessible eating fad (Philippon, 2015). Products sold directly from producer to consumer do not necessarily challenge food as a commodity (Hinrichs, 2000). Middle-class, educated consumers retain the power and privilege over poorer consumers or the farmers who must weigh financial decisions more carefully. Local meat, for example, may become more expensive due to shortening the feed supply chain and the associated costs for the farmer (Stein & Santini, 2021). In the UK, local food makes up a niche market and a lack of infrastructure makes it hard to further develop local supply chains (Beer, 2015). As a result, global food products remain more affordable for many consumers (Stein & Santini, 2021). In short, there are numerous challenges and barriers which keep local food from being available and accessible to everybody.

As for local food being resilient, Stein and Santini (2021) argued that resilience is actually strengthened through strategic diversification of food supply avenues, as opposed to reliance on local production only. Additionally, they noted that most of the global population would be unable to meet its food demand with only local crops (those within 100 kilometres) (Stein & Santini, 2021).

Across the literature reviewed, the attributes of local food prove mostly inconsistent or inconclusive. Local food is not inherently more environmentally sustainable than products from conventional

agriculture. Stein and Santini (2021) argued that promoting local food as "better for the climate could lead to outcomes that may not be in line with the professed objectives of policy-makers, or even contrary to some aspects of sustainability" (p. 85). Localised food production may have some social benefits, but this can be a challenge to measure. With definitions of local food remaining diverse, it is not possible to accurately compare the many studies in the field, and findings are often not definitive as they rely on many external factors. This suggests that the notion of local food must be approached critically, and the assumption that local food is good food based on geographical proximity alone should be questioned.

2.7 Local Food in Aotearoa

While strong local food movements have predominantly been based overseas, Aotearoa has not been immune from the influence they have. The term local food is used promotionally and can be found on market websites (for example, Bay of Islands Farmers' Market, 2018; Gisborne Farmers' Market, 2020; Nelson Farmers' Market, 2022) and on the menus at prominent restaurants (for example, The Hunting Lodge Winery, 2022; Rātā Dining, 2022; Rita, 2022). Even Aotearoa's global branding initiative *100% Pure New Zealand* promotes farmers' markets to tourists as "an intrinsic part of Kiwi culture" and "a place to taste sample [*sic*] the best of fresh and local culinary fare – direct from source" (2022). In a survey of its members, the Restaurant Association of New Zealand found that "hyper local ingredient sourcing ranked as the number one chef driven priority" (2020). Thus, there is demand for local food products in Aotearoa as consumers, chefs, tourism initiatives and guiding hospitality associations are all framing local food as desirable.

2.7.1 Studies in Aotearoa

In North America and Europe there is extensive, though not definitive, academic literature on the topic of local food (see for example Augère-Granier, 2016, and Pirog et al., 2014). However, in Aotearoa, only a few studies have been conducted on the topic and the term 'local' has not been officially defined or regulated. A review of the literature available revealed that the majority of

research on local food in Aotearoa is focused on who consumers of local food are and how they understand the concept (Berg & Preston, 2017; Hiroki, 2014; Hiroki et al., 2016; Millar, 2012; Mirosa & Lawson, 2012). Two of these studies found that consumers considered local food to be that which is produced in Aotearoa, within a certain geographical area, and the concept is closely associated with community values (Hiroki, 2014; Hiroki et al., 2016). Millar's (2012) report on local food in Otago found that consumers may consider any meat from within the South Island to be local. A study by Mirosa and Lawson (2012), however, suggested that consumers consider products from either the North or South Island to be local, depending on the context. Either way, Berg and Preston's (2017) examination of food preferences revealed that New Zealand consumers valued domestic produce over that from China or the United States. Hiroki et al. (2016) argued that in Aotearoa "the term local is frequently used to mean domestic, and this may have strengthened the association made by consumers between local food and national identity" (p. 487).

Primary sites for empirical data collection on local food in Australasia have been community gardens and farmers' markets (Duell, 2013). One such study in Aotearoa considered that farmers' markets are a result of consumer interest in sustainable food systems, as the markets themselves represent local food (Hall, 2013). Hall examined the concept of authenticity in relation to farmers' markets and consumer understandings of local food by conducting surveys at two markets in Christchurch. In the findings, consumers indicated a preference for "the shorter the better" (Hall, 2013, p. 113) when it came to distance that produce travelled. They also found it important that the food is fresh and sold to them directly by the grower (Hall, 2013). A different study in Christchurch examined the role of local food in Aotearoa's tourism sector, noting that face-to-face interaction with producers at farmers' markets is a way for visitors to connect with the destination (Fusté-Forné & Berno, 2016). By eating local products, tourists "literally 'consume' the landscape" (Fusté-Forné & Berno, 2016, p. 82).

The most recent study on local food in Aotearoa explored alternative food systems through the lens of food sovereignty (Ritchie, 2021). Ritchie conducted an ethnographic study of local food producers in Whāingaroa (Raglan), using interviews to learn about their values and the connectedness of those who

are taking small-scale action to oppose big-scale industry. She noted that "the food ethics presented here generally arise out of genuine concerns over exploitation and the desire to avoid social and environmental harm as much as possible" (Ritchie, 2021, p. 242). Ritchie's research reveals that local food and localised food systems are generally understood within Whāingaroa to be sustainable, community-oriented initiatives which reclaim some power from the global industrial food system (Ritchie, 2021).

2.7.2 Organisations Promoting Local Food in Aotearoa

To gain an understanding of the current discourse around local food in Aotearoa, it is useful to look at the work being done at a grassroots level. This section looks at the organisations around the country who are the most visible leaders in discussions around local food. Most prominent is Eat New Zealand, a not-for-profit food movement "dedicated to connecting people to our land and our ocean through our food" (2023a). In the organisation's *Food Manifesto*, point number 7 is 'Awareness'. It proclaims "we will raise awareness about the importance of food culture. This includes raising awareness of the lack of access to local ingredients where necessary." (Eat New Zealand, 2023a). Eat New Zealand is working to establish a local grain economy across Aotearoa and has launched campaigns around local food including #KnowYourFarmer, #KnowYourFisher, #GrowFoodCommunities, and #LotsofLittle (2023a). These campaigns encourage community and relationship building, and support local food systems and small food producers.

The Slow Food movement is also present in Aotearoa, with Auckland being one of the most active areas of engagement. The volunteer-based organisation hosts events and initiatives that celebrate "local", supporting community food producers in order to strengthen local economies, care for the planet, and drive positive change in the food system (Slow Food Auckland, 2019). In Wellington, the Sustainability Trust has a food component because they "believe in connecting communities through sustainable agriculture" (2019). They host monthly meet up and urban gardening workshops, offering anybody in Wellington the opportunity to learn how to garden. Furthermore, there are a variety of

small-scale urban agriculture and community garden initiatives across the country. These include the likes of Kelmarna Gardens in Auckland, Kaicycle in Wellington, and Cultivate Christchurch. Kelmarna has been around for more than forty years, and endeavours "to champion and demonstrate a regenerative local food system that supports climate change mitigation, urban resilience, and community wellbeing" (2023). Cultivate Christchurch grows organic, local, and seasonal food. They have a strong emphasis on the importance of community and teach young people the basics of gardening in order to provide them with a sense of purpose and belonging (Cultivate Christchurch, 2021b). These organisations provide only a small sample of the many active across Aotearoa. What they all have in common is that they share an approach that is uncritically enthusiastic about the benefits of local food.

2.8 New Zealand Government's Involvement in Food Systems

Aotearoa does not have a national food strategy, though there are calls for one to be established to increase food security (Clifford, 2023; Mcilraith, 2023). In May 2023, Eat New Zealand launched a campaign titled *Our food system is cooked* to demand action on food security strategy from the central government. Issues raised in the campaign are presented in Figure 2.1 below. The premise is that having a strong domestic food system which prioritises feeding New Zealanders is "more important than ever" (Eat New Zealand, 2023b) to manage climate change, high costs of living, food insecurity, geopolitical unease, and food-related health issues. As a nation, Aotearoa overproduces food and would be considered food self-sufficient. Food self-sufficiency is generally understood as "the extent to which a country can satisfy its food needs from its own domestic production" (Thomson & Metz, 1998, n.p.). However, most of the food produced in the country is exported (Hancock, 2021). Rosin argued that New Zealand agricultural production "feeding the world" (2014, p. 222) is rooted in the country's colonial history. Aotearoa has long helped to ensure the food security of other nations, with the state of food security domestically being of little concern (Rosin, 2014). The nation's predominant export markets are agricultural commodities, with the largest being dairy products (Observatory of

Economic Complexity, 2023). While only five million people live in Aotearoa, enough food is produced here to feed 40 million (Mcilraith, 2023). This adds another level of complexity to discussions on local food: knowing that food production is abundant, yet there are New Zealanders who are going hungry. It is estimated that around fourteen percent of New Zealanders are food insecure (O'Gorman et al., 2020).

Figure 2.1

Eat New Zealand Food Systems Visual

Note. A food systems key issues visual from the *Our food system is cooked* campaign. Used with permission from Eat New Zealand. (Eat New Zealand, 2023b).

Political entities across Aotearoa are participating in conversation around local food. A report from the Ministry for Primary Industries (MPI) from February 2023 predicted that changing consumer desires will include a preference for localisation. The report identified the three drivers of this as "supply chain/food security post-COVID, perceived lower emissions footprint and local producers lifting their performance" (Ministry for Primary Industries, 2023, p. 14). MPI also collaborates with

Eat New Zealand on campaigns to promote local food communities (Eat New Zealand, 2022). The Ministry for the Environment lists actions that individuals can take at home to help the environment, one of which suggests to "shop at your local fruit and vegetable market" (2023) in order to reduce transport emissions and support the local economy. Other suggestions include growing food at home and buying local and seasonal food in addition to going to the local farmers' market (Ministry for the Environment, 2023).

Another organisation concerned with local food is Healthy Families New Zealand, a government-led initiative to increase healthy lifestyles, which advocates for establishing a sustainable local food system (2020). According to their 2020 report around the impact of Covid-19 on food, the pandemic highlighted ways in which the current food system is flawed. Food insecurity is the current system's "status quo" (Healthy Families New Zealand, 2020, p. 11). They argue that a localised food system would increase both food security and sovereignty. Their report also highlighted the importance to consumers of knowing a food's whakapapa (origin) and asserted that "Kai connects people with the whenua [land] through growing food" (Healthy Families New Zealand, 2020, p. 4). Healthy Families South Auckland collaborated with the Southern Initiative to create the *Good Food Road Map*, a strategic framework to increase good food access across Aotearoa through local food systems that are resilient, inclusive, and regenerative (Bin, 2020). In 2022, the *National Kai Impact Report* was released, which noted that "the current unsustainable food system is dominated by the prioritisation of profit over people" (Healthy Families New Zealand, p. 2) and advocated for the localisation of food systems in Aotearoa.

The Green Party of Aotearoa New Zealand has a food policy which expresses that "government and local council policies should encourage local food production" (2022). The Green Party has a long-standing involvement in conversations about food. Recently the party was involved in the establishment of mandatory organics standards that provide quality assurances for organic produce consumers (Tuiono, 2023).

It should be noted that government involvement in local food systems is not always welcomed (Ritchie, 2021). Government funding may come with strings attached or rules and certifications that are expensive and time-consuming, and communities may prefer to be able to produce food as they wish without interference (Ritchie, 2021).

2.9 Local Council Action

Cities have an important role in developing, implementing, and upholding food plans and policies. The *Milan Urban Food Policy Pact* (2023) estimates that by 2050, nearly seventy percent of the world's population will be living in urban centres. At that point in time, cities will likely be consuming eighty percent of the food produced globally (EAT Forum, 2022, p. 3). The argument is made that local authorities should have a leadership role in developing food strategies, as they may be able to provide resources and long-term stability (Zerbian et al., 2022, p. 2). However, it must be noted that this is dependent upon factors such as political will and governance participation (Zerbian et al., 2022, p. 2). According to the New Zealand Government, the purpose of city councils is to "promote the social, economic, environmental, and cultural well-being of communities in the present and for the future" (Department of Internal Affairs, 2011b). Therefore, local councils should aim to do whatever needed to best take care of their constituents. This is an important point to bear in mind when examining the work that city councils are doing around localised food systems.

There are seventy-eight local authorities across Aotearoa; these include regional councils, city councils, and district councils. Auckland Council has its own unique status, as itself, due to its size. These councils enable "democratic decision-making by and for local communities" (Department of Internal Affairs, 2011a). They have the power to create and enforce bylaws, create jurisdiction management plans, engage and support community initiatives, ensure emergency preparedness, and provide services such as water or rubbish disposal (Department of Internal Affairs, 2011a).

Aotearoa is split into 16 regions for "purposes of its political map and societal organization" (Mappr, 2023). These can be seen in Figure 2.2. While these regions do not have the same geographical

boundaries as local councils (Auckland being the exception), they do encompass a lot of valuable growing area which is important when talking about local food production. Wellington City Council, for example, may rely on the highly productive land outside of the city boundaries but within the Wellington Region for growing food (Wellington City Council, 2023d). Christchurch City Council is located in the Canterbury Region, where around 20 percent of the nation's farmland is located (Fusté-Forné & Berno, 2016, p. 75). It is the largest region in the country (Mappr, 2023).

Figure 2.2

Regions of Aotearoa

Note. Map of Aotearoa's regions and major cities (Mappr, 2023). Image used with permission from Mappr.

In the flagship *Mana Kai Initiative* report from the Aotearoa Circle collective of New Zealand businesses, universities and local governments, a value of importance is ngā nuinga, or abundance. An objective of this value is ensuring that "there are community food security plans for local food systems in place, incorporating additional land for food commons, and being implemented across the majority of local government entities by 2030" (The Aotearoa Circle, 2022, p. 24). Some local councils in Aotearoa already have their own local food initiatives, with Auckland, Wellington, and Christchurch city councils being the most visible leaders in the space.

2.9.1 Auckland Council

Auckland Council's food action plan is primarily positioned within its climate change strategy. In 2020, the council adopted *Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan*. The focus of the climate action is on reducing carbon emissions, 18 percent of which are from food consumption in Auckland (Auckland Forever, 2023). *Auckland Forever*, the council's climate action website, lists a commitment to "restore, rejuvenate and replenish mahinga kai - our soils and systems that support food" by building "a resilient, local, regenerative food system" (2023). *Live Lightly*, another Auckland Council website, encourages environmentally friendly changes to everyday choices. There is a section devoted to kai (food) which suggests eating more plant-based, local, and seasonal foods as good ways to reduce carbon footprints (Live Lightly, 2023b). Local food, it explains, can increase community resilience and "by shopping locally you are also helping to reduce food miles - the distance food has to travel (and so energy used) to get from farm to plate" (Live Lightly, 2023b). On both the *Auckland Forever* and *Live Lightly* websites, local food is positioned as a way to eat that is beneficial for the planet and people.

Auckland Council's annual budget 2022 / 2023 was clearly stated to be a climate action budget. In ex-Mayor Phil Goff's opening message, he wrote that it "lays the groundwork for the urgent action we need to take to avert a climate disaster and ensure a stable climate and a sustainable future" (Auckland Council, 2022, p. 6). This budget included funding to be invested in urban ngahere (forest), which

includes food forests and māra kai (food gardens), with the goal of reducing emissions (Auckland Council, 2022, p. 15).

2.9.2 Wellington City Council

Wellington City Council has run various initiatives to promote local food and support the city's food system. In 2011, the *Edible Wellington Snapshot* report was commissioned by the council to provide an overview of the state of local food in the city. A key recommendation of this report was that the council "should investigate the potential for developing a Wellington Food Strategy" (Duignan, 2011, p. 1). The *A Seed and A Wish* report was published about the city's urban agricultural activity in 2014. It mapped existing entities working in the space and made recommendations to increase the accessibility and visibility of urban agriculture in the city (Stephens, 2014). At that point in time, community residents were showing interest in "community gardens, local food, composting and reconnecting to health food systems" (Stephens, 2014, p. 2). Three years later, the council funded research on sustainable food and green spaces in the city. A workshop was hosted with sixty stakeholders from local food organisations and businesses to discuss challenges to growing urban food systems (Global Research, 2017). Each of these helped to inform the food strategy that the council now has.

The *Wellington Resilience Strategy* was adopted in 2017. The strategy is "a blueprint to enable Wellingtonians to better prepare for, respond to, and recover from disruptions" (Wellington City Council, 2017, p. 7). Such disruptions anticipated could include rising sea levels, earthquakes, frequent flooding, extreme winds, excessive traffic, and people living in poverty. The vision held by the council is that "as Wellington moves and changes, everyone here will survive and thrive" (Wellington City Council, 2017, p. 7). Points on local food fall under the strategy's first goal, where it reads "Our connections in the community provide us with informal support and shared resources, such as locally grown food, carpooling options, and opportunities to socialise" (Wellington City Council, 2017, p. 41). The idea is that community members will be able to support and help provide for one

another in challenging times, and a part of this is ensuring that there is access to and enough food for all at the local level.

Wellington City Council's *Te Atakura – First to Zero* (2019) is a plan to become a zero carbon city by 2050. In this plan, the council recognises the role that cities play in contributing to the effects of climate change; it assumes responsibility for acting strongly and immediately to prevent the worst consequences. In this document, the Wellington City Council (2019) justifies the proposed steps with reference to the likely effects of global warming on the environment:

> The IPCC's 2018 report indicates what is ahead if the world cannot keep well below 2°C of warming: hundreds of millions suffering food and water shortages; mass migrations and resultant conflict; significant biodiversity loss, including 99% or more of the coral reefs across the planet dying; and disruption of natural processes like storms and rainfall across the planet. (p. 21)

In 2021, Wellington became the first city in Aotearoa to sign onto the Milan Urban Food Policy Pact. It remains the only city in the country to do so, and it is unclear if there is intention from other cities to sign on. The pact is "an international framework for urban food systems based on the principles of sustainability and social justice" (Wellington City Council, 2021). It is not legally binding in any way, rather acting as a platform for countries to share their approaches to creating more sustainable local food systems.

According to the Wellington City Council's (2022a) annual plan 2022/23, long term council priorities include "a sustainable, climate friendly eco capital (environmental wellbeing)", "an accelerating zero-carbon and waste-free transition", and "strong partnerships with mana whenua" (p. 9). A key highlight to support strong communities and deliver on these priorities is the Sustainable Food Initiative, which entails "funding the delivery of food security efforts, supporting local food production, facilitating sustainable food system events, coordinating the Wellington Community Gardens Network, funding sustainable agriculture education courses, and supporting Wellington's food entrepreneurs"

(Wellington City Council, 2022a, p. 44). The council recognises that the food system used to feed the local community relates to the health and wellbeing of the city.

Te Anamata ā-Kai o Tō Tātou Tāone: Our City's Food Future (Wellington City Council, 2023c) is the realisation of the long-anticipated Wellington City Council food strategy. It engages the Hua Parakore framework which positions Māori kai and soil sovereignty as the core that all other food strategy considerations are based on. Wellington is the capital of Aotearoa and is well positioned to lead by example and advocate for national efforts (Wellington City Council, 2023d). Each year, the council runs Local Food Week to celebrate local food production, community gardens, and farmers markets (Wellington City Council, 2022d).

2.9.3 Christchurch City Council

Christchurch City Council is familiar with disaster situations; in 2011, a six-point-three magnitude earthquake shook the city, causing one hundred and eighty-five deaths (Ministry for Culture and Heritage, 2023). Some of the affected areas where building is no longer safe are now classified as edible red zones, growing fruit and nut trees that are accessible to the community. According to the Christchurch City Council's *Food Resilience Policy* (2014), one of the main goals of the policy was to become "the best edible garden city in the world" (p. 1). Notably, this food policy was established in November 2014, placing the city as a national leader in the local food space. At the same time the policy was adopted, the council agreed to become a signatory to the *Edible Canterbury Charter*. The charter, an initiative of the Food Resilience Network, is based on the belief "that all people in the Canterbury region have the right to fresh, nutritious food that is grown and prepared locally in ways that are ecologically sustainable and culturally appropriate" (2014a, p. 1). The council-supported *Food Resilience Network Action Plan* was also established in 2014 with the vision of "a patchwork of food growing at local hotspots, linked together like a ribbon and woven into the fabric of our communities" (Food Resilience Network, 2014b, p. 1).

A key role for the council to support the above policies was to encourage community gardens, and in 2016 they developed the *Christchurch City Council Community Gardens Guidelines*. The document clearly outlines the process needed to establish and maintain a successful community garden, which it defines as "land gardened collectively by a group of people for the benefit of the community" (Christchurch City Council, 2016, p. 1). The council has provided land for these gardens.

In 2017, the *Healthy Food Action Plan* was implemented under the *Food Resilience Policy* with the purpose to "make healthy food choices easy" (Christchurch City Council, 2017, p. 1). The council supports this plan by encouraging edible gardening and foraging. Gateley et al. (2017), in collaboration with Christchurch City Council and Healthy Families Christchurch, interviewed experts and community members about community engagement with the fruit and nut trees around the city and put forward recommendations to the council to help encourage a stronger culture of foraging for food. A council webpage, titled *Edible Christchurch*, outlines how to "Grow and enjoy delicious fruit, crisp vegetables and tasty herbs in our edible garden city" (Christchurch City Council, 2023c). It shares tips for growing food at home and information about foraging, farmers markets, food resilience, and community gardens.

Recently, Christchurch City Council has shifted its focus to the effects of climate change. In *Mahere Rautaki ā Tau: Our Annual Plan 2022/23*, it is noted that constituents' feedback included "a general consensus that we need to get even more serious about prioritising climate action and mitigation and embedding it in all that we do" (Christchurch City Council, 2022). This focus on combatting climate change also involves the notion of local food and, based on the council's website, the local government seems to buy into the prevailing idea that growing food locally would help cut emissions, increase employment, and will provide constituents with affordable healthy food (Christchurch City Council, 2023j).

Christchurch City Council shows strong support for gardens generally, not only those which are edible. For the past thirty-three years, the city has been running its annual Community Pride Garden

Awards. These awards were developed to “encourage civic pride and acknowledge those who have contributed to maintaining the image of Christchurch as the Garden City by beautifying their streets and gardens” (Christchurch City Council, 2023b). There is a vision not only to have a food resilient city, but a beautiful one too.

2.10 Summary of the Literature

The literature presented in this review suggests that there are varying definitions and understandings of local food both internationally and in Aotearoa. Generally understood to be food that is produced locally, local food can also be that with a terroir-based label, that which is distributed locally, that which is directly sold from producer to consumer, or that which can be associated with a variety of positive attributes, such as fresh and healthy or environmentally sustainable. Local food is connected with ideas of food sovereignty, food security, and community-building. It is generally framed in opposition to the global industrial food system and often uncritically viewed as desirable by many activists, food writers, and scholars, as well as within popular culture.

However, the reality of the impact that local food has is heavily critiqued. There is a lack of conclusive data to demonstrate whether or not local food systems are to be accurately classed as part of a more sustainable model of food production and distribution. While some areas of the world have received more academic attention on this front, such as Europe or the United States, little critical research on local food has been conducted in Aotearoa.

The New Zealand Government does not have a national food strategy, but some local councils have their own local food initiatives or help fund work around local food within their jurisdiction. The most populous cities, Auckland, Wellington, and Christchurch, are also those with the most visible action around localised food systems. This research will explore the engagement of the councils of the three largest three cities in Aotearoa with local food and critically evaluate what these local councils are doing in the local food space. The aim is that this research may serve as a building block for future academic work and policy development on the topic of local food in Aotearoa.

Chapter 3. Methodology

3.1 Introduction

This chapter discusses the methodological approach to this dissertation. It first positions the researcher, and explains the development of the research question. Then the research ontology, epistemology, and paradigms are outlined, followed by a discussion of the methods used to collect the data. It concludes by considering the ethical implications of the study and acknowledging the role of Te Tiriti o Waitangi in the research.

The examination of policies and their underlying ideologies is best approached by a qualitative methodology. Qualitative research "does not necessarily shy away from political agendas" (O'Leary, 2017, p. 142) which is important as this dissertation could be considered highly political. Social complexities are addressed, and quality is prioritised over quantity (O'Leary, 2017). A deductive approach starts with a hypothesis and tests it. Contrarily, an inductive approach seeks to build theories through data collection. An inductive process will be used in this research as data analysis is used to "establish patterns, consistencies and meanings" (Gray, 2004, p. 6). This research engages a relativist ontology, a constructivist epistemology, and a paradigm of constructivism. Research methods used include a systematic qualitative review, purposive sampling, and thematic analysis of the data.

Mapping research philosophy provides a framework for understanding the values and beliefs that the researcher holds and helps to justify chosen research methods. As Braun and Clarke (2022) noted, "all maps encode something of the worldview of the cartographer and their moment of creation" (p. xxviii). It is generally accepted in academia that no research can be conducted completely without bias (Florczak, 2022). In qualitative research, the researcher collects and interprets the data, and human interpretation is "inherently complex and personal" (Florczak, 2022, p. 22). Researchers must be self-aware and actively prevent bias where possible. In order to mitigate bias, the position of the researcher is clearly explained in the following section.

3.2 Positioning the Researcher

Firstly, I must speak to my own positioning in relation to the research. I am a white, American-European female. I grew up in the United States of America, lived in Italy and Australia as a teenager, then moved to Aotearoa as an international student. I completed my Bachelors degree majoring in Cultural Anthropology and International Relations. My cultural identity is complex; I feel privileged to be both American (by birth) and New Zealander (by choice). Eight years ago I moved to Wellington and two years ago I shifted to Auckland. This research will look at sources from Aotearoa's three most populous cities. It is worth noting that I have lived in and have a connection to two of these locations. I acknowledge that my own views are likely to be reflected in the work despite my best intentions to remain objective; I am of the belief that subjectivity is inherent and unavoidable.

The role of food in my life has progressively become more important. I have never had too little on my plate; I was a child with the luxury to be picky. My family ate a classic American diet, consisting of meat, cooked vegetables, and convenience foods. We occasionally dined out, but it has been working in restaurants and cafes that has formed the basis of my food knowledge. I was hired into my first hospitality role more than a decade ago; while I have diverted into other career paths since, I have always kept one foot in the food service industry. I have held both front and back of house jobs, cooking and serving the food, managing rosters and seating guests, pouring beers and pairing wines. Working with and thinking about food every day has had a major impact on me. I have fluctuated between different ethos-based diets and struggled with my own food choices. My interest in the topic of local food stems from a concern about the future of food and planetary well-being, as well as an interest in being part of a sustainable community.

I have been involved with local food systems in my neighbourhoods in Aotearoa. When the Sustainability Trust hosted a project to build community vegetable boxes in front of their building in central Wellington, I helped to plant the first lot of vegetables and returned weekly to water them, eventually harvesting some kale to take home for dinner. Shortly after moving to Auckland, I reached

out to Kelmarna Gardens to volunteer with them. I figured that being involved in a community food space would be a good way to begin connecting with my new neighbours. Sometimes I bring home vegetables or fruits, and yes, they physically nourish me and my family. Yet it is the whole experience of working with other people with our hands in the dirt, under the open sky, with a sense of purpose for ourselves and the planet that keeps me going back.

3.3 Developing Research Questions

O'Leary (2017) argued that the process of developing a research question should be a challenge. The question must be original and address a gap in the existing research. It would help to focus the study, while also anticipating discovery (Agee, 2009), in a way that can be completed within the allotted six month timeframe for a sixty point dissertation. Agee suggested that a good qualitative research question invites exploration beyond a 'yes' or 'no' answer (2009, p. 434). Some flexibility is required, as the inquiry process is likely to change as the researcher critically assesses their positioning on the topic (Agee, 2009).

The following research topic and question were designed to guide this study:

Research Topic

A critical analysis of Aotearoa's three most populous cities' council engagement with local food initiatives.

Research Question

To what extent do the councils in the three most populous cities in Aotearoa prioritise and invest in local food, and what critical insights can be derived from analysing their initiatives in the local food space?

3.4 Ontology and Epistemology

All research is positioned within a web of research philosophy, an active space where there is constant debate among academics and scholars over philosophical perspectives (Gray, 2004). As Crotty argued, the researcher inevitably brings "a number of assumptions to our chosen methodology" (1998, p. 7). Theoretical perspectives must be elaborated on to make these assumptions clear. Ontology and epistemology are branches of this research philosophy that are concerned with understanding reality and knowledge. Specifically, ontology is the "study of being" (Gray, 2004, p. 16) and positions beliefs about the ways of the universe. Commonly, this is split into two opposing views: realist or relativist. A realist perspective aims to be objective and value-neutral (Fletcher, 1996) and holds that there is one true reality. However, there is on-going academic debate around whether any research can truly be objective (Fletcher, 1996).

In approaching this research, the assumption is that there is no one truth. This dissertation therefore engages a relativist ontology, which reflects the idea that "there are multiple realities and ways of accessing them" (Gray, 2014, p. 19). Gray (2004) called this *becoming* ontology, with the emphasis being on a "changing and emergent world" rather than a "permanent and unchanging reality" (p. 16). At the core of a relativist ontology stands the belief that everything is subjective.

Epistemology is concerned with the nature of knowledge and determines what acceptable knowledge is; it asks "what it means to know" (Gray, 2004, p. 16). The epistemology underpinning this research is constructivist. A constructivist epistemology rejects the idea that there is an objective truth to be discovered. Instead, it assumes that "meaning is *constructed* not discovered" (Gray, 2004, p. 17) through interactions between people and things in the world. Objects in the world may be full of potential meaning, but "actual meaning emerges only when consciousness engages with them" (Crotty, 1998, p. 43). Without a mind, there is no meaning.

3.5 Paradigms

Research paradigms are guided by the researcher's assumptions about reality and knowledge as explained in the section on ontology and epistemology above. A paradigm provides a framework which guides the researcher's process. Social science, which this research is part of, exists to "discover new or different ways of understanding the changing nature of lived social realities" (Jackson et al., 2007, p. 21). Defining social science research, and its legitimacy as a science at all, is entangled in the ontological back-and-forth around what is real (Packer, 2010). Ideas around appropriate methods of inquiry and a belief that there is an objective truth have served as the building blocks of Western science (Crotty, 1998). In the past few decades, a more subjective perspective has gained credibility and risen to counter realism. Crotty (1998) suggested that the constructivist paradigm has been "part of the artillery brought against it" (p. 42). He defined constructivism as:

> ...the view that all knowledge, and therefore all meaningful reality as such, is contingent upon human practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context. (Crotty, 1998, p. 42)

Positivism was once the primary paradigm for the social sciences (Crotty, 1998; Gray, 2004). According to Crotty (1998), this implies that the results of the research are objective facts. However, experiences and meanings associated with local food initiatives are likely to vary, making them difficult to quantify, let alone consolidate. Instead, constructivism can be used to gain an understanding of the underlying social, cultural, and historical contexts that have influenced the development of these initiatives. Therefore, the research paradigm used for this dissertation is constructivism. It is based on the assumption that social reality is socially constructed and allows for the meaning of local food to remain subjective.

3.6 Methods

Clearly outlining the chosen research methods serves to identify and justify the research process (Crotty, 1998). Methods include the procedures and techniques used to gather data. Three methods were used in this research: systematic review, purposive sampling, and thematic analysis. Before discussing the use of systematic review and purposive sampling, local food and localised food system are defined as they apply to this research in order to establish research parameters. Thematic analysis and its implementation in this study are discussed in Chapter 4.

3.6.1 Defining Local Food and Localised Food Systems

With understandings of local food remaining far-varying, as demonstrated in the literature review, it is useful to clarify the way that local food and a local food system are defined and used in this dissertation. The most common understanding of local food is based on geographical boundaries (Eriksen, 2013; Ostrom, 2006), so the definition of local food to be applied to this research is:

Local food is food that is produced and consumed within the region where the selected city council is located.

According to the intergovernmental Organisation for Economic Co-operation and Development (OECD), a food system refers "to all the elements and activities related to producing and consuming food, and their effects, including economic, health, and environmental outcomes" (2023). Building on this description, the definition of a localised food system used in this research is:

A localised food system concerns all aspects of the production and consumption of food within the region where the selected city council is located.

Council plans and policies referring to food production as well as organisations which received local government funding and are part of initiatives to grow or produce food as per the above definitions are included in the analysis. How these documents and organisations were identified is discussed in more depth in the following sections.

3.6.2 Systematic Review

A systematic review is an overview of work on a specific topic using transparent and reproducible methods (O'Leary, 2017). In order to ensure transparency, it need to explain how the primary sources for the research were found and selected (EPPI Centre, 2019). For this research, two systematic reviews were conducted. The first was used to sort through available data on local council websites to find where the concept of local food was evident. The second established what council funding was relevant for local food initiatives, as well as which organisations in the local food space had received council funding.

This first systematic review included entering the keywords "local food" and "food" into all seventy-eight council databases across Aotearoa to understand what exists in the space. Of these, 12 councils had results which explicitly mentioned local food. Four of these were related to either festivals involving local food or awards given by the council to groups or organisations doing work which related to local food (Southland Regional Council, South Taranaki District Council, Whakatane District Council, and Central Otago District Council). Nelson City Council featured a strategy which includes the goal to "produce more of our own food" (2013, p. 12), and Waikato District Council noted local food as a priority in the *Raglan local area blueprint* (2020). Palmerston North City Council claimed a "great history of markets" (2023) and Selwyn District Council (2021) took action during Covid-19 to connect constituents with local food producers. In 2018, the Dunedin City Council developed *The Good Food Dunedin Charter* to support a local food economy. Finally, Auckland Council, Wellington City Council, and Christchurch City Council each returned food plans or policy and an assortment of webpages which included discussion on local food. The results from all council websites were recorded into a spreadsheet (see *Appendix A*) in order to gain an overview of the findings.

The most common result yielded by the keyword search for 'food' on council websites was around food waste - the majority of councils in Aotearoa mentioned the Love Food Hate Waste campaign and

have supported its mission to reduce household food wastage in some way. The campaign arrived in Aotearoa in 2016, and the reach has been so effective that fifty-seven local councils across the country are actively engaging with it at the time of writing (Love Food Hate Waste New Zealand, 2023). Food waste, composting, and surplus food redistribution are all part of a sustainable local food system, which is expected to offer a way to deal with food waste (Kira, 2017). However, food initiatives centred on food waste, composting, food rescue, free meals, community pantries, and similar are not within the parameters of this research as the production points of the foods in these initiatives are unknown.

A secondary systematic review was undertaken to determine which organisations working in the local food space had received council funding. This required first learning about the types of council funding, determining which funds met the criteria to support local food initiatives using the information available on council websites, and then collecting information from the council websites on which organisations had received those funds. Of the 25 funding categories in Wellington, the following were applicable: *Climate and Sustainability Fund*, *Contract Funding*, *Social and Recreation Fund*, and *Stone Soup Funding*. Additionally there was a *Capital Compost Community Grant* which was of some interest as it supports the growing of food, however it was not included in this research as it directly provides compost rather than money to recipients (Wellington City Council, 2023a). Christchurch City Council offered 17 community funding categories of which the following three were applicable: *Discretionary Response Fund*, *Sustainability Fund*, and *Strengthening Communities Fund*. A list of funding recipients was easily collected for Wellington City Council (2023b) and Christchurch City Council (2023a) via their websites.

Auckland council is a unitary authority, meaning it "has the responsibilities, duties and powers of a regional council conferred on it" (Department of Internal Affairs, 2011c). Within Auckland Council are twenty-one local community boards. There are two main sources of community funding: regional grants and local board grants. This is more extensive and complex than either the Wellington or Christchurch City Councils, so it was necessary to clarify exactly what type of grants would be

considered as part of this research. The decision was made to look explicitly at regional funding, as the entirety of Auckland Council's constituency would be eligible to apply. Four regional grants had criteria that local food initiatives could fall under. These were the *Auckland Climate Grant, Ngā Hapori Momoho - Thriving Communities Grant, Regional Events Fund,* and *Regional Environment and Natural Heritage Grant.* Only the recipients of the Auckland Climate Grant could be found in the public domain on Auckland Council's climate action website *Live Lightly* (2023a). A list of grant recipients can be found in the appendices (see *Appendices B.a., B.b., & B.c.*).

3.6.3 Purposive Sampling

Purposive sampling was then used to select samples. In this type of nonprobability sampling, the researcher judges which samples will be the most representative (Babbie, 2020). Working with content from all seventy-eight local councils in Aotearoa would have been too large an enumeration for this dissertation. This research is therefore made up of two samples across three cities in Aotearoa: Auckland, Wellington, and Christchurch. These councils were selected because they are the most populous cities in the country. Additionally, based on a preliminary sample analysis all three of these cities were visible leaders in food policy and members of the Aotearoa Food Policy Network, which supports "sustainable food systems in Aotearoa New Zealand" (2023). Moreover, the cities happened to be well-distributed across the country: top of the North Island (Auckland), bottom of the North Island (Wellington), and middle of the South Island (Christchurch).

The parameters of the first sample were local government strategy or policy documents collected from local council websites in the public domain. The first sample included local government plans and policies which discuss local food or localised food systems as outlined in Table 3.1. In *Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan* the goal of the food priority was the creation of "a low carbon, resilient, local food system that provides all Aucklanders with access to fresh and healthy food" (Auckland Council, 2020, p. 101). The objective of the Christchurch City Council's *Food Resilience Policy*, which the *Healthy Food Action Plan* (2017) was implemented under, was to create "A food

resilient Christchurch with thriving social, economic and physical environments providing healthy, affordable and locally grown food for all people" (2014, p. 1). These documents directly refer to encouraging local food and a localised food system.

The *Wellington Resilience Strategy* "sets out a blueprint to enable Wellingtonians to better prepare for, respond to, and recover from disruptions" (Wellington City Council, 2017, p. 7). Part of this is ensuring that sustainable food networks are in place and accessible during emergencies. Wellington City Council's strategy *Te Atakura – First to Zero* (2019) expanded the concept of sustainable food networks as those which are also environmentally friendly, healthy, and resilient. Building on both of the previous plans, as well as being a direct action from them, *Te Anamata ā-Kai o Tō Tātou Tāone: Our City's Food Future* was written as a plan "to achieve a sustainable, equitable, healthy, and resilient food system for Wellington City" (Wellington City Council, 2023c, p. ii). Wellington City Council's documents often refer to "urban agriculture" (see for example 2023c, p. 9, & 2017, p. 53) or regional production (see for example 2023c, p. 2) in addition to using the terms "local food economy" (2023c, p. 7) and "local food initiatives" (2023c, p. 9).

Table 3.1

Council Food Strategy Documents

Local Council	**Plan or Policy**
Auckland Council	*Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan* (2020)
Wellington City Council	*Wellington Resilience Strategy* (2017) *Te Atakura – First to Zero* (2019) *Te Anamata ā-Kai o Tō Tātou Tāone: Our City's Food Future* (2023c)
Christchurch City Council	*Food Resilience Policy* (2014) *Healthy Food Action Plan* (2017)

Note. Sections were used from *Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan*, *Wellington Resilience Strategy*, and *Te Atakura – First to Zero* that specifically contained reference to food. The remaining documents *Te Anamata ā-Kai o Tō Tātou Tāone: Our City's Food Future*, *Food Resilience Policy*, and *Healthy Food Action Plan* were analysed in full.

The parameters of the second sample included ‘about’ or ‘home’ pages from the websites of organisations that work with local food and localised food systems that have received council funding since 2020. All samples were written text, and proof of funding had to be publicly available online. Some of the organisations that received council funding do not have their own webpage, but short descriptions of their missions or brief ‘about’ statements could be found in the public domain via their Facebook page or websites such as Neighbourly or the Citizens Advice Bureau which catalogue community organisations. There was no online information available on the Otahuhu College community garden (Auckland) or the Cashmere New Life community garden (Christchurch), and the Re-Creators Charitable Trust (Auckland) provided no information specific to its upcycled gardening classes. Therefore, these three organisations were not included in the data set despite having received council funding between 2020 and 2022.

3.7 Ethical Considerations

The *AUT Code of Conduct for Research* outlines the values and principles for conducting research in Aotearoa. These are based on “respectful and rights-based knowledge discovery between researchers, participants and communities to advance science, technology and the humanities in Aotearoa New Zealand” (Auckland University of Technology, 2019, p. 3). The Code outlines standards and responsibilities which researchers must follow. Ethics in research are of the utmost importance. As Zina O’Leary explained, “researchers are responsible for shaping the character of knowledge” (2017, p. 55). Positions of power, underlying politics, and potential risks to all stakeholders must be considered.

Ethics approval was not required for this research as it was conducted using only secondary sources which are in the public domain. No sensitive data requiring safeguarded storage was collected. The research itself presents a low risk of causing anyone emotional or physical damage. The researcher and supervisor are the only active stakeholders, though the findings of this research may have some

impact on Auckland, Wellington, and Christchurch City Councils as well as the organisations which they have provided funding to.

3.8 Te Tiriti o Waitangi

Part of adhering to the AUT Code of Conduct for Research is ensuring that research upholds the ethics of Te Tiriti o Waitangi. According to *Te Ara Tika: Guidelines for Māori research ethics*, "all research in New Zealand is of interest to Māori, and research which includes Māori is of paramount importance to Māori" (The Pūtaiora Writing Group, 2010, p. 1). This research may not be specific to Māori ways of being, but it still touches on Māori perspectives. Beyond it being an academic necessity, it is important to acknowledge the role of Te Tiriti o Waitangi in this research. While I am on my own learning journey with tikanga Māori, I appreciate that the ideas concerned with local food cannot (and absolutely should not) be separated from indigenous culture. The concept of food sovereignty in particular is inherently connected to indigenous food culture. Māori traditions overlap with some of the concepts that will be explored, and mātauranga Māori is integrated into some of the research samples.

Chapter 4. Analysis

4.1 Introduction

In qualitative research, there are a variety of ways that data can be analysed. Two commonly used methods are content analysis and thematic analysis, which are often seen to overlap (Vaismoradi et al., 2013, p. 404). Content analysis is a method of unobtrusive research, or "studying social behaviour without affecting it" (Babbie, 2020, p. 326), where secondary sources are used to answer a new question. It uses recorded human communications such as books, letters, paintings, or newspapers (Babbie, 2020, p. 327). Content analysis can allow for the quantification of data by measuring the frequency themes (Vaismoradi et al., 2013, p. 404).

In the case of this research, web pages and council documents were used. However, thematic analysis was selected as the best method to identify important themes in the data. Thematic analysis is "an independent qualitative descriptive approach" (Vaismoradi et al., 2013, p. 400) to identify meaning and report themes in the data. Some academics have posited that thematic analysis is a tool or process that is used within other analytic traditions, such as grounded theory (Boyatzis, 1998, and Ryan & Bernard, 2000, as cited in Braun & Clarke, 2006, p. 78). However, Braun and Clarke (2006) argued that it should be considered a method of its own, pointing to the flexibility of thematic analysis as being crucial in its ability to tell a rich but complex story about the data (p. 78).

4.2 Thematic Analysis

Reflexive thematic analysis was used to identify explicit and implicit ideas which form meaningful themes in the texts (Guest et al., 2012) as well as similarities and differences in the data (Braun & Clarke, 2006). Taylor et al. (2015) wrote that "data analysis is probably the most difficult aspect of qualitative research to teach or communicate to others" (p. 159) because it requires the researcher to develop thoughtful insights. Clarke and Braun (2014) suggested that thematic analysis is an accessible

method for novice researchers, since it has a clear procedural outline. Thematic analysis helps "to tell the complicated story of your data" (Braun & Clarke, 2006, p. 93). Though thematic analysis is most commonly used within a realist framework, Clarke and Braun (2014) suggested that theoretically flexible thematic analysis has something to offer for nearly any qualitative research. They argued that valuing "a subjective, situated, aware and questioning researcher" (Braun & Clarke, 2022, p. 5) is a key characteristic of thematic analysis. Braun and Clarke (2022) have developed six phases of thematic analysis, which are presented in Table 4.1.

Table 4.1

The Six Phases of Thematic Analysis

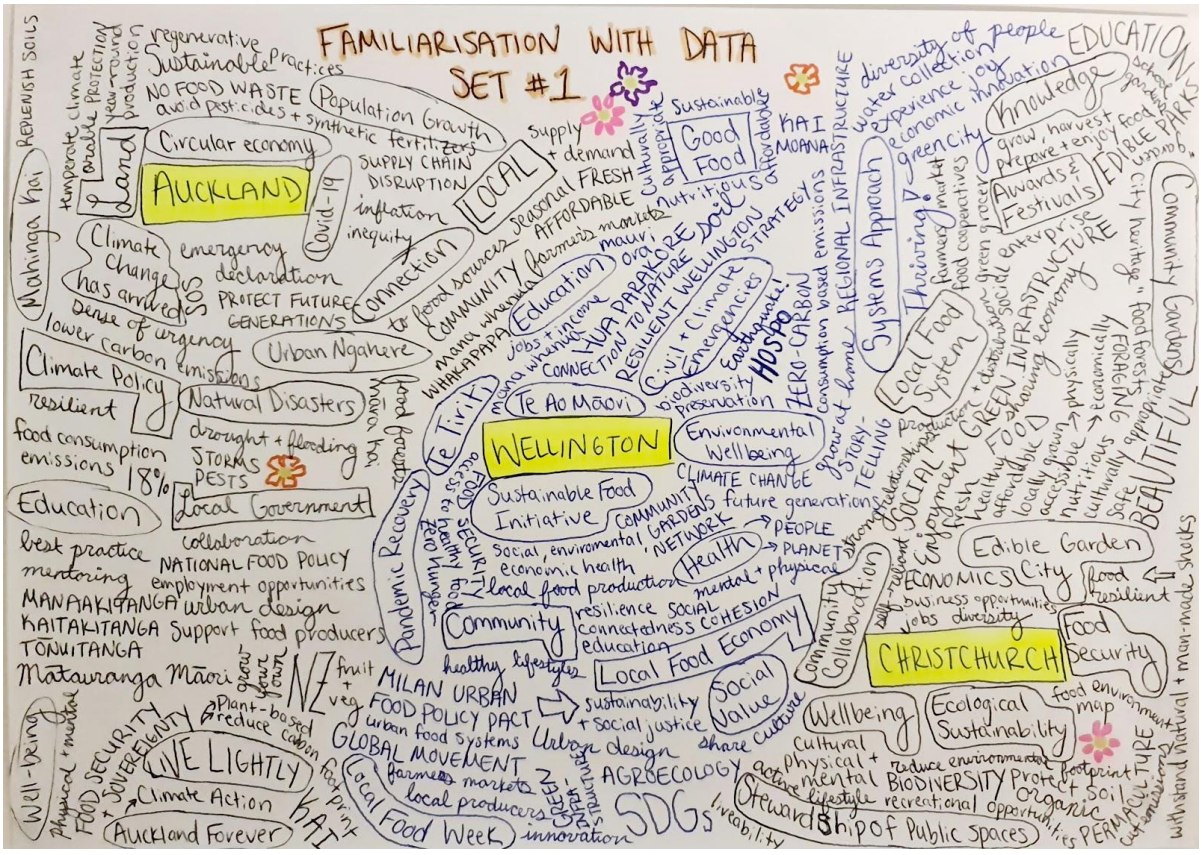
Phases of Thematic Analysis	
Phase One	Become familiar with the data
Phase Two	Code the data systematically
Phase Three	Generate potential themes
Phase Four	Review the potential themes
Phase Five	Define and name themes
Phase Six	Write

Note. Adapted from Braun and Clarke (2022, p. 35-36).

The first phase is about becoming familiar with the data. This is about engaging critically and deeply with the research sample by reading it thoroughly, multiple times, until familiar with it (Braun & Clarke, 2022). This phase is a chance to ask questions about the data set, as well as questioning the way it is being understood by the researcher. In this phase, the research samples were printed and read through multiple times, while passages of interest were highlighted and marked with notes. Overall impressions of the data were recorded in mind maps (see Figure 4.1 and Figure 4.2) before moving on to phase two.

Figure 4.1

Familiarisation with Data Set One



Note. This mind map was created by the researcher during the familiarisation phase with data set one. It contains key words and concepts that were used in the councils' plans and policies around local food systems. Some immediate observations are made: all councils discuss environmentally friendly food production and community connection and wellbeing. Wellington and Christchurch have a strong focus on food resilience, while Auckland is most concerned with mitigating climate change.

Figure 4.2

Familiarisation with Data Set Two

Note. This mind map was created by the researcher during the familiarisation phase with data set two, the 'about' pages of organisations with council funding in the local food space. It shows frequently mentioned terms and concepts based on the council from which the organisation received funding. An immediate observation is that a majority of the organisations are concerned with fostering connected communities in addition to growing food.

NVivo software was used in addition to printed copies of the data sets to code and develop themes. Codes were generated which "capture specific and particular meanings within the dataset, of relevance to your research question" (Braun & Clarke, 2022, p. 52). Coding is an analytic process which captures both surface and underlying meaning. Themes can then be constructed from the coding. The flexibility of this method can lead to a lack of coherence (Nowell et al., 2017); in order to avoid this, the themes are regularly related back to the research question during the generation stage. Phases three, four, and five of conducting a thematic analysis involve generating themes, reviewing

themes, and defining themes. In order to do this, each code was written on a card, and these were organised in a variety of possible ways to generate themes. These categorisations were reviewed multiple times, and themes were adjusted to make better sense of the data. The themes that were finalised from data set one, the councils' plans and policies which discuss local food or localised food systems, are shown in Table 4.2 below. The themes from data set two, the 'about' pages of organisations with council funding since 2020 working with local food, can be found in Table 4.3. The final phase of the thematic analysis process is writing, which is captured in Chapter 6.

Table 4.2

Themes from Data Set One

Themes	Codes
Overarching theme: *The pursuit of a food system centred around wellbeing: environmental, individual, social, and economic.*	
Create more sustainable food systems and minimise environmental impact	active local food system; the current linear food system is failing; community gardens; edible gardening; encourage grow-your-own; reduce food waste; encourage seasonal food; healthy environment; food choices impact planetary health; food foraging; importance of regenerative practices; systems approach; connection to the land; sustainability; fostering growth of food spaces; unreliable global supply chain; increase biodiversity; caring for people = caring for the land; food is connected to the whenua; food production emits carbon; reduce carbon footprint; responsible use of resources; strong climate action is needed; arable land and soil protection
Increase access to culturally appropriate, affordable, healthy and high quality food for all	culturally appropriate food; sharing of surplus food; food sovereignty; food security; equity of food; quality of food; free food; access to food; healthy; importance of affordable food; food resilience
Uphold and honour Te Tiriti o Waitangi (The Treaty of Waitangi)	mātauranga Māori (Māori knowledge); mahinga kai (traditional food resources); Hua Parakore framework (Māori food production); whakapapa (genealogy); kaitiakitanga (guardianship); mana whenua (indigenous Māori with rights over the land); mana motuhake (self-autonomy); alignment with Te Tiriti o Waitangi
Grow community and strength of social connectivity	food is connected to community; community connectedness; self-sufficient communities; diversity of people; culture of volunteering; socially healthy communities; community resilience
Utilise knowledge sharing and collaborative solutions	increase knowledge around food; sharing of intergenerational knowledge; changes to individual behaviour; collaboration between government and community groups; engagement in international knowledge sharing; work with the primary industries; advocate for strategic government food policy
Ensure emergency and climate change preparedness and resilience	natural disasters will affect food access; resilient to climate change; climate change will affect food production; prepared in case of emergency; ensuring the wellbeing of future generations
Maximise urban liveability	increase liveability of city; garden city heritage; stewardship of public spaces; enjoyable experience; incentivise and celebrate gardening; reduction of crime
Foster a thriving economy	healthy economy; growth of new job opportunities

Table 4.3

Themes from Data Set Two

Themes	Codes
Foster healthy, connected, and resilient communities	socially connected communities; serving the community; thriving communities; self-sufficient communities; collaboration with community leaders; interaction with local government; physically healthy communities; general wellbeing; therapeutic programmes; sense of belonging and purpose; sense of public ownership; friendly, welcoming space; enjoyable spaces; aligned with Te Tiriti o Waitangi
Establish edible growing spaces	community farm or garden; urban gardening; foraging; animal farming; income-generating market garden; farmers market; locally grown food; growing fruit and vegetables; encouraging grow-your-own; producing nutritious food; using red-zone land; celebrating gardening
Environmental stewardship	use of permaculture design; use of regenerative practices; healthy soil; use of organic methods; gardening as climate action; sustainable agriculture; healthy ecosystems; saving seeds; composting; waste minimisation; connection to nature; mahinga kai; encouraging biodiversity; reducing carbon footprint; kaitiakitanga; promoting sustainable living; protecting the planet for future generations; hope for the future
Ensure food access and abundance	Addressing food insecurity; food resilience; abundance of food; working toward food sovereignty; food for free; access to quality food; access to affordable food; advocating for better food systems; connecting people to their food
Skill development and education	opportunities to upskill; educational programmes; sharing of knowledge; engagement with intergenerational knowledge; mātauranga Māori; volunteer work

Chapter 5. Findings and Discussion

5.1 Introduction

In this section, findings from the thematic analysis are outlined and critically examined. Explicit references to the data sets are included, and a discussion around the ways that Auckland, Wellington, and Christchurch City Councils are engaged with localised food systems is presented. Seeing as each council approach is autonomous and therefore unique, differences and similarities of strategies, visions, and actions are explored. The findings on the engagement of the city councils with local food are compared to international takes on the topic by relating them to the learnings gained from the literature review.

5.2 The Pursuit of a Food System Centred Around Wellbeing

Each theme developed through thematic analysis of data set one, the councils' plans and policies, is related to an overarching theme: *the pursuit of a food system centred around wellbeing*. This approach to wellbeing is holistic, with an understanding that the wellbeing of one component is connected to and relies upon the wellbeing of other components. Four focus areas of wellbeing were identified: 'environmental', 'individual', 'social', and 'economic'. An active local food system is positioned at the centre of them all. The themes from data set two, information about organisations with council funding, can also be related back to an overarching theme of a wellbeing-focused food system. In some cases, one theme may fit within multiple wellbeing areas. The four focus areas, which are used to guide the presentation of findings and discussion, are described in the following sections.

5.2.1 Environmental

Environmental wellbeing is about reducing the harm that human actions cause the planet, mitigating and managing the effects of climate change, and encouraging a healthy and thriving natural environment. Aotearoa is susceptible to a variety of natural disasters. Wellington and Christchurch are vulnerable to major earthquakes, which each city has already experienced in varying magnitudes

(New Zealand Herald, 2016; Ministry for Culture and Heritage, 2023). Auckland has recently experienced excessive rain and flooding, which causes complications to growing seasons and destroys crops (Prasad, 2023). This type of atypical and unpredictable weather is expected to increase with failure to address the root causes of climate change. Food production and food choices impact heavily on the environment, through the release of greenhouse gases or the use of resources with abandon (La Trobe & Acott, 2000). Hence, the way people eat is a critical part of managing the effects of climate change and natural disasters, and generally protecting the environment.

The following two themes from data set one fit within the environmental wellbeing category: *create more sustainable food systems and minimise environmental impact*; *ensure emergency and climate change preparedness and resilience*. Data set two contributes the themes *environmental stewardship*, in clear alignment with this section, as well as *establish edible growing spaces*, which are part of sustainable food systems. The following section discusses how the three councils acknowledge and address environmental issues and natural disasters within their food strategies and where this is part of the mission for organisations in the local food space with council funding. Discussion topics include climate change and carbon emissions, natural disasters and emergency preparedness, arable land and healthy soil, sustainable food systems, and finally, community gardens, growing food, and foraging.

5.2.1.1 Climate Change and Carbon Emissions

A strong shared idea across all three councils is reducing and preparing for the effects of climate change. Christchurch City Council is optimistic that "a more diverse and localised food production and distribution system builds resilience and enables more sustainable production and distribution methods that reduce the environmental footprint of food" (2014, p. 1). Auckland Council's food priority is located within *Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan* (2020), and it emphasised most strongly the need to reduce the city's carbon footprint. The plan outlines that urgent action is needed as emissions continue to rise, stating that: "we need to act now – and we must act fast. We have less than a decade to avoid the worst impacts of climate change and dramatically reduce our

emissions." (Auckland Council, 2020, p. 6). Auckland has committed to halving its emissions by 2030. One key to lowering emissions is outlined to be a low carbon local food system, as the council claims that "local, sustainable food production can secure our food supply and reduce emissions" (Auckland Council, 2020, p. 102).

Food production emits greenhouse gases (Crippa et al., 2021; Pirog et al., 2014). As Wellington City Council explains, "everything from driving to work, to flicking on the heater, to having a steak contributes a degree of warming, and becoming zero carbon is all about managing that" (2019, p. 65). Auckland Council notes that currently food production depends on fossil fuels, "from the production of inorganic fertilisers through to the processing and distribution of food" (2020, p. 107). The standard way that emissions are calculated is from the point of production (Wellington City Council, 2019, p. 20). This means that any products from outside of the city, but consumed within the city, do not count toward total emissions. As this does not accurately represent the amount of emissions that are produced as a result of the city's activities, Wellington City Council has also started measuring a "consumption based greenhouse gas inventory" (2019, p. 42) which includes the emissions from products consumed. When it comes to diet-related emissions, this change in the measurement method makes a significant difference. Using the traditional measurement, only one percent of Wellington City's emissions come from agriculture (Wellington City Council, 2019, p. 20). Switch to the consumption based measurement, and forty percent of the average household emissions are related to food (Wellington City Council, 2019, p. 64). This identifies diet as having a major impact on climate and suggests that "local vegetable co-ops, plant-based to lab-grown meat replacements, and aquaculture are all needed to average down carbon emissions" (Wellington City Council, 2019, p. 56). What people eat has a climate impact.

As discussed in the literature review, the distance travelled is not the main or only consideration to measure a food item's environmental impact (Beer, 2015; Ritchie et al., 2022; Schnell, 2013; Stein & Santini, 2021). For example, fresh foods do not take as much energy to produce as processed foods (Ministry for the Environment, 2023), and shipping an item can release less greenhouse gases than

growing it in a heated greenhouse (Allen, 2023). The type of food being produced and consumed becomes crucial when talking about carbon footprint. Research shows that animal products have significantly larger carbon footprints and negative environmental impact than grains, fruits, and vegetables (Willett et al., 2019). In Aotearoa, agriculture comprises half of the nation's total greenhouse gas emissions because of the diary and meat industries (Mitchell, 2019). Raising animals to uphold current dietary trends of meat and dairy consumption, if done locally, would drastically increase a city's production-based emissions. While not explicitly stated, there are suggestions throughout the councils' documents that a plant-based diet is favourable to manage climate change. In Auckland Council's (2020) plan, one progress indicator used is the "percentage change in domestic plant-based diet consumption" (p. 105). The number of those following a plant-based diet is known to be increasing, and *Te Atakura – First to Zero* notes that at the time of writing, ten percent of New Zealanders were eating a meat-free diet (Colmar Brunton's Better Futures report as cited in Wellington City Council, 2019, p. 56).

While a large focus for the councils is on reducing emissions, and local food is discussed as being beneficial for reducing the cities' carbon footprints, the fact is that food production is a much larger source of emissions than its transport (Schnell, 2013). Wellington City Council correctly noted this increase of food-related emissions in their *Te Atakura – First to Zero* (2019) with the switch to a consumption based measurement method. It cannot be assumed that a move to a localised food system will lower a city's greenhouse gas emissions while traditional measurement systems are being used. There is also no concrete evidence of food that is produced locally having a lower carbon footprint than that which has been produced further away and transported (Stein & Santini, 2021). Many factors come into play, from the local weather to the method of shipping, which must be considered when calculating the true emissions of a food item (Ritchie et al., 2022).

A focus area of Wellington City Council's *Te Anamata ā-Kai o Tō Tātou Tāone: Our City's Food Future* was that the city's "climate-responsible food system and culture is reversing the effects of climate change" (2023c, p. 7). It is not just about reducing emissions – the effects of climate change

have started to be felt, and now cities must be resilient and able to adjust and manage new risks. Auckland Council suggests that climate change will affect food production with "longer periods of drought, more intense storms and flooding, increasing number of pests and diseases" (2020, p. 101). This is already affecting what imports are available as well as the success of crops in Aotearoa. Beyond the atypical weather, global warming will cause food shortages, intertwined with migration, conflict, and biodiversity loss (Wellington City Council, 2019, p. 21). Wellington City Council proclaims that "letting the 'unthinkable' happen is not an option" (2019, p. 21). The councils recognise that a collective impact is needed to prevent the worst effects of climate change, and that the way cities feed themselves is centrally involved.

Preventing the 'unthinkable' from happening means protecting the planet for future generations. This is also a source of motivation for a number of the organisations that received council funding in the local food space. In Auckland, Sustainable Papakura wants a "viable future" (2023a) for the community's grandchildren. Bush Farm in Christchurch calls for a sustainable future (Bush Farm Education, 2022), and in Wellington at Te Māramatanga they are planting fruit trees with expectation of "seeing our rangatahi grow into a more prosperous food future alongside them" (Wellington Boys' and Girls' Institute, 2023). Many of the organisations in data set two also assume responsibility to reduce the effects of climate change and harm to nature. One of the goals of Tāmaki Urban Market Garden is to "support and empower our community to do what we can for the climate crisis" (Eastern Bays Sustainable Garden Trail, 2023). Work is being done by organisations in all three council areas to restore and enhance ecosystems. Wellington's Sustainability Trust originated from a group of environmentalists who wanted to help people to "live in balance with the environment" (2023). Many of the organisations promote sustainable living through community engagement and educational opportunities.

Across the international literature, there are inconclusive findings around local food being more environmentally friendly. Certainly, as warned by Born and Purcell (2006), it cannot be assumed that local food is better based on its localness alone. Many other factors must be considered including but

not limited to growing climates, shipping methods, and labour issues (Cleveland et al., 2015). By assuming that local food will reduce emissions and is therefore better for the environment, the councils may have been susceptible to the "local trap" (Born & Purcell, 2006) fallacy discussed in section 2.6 above.

5.2.1.2 Disasters and Emergency Preparedness

In recent years, Covid-19 unexpectedly and dramatically affected supply chains, causing irregular pricing and shortages of certain food products (Auckland Council, 2020, p. 101). As mentioned in the literature review, this global event caused an increased demand for locally produced food. The warming of the planet will also cause disruptions. Auckland Council's plan notes that extreme weather can be expected as an effect of climate change (2020, p. 101). This has the potential to ruin crops and isolate community members. While Auckland Council is primarily focused on preventing climate disaster, Christchurch and Wellington City Councils are more interested in preparing for various disruptions. Christchurch City Council's food strategy is focused on being food resilient, which includes the ability to "withstand natural and man-made shocks" (2014, p. 1). Cities must be equipped for disaster situations.

In Wellington, preparing for a natural disaster, specifically for an earthquake to which the city is vulnerable, is one of the primary drivers for a localised food system. There is a strong focus on improving regional infrastructure and "access to household resilience items" (Wellington City Council, 2017, p. 44) that would be able to sustain Wellingtonians for at least one week after a major shock. Examples of this include resources for people to learn how to grow their own food and start community gardens. Strong community connections provide support and resources in times of disaster, which may include locally grown food (Wellington City Council, 2017, p. 41). The council has taken on the role to connect existing food projects in the community and identify where there are gaps and what partnerships can be formed. Working with plant nurseries is suggested to provide fruit trees and other edible plants which can be grown at home (Wellington City Council, 2017, p. 44).

This would make local food available in case Wellington was cut off from the rest of the country (Wellington City Council, 2017, p. 53). The council also aims to model food distribution methods which could be used in such situations (Wellington City Council, 2017, p. 53).

Organisations in both Christchurch and Wellington discuss part of their mission as being food resilient in disaster situations. The Food Resilience Network references the 2010 and 2011 earthquakes in Christchurch, which made councils realise the importance of having a food resilient region. They define this as the "ability to prepare for, withstand, and recover from disruptions in the food supply chain in order to make food accessible for all" (Edible Canterbury, 2023b). The Seeds to Feeds Foundation notes that if people grow and preserve more food within their communities, more local food will be available when needed (2023).

Christchurch was a "living laboratory in relation to resilience" (Berno, 2015, p. 162) after being affected by major earthquakes. A study of four social enterprises in the local food space determined that the reconnection of people to their local food resources resulted in a sense of empowerment and self-efficacy, which is a key part of resilience during times of crisis (Berno, 2015, p. 161). In her research, Berno noted that the experience members of the Christchurch community had in the earthquake caused them to engage with alternative food systems, as the traditional models did not prove resilient (Berno, 2015, p. 161). However, as Berno (2015) pointed out, "this has occurred in spite of the perceived shortcomings of government and local body responses" (p. 161).

When disaster strikes, what a city needs more urgently are food and water. International research has found that the direct producer to consumer sales model that local food relies on may improve community resilience by strengthening social networks (Farmer et al., 2011; McDaniel et al., 2021). Community food initiatives can foster a sense of belonging and build social capital (Macias, 2008; McDaniel et al., 2021). This is elaborated upon further in section 6.2.3.1 below. When a city has strong community connectedness, research shows that it will also be more resilient during challenging times (King, 2008; McDaniel et al., 2021). A crucial part of community resilience is access to food.

Having an established local food system means that there is supply to meet the demand as well as existing networks of communication to coordinate food distribution should the city become isolated.

5.2.1.3 Arable Land and Healthy Soil

Te toto o te tangata he kai, te oranga o te tangata, he whenua, he oneone.
While food provides the blood in our veins, our health is drawn from the land and soils.

Note. A whakatauki (proverb) from *Te Anamata ā-Kai o Tō Tātou Tāone: Our City's Food Future*. (Wellington City Council, 2023c, p. 27).

All three of the councils recognise the productive soils in their regions as valuable resources which should be cared for. The Auckland region has the ability to produce food year round thanks to its arable land and temperate climate (Auckland Council, 2020, p. 101). However, productive soils are being lost to development due to population growth and unsustainable ways of farming (Auckland Council, 2020, p. 102). Specifically, some of the nation's best soil is in the Pukekohe hub, which has also been the site of many rapidly growing housing developments in recent years (Richardson, 2021). This pressure on the land was identified by the council, with the note that only one percent of the soil in Auckland is suitable for growing vegetables (Auckland Council, 2020, p. 102). The loss of this land affects the region's ability to produce enough food to meet demands. The council acknowledges the importance of local food production and the need to restore mahinga kai, the "soils and ecological systems that support the production and gathering of food" (Auckland Council, 2020, p. 102).

Food production depletes soils in intensive growing areas (Auckland Council, 2020, p. 107). Wellington City Council is committed to upholding Te Ao Tūroa (connection to the natural environment), part of which is reducing the use of agrichemicals by the council and supporting better soil health (2023c, p. 17). Auckland Council notes that a resilient local food system minimises or avoids pesticides and synthetic fertilisers (Auckland Council, 2020, p. 101). Switching to regenerative practices is believed to promote "healthy soils that are more resilient to weather events, sequester carbon, minimise nutrient leaching, and increase biodiversity, food nutrition and crop yield"

(Auckland Council, 2020, p. 107). This indicates that the councils recognise that existing growing practices are causing harm. Auckland Council also identifies soil as playing a critical role in meeting emissions targets, as healthy soil can store carbon (2020, p. 102).

The *Food Resilience Policy* called for Christchurch City Council to "protect locally productive soils surrounding the city from inappropriate development that undermines the lands productive capacity" (Christchurch City Council, 2014, p. 2). Wellington City Council has a similar action to protect soils in its region, with the understanding that strong city infrastructure such as transport and a denser urban centre will help prevent development on farmlands (2023c, p. 21). An action area from Auckland Council's plan is to advocate for the *National Policy Statement for Highly Productive Land* - this policy has since been implemented by the New Zealand government. It exists to ensure the "availability of New Zealand's most favourable soils for food and fibre production, now and for future generations" (Ministry for the Environment, 2022). This is extremely important, since soil is a finite resource that nearly ninety-nine percent of humanity's food comes from (Kopittke et al., 2019). As the global population continues to grow, the amount of land available for food production is reaching a crisis. Half of the habitable land on Earth is already used for agriculture (Ritchie & Roser, 2019). Having rich, arable land for growing within the vicinity of Auckland, Wellington, and Christchurch is imperative for the cities' resilience in challenging times.

However, the councils do not give an amount of food that they would like to see produced locally. As environmental activist and author George Monbiot (2022) wrote, "In most cases, sufficient growing areas close to our centres of population simply do not exist" (p. 145). The majority of food is grown in rural areas which are lightly populated, then transported to dense urban centres (Monbiot, 2022, p. 145). It is unclear whether Auckland, Wellington, and Christchurch would be able to feed their own populations exclusively off regional farmland. In those cases where a local food system requires more intensive agriculture to meet demand, or if cropland is expanded, there are automatically negative environmental impacts that need to be accounted for (Stein & Santini, 2021).

A few of the organisations with council funding recognise the role that the soil has in reducing carbon footprints. In Wellington, Kaicycle views local food and compost hubs as an important part of climate resilience, in part due to their ability to sequester carbon (2023a). Tāmaki Urban Market Garden has converted a grass field in Auckland into a "living soil factory" (Eastern Bays Sustainable Garden Trail, 2023) which no longer needs to be mowed. Also in Auckland, Kelmarna Gardens use regenerative practices to ensure that soil is healthy, with the goal of sequestering carbon as well as growing more nutritious food (2023).

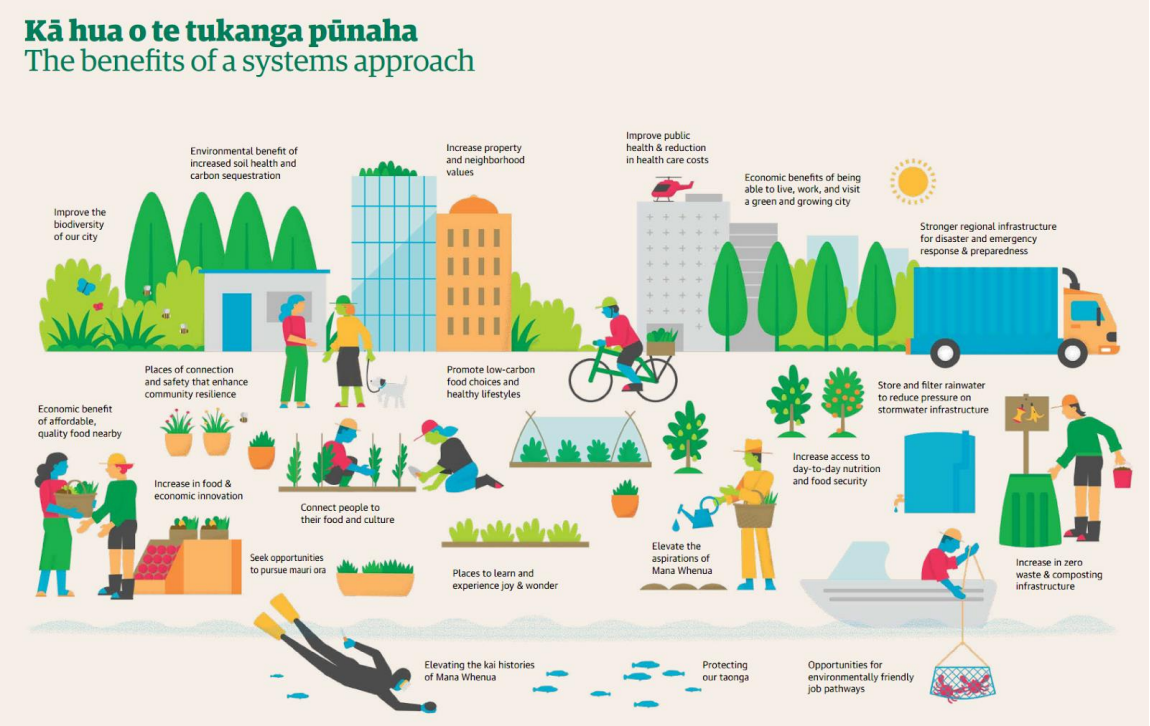
5.2.1.4 Sustainable Food Systems

The international food system is failing (Rosin et al., 2012). There is an abundance of academic work that highlights its many flaws, from causing biodiversity loss and land system change to nitrogen and phosphorus runoff into water sources (Willett et al., 2019). A linear food system is based on a "take-make-waste model" (Auckland Council, 2020, p. 107) that depletes the soil and fails to use natural resources responsibly. In contrast, "a low carbon, climate resilient local food system" (Auckland Council, 2020, p. 101) is circular and regenerative. Auckland Council documents indicate that they interpret this to mean eliminating food waste, avoiding synthetic fertilisers and pesticides, as well as using surplus food in the best ways possible.

Wellington City Council expresses the notion that food that is good for the environment is sustainably produced using regenerative practices while honouring kaitiakitanga (2023c, p. 2). A systems approach to local food acknowledges the interconnection of all the stakeholders in the food system, from the earth itself to the consumer. One area of the system cannot be healthy on its own; its wellbeing relies on the wellbeing of all parts. Wellington City Council provided the visual in Figure 5.1 to show the benefits that a local food system can have.

Figure 5.1

"The Benefits of a Systems Approach"



Note. Systems approach benefits visual from *Te Anamata Ā-Kai o Tō Tātou Tāone: Our City's Food Future* (Wellington City Council, 2023c, p. 4). Image used with permission from Wellington City Council.

In Christchurch, productive gardens are a key part of the city's green infrastructure. While Christchurch City Council does not mention regenerative growing in their policies, they do note that the edible gardens around the city support "bees, birds, butterflies and biodiversity" (Christchurch City Council, 2014, p. 2). Wellington City Council also notes the benefit that a localised food system can bring to the city's biodiversity (2023c, p. 4). In Auckland, the council plan does not mention biodiversity; however council-funded community farm Kelmarna uses regenerative methods to encourage a variety of plant and animal life (Kelmarna Gardens, 2023). It is true that intensive agriculture is one of the largest threats to biodiversity (Chappell & LaValle, 2011). However, local scale alone is not enough to ensure a thriving ecosystem. Alternative agricultural methods such as

organic growing and intercropping have been shown to increase biodiversity (Chappell & LaValle, 2011). As discussed in the literature review, the local food movement is often associated with the organic food movement, though certainly not all local food is organic and vice versa. Nor is local food necessarily grown using sustainable or regenerative practices.

Of the organisations with council funding in data set two, five community gardens explicitly mention the use of permaculture design and philosophy (Karori Community Garden, 2020; Northern Community Gardens, 2021; Innermost Gardens, 2023b; Kelmarna Gardens, 2023; Lyall Bay Community Garden, 2023). Permaculture outlines ethics of engagement and care for the environment, using sustainable and regenerative growing methods. Ten of the organisations discuss using organic principles (Bryndwr Community Garden, 2014; Karori Community Garden, 2020; Citizens Advice Bureau, 2023; Eastern Bays Sustainable Garden Trail, 2023; Edible Canterbury, 2023a; Innermost Gardens, 2023a; Kaicycle, 2023a; Kelmarna, 2023; New Brighton Community Gardens, 2023; Whenua Warrior, 2023). Christchurch's Linwood Community Gardens defines organic as "no toxic chemicals or artificial fertilisers used" (Edible Canterbury, 2023a) while Karori Community Garden in Wellington simply states a membership rule of "no chemical poisons" (2020). These organisations demonstrate a connection between local food and growing philosophies such as permaculture and organics.

Values of proximity of local food are explained as "context where values can flourish" (Eriksen, 2013, p. 53). These are positive associations with local food. Just as local food may be perceived as 'fresher' or 'more nutritious' based on its localness, similar themes on sustainability emerge throughout the literature (Eriksen, 2013, p. 53). As Born and Purcell (2006) caution, localness alone is not indicative of a product's other attributes. The councils must be cautious to not assume that all local food is inherently part of a sustainable food system. Likewise, they should question whether a sustainable food system is always a local food system.

5.2.1.5 Community Gardens, Growing Food, and Foraging

Each council's plan or policy includes discussion on edible gardening, community gardens, or grow-your-own food. This is especially a focus of Christchurch City Council's *Food Resilience Policy* (2014) and *Healthy Food Action Plan* (2017) where the vision is to be "the best edible garden city in the world" (2014, p. 1). Christchurch City Council prioritises making council land available for growing food, as well as supporting any initiatives to do so. The council sees supporting community gardens as a healthy city action, as these are spaces where "people grow and share fresh, healthy food" (Christchurch City Council, 2017, p. 1). Community gardens are also noted to be spaces to support community education, connectivity, and wellbeing (Christchurch City Council, 2014). Furthermore, foraging for food is actively encouraged by Christchurch City Council. The *Healthy Food Action Plan* includes the planting of edible trees around the city, as well as working with landscape professionals on "the value, importance and practicalities" of edible plants in the city (Christchurch City Council, 2017, p. 3-4). Edible planting has been done by Christchurch City Council on public land for anybody to forage from, as well as at social housing owned by the council (Christchurch City Council, 2017, p. 1). These initiatives aim to increase access to food.

In Wellington, community gardens support the council's social wellbeing goals. In the *Wellington Resilience Strategy* a council action is to identify communities in need where coordinators can be established to launch community garden projects (Wellington City Council, 2017, p. 53). Growing food at home is also suggested in the *Wellington Resilience Strategy* (Wellington City Council, 2017) as a way for individuals to be prepared and to ensure community resilience in case of an emergency. This is all part of the larger goal to develop sustainable food networks in the city, a project which "will teach potentially vulnerable Wellingtonians how to grow food for their own use and to establish small businesses" (Wellington City Council, 2017, p. 53). The idea is to ensure that local food is available in case the city is cut off from the rest of the country in an emergency, since "A resilient city has multiple ways for its residents to obtain food" (Wellington City Council, 2023c, p. 9). The council proposes that encouraging food spaces in the city helps to ensure that this is the case. Auckland

Council, too, has an action to support people to grow their own food. This is part of encouraging more local and seasonal food production and consumption (Auckland Council, 2020, p. 103), although the council does not go into detail about what this might look like or how it could be achieved.

The assumption that anybody can participate in a community garden or grow their own food at home is incorrect. Many people are time-poor or do not have the knowledge or resources to start their own garden, and food production in small spaces is inefficient for meeting the needs of families (Siegner et al., 2018). While Wellington City Council suggests a project to investigate making edible plants more financially accessible to community members (2017, p. 44), Auckland Council and Christchurch City Council have so far failed to address the cost of establishing a growing space at home. On the same note, the establishment and maintenance of community gardens and other similar projects is often challenging and expensive (Siegner et al., 2018). The funding that the councils provide is short-term, keeping projects in a constant state of fluctuation. This is a pattern that can be seen globally; in New York City, hundreds of community gardens are marked for redevelopment each year due to high costs (Siegner et al., 2018). There is a tendency, as noted in the literature review, for these spaces to be romanticised. In reality, they require many hours of maintenance work and financial backing to cover operations.

The organisations that received council funding in the local food space are largely community edible growing spaces. Twenty-seven organisations out of the forty-nine analysed are community gardens, orchards, farms, or commons. Some of these give the food they grow away to volunteers and the wider community (Richmond Community Garden, 2021b; Lyall Bay Community Garden, 2023; Roimata Food Commons, 2023), while others run market garden shops or have CSA schemes with paid subscription produce boxes (Kaicycle, 2023a; Kelmarna Gardens, 2023). Some are located on council land, for example Kelmarna Gardens (2023) in Auckland and Christchurch South Community Gardens (2023), while others are on land from community businesses, such as Tāmaki Urban Market Garden in Auckland where a local family doctors surgery provides the site (Eastern Bays Sustainable

Garden Trail, 2023). The primary objectives of these spaces are to grow food for the community, to educate the community, and to strengthen community connectedness.

Many serve as examples of "gardening as climate action" (Eastern Bays Sustainable Garden Trail, 2023). Toha Kai in Christchurch describe their operation as growing "climate appropriate kai" (2023) while Lyall Bay Community Garden in Wellington write that they care for the environment by "responding to the climate we are working in" (2023). Partly funded by Wellington City Council, Growathon is an app which will give tips for growing food at home. One of the values behind the app's development is "understanding the power in everyone playing their part in tackling climate change" (Growathon, 2022). The implication here is that growing urban gardens can reduce emissions. The assumption is that because they require less transportation, local foods have a lower carbon footprint (Cleveland et al., 2017). As discussed in the literature review, localness alone is not enough to determine the true carbon footprint of a food item. However, research has shown that home gardening can be a way to lower emissions if the correct processes (such as organic methods) are used (Cleveland et al., 2017).

Growing spaces are at the heart of local food initiatives. While community gardens, grow-your-own food, and foraging have been introduced here under the environmental wellbeing focus area, such spaces and activities also fall under the individual, social, and economic wellbeing areas.

5.2.2 Individual

This section discusses how the two data sets frame local food in relation to individual wellbeing. The section discusses individual actions that can ultimately affect the other focus areas of wellbeing (environmental, social, and economic), as well as the wellbeing of the individual. Individual choice is suggested as an area where positive change can be enacted through education and resources, enabling people to make 'better' decisions about day-to-day actions. For the purpose of this dissertation, the daily action is choosing what to eat. Decisions are deemed 'better' if they are the healthier option for

the individual, as well as for the community and the planet. Wellbeing of the individual is about the accessibility of good food that nourishes body, mind, and soul.

The following theme from data set one sits in this wellbeing area: *increase access to culturally appropriate, affordable, healthy and high quality food for all.* From data set two, the similar theme *ensure food access and abundance* is included. Aspects of the theme *establish edible growing spaces* are also included, as these play into increased food access. This section will discuss how the councils and the organisations that they have funded position local food as part of food access and security, food choices that are good for the planet, and overall individual wellbeing.

5.2.2.1 Food Access and Security

Food often comes from a long distance away, and "many communities experience unhealthy food environments with good access to poor food and poor access to good food" (Auckland Council, 2020, p. 107). Across all three councils' plans and policies, there is reference to a need for better food security. The consensus is that people should be able to access and afford fresh and healthy food. The Christchurch City Council *Food Resilience Policy* (2014) defines food resilience based on the definition of food security from the 1996 World Food Summit and places food resilience within the concept of food security:

> Physical and economic access, by all people, at all times, to enough food to maintain an active and healthy life. This exists when everyone can access a reliable supply of healthy food which is nutritious, affordable, safe and culturally appropriate, that is able to sustain a person's physical, mental and cultural wellbeing. A local food production and distribution system based on ecological sustainability, able to withstand natural and man-made shocks is a vital part of food resilience. (p. 1)

According to the document, Christchurch City Council's priorities include supporting initiatives such as farmers markets, local food cooperatives and others which "increase the availability, distribution and affordability of fresh, healthy food in our communities" (2014, p. 2) as well as working with food producers and others in the community to encourage the growth and success of these initiatives. Action areas in the *Healthy Food Action Plan* (Christchurch City Council, 2017) include "food

environment mapping" where locations of public fruit and nut trees, markets, and community gardens are published online, and an increase in "edible planting on council-owned and managed land to improve accessibility to fresh, local produce" (p. 3). They plan to work with "food producers, distributors, retailers, other agencies and the community" (Christchurch City Council, 2014, p. 2) as well as to increase education initiatives to encourage healthy food in the community. Christchurch City Council is the only council that has provided funding directly to a farmers' market - note that other councils do provide land to be used and support farmers markets in different ways, but that is outside of the scope of this research. The Little River Farmers Market provides the local community with access to fresh produce (2022).

In the food priority in *Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan*, the council outlines that it "seeks to increase access to healthy, sustainable food" (Auckland Council, 2020, p. 104). This is meant to be achieved by encouraging local and seasonal food, and the point is made to "work with communities, food growers and retailers to ensure that all Aucklanders have access to fresh, affordable, and low carbon food and that this is an easy first choice for consumers" (Auckland Council, 2020, p. 103). Some communities have unhealthy food environments, and an indicator for this priority is to find out how many Aucklanders live within a kilometre of a fresh produce source (Auckland Council, 2020, p. 105). Lack of access to good food is another area that the councils address and commit to exploring more in depth. Christchurch City Council suggests mapping food deserts in the city to learn about "where access to healthy food is limited" (Christchurch City Council, 2017, p. 3).

One of the five focus areas of *Te Anamata Ā-Kai o Tō Tātou Tāone: Our City's Food Future* is that "everyone in Wellington has dignified and secure access to nutritious, affordable, and culturally appropriate food" (Wellington City Council, 2023c, p. 8). To see positive change, the council outlines that it will partner with key players who have best practices around food access, as well as identifying barriers to quality food in order to achieve "a resilient and equitable food system" (Wellington City Council, 2023c, p. 9). Additionally, to increase available food sources, the council will work to

activate food spaces in the city (Wellington City Council, 2023c, p. 9). The proposed plan also involves the development of a green infrastructure plan, which should increase food security at the same time as managing stormwater (Wellington City Council, 2019, p. 49). Other food spaces may include the likes of urban growing spaces and community gardens. Auckland, Wellington, and Christchurch are coastal cities with active fisheries, making for easy access to kaimoana (seafood). However, only Wellington City Council mentions kaimoana and commits to actively explore what opportunities this provides (Wellington City Council, 2023c, p. 9). Wellington City Council is also the only council to note that it will use an equity approach to analyse which areas of the city would most benefit from the activation of local food spaces (2023c, p. 9). Taking an equity approach is important, since research has shown that local food systems often increase food access in areas with higher incomes, instead of helping those who are most food insecure (McDaniel et al., 2021; Macias, 2008).

The underlying assumption by the councils is that access to gardening space or foraging areas will increase food security. Much of the existing research on urban agriculture is on productivity potential, while it remains unclear how communities in need can best be helped (Siegner et al., 2018). Just because there is more food does not mean that it is being well-distributed. Local food initiatives often most benefit those in a higher socio-economic class (Duell, 2013). In the council documents, the potential for increased food security is presented in a way that is too simplistic for complex realities. There is a lack of tangible evidence of positive food security outcomes in the literature (Siegner et al., 2018).

A goal of the *Healthy Food Action Plan* is to establish a sharing economy for produce (Christchurch City Council, 2017, p. 4). Similarly, Wellington City Council is motivated to create educational content which encourages a sharing culture in the city (2023c, p. 21). There is an idea in Christchurch City Council's policy that food can be free. They suggest that surplus food from gardens can be distributed to support "low-income households, food banks and community kitchens" (Christchurch City Council, 2014, p. 1). Additionally, the policy notes volunteering in community gardens is

"rewarded often with free food" (Christchurch City Council, 2014, p. 1). While many similar examples can be found internationally of organisations giving food away for free, there is little research on the impact of doing so (Siegner et al., 2018).

While many of the organisations who receive council funding work to address food insecurity without clearly stating it, one set out with this as its main goal. Whenua Warrior in Auckland works to establish garden beds in the backyards of community members, helping "to increase the availability and cultivation of kai" (2023). This in turn is meant to encourage communities to be more self-sufficient, aiding both food security and food sovereignty for diverse community members. In some cases, as Christchurch City Council said, food is available for free from organisations in all three cities. Some of the organisations give surplus food to food banks or distribute it to community members (e.g. Richmond Community Garden, 2021b). Others allow volunteers to take food home with them (e.g. Neighbourly, 2023; New Brighton Community Gardens, 2023) or welcome anybody to harvest what they need (e.g. Roimata Food Commons, 2023).

Many of the organisations are concerned with improving the quality of food available in the local community. Toha Kai highlights research showing that the local area of Woolston, Christchurch has inadequate access to good quality, healthy food (2023). The organisation works with local food producers to help ensure the distribution of better food in the area. Across all three cities, a handful of the organisations are concerned with producing food that is nutrient-dense and healthy (e.g. Bryndwr Community Garden, 2014; Eastern Bays Sustainable Garden Trail, 2023; Kaicycle, 2023a; Kelmarna Gardens, 2023). This is interconnected with mindful growing methods such as regenerative and organic gardening that build the health of soil, which in turn grows nutritious food.

Each council expresses the need for accessible and affordable food. However, local food is unlikely to come with a cheaper price tag. One of the undeniable benefits of the globalised food system is that it provides access to a variety of inexpensive foods that would otherwise be out of financial reach for many people (Stein & Santini, 2021). With the development of global food supply chains, production

was outsourced to wherever it was cheapest (Pirog et al., 2014, p. 7). Aotearoa is currently experiencing a cost-of-living crisis. Between May 2022 and April 2023, the New Zealand supermarket prices of fresh fruits and vegetables increased more than 22 percent (Radio New Zealand, 2023). This is partially due to the extreme weather events that ruined crops across the nation (Radio New Zealand, 2023). Another major issue in Aotearoa is that the supermarket duopoly keeps prices high (Robson, 2022). Moreover, most of the best quality food products are sold for international consumption (Hancock, 2021). The nation produces enough food to feed at least forty million people, but it is only home to five million (Hancock, 2021). It is incredulous that there remain New Zealanders without access to enough food. None of the councils mention these much bigger issues that are at the core of food insecurity in a country of abundance.

5.2.2.2 Food Choices that are Good for the Planet

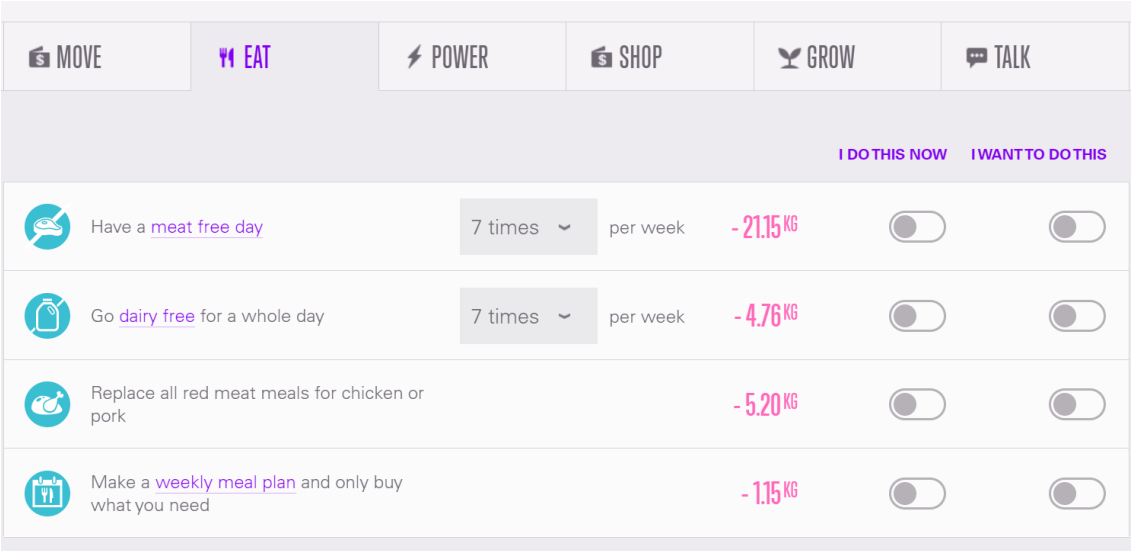
Food choices have an impact on environmental wellbeing. Both Auckland Council and Wellington City Council's plans mention fostering a shift toward more environmentally sustainable diets on the level of the individual. In order to understand how to create a zero carbon city, individuals must first understand their own carbon footprints and how daily actions contribute to this. The choices that individuals make play a major part in greenhouse gas emissions. *Te Anamata ā-Kai o Tō Tātou Tāone: Our City's Food Future* notes that "Wellingtonians can make climate-responsible choices in their food habits" (Wellington City Council, 2023c, p. 21). The council proposes to push toward local food habits that are low in emissions and more sustainably produced using a variety of methods, from online campaigns to working directly with stakeholders and the wider community (Wellington City Council, 2023c, p. 21).

An action of Auckland Council's food priority is to deliver initiatives that focus on behaviour change that will encourage the prioritisation of low carbon food that has been sustainably and locally produced (2020, p. 153). Auckland Council and Wellington City Council collaborated together to create an app called FutureFit. It is a behaviour change app that calculates a personal carbon footprint

based on daily actions. The idea behind it is to get "the right information in individual's hands for them to make low-carbon decisions" (Wellington City Council, 2019, p. 42). An individual's food choices are part of the calculation. Questions around lifestyle do not centre on where food consumed comes from, but rather on what type of food it is. Users are asked to pick an option that best describes their typical diet from the following: "red meat (beef & lamb) in most meals, red meat in some meals, red meat rarely, no red meat, vegetarian, vegan" (FutureFit, 2023). The other question related to food is around composting food waste. Once a user has completed the questionnaire, the app suggests actions in six areas: move, eat, power, shop, grow, talk (FutureFit, 2023). The 'grow' actions include planting native trees or taking part in a community planting day, but suggestions made are not specific to edible gardening. The 'eat' actions, as seen in Figure 5.2, focus mostly on eating fewer animal products. This suggestion is in line with current research as studies have shown that the emissions from a plant-based diet are significantly less than a diet with meat and dairy (Willett et al., 2019).

Figure 5.2

Screenshot of the FutureFit App



Note. Recommended 'Eat' actions to reduce personal carbon footprint in the FutureFit app. Used with permission from FutureFit by Auckland Council. (FutureFit, 2023).

While Wellington City Council's *Te Anamata Ā-Kai o Tō Tātou Tāone: Our City's Food Future* does not explicitly state that an example of a more sustainable diet is eating more plant-based foods, one image used shows two smiling women in a kitchen with the following caption: "two friends making a plant-based meal" (2023c, p. 23). As previously mentioned, both *Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan* (Auckland Council, 2020) and *Te Atakura - First to Zero* (Wellington City Council, 2019) have indicated that the councils are interested in knowing what percentage of the population eats a plant-based diet. Christchurch City Council, on the other hand, does not discuss the impact of individual food choice on planetary health, nor does it reference a plant-based diet as beneficial. This is also not a topic that is mentioned by the organisations with council funding. The EAT-*Lancet* report showed a reduction in the consumption of animal products to be beneficial for both people and planet (Willet et al., 2019), and the World Health Organisation generally encourages policies that bolster healthy diets and restricts unhealthy food items (2021b). However, this raises the question of whether or not it is the mandate of governments to make dietary recommendations, as this may be perceived to infringe on people's personal freedom.

5.2.2.3 Individual Wellbeing

While all three cities' plans or policies emphasise the importance of food that is nutritious, healthy eating is one of the primary concerns for Christchurch City Council. 'Healthy' is used to describe food that is nourishing for a person's body. Part of the *Food Resilience Policy* (Christchurch City Council, 2014) is ensuring that there is access to healthy food. Healthy eating, it notes, enriches both mental and physical health (Christchurch City Council, 2014). The purpose of the *Healthy Food Action Plan*, implemented under the *Food Resilience Policy*, is to "make healthy food choices easy" (Christchurch City Council, 2017, p. 1). Through the Christchurch Garden Festival and the Papanui-Innes-Central Edible and Sustainable Garden Awards, growing nutritious food and healthy eating are celebrated with workshops and accolades (Christchurch City Council, 2023d; Grow Ōtautahi, 2023). In the documents written by the council, healthy eating is linked to "creating a strong and healthy

community for generations to come" (Christchurch City Council 2017, p. 1). For Christchurch City Council, a physically healthy community is a key part of a thriving city.

The Christchurch City Council documents highlight gardening as an enjoyable experience that is connected to better health outcomes. Gardening is positioned as a form of exercise, as the council notes people can have "more active lifestyles through gardening activities" (Christchurch City Council, 2014, p. 1). The council's policy also highlights the enjoyment that can be gained from gardening, which is in turn good for one's mental health. The document also features the belief that mental health can improve through community collaboration and strong relationships (Christchurch City Council, 2014, p. 1). This belief is also reflected in the organisations that have received funding from Christchurch and Auckland councils as some of them provide horticultural therapy (e.g. Christchurch South Community Gardens, 2023; Kelmarna Gardens, 2023).

While they do not go into much detail around the benefits of healthy food for individuals, Auckland Council does include access to healthy food as part of the food priority goal, as well as improving physical wellbeing of community members (2020, p. 104). Wellington City Council's documents briefly touch on improving public health through healthy food and lifestyles. They want community members to have confidence that their food choices are good for their wellbeing (Wellington City Council, 2023c, p. 20).

The implicit assumption that is reflected in these documents from the councils is that local food is healthier food. This may be because the expectation is that local food generally means fruit and vegetables - people are being encouraged to grow their own edible plants and trees, but not to fish or adopt their own animals to raise for meat or dairy. An exception to this can be found on the Auckland Council website *Live Lightly*, where it is suggested that choosing local food can lower an individual's carbon footprint and goes on to suggest to "keep chickens to provide eggs for your household" (2023b). The EAT-*Lancet* report found that a shift to more plant-based foods would have desirable health outcomes, for both people and the planet (Willett et al., 2019). Moreover, some research

suggests that local foods may be fresher and less processed due to their shorter travel distances (Rossano, 2022).

In Auckland, Healthy Families Waitākere supports community shifts to healthier lifestyles. They consider the underlying causes of poor health and work to create positive changes, empowering "people to eat well, support mental wellbeing, be physically active, be smoke-free and only drink alcohol in moderation" (Healthy Families Waitākere, 2023). One of the underlying causes of poor health identified was a lack of access to healthy food. Healthy Families Waitākere is included in data set two because they conducted an urban farming feasibility study in West Auckland. The study pointed to land use issues preventing food production at scale. The *Auckland Unitary Plan* either does not allow it or requires consent costing between ten and one-hundred thousand dollars (Allen et al., 2022). The study notes that there is an opportunity for Auckland Council to deliver on the food priority in *Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan* (Auckland Council, 2020). To do so, the suggestion is that 'urban farming' be defined and enabled within the *Auckland Unitary Plan* (Allen et al., 2022). As of now, the concept is undefined, rendering it challenging for anybody wanting to produce food at scale to get council permission.

The Seeds to Feeds Foundation in Wellington states that "connecting people around local food is an ancient, tried and tested way to lift and sustain our wellbeing - emotionally, mentally and physically" (Seeds to Feeds Foundation, 2023). Having a sense of belonging and purpose is assumed by the organisations to be important for individual health, which is why Te Whare Roimata Trust works to provide "tūrangawaewae – places for residents to stand tall" (2023). Their community garden in Christchurch is one project where people can apply their unique skills. In Wellington, Lyall Bay Community Garden notes that the garden is a project with collective ownership, where everybody can participate (2023). These examples of the organisations' ideologies demonstrate that they conceive of individual wellbeing as inextricably linked with having opportunities to be an active part of the local community.

5.2.3 Social

Auckland, Wellington, and Christchurch city councils depict social wellbeing as about strong community connection, where all are empowered, in a lively, liveable city. The wellbeing of a community is reliant upon the wellbeing of its natural environment; as *Te Anamata ā-Kai o Tō Tātou Tāone: Our City's Food Future* opens, "you cannot separate kai from either community or whenua" (Kore Hiakai as cited in Wellington City Council, 2023c, p. ii). The social wellbeing focus area includes the following themes from data set one: *grow community and strength of connectivity*; *uphold and honour Te Tiriti o Waitangi; maximise urban liveability*; *utilise knowledge sharing and collaborative solutions*.

In data set two, one of the themes relevant in this context is: *foster healthy, connected, and resilient communities*, which is all about social wellbeing. A second theme in data set two, *skill development and education*, is also relevant for this topic. While growing food is the main activity for most organisations in research sample two, there was a common thread of a vision of community-building throughout. The organisations see themselves as serving the communities that they are in. As explained by the Wellington Boys' and Girls' Institute (BGI), who received some council funding to grow a community garden, "our edible green spaces are less about producing mountains of food and more about cultivating care" (2023).

This section begins by discussing the councils' emphasis on the importance of connected communities. It then moves on to discuss the connection of the community with the land and consider urban liveability. Part of community empowerment is about access to learning opportunities, which are discussed in terms of increased food knowledge and sharing knowledge. Then, the importance of working with community groups, primary industries, and government is explored. This section ends by addressing the alignment of data set one, the councils' plans and policies, and the missions of the organisations in data set two with Te Tiriti o Waitangi.

5.2.3.1 Connected Communities

Communities where people are well-connected are socially healthy and help to ensure the wellbeing of each other. This belief is reflected in the policy documents of each of the councils as they emphasise community-building that comes with local food systems. Christchurch City Council calls these "close knit and self-reliant communities" in which "enjoying, growing and sharing food brings neighbours and communities together" (2014, p. 1). The council conveys the assumption that community collaboration also betters mental and physical health, through strong relationships and enjoyable experiences, and note that community gardens are spaces that can facilitate this (Christchurch City Council, 2014, p. 1). The strongest theme that could be found throughout the second research sample is fostering healthy, connected, and resilient communities. The Seeds to Feeds Foundation in Wellington explains that their organisation "is all about exploring the future role of local food in building strong, connected communities" (2023). While many of the organisations grow produce which helps to physically nourish people, the act of growing local food together is one that builds a stronger community.

Developing sustainable food networks is a part of the programme to improve community resilience in Wellington (Wellington City Council, 2017, p. 15). The *Food Resilience Policy* suggests that since community gardens are community hubs, they "empower residents to solve local problems in many creative ways" (Christchurch City Council, 2014, p. 1). Having whanaungatanga (kinship) and community resilience is seen as a key part of an effective response to emergencies (Wellington City Council, 2023c, p. 7). The first goal of the *Wellington Resilience Strategy* is that "people are connected, empowered and feel part of a community" (Wellington City Council, 2017, p. 41). It recognises that strong communities will best be able to support themselves in challenging times, part of which is the sharing of resources such as food. As has already been discusses, the academic literature generally supports this idea.

Christchurch City Council incentivises and celebrates its gardening scene with competitions and events. The council supports "competitions, awards or harvest festivals that celebrate our garden city identity, encourage edible gardens, community gardens, and educate the community about the benefits of our food resilient edible garden city" (Christchurch City Council, 2014, p. 2). The annual Edible Garden Awards, one way Christchurch City Council shows support for healthy food, are "aimed at acknowledging and supporting individuals, schools and communities who are actively involved in the growing of their own food" (Christchurch City Council, 2017, p. 1). The Christchurch Garden Festival Trust puts on a festival showcasing the city's love of gardening to bring people together and celebrate the community (Grow Ōtautahi, 2023). These events serve to recognise those who are passionate about their gardens and provide an opportunity to showcase "the region's love of gardening and the outdoors" (Grow Ōtautahi, 2023). By supporting these events, the council fosters a sense of pride in Christchurch's garden city heritage, an important part of which is edible gardening. International research has shown that edible gardening does have the potential to increase food production in a select area, however there is little research on tangible outcomes and how they benefit communities (Siegner at al., 2018).

Beyond just growing food, creating safe spaces for communities to come together is a clear goal for many of the organisations in data set two. On their "about" pages, community gardens write the likes of "everyone is welcome at the gardens" (Neighbourly, 2023), "this garden is everyone's patch" (Lyall Bay Community Garden, 2023), or "people of all ages and abilities volunteer and visit, including families, people with disabilities, local schools and people feeling isolated in our community" (New Brighton Community Gardens, 2023). The Little River Farmers Market in Christchurch states that it works to create a relaxing family environment that anybody can enjoy - "yes, even grumpy old dads!!" (2022). In this way the organisations demonstrate that these spaces, where people come together around local food, can be important parts of the community (Richmond Community Garden, 2021a).

The Food Resilience Network has the vision for "a patchwork of food producing hotspots woven like a ribbon into the fabric of our community" (Edible Canterbury, 2023b). While perhaps not phrased so eloquently, most of the organisations in data set two demonstrated an understanding that growing local food, community connectedness, and community resilience are interlaced. Community growing areas are believed to be good places to meet new people (Neighbourly, 2023) and get to know neighbours (Bryndwr Community Garden, 2014). The Seeds to Feeds Foundation in Wellington is not an edible growing space itself, but it hosts a recurring event "for everyone involved to make meaningful new connections with people in their community, and be inspired to participate more in local food" (2023). These organisations present local food playing a part in connecting and strengthening communities.

Sustainable Papakura have placed urban edible planters in the town centre, which do not just serve to grow food but are a source of community connection. The organisation's website notes that "as people pass in the street they stop to touch and inspect the plants and connect with others" (Sustainable Papakura, 2023b). The initiative is intended to foster a sense of community. Other organisations refer to creating neighbourhood support (Christchurch South Community Gardens, 2023) and "exploring the future role of local food in building strong, connected communities" (Seeds to Feeds Foundation, 2023). The Innermost Gardens sums this up nicely with their mission: "Growing community through hands in the soil" (2023a).

The examples provided above show that community connection is at the core of the councils' food strategies, as well as being central to the missions of the organisations in the local food space with community funding. As discussed in the literature review, local food often intersects with social wellbeing. Research has shown that involvement with local food systems can increase social connectedness (Macias, 2008). A sense of belonging and community pride are considered important features of well-connected, resilient communities (McDaniel et al., 2021, p. 1387). Face-to-face interactions with others can facilitate social and environmental interest and connectedness (Allen et

al., 2003). Through interactions at community gardens, farmers' markets, fruit and vegetable stalls, or other local food places, community members build relationships over time.

5.2.3.2 Connection to Place

Ko te hau o te whenua, ko te hau o te tangata
The essence of the land, the vitality of the people

Note. A whakatauki (proverb) from *Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan*. (Auckland Council, 2020, p. 108).

Auckland Council documents note that having a connection to where food comes from is important and contributes to being more resilient: "As identified by our rangatahi, we need to reconnect people of all ages to where our sustenance comes from" (Auckland Council, 2020, p. 101). Taiao, whenua, and tangata are all considered to be interconnected, and the goal of Te Puāwaitanga ō te Tātai is to see these relationships flourish (Auckland Council, 2020, p. 108). Place is central to the concept of local food, and it cannot be understood without considering the things that construct it. Schnell (2013, p. 624) notes that place is more than a location in the physical world - it is also the human relationships and meanings that can be found there. Eating local food in a particular place is seen as "a key part of the narrative that establishes their connections to that place" (Schnell, 2013, p. 626). Such relationships and meaning are of particular importance to Māori for whom whakapapa in Aotearoa entails an inseparable bond between people and place. For Māori, the whenua is a source of identity and spirituality, as well as cultural and environmental health (Mark et al., 2022, p. 2).

Funded organisations across all three councils use the Māori term kaitiakitanga. Whenua Warrior has a mission "to nourish communities and nurture connectedness through kaitiakitanga" (2023), while a focus of Toha Kai in Christchurch is to strengthen kaitiakitanga (2023). The Community Rongoā Forest in Wellington holds kaitiakitanga, "taking care of our environment and each other" (2023), as one of their three guiding principles. Under Te Puāwaitanga ō te Tātai, the priority action area of kaitiakitanga includes a wellbeing activity to "Restore, rejuvenate and replenish our mahinga kai

(food production)" (Auckland Council, 2020, p. 109). Mahinga kai is about more than just producing food. It is about protecting the ecosystem in which food grows. Taking a Te Ao Māori approach, "recognising the rights and interests of nature, place and people from a whole living systems perspective is critical" (Auckland Council, 2020, p. 110). The term taurite is used by mana whenua (Māori with jurisdiction over the local land) to mean maintaining harmony between people and nature. Balance must be kept in the relationships between people and place, for the generations of yesterday, today, and tomorrow (Auckland Council, 2020, p. 110).

Bush Farm Education in Christchurch grew from "the need to bring deep nature connection to the farm, sea, and whenua" (2022). They note on their website that a connection with the land supports a sense of belonging, part of a holistic approach to wellbeing. One of the teachings in their activities is about where kai comes from, forging a connection between people and their food. The Community Rongoā Forest (2023) in Wellington states that people are only one part of a whole system. Therefore, respect for the environment is of the utmost importance. Humans "are the teina (younger sibling) to the natural world" (Community Rongoā Forest, 2023) and must enhance the environment and ask before taking. Te Māramatanga in Wellington expresses that "food knowledge starts with a relationship with the whenua (land)" (Wellington Boys' and Girls' Institute, 2023). Local food consumption can be seen as one way of consciously fostering connections between the individual, others, the environment, and place (Schnell, 2013). DeLind (2006) wrote that the ground underfoot "can shape bodies, nurture identity, speak across generations, serve as a 'res public,' and inspire civic action" (p. 141). To build successful local food systems requires interactions between people and place. Rather than being only *consumers* of local food because of its "political and environmental correctness" (DeLind, 2006, p. 142), people should engage with local food and place to become part of something that is shared and self-affirming.

5.2.3.3 Urban Liveability

The liveability of a city is considered in the three councils' plans and policies. Food is understood as more than just physical nourishment; it is connected to wider social networks and on an individual level, the emotional and the personal. Local food is positioned as an improvement to social connectivity, life enjoyment, and more. All three city councils express that food growing spaces should be included in the design of urban spaces. Auckland Council includes an indicator of the success of the food priority as the "number of green spaces, mahinga kai, maara kai and hua whenua incorporated in urban design projects" (2020, p. 106). Wellington City Council lists one of the benefits of a systems approach to food as fostering "places to learn and experience joy and wonder" (2023c, p. 4). The benefit of living in or being able to visit "a green and growing city" (Wellington City Council, 2023c, p. 5) is also noted.

Christchurch City Council values having gardens for aesthetics and as a component of a liveable city. Having edible gardens around the city is considered to offer "a wider range of recreational opportunities and amenity, enriching the liveability and enjoyment of our city" (Christchurch City Council, 2014, p. 2). Christchurch City Council (2014) notes that "crime is reduced because the city's green spaces are activated and cared for by more connected self-reliant communities" (p. 1). Similarly, they state, community members having stewardship of public spaces helps to "manage anti-social behaviour" (Christchurch City Council, 2014, p. 1).

Claims of reduced crime due to the activation of green spaces in the city are hard to substantiate. There is no evidence that the crime rate in Christchurch has gone down based on there being more gardens. The idea is supported within academia, however. Studies in the United States have shown that community gardens and vegetation correlate with a reduction in inner city crime (Kuo & Sullivan, 2001) and a perception of a safer neighbourhood (Gorham et al., 2009). Kuo and Sullivan argued that vegetation may increase surveillance through residents' use of outdoor spaces and mitigate some of the "psychological precursors to violence" (2001, p. 346). A positive relationship

could be seen across many studies between green spaces and improved cognitive functioning (Kuo & Sullivan, 2001, p. 347). Gorham et al. (2009) noted that community gardens, "while not necessarily being a cure for crime" (p. 296), do encourage community revitalisation. Importantly, they noted that areas with community gardens have been shown to grow in affluence (Gorham et al., 2009, p. 291).

Urban liveability is a consideration of a couple of the organisations with council funding, too. In Wellington, the Innermost Gardens suggest that community gardens provide green spaces which are "increasingly important as living becomes more intensified" (2023c). Creating a beautiful environment is one goal of the Christchurch South Community Gardens (2023). The idea is that the aesthetic of growing spaces contributes to more enjoyable urban environments. The value of urban gardening in city planning is increasingly recognised in academia. Research has found that the incorporation of growing spaces helps to manage urban heat and noise and air pollution (Sia et al., 2023). Additionally, it can support community wellbeing through restorative environments where people can form bonds and increase their physical activity. These "urban nature" spaces can facilitate relationships between people and their environments (Sia et al., 2023, p. 2).

5.2.3.4 Increased Food Knowledge

Christchurch City Council suggests in their policies that collectively growing food can bring communities together and encourage the learning of practical food knowledge (2014, p. 1). A council priority is supporting community education initiatives "that increase knowledge of how to grow, harvest, prepare and consume healthy locally grown food to support edible gardens and a thriving local food economy" (Christchurch City Council, 2014, p. 2). Education is positioned as a key part of social wellbeing, and much of the learning is suggested to take place at community gardens. The policies list a social outcome of being an edible garden city as the sharing of food knowledge, including "how to grow, harvest, prepare and enjoy locally grown food" (Christchurch City Council, 2014, p. 1). Further potential learning includes traditional uses for plants, weaving, art, and medicinal uses. One aim of the Christchurch *Healthy Food Action Plan* is "to encourage health food choices"

(Christchurch City Council, 2017, p. 1) through community education. Proposed actions from the plan include education in schools to learn how to grow and cook healthy food and launching an educational facility to teach the wider community food literacy (Christchurch City Council, 2017, p. 3-4).

Auckland Council's food priority "seeks to increase access to healthy, sustainable food and provide communities with the knowledge to become more self-sufficient, improving mental and physical wellbeing and autonomy" (2020, p. 104). Education programmes include preventing food waste, use of surplus food, and support to grow food at home. As part of ensuring that Wellingtonians have access to affordable and healthy food, Wellington City Council recommends providing resources for people to upskill and learn more food skills (2023c, p. 9). This learning can be delivered through a variety of methods such as social media campaigns or events while working directly with the community, advocates, and stakeholders. *Te Atakura – First to Zero* outlines advocacy points for Wellington City Council on the journey to becoming a zero carbon city, one of which is "education initiatives surrounding diet change" (Wellington City Council, 2019, p. 56). All three councils acknowledge the need for food education to ensure that both people and the planet are healthy.

Community education around food is also a priority for many of the organisations in the local food space funded by the council. Out of forty-nine organisations in data set two, nineteen across all three cities were coded for having or encouraging educational programmes. These include workshops to learn how to grow your own vegetables (e.g. Sustainable Papakura, 2023b) or on sustainability topics (e.g. Northern Community Gardens, 2021), guided activities in nature to connect with the whenua (e.g. Bush Farm Education, 2022), and online apps which provide food growing tips (e.g. Growathon, 2022). The desired outcomes vary by organisation - some want to promote more eco-friendly lifestyles to help the planet (e.g. Innermost Gardens, 2023a), while others want to increase food security of community members in need (e.g. New Brighton Community Gardens, 2023). The Community Rongoā Forest in Wellington holds a principle of Māramatanga (enlightenment) according to which learning together benefits the wellbeing of the community (2023). Physical spaces

to learn are provided by the organisations to the community. Many of the organisations are community gardens, where people are invited to come together not only to learn from organisation leaders, but also to share their own knowledge.

Local food spaces are often perceived as places where community education can occur (McDaniel et al., 2021). Often this is framed as social capital that contributes to community resilience (King, 2008; McDaniel et al., 2021). Food literacy is "the idea of proficiency in food related skills and knowledge" (Truman et al., 2017). Topics can range from cooking and healthy choices to food system awareness and cultural knowledge. Food education is suggested by the councils and organisations as an effective way to change consumption habits and equip people with new skills. However, studies have shown that the costs of these education programmes are often too high to be sustained (Drake & Lawson, 2015). If the councils expect the organisations in the local food space to deliver on community education outcomes, they should be prepared to cover the ongoing costs. Many local food spaces are non-profit or community-based organisations who rely on funding, which is often competitive. The lack of secure ongoing funding is likely to prevent collective change from coming to fruition (Zerbian et al., 2022).

5.2.3.5 Sharing Knowledge

The three councils share an idea that the way to a better food system is through collaboration and connection, working as a collective and sharing knowledge. Ensuring the wellbeing of future generations through the sharing of knowledge is part of the vision of the plans and policies being implemented by the councils. In their plan, Wellington City Council commits to supporting programmes for young Māori to ensure they have access to traditional, intergenerational knowledge on local cultural food practices (2023c, p. 17). The importance of sharing intergenerational knowledge is emphasised by Auckland Council (2020):

> Our tūpuna (ancestors) have provided rich legacies of knowledge and practices that nurture whakapapa (genealogy) and reaffirm Māori ways of collective action. These can guide our responses today. Learning from these intergenerational relationships and practices allows us to plan for what our unique places and communities will face over the next few generations and beyond, not just what they need today. (p. 108)

A case study is presented in *Te Anamata ā-Kai o Tō Tātou Tāone: Our City's Food Future* (Wellington City Council, 2023c) on Te Aro Pā, a community who were based in central Wellington in the 1800s, and their kai system which included mahinga kai in the harbour, local swampland, and planting sites on the hills. Wellington City Council suggests that these historical practices can be looked to for inspiration for today's community (2023c). The Innermost Gardens in Wellington consider one of their purposes is "to provide spaces for people to develop, share and celebrate their own gardening and food sharing traditions and to pass these onto the next generation" (2023a). In Auckland, Whenua Warrior reflects on the knowledge and solutions that community members' ancestors would have used, in this case how they grew food for themselves (2023).

Christchurch City Council encourages sharing knowledge about sustaining a local food economy between communities to create "a green knowledge economy" (2014, p. 1). There is also a strong theme of skill development and education throughout the organisations who have council funding. Kaicycle states that they "believe in open-source systems and peer-to-peer networks working together like mycelium to create resilient and co-operative communities" (2023a). A focus is on the opportunities for people to share and learn with and from each other. Community members bring their own skills, knowledge, and wisdom to the spaces. Lyall Bay Community Garden in Wellington even put it in their rules, announcing that "we value everyone's collective knowledge and experience and we are willing to learn from each other" (2023).

5.2.3.6 Community and Industry Partnerships

Each council recognises the importance of collaboration between the government and community groups. Christchurch City Council's *Food Resilience Policy* (2014) notes that it will work with the

community to achieve its food resilience objectives and outcomes. Wellington City Council takes this further by developing the Sustainable Food Network which brings together community groups that contribute to reaching sustainable food goals in the city (2019, p. 43). They also consider barriers to reaching communities and identify partnering with existing trusted community groups as a solution (Wellington City Council, 2017, p. 44). Improvements to the existing food system are likely to be made by co-creating better outcomes with key partner organisations in the local food space (Wellington City Council, 2023c, p. 9). The council also promises to explore partnerships with nurseries to supply edible plants for community members to grow at home (Wellington City Council, 2017, p. 44). This is proposed as a way to ensure resilience in the case of a natural disaster.

The organisations with council funding also see the value and importance of partnerships with community leaders and groups. In Auckland, Healthy Families Waitākere wants to drive "sustainable change that is owned by community – not delivered to community" (2023). Whenua Warrior emphasises that collective work with whanau, iwi, and schools helps to achieve visions to nourish communities and nurture connectedness (2023). Other organisations utilise relationships with community groups to host workshops and support community members in need (Toha Kai, 2023).

Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan discusses collaborations between local government and community groups, as well as with industry, to promote best practice regenerative food growing (Auckland Council, 2020, p. 103). Auckland Council has an action to "support primary industries and small businesses to increase food security, reduce emissions and build economic and climate resilience" (2020, p. 102). This includes collaborating with the primary industries to share best practices and innovations as well as finding opportunities to work toward better environmental and economic sustainability. The current national New Zealand food system is based on optimisation, not resilience. As much as the primary industries are part of the global industrialised food chain, which localised food systems are often placed in opposition to, it is unlikely that significant positive change on the issues of food security or climate change will be possible without their collaboration. As it stands, global food systems are responsible for one third of carbon emissions (Crippa et al., 2021).

Auckland Council is the only council to directly reference and suggest collaborating with industry on best practices and opportunities; there is a near total absence of discussion of commercial agriculture in the council policies, despite agricultural exports being the nation's largest source of income (Observatory of Economic Complexity, 2023).

Despite this, Aotearoa relies on other countries to source key ingredients that many people use daily, such as cereals, cooking oils, coffee, or tropical fruits, as shown in the import figures from Stats New Zealand (McConnell, 2021). South Canterbury is sometimes called the food bowl of Aotearoa, yet a study from the Timaru District Council showed that 95 percent of commercially purchased food in the district's boundaries does not come from the region (Renwick, 2023). This dependence on non-local ingredients is not mentioned in any of the council documents.

5.2.3.7 Strategic Government Food Policy

All three councils are members of the Aotearoa Food Policy Network, and each has already implemented some form of strategic food plan or policy (the documents being analysed for this dissertation). An action from *Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan* is to "provide strategic direction and governance for Auckland's food system" (Auckland Council, 2020, p. 103). This includes developing an Auckland food charter, establishing a Food Policy Council, and advocating for a national food strategy. Christchurch City Council also holds a priority to advocate to the central government around issues affecting the city's food resilience (2014, p. 2). Wellington City Council recommends active participation in policy communities at all levels, from the global to the local (2023c, p. 13). Wellington became a signatory of the Milan Urban Food Policy Pact to share best practices in urban food systems with cities around the globe. This is further reflected in the council's plan, using these relationships with similar cities to share key learnings in food security response after Covid-19 and other emergency situations (Wellington City Council, 2023c). Sharing ideas with other cities can provide inspiration.

None of the organisations with council funding mention advocating for government policy around food. As Isa Pearl Ritchie explained, those doing grassroots work may be hesitant to have government involvement, even if they generally agree that the government is there to support public interests (2021, p. 106). Local food movements were born from a resistance to the global industrial food system, and "the New Zealand Government is seen as being actively influenced by global corporate interests" (Ritchie, 2021, p. 106).

5.2.3.8 Alignment with Te Tiriti o Waitangi

Nā tō rourou,	*With your food basket,*
Nā taku rourou	*and my food basket,*
Ka ora ai te iwi	*the people will thrive.*

Note. A whakatauki (proverb) from *Te Anamata ā-Kai o Tō Tātou Tāone: Our City's Food Future*. (Wellington City Council, 2023c, p. i).

All government entities in Aotearoa have commitments to Te Tiriti o Waitangi, which exists to govern the relationship between Māori and the Crown. It is legally binding and establishes Aotearoa as a bicultural society. It ensures that tangata whenua (people of the land) retain rights to their land and resources. Through food and community, people can have connection to the land and waters where they live.

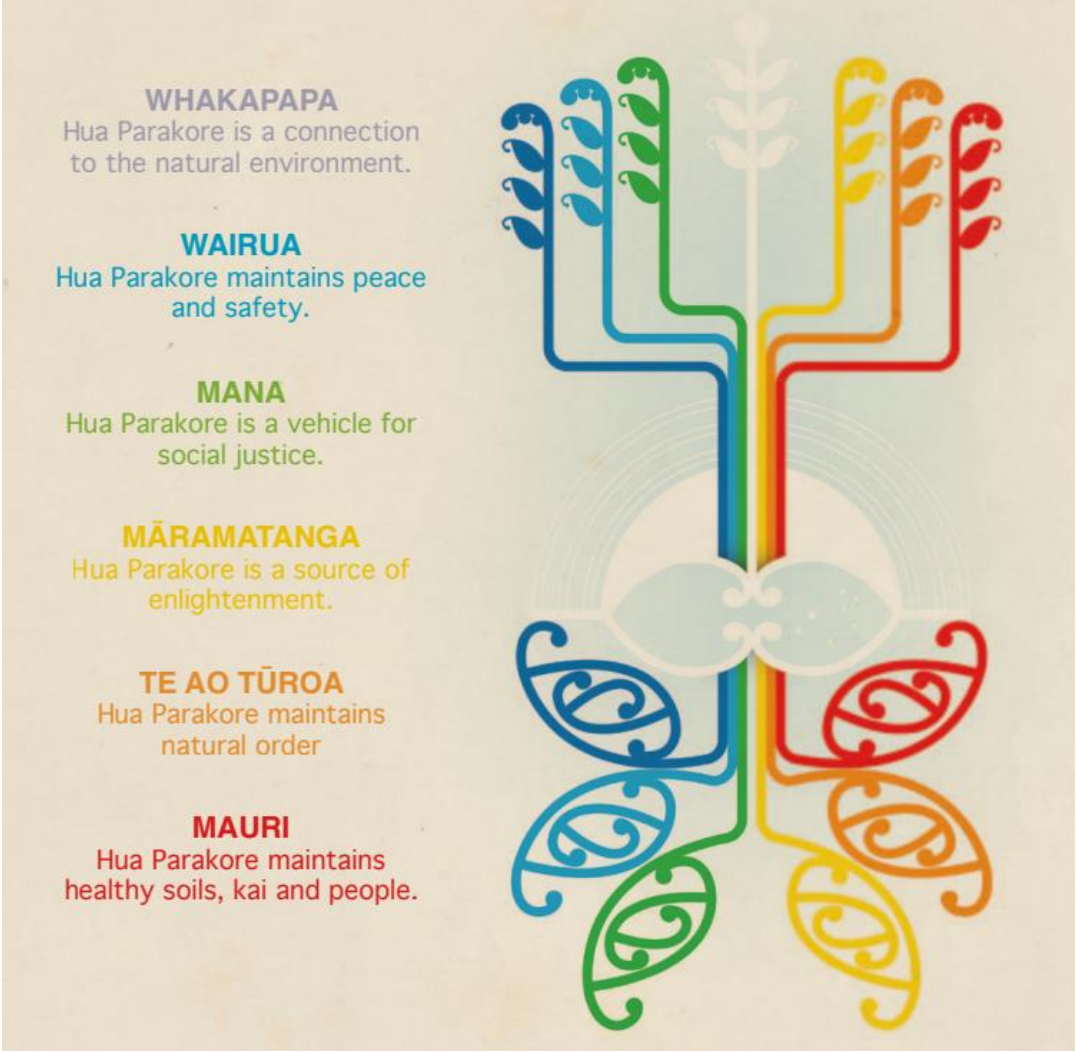
For more than one thousand years, Māori have been living in Auckland. Te Tiriti o Waitangi recognises the "inseparable bond between Tāmaki Makaurau the people and Tāmaki Makaurau the place" (Auckland Council, 2020, p. 108). The goal of the Te Puāwaitanga ō te Tātai Priority in *Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan* is listed as follows: "Intergenerational whakapapa relationships of taiao (nature), whenua (land) and tangata (people) are flourishing. The potential and value of Māori is fully realised. Māori communities are resilient, self-sustaining and prosperous." (Auckland Council, 2020, p. 108). The food priority aligns with Te Puāwaitanga ō te Tātai, as "a low carbon, resilient and equitable food system embodies values of manaakitanga [hospitality],

kaitakitanga [leadership], whanaungatanga [kinship], rangatiratanga [autonomy], mātauranga [knowledge], ōritetanga [equity] and tōnuitanga [prosperity]" (Auckland Council, 2020, p. 103). One indicator for the success of the food priority is the number of Māori-led initiatives and maraes leading growing food using mātauranga Māori (Māori knowledge) (Auckland Council, 2020, p. 106). Auckland Council notes the importance of establishing a mana whenua climate office and a stewardship framework that will "restore, rejuvenate and replenish" (Auckland Council, 2020, p. 109) wetlands, seas, springs, and mahinga kai. When communities grow their own food, they protect whakapapa connections "to kaitiaki (people), whenua (place), and ātua (primal ancestors)" (Auckland Council, 2020, p. 104). This suggests that a mātauranga Māori framework is needed "to safeguard taonga knowledge and achieve a balance between western science and indigenous narratives of our changing climate" (Auckland Council, 2020, p. 109).

Mātauranga Māori is a key component in both Auckland Council and Wellington City Council's food plans. Kaupapa Māori (Māori principles) is strong throughout Wellington City Council's plans, which are fully designed according to the Hua Parakore framework. Derived from Te Waka Kai Ora, the National Māori Organics Authority of Aotearoa, the framework focuses on Māori kai and soil sovereignty and "connects Taiao [the natural world] as a woven universe where the relationships between tangata whenua and whenua are indivisible" (Wellington City Council, 2023d, p. 4). Figure 5.3 shows the principles of Hua Parakore. The wellbeing of people and the wellbeing of the land are one and the same.

Figure 5.3

Principles of Hua Parakore



Note. The six principles of Hua Parakore. Visual from *Te Papawhairiki mō Hua Parakore, Ngā Āhuatanga o Hua Parakore: Resource 1* (Te Waka Kai Ora, 2011). Used with permission from Te Waka Kai Ora.

Te Anamata ā-Kai o Tō Tātou Tāone: Our City's Food Future (Wellington City Council, 2023c) reflects mana whenua and Tūpiki Ora (Māori wellbeing strategy) aspirations. Throughout the plan, icons are used to denote alignment of the council's strategy with priorities of the Māori of Wellington (Wellington City Council, 2023c, p. 7). One of the focus areas of the strategy is to ensure that "Mana Whenua and Māori are activating kai and soil sovereignty in relation to the cultural landscapes"

(Wellington City Council, 2023c, p. 7). The goal is to increase Māori-led projects around kai and soil. Wellington City Council notes that supporting "kaupapa Māori food production and infrastructure" (2023c, p. 9) is one way to support Te Tiriti commitments. Further opportunities for Wellington City Council to honour Te Tiriti for this strategy include "undertaking a Tiriti-based formative evaluation process, supporting Tiriti partnership projects, establishing kaupapa Māori funding pathways, and developing a Māori-led Māori kai strategy" (Wellington City Council, 2023c, p. 17).

Te Whare Roimata Trust in Christchurch is the only organisation with council funding to explicitly state that its work is "Treaty-based" (2023), though the Sustainability Trust in Wellington notes that they work to uphold the principles of Te Tiriti o Waitangi (2023). Karori Community Garden (2020) and Kaicycle (2023b) in Wellington both acknowledge the mana whenua of the land where they have established gardens and community spaces. In Auckland, Whenua Warrior is committed to bettering indigenous food sovereignty and security by specialising in mahinga kai (2023). In Christchurch, Roimata Food Commons is located in an area that was originally wetlands bordering the Ōpāwaho/Heathcote River. It is important to the organisation "to do more than our share to improve the health of the river and all living beings that live in relationship with it" (Roimata Food Commons, 2023). This is explained as mahinga kai - respecting and looking after the land and natural resources in the area.

There is no mention of mātauranga Māori, the local iwi, or Te Tiriti o Waitangi in the Christchurch policy. This is notable because the concept of mahinga kai originates with Ngāi Tahu. Ngāi Tahu is the largest Māori iwi in the South Island, and mahinga kai in law "properly refers to Ngāi Tahu interests in traditional food and other natural resources and the places where those resources are obtained" (Te Rūnanga o Ngāi Tahu, 1997). While the term is now used by iwi all over Aotearoa and can be found in Auckland Council's plan, Christchurch City Council has not included it in their policy.

5.2.4 Economic

Economic wellbeing is about having a strong local economy with an abundance of opportunities for business growth. Jobs are created through the success of local businesses, and money is kept within the community. A thriving local food system is an opportunity for a community to support its own economy, with enough supply to meet the demand of consumers. Cities need to be economically healthy and resilient to thrive and manage any challenge they may face. In data from the councils' plans and policies, the theme *foster a thriving economy* is about economic wellbeing. In data from the organisations with council funding, some codes from within the theme *skill development and education* are applicable. This section will first discuss how the councils' policies and plans position local food as part of a healthy economy, followed by an exploration of how it can grow businesses and create new job opportunities.

5.2.4.1 Healthy Economy

A thriving local economy is part of the objectives in all three councils' plans and policies. Christchurch City Council wants to localise food production and distribution for economic gain (2014, p. 1). Wellington City Council plans to analyse how food distribution in the city currently works in order to make recommendations to encourage more localised food purchasing (2023c, p. 25), while Auckland Council proposes an action to "increase supply and demand for local, seasonal and low carbon food" (2020, p. 103). The policies reflect an assumption that the multiplier effect, as discussed in the literature review, will apply if production and consumption is all done locally, keeping money within the cities' limits. However, even when buying local does result in economic gains, there is no assurance that those gains will be shared across the community. Instead, existing inequalities can grow, as those who benefit most from the likes of farmers' markets and CSAs tend to be educated, middle class consumers (Hinrichs, 2000). Born and Purcell also argued that buying local products may result in economic losses if the opportunity is missed to "benefit from another region's comparative or absolute advantage" (2006, p. 202).

The policy documents reflect the belief that local food systems have the potential to lower public expenses. An economic outcome listed in the *Food Resilience Policy* is that when community members engage in stewardship of public spaces, the maintenance costs for the council are lowered (Christchurch City Council, 2014, p. 1). With a healthy diet of locally grown food, Wellington City Council notes that communities should be healthier, which in turn reduces healthcare costs (2023c, p. 4). Food-related health conditions such as obesity, heart disease, cancer, or diabetes are global issues. The EAT-*Lancet* report suggests that a switch to their Planetary Health Diet, consisting of mostly plant-based foods, would prevent between 10.8 and 11.6 million deaths each year (Willett et al., 2019). The problem remains that local foods are often out of financial reach for those who would most benefit from them (Duell, 2013). The global food system makes cheap product imports available, and these remain more affordable for many consumers (Stein & Santini, 2021). Often these undermine the production of food products locally, as farmers cannot afford to compete with them (La Trobe & Acott, 2000). The councils' plans and policies do not include proposals to limit cheap imports, although Auckland Council does propose shifting their procurement policy to prioritise low carbon food (2020, p. 153).

A local food system may increase the prices of real estate, too. Wellington City Council notes that greener neighbourhoods with a thriving local food economy could increase neighbourhood and property values (2023c, p. 4). This is consistent with the literature; areas with community gardens often are seen to gentrify (Gorham et al., 2009). However, increased real estate values are not beneficial for everybody, as often they mean that less affluent people are pushed out. Social justice goals are at odds with economic growth goals.

5.2.4.2 Growth of Business and New Job Opportunities

The production and consumption of local food creates potential for economic growth and business opportunities. Christchurch City Council states that new businesses and jobs develop through "the community supporting their locally grown food economy" (2014, p. 1). They express the belief that

there is space for entrepreneurs to work with new business models, "such as local food co-operatives, boxed food delivery, farmers markets, and grower incubators and syndicates" (Christchurch City Council, 2014, p. 1). The councils assume that this would create new jobs, both paid and voluntary (Christchurch City Council, 2014, p. 1), as well as more opportunities for careers within the food system (Wellington City Council, 2023c, p. 24). Wellington City Council is committed to exploring how the living wage might be incorporated to make such work more equitable and mapping job pathways such as internships or other opportunities (Wellington City Council, 2023c, p. 25). They also promise support to new local food businesses through community funding and the Good Food mentoring programme, which is part of the Sustainable Business Network where new food businesses are awarded sustainability mentorship (Leach, 2020).

Wellington City Council also drives the argument that the development of the local food system can provide opportunities for more environmentally friendly jobs (Wellington City Council, 2023c, p. 5). The council addresses the many hospitality businesses that the city is renowned for, seeing opportunities to shift cafes and restaurants to more climate-friendly business models (Wellington City Council, 2023c, p. 25). In addition, helping the region's farmers to shift to more sustainable farming practices is seen to have the "potential to strengthen the regional agricultural economy" (Wellington City Council, 2023c, p. 25). Auckland Council similarly notes that "Growth in sustainable food production and manufacture provides increased training and employment opportunities in a low carbon industry that will adapt with climate change" (Auckland Council, 2020, p. 104). The councils make the connection between economic health and environmental health, social health, and individual health. However, as already discussed in the environmental wellbeing section (see 5.2.1.1 and 5.2.1.4), the localness of food alone is not enough to ensure that it has a less severe impact on the environment. In the same way, a local food economy cannot be assumed to be more environmentally-friendly than larger scale operations.

Wellington City Council sees the ability to grow food as a potential source of income for community members (2017, p. 53). Providing individuals with the skillset to grow their own food allows for

better resilience in trying times, whether that is feeding themselves or the ability to sell produce for money. The organisations with council funding in all three cities include the opportunity for community members to upskill as part of their mission. Beyond just learning opportunities, they discuss encouraging small business opportunities (Sustainable Papakura, 2023a) and providing paid employment to young people (Cultivate Christchurch, 2021a). However, the most frequently referenced type of work is voluntary and unpaid. Many of the council-funded organisations train and rely on volunteers (e.g. Richmond Community Garden, 2021a; Kelmarna Gardens, 2023; New Brighton Community Gardens, 2023; Roimata Food Commons, 2023; Sustainable Papakura, 2023a). Innermost Gardens in Wellington note that most of their volunteers get involved "because of the community connection and feel-good factors" (2023c). It is unsurprising that many of these organisations rely on volunteers. Academic work on the topic outlines food security goals as being in tension with the goal of providing living wage jobs (Siegner et al., 2018). This is referred to by Siegner et al. (2018) as the "unattainable trifecta of urban agriculture" (p. 9), the idea that food security, opportunities for upskilling and paid wages, and revenue generation to cover the costs can all be achieved without significant outside funding.

Chapter 6. Conclusion

This research described and critically analysed the engagement of Aotearoa's three most populous city councils with local food initiatives. It addressed the research question: To what extent do the three most populous cities' councils in Aotearoa prioritise and invest in local food, and what critical insights can be derived from analysing their initiatives in the local food space?

This closing chapter summarises the key findings of the analysis as discussed in depth in *Chapter 6.* Contributions and limitations of the research are noted before suggestions are made for areas of further research. Final thoughts are then given, concluding the dissertation.

6.1 Key Findings

In Auckland, Wellington, and Christchurch, the city councils have initiated the process of considering food systems to ensure local community members have affordable access to food that is healthy for body, mind, culture, and the environment. The findings of this research demonstrate a complex understanding, or misunderstanding, of local food and localised food systems. As discussed in the literature review, the most common way academics and activists understand the concept of local food is through geographical proximity. When outlining their strategies for better, more localised food systems, Auckland, Wellington, and Christchurch city councils all consider much more than simply how far food has travelled to its consumer. There is an understanding across all the documents analysed that a healthy environment and a healthy community are key to having a successful city. The council policies and plans demonstrate intersectionality of local food to a variety of other areas and issues, comprising environmental, individual, social, and economic wellbeing. Similarly, the organisations with council funding in the local food space which were analysed form an understanding of local food as an inseparable part of a thriving community.

Without a complete understanding of the innerworkings of the city councils or the full extent to which they may provide support for local food systems outside of direct funding, it is difficult to draw

concrete conclusions from this research. However, some general observations can be formed from the findings of the thematic analysis and comments can be made by positioning these within the context of the literature review.

While concepts of scale and food miles dominate the global conversation about local food, the council policies and all but one organisation they fund (Eastern Bays Sustainable Garden Trail, 2023) refrain from using the terms. Auckland, Wellington, and Christchurch city councils all demonstrate an understanding of local food as part of a systems approach to the wellbeing of their cities. The availability of local food and thriving localised food systems are considered key to healthy and happy people and planet. This demonstrates that the councils position local food in proximity to good environmental practices and community values and within global planetary health.

Significant differences in council reasonings for engaging with local food or localised food systems and how they approach it were found in the data. Auckland Council positions their food priority within the city's climate change plan. Their primary concern is lowering carbon emissions, and they posit local and seasonal food as a way to achieve this. In Wellington, the city council is most concerned with ensuring that community members have access to 'good' food and being in a position of food resilience in the case of a natural disaster, with a particular worry being that the city might get cut off from the rest of the country by an earthquake. Christchurch has suffered major earthquakes and emerged with an understanding of the importance of food resilience. Consequently, the city council's policy aims to ensure food resilience through thriving environments that provide locally grown food for all community members.

Despite listing localised food systems as a priority to mitigate climate change, it remains unclear how accessible local food initiatives are in Auckland. In Wellington and Christchurch, there is more evidence of work on the ground in the local food space being bolstered by the local government. Across all three councils, the themes of the plans and policies are mostly aligned with the themes from the organisations in the local food space to which they provide funding. While the primary

objectives of localised food systems from each council are slightly different, they do share many goals. These fall into four wellbeing focus areas: environmental, individual, social, and economic.

Local food is positioned by the councils as being good for the environment. It is associated with organic methods, better soil health, increased biodiversity, and a lower carbon footprint. However, as discussed in the literature review, localness alone does not guarantee that a product is more environmentally friendly. Many of the organisations with council funding in the local food space are community growing areas. These gardens, orchards, and farms grow food that can be used within the local community. The councils assume that localised food systems will lead to better food access and security. They propose activating food spaces in the cities and encouraging people to grow their own food at home. However, there is not enough research to show whether or not such initiatives increase food security or if they benefit those who are most in need. The international literature on local food demonstrates that the likes of community gardens and farmers' markets most benefit the educated middle-class.

Another assumption underlying the councils' policies and plans is that local food is healthy food. Again, localness alone is not enough to determine this. Increased food literacy is one way to educate people about how to eat well. The councils and organisations put a lot of emphasis on the learning opportunities that come with local food spaces, but these are often expensive and lack longevity of funding.

When analysing all of the council documents and the 'about' pages of the funded organisations, it was found that the most prominent goal is social wellbeing. The councils want to increase the liveability of their cities, connect community members, and share food knowledge. Local food initiatives are signalled as a way to bring communities together. This is about shared ownership of public spaces and areas where individuals can find a sense of belonging. There is some evidence in the international literature that local food systems do lead to better resilience in times of crisis, primarily due to the networks that they create (Berno, 2015; McDaniel et al., 2021).

Economically, the councils position local food as an opportunity to keep money within the community and generate new jobs and opportunities. While there is the possibility of a multiplier effect when a local food system is thriving, sometimes it simply does not make sense to produce a certain product locally when it could be produced much cheaper and more sustainably elsewhere. The desired generation of fair-pay jobs in local food conflicts with the ability to cover operational costs and ensure the food produced is affordable. Most roles that people fill in the organisations with council funding are voluntary and have primarily social outcomes.

Many of the statements made by the councils around the benefits of local food are unsubstantiated and aspirational. Is it naïve to assume that localness alone is enough to achieve all the wellness goals outlined in the councils' plans and policies. In promoting local food uncritically as a solution for environmental, individual, social, and economic issues, the councils have been susceptible to the "local trap" (Born & Purcell, 2006).

6.2 Contribution of Research

As Ritchie writes "It is an academic tradition to justify one's research through demonstrating that it provides a unique contribution to the literature" (2021, p. 267). This dissertation contributes to the research on local food in Aotearoa, specifically with regard to how local government is engaging with local food and localised food systems. Existing work in the local food space in Aotearoa is primarily based on empirical data from community gardens and farmers' markets (Duell, 2013). There is little research specific to the nation's food system planning, especially at government level. While the this dissertation focused on the local government level, the lack of a national food strategy means it is also representative of discussion around food policy happening in the country as it captures the state of government engagement with local food in Aotearoa at this time. This research may serve as a building block for future academic work and policy on the topic of local food for the country.

No other research project on the government's approach to local food in Aotearoa was found through the initial literature review. However, since embarking on this research journey, Kore Hiakai have

released a report reviewing "locally-led reports, plans and strategies about local aspirations to realise communities that are food secure in Aotearoa" (Cameron, 2023, p. 2). The review includes *Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan* (Auckland Council, 2020), *Te Anamata ā-Kai o Tō Tātou Tāone: Our City's Food Future* (Wellington City Council, 2023c), *Food Resilience Policy* (Christchurch City Council, 2014), and *Healthy Food Action Plan* (Christchurch City Council, 2017) which were all part of data set one in this dissertation. This is the most comparable work with this research to date, though its scope spans the whole of Aotearoa and focuses on realising food secure communities, while the focus of this dissertation is on critically analysing local food and localised food systems in plans and policies from only Auckland, Wellington, and Christchurch City Councils.

6.3 Limitations of Research

This research is limited in scope. A 60-point master's dissertation is completed in six months, meaning the topic for exploration must be appropriately limited in size. Exploring the concept of local food in full within a New Zealand context would have been too large a sample. As such, this research has been focused the engagement of the councils of Aotearoa's three most populous cities with local food and localised food systems. While Auckland, Wellington, and Christchurch city councils provide an interesting snapshot of where local government is currently sitting on the topic of local food, they are only three of seventy-eight councils. Additional limitations include the timing of the research, challenges to finding and understanding funding information, and the fragility of council support.

6.3.1 Timing of the Research

While this dissertation topic is very timely and related to other work happening in Aotearoa at the moment, this is also a limitation of the research. Following the research analysis, new content was released too rapidly to ensure that it was all included within this dissertation. For example, while highly relevant to food systems in Aotearoa, Emily King's *Re-Food* (2023) on challenges in the national food network could not be included as it was released too close to my submission deadline. Recently, Eat New Zealand launched a parliamentary petition to develop a national food strategy, the

results of which are still pending. It is an exciting time to be examining food systems in Aotearoa, as the nation is on the brink of necessary changes. However, this means that a deeper understanding of the topic is actively evolving and not all new content could be included for analysis.

6.3.2 Challenges to Finding and Understanding Funding Information

It was difficult to find public information on organisations that have received funding from Auckland Council. Despite best efforts, including the lodging of an Official Information Act (OIA) request via the Auckland Council website, information on funding granted in Auckland was difficult to source and verify. Information was needed on four regional grants which have criteria that local food initiatives could fall under. These are the *Auckland Climate Grant, Ngā Hapori Momoho - Thriving Communities Grant*, *Regional Events Fund*, and *Regional Environment and Natural Heritage Grant.* The only grant recipients that could be found online were from the *Auckland Climate Grant* (Live Lightly, 2023a).

In response to the OIA request, a member of the Auckland Council Grants and Incentives team provided spreadsheets relating to the *Regional Events Fund* and the *Regional Environmental and Natural Heritage Grants Programme*. The *Regional Events Fund* spreadsheet was of all applicants for the funding, but did not include whether or not the funding was successful nor what activities were funded. This was followed up on, but at the time of writing, there had been no further response from Auckland Council. The *Regional Environmental and Natural Heritage Grants Programme* spreadsheet did provide the requested information, but the recipients and projects were exactly the same organisations and initiatives which had received the *Auckland Climate Grant*. A further email was sent for clarity, questioning whether the two funds may be the same fund, which was not answered. Therefore, research was undertaken with the data from the *Auckland Climate Grant* only, as the recipients are clearly listed online. This is a limitation of the results.

Additionally, to ascertain all forms of council support for local food initiatives proved challenging. Where funding is not given in monetary form, other resources may be donated in kind. For example,

the space where the Wellington Harbourside Market is held is provided by the council, as well as the land where Kelmarna Gardens was established in Auckland. There are many examples like this which are outside the scope of this research.

6.3.3 Fragility of Council Support

Though the span of this research was six months, a relatively short period of time, significant changes in council priorities and actions have occurred. It became clear that relying on council funding to see local food projects through to completion is not sustainable. Council policies and plans are not legally binding.

Auckland Council's 2023 / 2024 budget was finalised at the end of June for implementation from July 1st under leadership from the current mayor Wayne Brown. There was swift public reaction to the draft budget which proposed cutting 41 million dollars in community funding (Brooks, 2023). Most of the funding that provides for the likes of local food initiatives was at risk. Public feedback was considered, and ultimately the funding in question was restored to its full amount with the sale of some of the council's Auckland Airport shares as a tradeoff (Orsman, 2023). However, this tension did demonstrate the fragility of relying on council funding for projects. With changes in leadership come changes of priorities and action areas. The newly implemented *Annual Budget 2023 / 2024* is no longer focused on climate action; instead it focuses on managing the city's debt (Auckland Council, 2023).

The ability of councils to guarantee regular funding of local food initiatives is a weakness in their ability to bring meaningful, lasting impact to food systems. Projects which involve establishing growing sites take consecutive years to come to fruition, then their operations must be sustained. As leaders and political parties change, priorities shift and momentum is lost on projects. In Wellington, the Sustainability Trust received funding to run an urban agricultural programme called the Wellington Urban Food Organisation. As of July 1st, 2023, that funding ran its course, and with it came the formal end of the organisation. Similarly, the Good Food mentoring programme that

Wellington City Council supported no longer exists. Community growing spaces are constantly in transition and reliant on funding, meaning that their longevity is not ensured. It is a limitation of this research that the findings in this dissertation cannot be sure to represent what is actually happening on a day-to-day basis in Auckland, Wellington, and Christchurch.

6.4 Areas for Further Research

Local food is being talked about in day-to-day contexts around Aotearoa, and the uncritical assumption is that local food is better than food from the industrialised food market. Working to better understand the intentions when using local food is important because allowing the understandings of the term to remain disparate "is not just a matter of academic concern, it can have practical consequences, such as frustrating further developments in the sector, preventing local food system development and responding inefficiently to customer desires" (Eriksen, 2013, p. 48). The term local food does not have a set definition or understanding. Therefore, more research is needed to help define local food both globally and within the context of Aotearoa. Having a better common understanding of the term would help ensure that initiatives around local food are accurately understood by the people who produce it, research it, regulate it, consume it and are otherwise affected by it. There are many more possibilities for valuable research in this space to help understand what the term means in the context of a relatively small, Pacific Island nation.

More research is also needed to critically analyse the existing food systems of Aotearoa, as it seems unreasonable that any citizen should be going hungry considering the amount of food produced in the country. Further research could be undertaken in Aotearoa to understand how local food systems could be beneficial for environmental, individual, social, and economic purposes. Additionally, it would be valuable to thoroughly examine the regulations on land use in Aotearoa. This could provide insight on what the barriers are to using more land for localised food growing (i.e. building / land use consents).

6.5 Final Thoughts

When I began this research, I was searching for hope in Aotearoa's food systems. At times it can feel like the world is crumbling, as social injustice and climate change dominate news headlines. It is clear that the way we eat is crucial to the wellbeing of the planet. As a consumer, I was tired of constantly feeling like I was being given a variety of bad food options, then asked to bear the responsibility of whatever poor choice I made based on availability and affordability. So much writing on food, rooted in academia or activism, tells the consumer how they can make a difference: give up eating meat; never buy products with palm oil; grow your own food; find seasonal ingredients; shop locally.

As a modern gastronome, I have a commitment to understanding the impacts of the foods that I consume. It is confusing to navigate the complexity of feeding oneself in an ethical way. What the government allows for within the food system matters; it can be the difference between a nation that is healthy and thriving, and one that is hungry and failing. A top-down approach may be one way to help regulate what and how New Zealanders are eating.

It is notable and important that the councils of the largest cities in Aotearoa are considering their food systems, how they can grow food, and how their communities are fed. While the councils' plans and policies are a good start, it is difficult to gauge the impact that they have. With nothing at a national or international level holding them accountable, the cities are at their own will to ensure positive results. So, in closing, I acknowledge the work that is left to do. It feels as if we have just started on a new journey in Aotearoa, one where we are endeavouring to appreciate the delicious food of our own soils and ensure that our communities are fed. The assumption that we are all taken care of because we are an agricultural country no longer holds. The nation's food insecurity can no longer be ignored; people must be able to enjoy the best kai from Aotearoa's lands, waters, and seas.

Over the process of researching and writing, I have learned to set aside my own naïve assumptions. I had certainly been susceptible to the "local trap". From a young age I had heard that slogan… "think globally, act locally". There were stages of learning through the literature review and in writing my

discussion where I wanted to give up, asking: Was everything that I thought I knew about local food untrue? Locally grown food may not be the golden solution to climate change or environmental issues; it may not be a quick fix for social injustices. However, it can be a source of community connectivity and resilience, and I for one appreciate having these initiatives in my neighbourhood. Most importantly, they give me a sense of hope.

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Appendices

Appendix A: 'Local food' search results on council websites

	Website	'Local Food' Mentioned
Regional Councils		
North Island		
Bay of Plenty Regional Council	https://www.boprc.govt.nz/	No
Hawke's Bay Regional Council	https://www.hbrc.govt.nz/	No
Manawatu-Wanganui Regional Council	https://www.horizons.govt.nz/	No
Northland Regional Council	https://www.nrc.govt.nz/	No
Taranaki Regional Council	https://www.trc.govt.nz/	No
Waikato Regional Council	https://www.waikatoregion.govt.nz/	No
Wellington Regional Council	https://www.gw.govt.nz/	No
South Island		
Canterbury Regional Council	https://www.ecan.govt.nz/	No
Otago Regional Council	https://www.orc.govt.nz/	No
Southland Regional Council	https://www.es.govt.nz/	Yes
West Coast Regional Council	https://www.wcrc.govt.nz/	No
City Councils		
North Island		
Hamilton City Council	https://hamilton.govt.nz/	No
Hutt City Council	https://www.huttcity.govt.nz/	No
Napier City Council	https://www.napier.govt.nz/	No

Palmerston North City Council	https://www.pncc.govt.nz/Home	Yes, 'local farmer's market'
Porirua City Council	https://poriruacity.govt.nz/	No
Tauranga City Council	https://www.tauranga.govt.nz/	No
Upper Hutt City Council	https://www.upperhuttcity.com/Home	No
Wellington City Council	https://wellington.govt.nz/	Yes
South Island		
Christchurch City Council	https://www.ccc.govt.nz/	Yes
Dunedin City Council	https://www.dunedin.govt.nz/	Yes
Invercargill City Council	https://icc.govt.nz/	No
Nelson City Council	http://www.nelson.govt.nz/	Yes
District Councils		
North Island		
Carterton District Council	https://www.cartertondc.co.nz/	No
Central Hawke's Bay District Council	https://www.chbdc.govt.nz/	No
Far North District Council	https://www.fndc.govt.nz/Home	No
Gisborne District Council	https://www.gdc.govt.nz/	No
Hastings District Council	https://www.hastingsdc.govt.nz/	No
Hauraki District Council	https://www.hauraki-dc.govt.nz/	No
Horowhenua District Council	https://www.horowhenua.govt.nz/Home	No
Kaipara District Council	https://www.kaipara.govt.nz/	No
Kapiti Coast District Council	https://www.kapiticoast.govt.nz/	No
Kawerau District Council	https://www.kaweraudc.govt.nz/	No
Manawatu District Council	https://www.mdc.govt.nz/	No
Masterton District Council	https://mstn.govt.nz/	No

Matamata-Piako District Council	https://www.mpdc.govt.nz/	No
New Plymouth District Council	https://www.npdc.govt.nz/	No
Opotiki District Council	https://www.odc.govt.nz/	No
Otorohanga District Council	https://www.otodc.govt.nz/	No
Rangitikei District Council	https://www.rangitikei.govt.nz/	No
Rotorua Lakes Council	https://www.rotorualakescouncil.nz/	No
Ruapehu District Council	https://www.ruapehudc.govt.nz/	No
South Taranaki District Council	https://www.southtaranaki.com/	Yes
South Waikato District Council	https://www.southwaikato.govt.nz/	No
South Waipara District Council	https://swdc.govt.nz/	No
Stratford District Council	https://www.stratford.govt.nz/	No
Tararua District Council	https://www.tararuadc.govt.nz/	No
Taupo District Council	https://www.taupodc.govt.nz/	No
Thames-Coromandel District Council	https://www.tcdc.govt.nz/Home	No
Waikato District Council	https://www.waikatodistrict.govt.nz/	Yes (for Raglan)
Waipa District Council	https://www.waipadc.govt.nz/	No
Wairoa District Council	https://www.wairoadc.govt.nz/	No
Waitomo District Council	https://www.waitomo.govt.nz/	No
Western Bay of Plenty District Council	https://www.westernbay.govt.nz/	No
Whakatane District Council	https://www.whakatane.govt.nz/	Yes, ‘local wild food’
Whanganui District Council	https://www.whanganui.govt.nz/Home	No
Whangarei District Council	https://www.wdc.govt.nz/Home	No

South Island		
Ashburton District Council	https://www.ashburtondc.govt.nz/	No
Buller District Council	https://bullerdc.govt.nz/	No
Central Otago District Council	https://www.codc.govt.nz/	Yes
Chatham Islands Council	https://www.cic.govt.nz/	No
Clutha District Council	https://www.cluthadc.govt.nz/	No
Gore District Council	https://www.goredc.govt.nz/	No
Grey District Council	https://www.greydc.govt.nz/	No
Hurunui District Council	https://www.hurunui.govt.nz/	No
Kaikoura District Council	https://www.kaikoura.govt.nz/	No
Mackenzie District Council	https://www.mackenzie.govt.nz/	No
Marlborough District Council	https://www.marlborough.govt.nz/	No
Queenstown-Lakes District Council	https://www.qldc.govt.nz/	No
Selwyn District Council	https://www.selwyn.govt.nz/	Yes
Southland District Council	https://www.southlanddc.govt.nz/	No
Tasman District Council	https://www.tasman.govt.nz/	No
Timaru District Council	https://www.timaru.govt.nz/home	No
Waimakariri District Council	https://www.waimakariri.govt.nz/home	No
Waimate District Council	https://www.waimatedc.govt.nz/	No
Waitaki District Council	https://www.waitaki.govt.nz/Home	No
Westland District Council	https://www.westlanddc.govt.nz/	No
Unitary Councils		
North Island		
Auckland Council	https://www.aucklandcouncil.govt.nz/	Yes
Gisborne District Council	https://www.gdc.govt.nz/	No

South Island		
Chatham Islands Council	https://www.cic.govt.nz/	No
Marlborough District Council	https://www.marlborough.govt.nz/	No
Nelson City Council	http://www.nelson.govt.nz/	Yes
Tasman District Council	https://www.tasman.govt.nz/	No

Appendix B: Council funding recipients

Appendix B.a. Auckland Council funding recipients

Auckland Council Funding Recipients			
Organisation	Intentions for funding	Grant Name	Year
Whenua Warrior Charitable Trust	Build 600 edible gardens in South Auckland homes	Auckland Climate Grant	2021/2022
Tamaki WRAP	Tamaki Urban Market Garden, establishment of a CSA	Auckland Climate Grant	2021/2022
Healthy Families Waitākere	Urban farming feasibility study in West Auckland	Auckland Climate Grant	2021/2022
Re-Creators Charitable Trust	Development of upcycled gardening classes	Auckland Climate Grant	2021/2022
Kelmarna Community Garden Trust	Creation of new market garden	Auckland Climate Grant	2021/2022
Otahuhu College Board of Trustees	Community garden set-up where students can learn the basics of gardening	Auckland Climate Grant	2021/2022
Sustainable Papakura	Demonstrate food growing in urban environments with planter boxes in town centre	Auckland Climate Grant	2021/2022

Note. Adapted from *Live Lightly* (2023a).

Appendix B.b. Wellington City Council funding recipients

Wellington City Council Funding Recipients			
Organisation	Intentions for funding	Grant Name	Year
Greenback Limited	PlantMe Growathon - digital platform development that provides resources for backyard food production and tracks its carbon benefits	Climate & Sustainability Fund	2022
Sustainability Trust	New Wellington Climate Action Centre where locals can connect to climate initiatives and movements (part of which is Welly Urban Food Org)	Climate & Sustainability Fund	2022
Sustainability Trust	On-going support for Sustainability Trust operations	Contract Funding	2022/2023
Sustainability Trust	Community programmes volunteer support	Social & Recreational Fund	2022
The Seeds to Feeds Foundation	Seeds to Feeds summer festival	Social & Recreation Fund	2022
Kaicycle Incorporated	Urban farm operational costs	Social & Recreation Fund	2022
Kaicycle Incorporated	Farm manager & community composting project	Social & Recreation Fund	2020
Brooklyn Food Group Incorporated	Seeds to diversify orchard plants, materials for garden boxes & pathways	Stone Soup Fund	2021 2022
Innermost Gardens Incorporated	Gardening equipment, vermicomposting set-up, mushroom production, & seed sharing pilot	Stone Soup Fund	2020 2021 2022
Island Bay & Berhampore Community Orchard	Maintenance, garden tools, & seedlings	Stone Soup Fund	2020 2021 2022

Lyall Bay Community Garden	Raised garden beds	Stone Soup Fund	2021 2022
The Mt. Crawford Community Gardens	Water tanks to provide water source to gardeners, garden equipment, plants, insurance, & electricity	Stone Soup Fund	2020 2021 2022
Tanera Gardens	Maintenance & operations, garden equipment	Stone Soup Fund	2021 2022
Tawa Community Garden	Seeds, seedlings, & general gardening supplies	Stone Soup Fund	2020 2021 2022
Te Maramatanga - Terrace Tunnel Community Garden	Garden equipment & compost	Stone Soup Fund	2021 2022
Khandallah Community Gardens	Maintenance, operations, insurance, plants, & nutrients	Stone Soup Fund	2020 2021 2022
Houghton Valley Progressive Association	Garden equipment	Stone Soup Fund	2022
Northern Community Gardens	Garden layout change, compost, general expenses & operations	Stone Soup Fund	2020 2021 2022
Kai o te Aro	Garden shed	Stone Soup Fund	2021
Community Rongoā Forest	Synchronising mātauranga Māori (Māori knowlege) with the ngahere (forest)	Stone Soup Fund	2021
Thurleigh Grove Community Garden	Garden upgrades	Stone Soup Fund	2020
Karori Community Garden	Garden amenities & materials	Stone Soup Fund	2020

Note. Adapted from Wellington City Council's *Climate and Sustainability Fund* (2022b), *Contract Funding* (2022c), *Social and Recreation Fund* (2022e), & *Stone Soup Funding* (2022f).

Appendix B.c. Christchurch City Council funding recipients

Christchurch City Council Funding Recipients			
Organisation	Intentions for funding	Grant Name	Year
Cultivate Christchurch	Youth internship coordinator	Discretionary Response Fund	2019/2020
Papanui-Innes Community Board	Edible garden awards	Discretionary Response Fund	2019/2020
Little River Farmers Market	Market set-up	Discretionary Response Fund	2020/2021
Bryndwr Community Garden	Community garden	Discretionary Response Fund	2020/2021
Food Resilience Network	Community coordinator, garden coordinator	Strengthening Communities Fund	2020/2021 2021/2022
Christchurch Garden Festival Trust	Grow Ōtautahi - Christchurch Garden Festival	Strengthening Communities Fund	2020/2021
New Brighton Community Gardens	Community garden	Strengthening Communities Fund	2020/2021
Roimata Commons Trust	Food commons & Toha Kai	Strengthening Communities Fund	2020/2021 2021/2022
Packe Street Park & Community Garden	Maintenance, development, & improvements	Strengthening Communities Fund	2020/2021 2021/2022
Richmond Community Garden	Community garden, operations	Strengthening Communities Fund	2020/2021 2021/2022
Christchurch South Community Gardens	Community gardens	Strengthening Communities Fund	2020/2021 2021/2022
Linwood Resource Centre	Community gardens	Strengthening Communities Fund	2021/2022
Cashmere New Life	Creation of community garden	Sustainability Fund	2021
Cultivate Christchurch	Urban farm	Sustainability Fund	2021

Food Resilience Network	School Garden Catalyst Project (edible gardens in schools)	Sustainability Fund	2021
New Brighton Community Gardens	Propagating Young Gardeners Sustainability Hub, education about food growing & preparation	Sustainability Fund	2020 2021
Te Whare Roimata Trust	Coordinator for CSA	Sustainability Fund	2021
Bush Farm Trust	Food and fibre youth education programme	Sustainability Fund	2021
Roimata Commons Trust	Toha Kai - food sharing service	Sustainability Fund	2020

Note. Adapted from Christchurch City Council's *2019/2020 Discretionary Response Fund* (2023f), *2020/2021 Discretionary Response Fund* (2023g), *2020/2021 Strengthening Communities Fund* (2023h), *2021/2022 Strengthening Communities Fund* (2023i), & *Sustainability Fund* (2023e).