Transformative Processes: Reimagining a Sustainable Dunedin Food System

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Abstract

Food issues are part of a highly complex, variable and interconnected food system that can affect local and global communities. An awareness of the multifaceted problems and a growing dissatisfaction with the conventional food system has been generated through its failure to address mounting social, economic and environmental damage around the world. These include a shift to more people that are obese in the world now than are malnourished, the loss of up to 75 percent of the genetic makeup of all agricultural crops, and increased control by a handful of multinational corporations over most sectors of the food system such as the growing, producing, packaging, and distribution of food. This has led to the mobilisation by some individuals and groups to seek societal change. The important position that food holds in each person’s life provides an opportunity to bring diverse groups together to socially mobilise in the pursuit of creating an alternative food system. Under principles such as a just and democratic food system, the potential for sustainable food system transformation is seen as a process through which to facilitate the promotion of social change.

This research will investigate at the local level, a case study which aims to understand the transformative processes that occur by those people who have socially mobilised around the creation of an alternative and more sustainable food system in the Dunedin context. The study will determine the type of engagements that Dunedin food actors have established and the degree to which the relationships between different forms of social mobilisation are enabling the practice of food system transformation. An analysis of this data hopes to provide greater awareness of the barriers, tensions and contradictions which exist within the food system. This will support stakeholders’ ability to overcome difficulties and work more collaboratively towards common and diverse goals for social emancipation. The research argues that food system transformation will require attention from multiple entry points, at various levels, and a commitment by individuals and communities in order to address the variety of food issues that now impact society and the environment. Although sustainable food system transformation will involve the use of different mechanisms - both formal and informal approaches, stakeholders must realise that they are ‘on the same side’ of promoting social change. Only then, will social mobilisation be able to effectively challenge the dominant structures that maintain the neoliberal constructs of the conventional food system and engage with radically reimagining what an alternative food system in the future could look like.
Much like my thesis topic – where to begin and where to end – my acknowledgements are infinite and unable to adequately express my utmost thanks to the many people who helped me along this journey with words of encouragement, support and advice when I needed it most.

My first and continuous thanks must go to my supervisor Sean Connelly who has guided me through this process. I want to thank you for your patience and clever observations as I struggled in every direction to come to terms with what I was doing and how I was doing it. This thesis has taught me so much more about life and how to live it than I ever imagined.

Next to my MPlan classmates, what a crazy few years! Thanks for making our last years at uni a time to remember. I know we will keep in touch and that everyone has bright and beautiful futures ahead of them.

To the many key informants that I interviewed, thank you for so openly and passionately taking the time to help me with my thesis. You are all taking huge steps and making amazing changes to ensure Dunedin’s food system becomes more sustainable for the future.

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<td>AFS</td>
<td>Alternative Food System</td>
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<td>DCC</td>
<td>Dunedin City Council</td>
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<td>GMO</td>
<td>Genetically Modified Organism</td>
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<td>Ministry for Primary Industries</td>
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<td>NZ</td>
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Chapter 1: Sustainable Food System Transformation

- Introduction

Think like a plan(e)t
- Sara Metcalf (2012, p. 22)¹

1.1 Introduction

Food is part of a highly complex, interconnected system that impacts both local and global communities. The impacts that food incurs on people or an awareness of particular social, economic or environmental food issues can amount to a point at which people decide to socially mobilise around the dissatisfaction of the effects that the current conventional food system is inflicting on society (Metcalf, 2012). Therefore, people that engage in alternative food activities are actively participating in the transformative process of reimagining the potential for a sustainable food system, as indicated in the two local Dunedin food stories below.

Recent media attention in 2016 reported the story on a small scale, local Dunedin, raw milk farmer whose operation had been shut down by the Ministry of Primary Industries (MPI) – a New Zealand government department that engages in export and domestic risk management of their primary products. National biosecurity regulation was implemented due to one heifer (that was not part of the milking herd) testing positive for bovine tuberculosis; and was thus slaughtered as part of New Zealand’s control strategy to manage the health risk and to ensure that food is safe for human consumption (Rosevear and Urlich, 2010). However, in the weeks following, a groundswell of support from customers, Dunedin residents, online media and New Zealanders helped the farmer to maintain the remaining 70 cows (that he alone could not afford to keep). It displayed an example of significant community resistance and social mobilisation to create an alternative solution against accepting the fate of closure for the local milk business.

¹“The phrase “think like a plan(e)l” is inspired both by Aldo Leopold’s (1949) “thinking like a mountain” and Hirsch and Norton (2011)” (Metcalf, 2012, p. 22), that emphasises the significance of scale and by thinking both about a plant and the planet is similar to the approach as this thesis aims to use by providing a local example to demonstrate the potential for structural transformation of the conventional food system on the global stage.
A second incident, although vastly different in circumstance, resonates similarly to the social mobilisation by another group during the same time, who were concerned with the sale of one of the Taieri’s last market gardens. The 300km² Taieri Plains is an area situated within Dunedin City and is known for its high-class soil that was once home to New Zealand’s largest market garden centres at the turn of the century (Mercer, 2016). A group of people identified this particular farm - McArthurs Berry Farm - as an iconic project to try and save. It represents a history of those that grew on the Taieri and signifies wider community values of local food, resilience, soil health, grower education and stewardship of the land.

Evidently, there is increasing agreement that change needs to take place in the current state of the conventional food system (Pierce-Quinonez, 2012). Both cases above are representative of the mounting support in Dunedin by interested individuals and stakeholder groups who are coordinating around food issues with an aim to radically transform the conventional food system. These examples demonstrate the potential for greater social change, as food can bring diverse groups together around social criticism and acts as an entry point through which other important issues may be addressed such as social justice and environmental degradation. Understanding the implications of the strategy needed for food system’s transformation in a single locality is one component aimed to contribute to a much larger process of widespread social mobilisation surrounding the structural problems that negatively impact society.

1.2 Sustainable Food System Transformation

Food impacts our lives in social, cultural, economic, environmental and political ways, though none is greater than its essential requirement for human survival, comparable to air and water (Morgan, 2009). The conventional food system coupled by growing and increasingly urbanised populations has shifted the way the food system currently operates, as the majority of people who live in cities have less access or direct contact with food production and must purchase it (Sonnino, 2009; Kremer et al., 2012). Since the postwar era, the global north has assumed food to be plentiful, inexpensive and accessible, with a consensus that hunger has been alleviated and that most people now have the ability to feed themselves (Wright and Middendorf, 2008; Morgan and Sonnino, 2010). However, the 2007/8 and 2011 food price crises demonstrated a vulnerable and highly fragile system. Disturbances such as the global financial crisis, climate change, peak oil, a rise in biofuel production and changing commodity speculation contribute to a vulnerable food system (Metcalf, 2012; Holt Giménez and Shattuck, 2011; Clendenning et al., 2015). Furthermore, the food riots which have occurred in recent years due to a growing
dependency and various unequal outcomes in society has created mounting tensions by citizens angry at the persistence of a growing food crisis (Sonnino, 2009; Holt Giménez and Shattuck, 2011). Consequently, social change is required through transformative practice, designed to dramatically convert the adverse impacts of the conventional food system with more just outcomes for all people and the environment (Hassanein, 2003). Statements such as “from field to table”, “farm to fork” or “soil to soil” exhibit a form of new social movement based around the concept of sustainable food and agriculture (Sobal et al., 1998; Freedgood et al., 2011). These alternative food initiatives attempt to take a holistic approach to restoring the sustainability our food system (Hassanein, 2003).

1.2.1 The Food System

The food system is a difficult term to define, with different understandings of what it constitutes or who is involved. Pothukuchi and Kaufman (2000) explain the food system to be “a chain of activities connecting food production, processing, distribution, consumption, and waste management, as well as all the associated regulatory institutions and activities” (p. 113). The current conventional food system is one of globalised, industrialised and centralised food structures that externalises environmental costs and is driven by profit maximisation and market dominance (Campbell, 2004). These characteristics are distinctive, yet together make up the conventional food system that generates a large number of food related issues. For instance, globalisation is about economies of scale, understood as “the ever-increasing integration of national economies into the global economy through trade and investment roles and privatisation, aided by technological advances” (Hinrichs, 2003, p. 34). The problem, however, can be summed up by the phrase ‘food from somewhere’ to ‘food from nowhere’, which describes the detached relationship that many people now have with food. It warns of the risks that could occur through failure by people to recognise when their food systems may no longer support them, especially before it is too late to prepare or change course (Toth et al., 2016). Meanwhile, industrial food practices comprise of a heavy reliance on fossil fuels for fertilisers, pesticides, and transport as well as the greater use of machinery and intensive livestock operations to increase efficiencies and the productivity of food (Levkoe, 2011).

Both features, industrialisation and globalisation, work to further alienate citizens from the source of their food through the ability to increase wage labour and mechanise farming practices that have impacted many family farms and drive away their viability to exist (Vitiello and Brinkley, 2014). Furthermore, the majority of the conventional food system is held in the hands
of a small group of transnational corporates who control many aspects of food and influence what size to grow, which varieties to grow, encourage large-scale mono-cropping and operate under long-term contracts that compel growers to only supply certain supermarket chains (Booth and Coveney, 2015). The conventional food system has become a state of food commodification that has resulted in a disjunction between the people’s right to a commons resource through the capitalist control via multination corporations (Hassanein, 2003).

Growing awareness and the dissatisfaction of the conventional food system’s impact on society, the environment and economy has contributed to the rise in people interested in establishing a more sustainable type of food system (Hathaway, 2012; Pierce, Quinonez, 2012). For example, unrelenting hunger, loss of biodiversity, exploitation of resources and human labour, water, soil and air pollution, as well as global obesity and health epidemics have in part been attributed to the failings of our current conventional food system (Levkoe, 2011). Furthermore, within the food system, increasing corporate control has led to the greater exclusion of people’s democratic rights over the food they eat or of knowing where their food has come from (Levkoe, 2011). Promotion of sustainability with greater democratic practice is sought for the creation of an alternative food system that aims to challenge and overtake the dominant commodity driven conventional system (Wright and Middendorf, 2008; Levkoe, 2011). This alternative agro-food movement is made up of many alternative food initiatives and alternative food networks which aim to transform current practices and create meaningful change for food and all those who eat it (Hassanein, 2003).

1.2.2 Alternative Food Responses

Local, national and international food and agricultural based actions have formed over time, that embrace a range of demands from food sovereignty, sustainable agriculture, local food, fresh and GMO-free food and food security (Holt Giménez and Shattuck, 2011). Many alternative food movements, food initiatives and food networks - although different in focus - stress the need for sustainability and as a collective, have indicated a shared view that change is required in the food system. Like most definitions regarding food, it is important not to fix any one meaning to the idea of food systems sustainability. The diversity of actors and interdisciplinary fields which are interested in the food system often hold differing priorities and various interpretations of what sustainable food means to them (Hassanein, 2003; Pierce-Quinonez, 2012). It is clear that the idea of sustainability will be moulded according to whichever interests and values are most important to those who are using its term (Forssell and
Lankoski, 2015), recognising that transformative action must always and necessarily be contextually based (Friedmann, 1987). However, Metcalf (2012) explains that sustainability focuses on the interactions between human and environmental systems and can be determined, depending on whether or not there is reassurance that “stocks of natural resources are not depleted faster than they can be replenished” (p. 8). For the purpose of providing clarity and the overall promotion of sustainable food practices in this study, sustainable food systems can loosely be inferred to as “one that equitably balances concerns for environmental soundness, economic viability, and social justice among all sectors of society” (Hassanein, 2003, p. 78). The quote above provides an inclusive definition that ensures a broad range of individuals and stakeholder groups can relate to and use the term of sustainable food systems according to how they value food, and for any part of the alternative food system seeking transformation.

1.2.3 Transformative Food Planning

Transformative action has received growing support in response to shortfalls in the conventional food system (Hassanein, 2003; Levkoe, 2011; Holt Giménez and Shattuck; 2011). Numerous mechanism for this transformation is sought through food systems planning, food policy councils, food activism to name a few, that aim to ensure a more sustainable, whole-of-system approach as it addresses the entire life cycle of food (Freedgood et al., 2011). A range of stakeholders are involved, including the planning professionals, for-profit and non-profit organisations and community groups (Freedgood et al., 2011). Some scholars have justified reasons to position professional planners at the front of constructing a more sustainable food system. Their interdisciplinary and cross-sectorial training, ability to link multiple perspectives together, as well as the facilitation and mediation role that these experts have acquired over time, are seen as critical skills to assist in sustainable food system transformation (Pothukuchi and Kaufman, 1999; Campbell, 2004; Freedgood et al., 2011). However, Morgan (2015) notes that a shift in food system planning aims to override “the debilitating divide between ‘expert’ and ‘lay’ knowledge by embracing urban designers, landscape architects, public health officials, environmental planners for example, as well as a wide array of civil society groups and NGOs that are committed to reforming the urban food system” (p. 1381). Furthermore, planners themselves realise that to create significant structural change; there must be a mixture of pressure which is sought both from below with concepts such as ‘food citizenship’ at the local level while backed politically at a national level (Eckert and Shetty, 2012, p. 126). Food Citizenship requires active engagement within local communities by contesting the commodification of food and work towards democratising the dominant food system that
upholds capital itself (Hassanein, 2003; Lockie, 2009). Therefore, all food actors, whether professional or lay people must together seek to engage in regular dialogue and active collaboration towards a more sustainable and democratic food system for the pursuit of social change (Hassanein, 2003).

Food system transformation is an expression of social change. Friedmann (1987) defined the term of radical planning as a theory of proposing a radical alternative to current practice – that traditional planning is a guidance of social reform. Therefore, to address food issues and develop more sustainable food practices, a groundswell effort by food actors is necessary through the form of social mobilisation. In the context of food system transformation, Holt Giménez and Shattuck (2011) also suggest the need for complete regime change, away from the dominant ‘corporate food regime’. The current food regime is entrenched in neoliberal tendencies and reform that “seek to mainstream less socially and environmentally damaging alternatives into existing market structures” (Holt Giménez and Shattuck, 2011. p.121). Only then will attempts to change the currently legitimated and hegemonic position of the conventional food system, have any sustained foundation for a robust and meaningful global food movement. Social mobilisation involves the pursuit of both struggle and structural change; thus the radical transformation of the convention food system will take different forms, depending on the context-specific circumstances of the particular structures and the issues of discontentment (Friedmann, 1987).

In the context of Dunedin, increasing numbers of food actors are beginning to emerge that have expressed concern with the variety of food issues which now exist in our society such as healthily and environmentally conscious food, relieving food insecurity within the city and installing a resilient food system. They function within the realm of an alternative food system space and have various reasons for their involvement often due to some social, cultural, economic or environmental value (Hassanein, 2003). Each different approach by people involved with alternative food activities such as community gardens, organic growing or a low-cost food map represents some reactive responses to issues that they are unhappy with. An increasing number of alternative food initiatives and alternative food networks have formed to create different outcomes from the ones that citizens are currently experiencing such as a lack of local growers in the area or the impacts of widespread food waste. Research by Sundkvist et al., (2005) has suggested that the further away that problems exist from our daily lives both temporal and spatial, the less likely people are going to be motivated to address it. Thus,
exploring the general ways that stakeholder groups understand food issues and are motivated to engage with issues in their local area provides insight into understanding the potential for sustainable food transformation and promotion of social change.

1.3 Research Aim

As the section above has indicated, the conventional food system has caused severe damage to many aspects of society, the environment and economy. Increasingly, this system has been challenged by demand for an alternative food system (AFS), driven by a range of responses in the form of alternative food initiatives (AFIs) and alternative food networks (AFNs). Together AFIs and AFNs support an alternative food movement (AFM), which aims to permanently transform the current conventional system to one of food system sustainability. Informed by these concepts, the primary purpose of this thesis is;

To explore the ways that stakeholder groups have socially mobilised to address food issues in the Dunedin context, to understand the potential for sustainable food system transformation and promotion of social change.

There exist both formal and informal food groups in Dunedin seeking to promote alternative forms of food system operations in the city. This research does not intend to be extensive in its analysis of every food actor in the City. Rather, it aims is to explore a range of different stakeholder groups who have diverse views and values around food system sustainability to understand the various ways that people interpret food issues and how they are trying to solve them. Recognising the tensions and different ways that people conceptualise and value food helps to ignite the transformative potential of creating a more sustainable food system (McClintock, 2014). The study will also investigate the type of relationships that different actors have established, which will demonstrate the degree of collaborative action that is occurring in the locality of Dunedin. This thesis uses Dunedin as a local food example to highlight the current level of alternative food activity, individual efforts and cooperation by stakeholder groups that aim to shift practices towards a more sustainable food system model. Examining the use of food as an entry point for engagement with various other issues that can create social change, provides a contribution to the wider research on social mobilisation and transformative theory.
1.3.1 Research Focus Questions

The study is guided by three research questions that support the primary research aim. Each point of inquiry seeks to build up an understanding of transformative practice in order to provide a more in-depth analysis of the overall research investigation.

1. Who are the key players involved in addressing food issues in Dunedin, what has motivated their engagement and what form of action did they take to transform current food practice in the City?

It is clear that stakeholder groups and food actors are not always unified in their aim or objectives for involvement in alternative food initiatives (Campbell, 2004). However, a consensus surrounding common goals and a shared discontentment regarding the conventional food system has positioned them ‘on the same side’ of challenging the current capitalist processes (Hassanein, 2003). Thus, this question will investigate diverse food actors who have an interest in addressing food issues and who seek to transform the detrimental effects of the conventional food system. It will contribute to the general level of alternative food system initiatives and networks which are occurring in Dunedin in order to understand how individuals and groups value food and conceptualise food issues to address structural problems of the conventional food system.

2. How/why have relationship or partnership arrangements formed between different stakeholder groups in an effort to socially mobilise around food for the creation of a more sustainable food system in Dunedin?

The study gathers and interprets relationships between diverse stakeholder groups in order to determine the extent of social mobilisation in the city. This question explores the dynamics between groups and their motivation for engagement with an alternative food system. There is a body of literature that focuses on the analysis of human action and social change through understanding the extent of social mobilisation through actor’s ability to coordinate and arrive at a collective understanding or social relationship with each other (Levkoe and Wakefield, 2014). This idea stresses that it is not just the individual entities of interaction that are important, but also the specific attributes which connect each other that can impact the success of creating social mobilisation and social change (Levkoe and Wakefield, 2014 – emphasis added).
Therefore, this research question will help to shape the nature of Dunedin’s relationships within the alternative food spaces and their ability to transform the conventional food system towards building a sustainable one.

3. What barriers and challenges have developed in relation to stakeholder’s inability to effectively mobilise towards transformation of the conventional food system?

Indicating the barriers and challenges which stakeholder's face helps to determine where stakeholders are restricted and why progression towards the transformation of the food system can prove extremely problematic, both as an individual unit and a collective group. Acknowledging the barriers and challenges along with the multitude of tensions and contradictions which exist in the food system and with addressing food issues, is also an opportunity to come to terms with these problems. Recognising conflict can greatly assist food actors to make better decisions and improve their positions of engagement to coordinate action around the transformation of the conventional food system (McClintock, 2014).

This research has been further guided by Friedman’s concept of transformative theory which promotes radical practice in the desire to build a civilisation “that will sustain diverging local paths of happiness” (1987, p. 382). In the context of food system transformation, this will demand social mobilisation, radical structural change as well as a strategy that can reach ordinary people in their daily life struggle.

1.4 Thesis Structure

The subsequent structure of this thesis will begin in Chapter 2 with an investigation into theoretical approaches of transformative actions that seek to challenge the capitalist structures that reproduced the conventions food system. Transformative processes attempt to reimagine what an alternative food system might look like and how to achieve that. Attention will be drawn to the inherent debates in the food system and the array of food issues and approaches used in response to the negative impacts that are produced by the current conventional food system. Chapter 3 will then detail on the organisation of the research through the methodological approach that was taken to achieve the thesis outcome including data collection and the theoretical framework. In Chapter 4, a contextualised understanding of how food in Dunedin is developing in relation to alternative food practices will be discussed including stakeholder's conceptualisation of food issues, food solutions and food values. Chapter 5
evaluates the way in which stakeholders are socially mobilising in the Dunedin context, revealing the relationships between the different categories of social mobilisation as informed by Friedmann (1987). Chapter 6 explores the barriers and challenges that stakeholders face when working within the transformative process and against a resistant capitalist structure that aims to maintain the status quo. Chapter 7 conclude the thesis by providing a strategy for transformative processes through a set of recommendations for all those who are active or interested in promoting a more sustainable food system. The chapter will also highlight the implications of this research for social mobilisation by communities and suggest further research regarding the further inquiry into the transformation of the conventional food system towards the promotion of social change.
Chapter 2: Transformative Action for an Alternative Food System

- Theoretical Framework

The dominant tradition of social reform deals with planning as a form of societal guidance; its radical counter is the tradition of social mobilisation, which deals with planning in a context of social transformation.

- John Friedmann (1987, p. 11)

2.1 Introduction

Social mobilisation begins at a point whereby people identify a common critique in society (Friedmann, 1987). The growing dissatisfaction concerning the effects of the conventional food system has provided a platform for collective critique by stakeholder groups. These groups address a range of food issues and seek structural transformation for a more sustainable food system. The important position that food holds in each person’s life provides a rare opportunity to bring diverse groups together for social change (Morgan, 2015). However, critics have noted the way that actors have chosen to respond to various food issues are often piecemeal, fragmented and lack coherency (Pothukuchi and Kaufman, 1999; Campbell, 2004; Morgan, 2013). Levkoe (2011) has argued that a comprehensive understanding of food system issues; the institutionalisation of an alternative food system in both policy and practice; and greater flexibility to allow for the interconnection of many variables involved with food such as social justice, environmental degradation, community health and democratic governance is fundamental in the pursuit of positive social transformation.

The chapter will start by providing the theoretical framework as a means to explore the way that food system transformation through social mobilisation can promote the transformative potential of the conventional food system. The construction of the food system through consecutive food regimes will be explored in relation to overcoming the structural constraints necessary to produce an alternative food system. The food system and many food issues will then be investigated within the wider body of knowledge surrounding the tensions and debates that have emerged out of the struggle to formulate an alternative food system. Specifically, the inter-relationships and contradictions that exist between social, environmental and economic
food issues provide insight into the interdependent nature of food, people and a wider society focused on social change (McClintock, 2014). Finally, the mechanisms available - both formal and informal - to confront the current failures of the conventional food system such as food strategies, food policy councils, community gardens and farmers’ markets are investigated. The mechanisms for social mobilisation are accompanied by strategic guidance by Friedmann’s set of six concrete tasks that aim to facilitate radical planners thinking about challenging structural powers. It will demonstrate the range of relationships that contribute to the transformative potential - by both formal and informal - for an alternative food system.

2.2 Transformative Food Action

The emergence of alternative food practices has provided a focus for groups to organise around visions of an alternative food system that challenge the detrimental effects created by the conventional food system (Levkoe and Wakefield, 2014). This section will explore Friedmann’s (1987) theoretical approach of transformative theory, and the ideas surrounding social mobilisation as a response by stakeholders to apply this theory to the creation of an alternative and more sustainable food system. Social mobilisation will be informed by Friedmann (1987) through the use of his categories of social mobilisation ‘ladder’. It is argued that transformative theory can be applied to understand the progress of the alternative food movement. This movement is made up of an array of alternative food initiatives and networks, local food activities, environmentalists and all those who are activity working to bring about change within the dominant structures of the food system (Hassanein, 2003). An analysis surrounding the characteristics of the ‘conventional’ and an ‘alternative’ food system will be investigated in section 2.2.2 to illustrate how one might re-imagine what a sustainable food system could look like in the future.

2.2.1 Transformative Theory and the Food System

Transformative theory was coined by Friedmann (1987) as a means to assist the concept of radical planning. As quotes at the start of this chapter, radical planning is considered a counter move against the traditional role that planning has provided through social reform, rather than activity seeking out structural change (Friedmann, 1987). Radical food system transformation aims to completely change the model of the neoliberal corporate food regime that has created an array of social, economic and environmental food issues, both local and global (Holt Giménez and Shattuck, 2011). The binary that exists between the conventional/alternative food
system should not be over-inflated, what is considered as ‘mainstream’ today may be easily disrupted at any point (Hathaway, 2012). A food system oriented towards an industrialised, globalised and centralised approach has occurred over a historically short timeframe. As a result, the idea ‘that human beings are the subjects of their own history’ provides optimism that the transformative possibilities of creating a sustainable food system are well within reach of human potential (Friedmann, 1987, p. 353; Kremer et al., 2012).

Much of the literature agrees that transformative action is paramount in order to adequately address the deep-seated and ‘wicked problem’ of the current food system (Hinrichs, 2003; Hassanein, 2003; Levkoe, 2011; McClintock, 2014). Furthermore, many scholars are in agreement that both incremental steps to address immediate food problems must endure, while efforts to establish the structural changes necessary to develop a more sustainable and democratic food system continue to be worked upon indefinitely (Holt Giménez and Shattuck, 2011). For example, Hassanein (2003) rejects the argument that grassroots activism and individual people’s struggle to challenge the social and political structures through daily life resistances are ‘woefully inadequate’ to deliver complete food system transformation. The author argued that widespread transformation of the food system is often stipulated without any clear direction as to how this change may be achieved. Accordingly, a pragmatic approach is all that is currently available. In addition, a constant re-evaluation of the transformative process must be aligned with ‘food democracy’ as conditions continuously change and must be consulted on (Hassanein, 2003). Furthermore, Friedmann (1987) recognised that relevant actors at the individual household level will play an important role in establishing transformative practices. In relation to transforming the food system, commitment by individual’s will remain at the heart of actively pursuing alternative food ventures. They are seen as the essence to succeed in challenging embedded structurally resistance towards food system sustainability and the promotion of a new society.

Radical transformation demands structural changes to the market-led distribution of land, water and other resources like food, which can be understood through concepts such as food

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2 ‘Wicked problems’ is a term meant for issues that are difficult to define, involve a range of intricate solutions, are often interrelated and evidently may never actually become ‘solved’. (Reid et al., 2012).

3 Food democracy proclaims that solutions to conflicts regarding the future direction of the agro-food system are best met with active participation as this is the most appropriate and important means of decision making for political responsibility (Hassanein, 2003).
sovereignty\textsuperscript{4} (Holt Giménez and Shattuck, 2011). Holt Giménez and Shattuck (2011) suggest the transformative potential of the food system could be strengthened in opposition to reformist approaches through an alliance between progressive and radical food responses. Reformist action seeks to maintain the neoliberal food model by making incremental adjustments to mainstream niche markets, like fair trade and organic products that protect an ongoing marketed capitalist society. The neoliberal model of the food system is argued by scholars to negatively impact social, economic and environmental aspects of society. Instead, it serves the economic interests of large multinational food industries, rather than individuals or their communities (Berman, 2011; Booth and Coveney, 2015; Forssell and Lankoshi, 2015; Toth et al., 2016). For example, some alternative food initiatives such as food banks offer free food to people who are food insecure, however, it does not address the structural problems that make people food insecure in the first place (McClintock, 2014).

In contrast, the progressive trend of food movements seeks to advocate for sustainable alternatives to the industrial agri-food system through its support for initiatives such as organic agriculture, producer-consumer relationship networks and its commitment to food justice and rights to food (Holt Giménez and Shattuck, 2011). Slow Food is an example of progressive social justice activism that draws on the promotion of engaging with good quality, traditional food by producers and consumers for the environment and wellbeing of people (van Bommel and Spicer, 2011). Nevertheless, the progressive trend remains largely within the economic and political constraints of the existing capitalist food system. Both radical and progressive food movements call for food systems change, yet by comparison, the trend of a more radical food movement emphasises the right to food through an entitlement or emancipatory capacity (Holt Giménez and Shattuck, 2011 - emphasis added). Morgan (2015) explains that the right to food is often misleading as the 1948 UN Declaration of Human Rights declared this statement actually means “the right to feed oneself in dignity” as opposed to being properly fed through being provided with an adequate supply of food (p. 1384). By linking up progressive and radical food movements, alternative food stakeholders can bring together progressive responses to address underserved communities by trying to dismantle the corporate agri-food monopoly power that radical food movements desire. Consequently, the proposal to align forces between

\textsuperscript{4} By definition, “Food sovereignty is the right of each nation to maintain and develop its own capacity to produce its basic foods respecting cultural and productive diversity” as established by Via Campesina in 1996 (Patel, 2009).
the progressive and radical models can strengthen the joint action of total food system transformation for the promotion of social change.

Applying transformative theory to radical food system transformation is suitable because as Friedmann (1987) explained; “it is these users of knowledge-in-practice who are the final arbiters of knowledge-in-theory” (p. 394). In other words, transformative theory must be contextually based on the problem it seeks to solve. Conceptualisation verifies, strengthens, and shapes the theory itself into ongoing political practice and new social learnings about the world (Friedmann, 2011). Friedmann (1987) further states that transformative theory is “a set of complexly related statements about the world” and that “the starting point is always a concrete problem” (p. 62). The problem of the conventional food system has been well established as a ‘wicked problem’ in society and is anything but a fixed ‘concrete’ issue. Yet, there is still a general consensus regarding the array of food issues that impact the social, economic and environmental spaces as a means for stakeholders to engage in food system transformation from various entry points (further discussed in section 2.3). The radical practice for food system transformation will use the statements laid out for transformative theory as a way to understand the process for enabling sustainable food system transformation, as indicated in Table 1. below.

Table 1 Transformative theory statements and thesis relevance. (Modified from Friedmann, 1987).

<table>
<thead>
<tr>
<th>Statement Number</th>
<th>Transformative Theory Statement</th>
<th>Thesis Chapter Relevance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Focuses on the structural problems of capitalist society viewed in a global context.</td>
<td>Chapter 2</td>
</tr>
<tr>
<td>2</td>
<td>Provides a critical interpretation of existing reality, emphasising those relations that, from period to period, reproduce the dark underside of the system.</td>
<td>Chapter 6</td>
</tr>
<tr>
<td>3</td>
<td>Charts, in a historical, forward-looking perspective, the probable future course of the problem, assuming the absence of countervailing, transformative struggles.</td>
<td>Chapter 2/4</td>
</tr>
<tr>
<td>4</td>
<td>Elaborates images of a preferred outcome based on an emancipatory practice.</td>
<td>Chapter 5</td>
</tr>
<tr>
<td>5</td>
<td>Suggests the choice of a ‘best’ strategy for overcoming the resistance of the established powers in the realisation of desired outcomes.</td>
<td>Chapter 7</td>
</tr>
</tbody>
</table>

Accordingly, the rest of this chapter will focus on the food system’s structural problems as they exist in the current capitalist model in section 2.2.2 (statement number 1). It will then unpack
the present and future trajectories of problems with the conventional food system if the oppositional struggle by stakeholder groups did not occur in section 2.3 (statement number 3). Transformative theory will provide a guide as indicated above by Table 1 and the column expressing the ‘thesis chapter relevance’, to assist this thesis project’s critical analysis and primary aim to understand the potential for sustainable food system transformation and the promotion of social change in subsequent chapters.

2.2.2 Conventional Reform or a Radically Alternative Food System

The conventional food system is characterised by its centralised and globalised economic structure (Hassanein, 2003; Campbell, 2004). It incorporates networks of growers, producers, processing, distribution and consumption, all of which have been significantly advanced through the development of an industrialised agricultural system (Morgan and Sonnino, 2010; Toth et al., 2016). The term ‘food regime’ was first used to distinguish the link between agriculture and industry showing that the relationship between the production and consumption of food has helped to reproduce the structure of a capitalist society at the global scale (Friedmann and McMichael, 1989; Holt Giménez and Shattuck, 2011). Friedmann (1987) explains that “capitalism introduced an unnatural division into human life. Under its dispensation, production was separated from consumption, work from leisure. Both were organised to serve the interests of capital; the first through labour markets, the second through markets of commodities” (p. 349). As previously mentioned, the current global and industrialised food system have encountered growing protest around various food-related issues; for instance, in the use of genetically modified organisms (GMOs) in foods or the increased control by multinational food corporations over the food system (Campbell, 2004). Dissatisfaction regarding damaged social and environmental food conditions has led stakeholder advocates to promote changes towards a more sustainable food system that establishes an entirely new food system arrangement and suggests a local or regional approach to food (Campbell, 2004; Levkoe, 2011).

Friedmann and McMichael (1989) suggested that failures of the conventional food system have manifested due to a succession of historical food regimes. Each food regime has its own identifiable period that was determined while it had experienced stabilisation in the food system (Burch and Lawrence, 2009; Clendenning et al., 2016, 2016). This concept of successive food regimes has provided a theory through which to examine the intersections of change within the capitalist food system (Clendenning et al., 2016). The aim is to highlight points where stability
and transition have occurred throughout time in order to analyse why the food system have
gone through changes (Burch and Lawrence, 2009). Emerging from the ‘settler’ states, the first
food regime of 1870-1914s modified the ‘colonial food relations’ which saw the growth of
wage labour through the decoupling of family farm work, and the reinforcement instead of food
markets (Friedmann and McMichael; 1989, Lamine, 2015). The terms of ‘settler’ and colonial
food relation’, along with the subsequent names of ‘post-World War II’ and ‘Corporate’ food
regimes are often used throughout literature to identify each of the different periods of time that
are being referred by as the food regime.

The result was a cheapened wage of goods, and the devaluation of work by traditional
agriculture, creating distance between the producer and consumer (Friedmann and McMichael,
1989; Lamine, 2015). Likewise, with the capacity to accumulate goods due to new durable
foods and intensive food industries, ‘post-World War II’ between the 1950s-1970s established
the second food regime by restructuring agriculture as a supplier of inputs to the capitalist
structure (Friedmann and McMichael, 1989; Lamine, 2015). This led to the abundance of cheap
food and raw materials and introduced surplus through the redirection of the flow of goods from
the South to the North (Friedmann and McMichael, 1989; Holt Giménez and Shattuck, 2011;
Clendenning et al., 2016).

The third food regime is said to have begun in the 1980s to present day in response to the global
economic shocks that further supports the expansion of capitalist dominance (Holt Giménez
and Shattuck, 2011). As previously mentioned, the recent occurrence of the 2007/2008 food
price surge has led to sharp increases in the cost of basic food items such as rice and wheat.
Such events have contributed to increased vulnerability through food insecurity triggering
national security issues, while concurrently impacting the agri-food systems operations through
climate change events and land conflicts (Morgan and Sonnino, 2010). This ‘corporate’ food
regime can be described as a period of deregulation and further intensification of food
production. (Clendenning et al., 2016). The corporate food industries have reacted to concerns
regarding perceived or real issues of ‘toxic’ food that may impact our long-term health due to
GMOs or the environment through growing processes. Lamine (2015) describes it as the
‘corporate environmental’ food regime to emphases the response by markets to introduce
‘green’ labels and measurements of food safety, quality or even localness.
Nevertheless, consequences of the current setup in the conventional food system have led to excessive world food commodities and unprecedented control over nearly the entire food system, exhibiting situations such as the ‘supermarket revolution’ and liberalised global trade (Holt Giménez and Shattuck, 2011, p. 111). Although the existence of this third food regime is still being debated, the accumulation of consecutive food regime activities has demonstrated the multifaceted deficits that now structurally exist in the conventional food system. To reflect briefly, it has driven out the viability of local farming in the first food regime and created surplus through new durable food items during the second. Now, the increase of trade liberalisation which further cheapens commodified food products make it increasingly harder for people to value food beyond a commodity. The idea of the ‘new food equation’ has been recently proposed to demonstrate that food problems of hunger and limited access to cheap, healthy, and nutritious food, associated largely with connotations of the global south, are once again visible and thriving in places of the global north as well (Morgan and Sonnino, 2010). A failure to provide even the most basic needs for people has led some members in society to seek dramatic renegotiation of the right to food through rebuilding a more sustainable and equitable alternative food system (Levkoe, 2011; Clendenning et al., 2016).

The characteristics of an alternative food system are driven by values of sustainability, justice and democratic principles (Hassanein, 2003; Campbell, 2004 – emphasis added). Sustainability can be interpreted in many different ways. However, sustainable food systems have been defined in the introductory chapter of this thesis; as one that “equitably balances concerns for environmental soundness, economic viability, and social justice among all sectors of society” (Hassanein, 2003, p. 78). The complex and often contradictory views around what sustainability actually entails cannot be disregarded, as the concept is multi-dimensional in nature and involves the trade-off between social, economic and ecological values (as discussed in section 2.3.1) (Morgan and Sonnino, 2010). Consequently, Hassanein (2003) argues that in order to ‘equitably balance’ the various interests and competing values surrounding sustainability, democratic practice through the social and political participation of food citizenship must be an essential part of any alternative food system strategy. Nevertheless, caution must be taken when describing the characteristics of alternative food system with the warning not to ‘romanticise’ the alternative, which should be put through the same rigorous scrutiny as the conventional food system (Forssell and Lankoski, 2015).
Furthermore, the *components* that make up an alternative food system are in reaction to current failings of the conventional food system such as large-scale, mono-cropping, through engagement with food activities outside the norm of the ‘corporate’ food model (Guthman, 2003; Hinrichs, 2003; Campbell, 2004). Alternative substitutes include activities such as organic farming, urban agriculture, localism and farmers’ markets (Guthman, 2003; Hinrichs, 2003; McClintock, 2014; O’Kane and Wijaya, 2015). Moreover, the structural qualities necessary for transforming towards an alternative food system will require notions of ‘a whole-of-food system approach’ and alliances between the progressive and radical activities that are happening within this space as explained in section 2.2.1 (Levkoe, 2011; Holt Giménez and Shattuck, 2011). Levkoe (2011) suggests that a holistic approach must take a “comprehensive perspective that integrates social justice, ecological sustainability, community health and democratic governance throughout all aspects of the food system from policy, to production, to processing to distribution, to consumption, and to waste management” (p. 694). This claim highlights the potential for food to bring diverse groups of people together who can offer differing perspectives about the impact that food has on aspects of society, and by which other sectors in society are intricately connected to the food and agricultural system. For example, food is linked to housing, transportation, soil health, waste problems, land-use, the quality of air and water, economic development, environmental conditions and has direct implications for social outcome (Pothukuchi and Kaufman, 1999). People are employed to work with food, own businesses related to food, food affects people's health and wellbeing and it has been noted that when housing is in higher demand, the ability for poorer populations to feed themselves is reduced (Pothukuchi and Kaufman, 1999). Therefore, the various characteristics, components and structural qualities necessary to encourage the transformation of the conventional food system are all considered a part of the term ‘alternative’ which seeks to generate a more sustainable food system.

The extent to which activities are *reforming* the current capitalist model, transitioning further along the latest stage of another distinct food regime or are in a *radical* counter action, trying to establish an entirely new model for the food system is still highly contested (Holt Giménez and Shattuck, 2011; McClintock, 2014). Stakeholders providing alternate approaches to the conventional food system have been questioning exactly how *alternative* they actually are (McClintock, 2014). For example, McClintock (2014) explains that although urban agriculture is used to provide free or low-cost food products within cities, where residents may lack access to fresh, nutritious and cheap enough food, such projects are believed to simply address the
faults of the capitalist market system. This system that has essentially caused the problem in
the first place by limiting both wages and the purchasing power of food. In subsidising market
failures, the AFI – urban agriculture in this case, accommodates for the conventional food
systems downfall but allows the model to continue to dominate all-the-while remaining
confident to continue to exploit aspects of society by externalising social and environmental
costs in the process (Campbell, 2004; McClintock, 2014).

To reiterate once more, the call for a more sustainable, equitable and democratic food system
is demanded in response to the corporate food regime, to help elevate the cumulative effects
that have led to the global food crisis. One of many consequences has been producing record
hunger levels, while at the same time achieving record global harvests and profit by the world's
leading agrifood corporations (Holt Giménex and Shattuck, 2011; Levkoe, 2011). Unsurprisingly, the vision for a more sustainable food system includes divergent opinions of
re-conceptualising what a new alternative model might look like and how that switch should
occur. However, ‘transformative food politics’ as Levkoe (2011) described it, “incorporates the
idea of ‘reclaiming the commons’ articulated in social movements discourse as “reorienting
economies away from an exclusive focus on commodification and profit maximization, and
towards a more equitable and sustainable provisioning of [collative] human [and non-human]
needs” (p. 691 – taken from Johnston 2009, p. 243). In order to address the ongoing and deep-
seated structural problems which exist in successive regimes of the conventional food system,
Friedmann (1987) argues that the transformative struggle “must rely on action from below” (p.
297). The idea that local communities themselves must be responsible for addressing their daily
struggles in society through social mobilisation to instigate change. The structural changes
incrementally built up by the resistance of social reform must inevitably be challenged by the
actions of social mobilisation (Friedmann, 1987).

2.2.3 Social Mobilisation

The opening statement from this chapter stated that social mobilisation begins at a point of
social criticism. It involves people in their own communities choosing to actively engage in the
struggles for liberation by taking back control of their own lives (Friedmann, 1987). Dissatisfaction by local people surround the variety of food issues and impacts that the
conventional food system created has led a diverse and an increased number of AFIs in response
(Levkoe and Wakefield, 2014). These AFIs aim to challenge the shortfalls of the corporate-led,
industrialised food system by providing practicable local solutions to preserve farmlands, create
food hubs and implement local food policy, for instance, to address food issues and raise awareness regarding the negative impacts of the food system (Connelly and Beckie, 2016).

Each particular response seeks to remedy certain food issues, whether it be environmental, economic, social or a blend, that other AFIs might not have the capacity to address on their own (Levkoe, 2011). For example, community garden initiatives see the importance of building social relationships as one of their main focuses while organic growing is involved primarily in alternative farming practices. Allowing the many AFIs to coexist should not be considered ineffective, but realistic. These steps are needed to begin mobilisation towards challenging the whole conventional food system from the ground up, in turn making a purposeful contribution to food system sustainability in the pursuit of social change (Hassanein, 2003; McClintock, 2014).

Friedmann (1987) explains that theories of social mobilisation come out of three great oppositional movements of the eighteenth century, utopianism, social anarchism, and historical materialism. Each was developed in reaction to the arrangements of social reform – thus social mobilisation is a form of radical practice. For the eighteenth century, such theorists were adamant that life could exist outside the deprivations and repression of bureaucratic domination. Now, it is relevant for problems such as militant overkill, unlimited growth and corporate gigantism (Friedmann, 1987). Their motive to socially act was driven by the idea of emancipatory self-liberalisation, compelled by the notion of removing “those ‘artificial’ barriers that blocked the full development of human potential” (Friedmann, 1987, p. 259). Indeed, AFNs are part of that reorganisation of relationships and structural rearrangement of ‘artificial’ barriers. They aim to establish better connections between the producers, consumers and other stakeholders through food such as farmers’ markets, community supported agriculture and consumer food co-operatives (Lockie, 2009, Clendenning et al., 2016). Dwiartama and Piatti (2016) explain that the networks are considered less structured in that prominence is given to the relationships between actors, rather that the use of an alternative food network as leverage for power relations. Accordingly, AFNs can be defined as “forms of food provisioning with characteristics deemed to be different from, perhaps counteractive to, mainstream models which dominate in developed countries” (Tregear, 2011, p. 419). The key difference is that alternative food networks are formed by stakeholders who are committed to certain values, goals or logic and seek relationships built on notions of trust and quality, with a
collective aim to achieve social justice (Forssell and Lankoski 2015; Dwiartama and Piatti, 2016).

AFNs have often been considered synonymous with ‘local’ food networks that bring up various connotations such as a positive counter to globalisation or even a new ‘elitist’ structure that propels further inequalities (Dwiartama and Piatti, 2016). Furthermore, scholars have been critical of alternative food networks functionality, stating they do not necessarily provide better local economies, nor do they intrinsically motivate sustainability (Forssell and Lankoski 2015; Dwiartama and Piatti, 2016). Although concern has been raised that AFNs do not inherently build a more sustainable food system, they often contain the values of sustainability. According to Forssell and Lankoski (2015), AFNs provide real opportunities to promote sustainable food systems through learning, participation and potentially the ability to insert sustainability considerations into the mainstream understanding of the food system.

The growing collaboration among alternative food initiatives actors and their links to build networks across sectors and scales has contributed to the notion of the food movement (Levkoe and Wakfield, 2014). Food movements have been described as “the most important social forces that could provide a countervailing tide to global integration of the agro-food system” (Hassanein, 2003, p. 80). Recent understanding of social movement theory has identified ideological, organisational and identity-based examples as ways for citizens to socially mobilise (Hayes-Conroy and Martin, 2010). For example, Levkoe and Wakefield (2014) highlighted that social movements theory comprises of analysing the relationship between human action and social change based on an understanding of collective actions, organised through networks. Wakefield (2007) described that concerned individuals, groups and organisations have identified problems of environmentally unsustainable food practices, controlling globalised food industries, and inaccessible healthy, local food options within the conventional food system as motivations for the growing number of diverse people mobilising around food. Some would call this a form of ‘food activism’ whereby people seeks to expose the obscured relationship between food and environmental and human devastation (Wakefield, 2007).^5

^5 Food activism challenges all aspects of the capitalist structure of the conventional food system through people’s discourses and actions to make the food system or parts of it more democratic, sustainable and ethically appropriate – it can be spontaneous or organised (Counihan and Siniscalchi, 2014).
As early as Carson’s 1962 *Silent Spring*\(^6\) debut, people have been calling for change around the unsustainable and detrimental effects of the conventional food system (Morgan, 2009). There are now a large number of food movements that attend to failures or alternative ideals about how a food system should operate such as the Slow Food Movement, the local fair trade movement, the anti-hunger movement and the famous Via Campesina peasant movement (van Campbell, 2004; Patel, 2009; Bommel and Spicer, 2011; Shawki, 2015). Additionally, the local food movement is an effort to connect alternative food initiatives and other food actions together to address not only the various social, economic, environmental problems within one locality, but to reduce the complexity of the industrial food chain by shortening the distance between producer and consumer (Bauermeister, 2016). Term such as ‘locavore’ and ‘foodprint’ were created to identify people who are committed to eating strictly from the local food system often within a certain distance from the city or within a particular foodshed\(^7\) (Metcalf, 2012). The local food movement hopes to increase transparency and accountability as a way to change how people “understand and interact with the multiple facets of our food system” (Bauermeister, 2016, p. 124). The constant struggle by people and communities is inherent in this process of sustained and active transformation of the conventional food system (Wakefield, 2007). Equally, Friedmann (1987) agrees that struggle is essential to endure by local people in order to perform the emancipatory practice of social mobilisation. Friedmann (1987) refers to emancipation as a “non-repressive, life-supporting community in which individual and collective needs are carefully balanced” (p. 271).

The question becomes one of strategy - how can people achieve such goals of lasting emancipation and what mechanisms will be required for success? As the purpose of this thesis is to use food as a way to understand how food system transformation may contribute to social change, a strategic amalgamation between the many differing struggles of AFIs, AFNs and AFMs are argued as an important development for this to occur. Friedmann (1987) pronounces that “[s]trategy is not an abstract, universal set of categories, though it can also be that. Rather, it is a way of proceeding, in actual circumstances, with particular allies, against specific enemies, for particular objectives” (p. 271). As previously mentioned in Chapter 1, although vastly different in many ways, AFIs, AFNs, and AFM's find themselves ‘on the same side’ of

\(^{6}\) *Silent Spring* is a book that exposed the negative effects of the chemical industries careless use of pesticides.

\(^{7}\) A local foodshed is defined by the extent of its bioregion or a fixed radial distance such as 100 or 200 miles (Metcalf, 2012, p. 12).
the alternative food system, activity working against the failures of the conventional one. Furthermore, Friedmann (1987) states that linking up the different points of people’s struggles provides a realisation of the full potential for transformation. Therefore, the incremental and numerous steps that are made by actors who have social mobilised around alternative food activities, are by no means ‘woefully inadequate’. Each is engaged in actual circumstances, creating new pressures that are strengthened by building alliances, recognised to be significantly more effective than the sum of its parts (van Bommel and Spicer, 2011; Gismondi et al., 2016). As Gismondi et al., (2016) states, providing alternative solutions to the current conventional food system can “plant the seeds of real transformative change – change that has structural implications for the whole economy and society” (p. 270). Furthermore, the authors suggest that in order to truly understand the potential for sustainable food system transformation, it will be paramount to multiply and diffuse a number of stakeholder actions out to other sectors of society and up through the various level of the food system itself. By scaling up through the food system and out into other sectors such as transport, waste and water systems, the potential to achieve social change increases.

Friedmann’s (1987) ‘ladder’ of different forms of social mobilisation provides one way of analysing this process of scaling out and up (see Figure 1). Table 2 below explains briefly each level of organisation, but which must be interpreted as working together all at once, rather than in incremental steps whether it be the spontaneous uprising of social mobilisation or the formalised hierarchical organisational procedures. Friedmann (1987) states that every choice may not be present in every location, but the use of different styles of social mobilisation illustrated above will benefit specific and contextualised situations are they emerge.
Figure 1 Friedmann’s integrated ladder of categorised social mobilisation

Table 2 Description of Friedmann’s (1987) integration ladder of categorised social mobilisation (p. 274).

<table>
<thead>
<tr>
<th>Social Mobilisation Category</th>
<th>Description of Friedmann’s Integration Ladder of Categorised Social Mobilisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spontaneous Uprising</td>
<td>May dramatise people’s grievances into unforgettable ways, but their drive and dynamics are impossible to sustain. Popular outbursts have chiefly symbolic or cathartic value. Do no usually grasp the deeper issues involved.</td>
</tr>
<tr>
<td>Local Action Group</td>
<td>May coalesce spontaneously around some public issues, but isolated within the local community they remain largely powerless and ineffective. Can form a nucleus of a wider movement; they constitute the lower-level links in generalised struggle for a new society. Have first-hand knowledge of local situation.</td>
</tr>
<tr>
<td>Networking</td>
<td>Local action groups may be brought together into larger movements. The least formal of these involves networking, a voluntary arrangement with easy conditions of entry and exist – make few demands on its members beyond those of sharing information. From time-to-time may mobilise for larger, combined action.</td>
</tr>
<tr>
<td>Coalition</td>
<td>Formal coalitions for joint undertakings involving either local action groups or formal organisations (or both). Coalitions are possible when objectives are convergent, or as is more generally the case, when separate but parallel objectives can be effectively pursued through a joint effort.</td>
</tr>
<tr>
<td>Formal Organisations</td>
<td>Ability to link local action groups into city-wide, regional, national, and even international movements. Seek to articulate and carry out radical policies. Positive as they acquire legitimate standing in the community and carry political weight. But these gains are purchased as a price. Becomes part of the current establishment.</td>
</tr>
</tbody>
</table>
Summary
This section introduced the theoretical framework underpinning this research project: transformative theory. It explained that in order to address the array of complex and unruly food issues that exist as a result of current food system practices, a complete transformation from the capitalist food regime must occur. Social mobilisation through active stakeholder engagement is essential for the creation of food system transformation to an alternative, sustainable food system in the pursuit of social change.

2.3 Food Issues and Sustainability

Levkoe (2011) urges that a comprehensive understanding of food system issues is required to identify the root cause of food problems and allow for the appropriate solutions to develop. However, tensions, conflict and contradictions undoubtedly exist about what the issues are and about potential solutions (Holt Giménez and Shattuck, 2011; Lamine, 2015). This section will begin by investigating a range of binaries that represent some of the tensions that occur within the food system such as the local/global and rural/urban dichotomies. Subsequently, examples of the different forms of food issues will be explored through the sustainability lens of social, economic and environmental food problems to establish the range of entry points by which food issues may be approached. McClintock (2914) suggests that by accepting that contradictions are inherently part of the food system, will allow stakeholders to become better equipped and more prepared to coordinate actions around the most pressing matters of structural and social changes in the food system. The author states “one of many means to an end rather than an end unto itself” (p. 147).

2.3.1 Tension within Sustainable Food System Transformation

Tensions and competing interests exist within the food system, both conventional and alternative models. These tensions can influence the way that food issues are conceptualised and subsequently, managed. For example, Campbell (2004) notes that “some tensions are based on differences in scale, power, fundamental values, or conflicting stakeholder frames, while others occur because stakeholders with compatible interests have not yet developed a common language and agendas” (p. 341). Perceptions of binaries such as the rural-urban/ nature-society and local/global are often set up in opposition to each other, portraying the notion that each is competing and if one is inherently ‘good’, then the other must be inherently ‘bad’ (Hinrichs, 2003). Table 3 identifies a range of ‘binaries’ in the food system that serve as sources of tensions.
in the agri-food space. However, Hinrich (2003) notes that by framing these attributes in a contrasting manner misrepresents their true potential. Relationships between systems processes such as the local and global food system are dynamic and interrelated as Campbell (2004) explained. Their links must take a holistic and interconnected approach, feeding back into each other to understand the different viewpoints and values that are at play. Recognising when the conflict of interest can be remedied or accepting whether this tension is actually unsolvable for the position that particular stakeholder groups have, is an essential consideration to ensure effort is not wasted on inefficient intervention (Campbell, 2004). To engage in the transformative process, radical actors must learn to live with contradictions (Friedmann, 1987). In this section, examples of some common food system tensions will be explored to highlight how the perception of food issues have been built up and to identify options that can help to overcome the trap of narrowly conceptualising tensions in a binary capacity.

Table 3 Tensions in the food system (Modified by Campbell, 2004, p. 347).

<table>
<thead>
<tr>
<th>Globalisation</th>
<th>Localisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban/rural division</td>
<td>Urban/rural partnership</td>
</tr>
<tr>
<td>Import/export model of food security</td>
<td>Food from own resources</td>
</tr>
<tr>
<td>Intensification</td>
<td>Extensification</td>
</tr>
<tr>
<td>Fast past scale of change</td>
<td>Slow pace scale of change</td>
</tr>
<tr>
<td>Few market players (concentration)</td>
<td>Multiple players per sector</td>
</tr>
<tr>
<td>Costs externalised</td>
<td>Costs internalised</td>
</tr>
<tr>
<td>Rural development</td>
<td>Vibrant rural population</td>
</tr>
<tr>
<td>Monoculture</td>
<td>Biodiversity</td>
</tr>
<tr>
<td>Science replacing labour</td>
<td>Science supporting labour</td>
</tr>
<tr>
<td>Agrochemical</td>
<td>Organic/sustainable farming</td>
</tr>
<tr>
<td>Biotechnology</td>
<td>Indigenous knowledge</td>
</tr>
<tr>
<td>Processed (stored) food</td>
<td>Fresh (perishable) food</td>
</tr>
<tr>
<td>Standardisation</td>
<td>“Difference” and diversity</td>
</tr>
<tr>
<td>Fragmented (diverse) culture</td>
<td>Common food culture</td>
</tr>
<tr>
<td>Creates wants (advertising)</td>
<td>Real wants (learning through culture)</td>
</tr>
<tr>
<td>Fast food</td>
<td>Slow Food</td>
</tr>
<tr>
<td>Top-down controls</td>
<td>Bottom-up controls</td>
</tr>
<tr>
<td>Dependency culture</td>
<td>Self-reliance</td>
</tr>
<tr>
<td>Consumers</td>
<td>Citizens</td>
</tr>
</tbody>
</table>
The rural/urban binary has been identified as a major tension in the food system. It is based on the traditional belief that food issues are for the agricultural and rural domain, rather than urban ones (Pothukuchi and Kaufman, 1999). Likewise, parallels can be drawn between nature/society or human/nature dichotomies, which theorists have critiqued, urging the ‘re-naturing of the city’ (Morgan, 2015). These estranged notions of nature/society divide highlight the apparent lack of understanding by people of our reliance on the ecological structure whereby urbanisation processes are bound by the foundations of a supported physical environment (Morgan, 2015). As early as 1946, Ebenezer Howard advocated the formation of the Garden City, which aimed to put food back within the territory of urban areas to provide both healthier and more economically viable cities (Morgan 2015). However, continued disparity by policy makers deemed urban spaces unsuitable for agricultural practices and food production which often discouraged people to farm within the city. Accordingly, authorities installed zoning codes, taxed farmland within the city and incentivised development which established clear tensions between urbanisation and agriculture within city centres and its suburbs (Vitiello and Brinkley, 2014).

As Sonnino (2009) explains, the above challenges are problematic for several reasons; firstly, it denies cities the necessary space to reintroduce alternative food production back into the places that need it the most as such urban food deserts.8 Secondly; the rural/urban binary has also misled planners and policy-makers by suggesting food issues are a rural problem, rather than an ‘urban distribution’ failure which is important for addressing issues of food access and food insecurity. And thirdly, it has endorsed the view that food policy is not for cities to worry about, therefore delaying cities uptake in addressing issues in the food sector. Nevertheless, the study of food systems has seen increased attention by planners and researcher of urban studies who emphasise the importance of the food system for both a cities function and its inhabitants (Born and Purcell, 2006). The fundamental question remains whether we, as a population, will be able to provide enough good nutritional food to feed ourselves and future generations indefinitely (Fresco, 2009). Also, whether the co-location of the producers of food could provide a number of benefits such as making healthy food more accessible in poor neighbourhoods or reducing both the economic cost and environmental damage associated with long-distance food travel (Morgan, 2009). A more unified narrative is advocated to combine

8 The term ‘food desert’ refers to urban areas where residents live that lack grocery stores or markets that make fresh food available for purchase (Eckert and Shetty, 2012).
city-country interlinkages in order to convey how these spaces are fundamentally linked and not oppositional (Morgan, 2015). Similarly, the rural/urban linkages have somewhat weakened due to growing dependencies on a globalised food system that have taken priority for the conventional food systems capitalist model (Sonnino, 2009).

The local/global binary introduces tension between globalisation and the apparently localised solution that aims to counteract the negative effects of the large-scale, homogenised and industrialised features of the conventional food system (Hinrichs, 2003). It is evident that as food chains have become increasingly globalised, competitive and higher yielding operations, they have also been associated with vulnerable, exploitive and profit orientated methods of producing food (Grant 2011; Booth and Coveney 2015; Lamine 2015; Paci-Green and Berardi 2015). For example, globalised long-distance supply chains can be vulnerable to shocks, disruptions or disasters. The Christchurch earthquakes of 2011 damaged warehouses and stocks of commercial food retail which resulted in residents unable to purchase or acquire basic food items such as bread and milk (Paci-Green and Berardi, 2015). As these long-distance processes rely heavily on external resource such as transportation connectivity to distribute food, the majority of people who are reliant on this form of food supply are significantly more susceptible to losing access to their food source if the globalised food system is interrupted (Paci-Green and Berardi, 2015). This was the case for Christchurch as emergency supplies were slow to deliver foods due to damaged transportation routes. Globalised disruptions like peak oil, a financial crisis or damaged infrastructure from hurricanes or earthquakes can affect the supply of food to cities and its residents (Paci-Green and Berardi, 2015). Thus, a focus on localised food systems has received increasing attention often with an understanding that supporting a ‘local’ food system provides more equitable, resilient, and better quality food which can empower local communities and rekindle relationships that people once had with their food (Hinrichs 2003; Berman 2011; Sadler, et al., 2015; Clendenning, et al., 2016 - emphasis added). However, Born and Purcell (2006) warn both researchers and food activists not to make assumptions that local food systems automatically address food issues. Indeed, ‘the local trap’, was coined to refute the belief that a local scale is inherently good, or that any one scale is necessarily more superior than any other scale of the food system (Born and Purcell, 2006 p. 195). Therefore, it is vital to avoid presumptions regarding the local/global binary hierarchy, and rather understand that different scaled responses to challenge the conventional food system will be required as a holistic and interconnected method to address all levels of the food system (Campbell, 2004).
Aside from the intricate and historically embedded tensions of multiple food issues and perceived binaries that have been demonstrated above, the concept of a sustainable food system adds further layers of complexities to the notion of an alternative food system. Sustainability is now a key component of the agricultural and food system literature (Pierce-Quinonez, 2012). The concept emphasises the linkages between environment, economy and society as the ‘three pillars of sustainability’ (Lamine, 2015). However, as expressed in earlier sections, Hassanein (2003) argued that “sustainability… is understandably a contested concept because it inevitably involves both conflicts over values and uncertainty about outcomes” (p.77). For example, from an economic viewpoint, the food system is about efficiency and providing the cheapest final product there can be (Pierce-Quinonez, 2012). Environmental concerns support sustainable agriculture through ensuring ecological qualities are not affected by the food system such as soil erosion, crop biodiversity, water conservation, disposal of unused food and packaging, transportation relating to carbon emissions and its effects on climate change (Pierce-Quinonez, 2012). Lastly, the third pillar of sustainability – social, underpins the notions of human rights, labour rights and upholding the responsibility of all the characteristics that create a socially sustainable society including a living wage, health and wellbeing, equity and safety for those who use the food system (Pierce-Quinonez, 2012). In other words, every living person whether through growing, harvesting, preparing or eating food, are stakeholder of the food system and are therefore impacted by the state of the conventional food system and the mobilisation towards a more sustainable one (Campbell, 2004; Pierce-Quinonez, 2012).

The difficulty in balancing and integrating each of the three scenarios mentioned above has created considerable tensions in reimagining what a sustainable food system might look like (Hassanein, 2003; Campbell, 2004). Friedmann (1987) explains that it is much easier to engage in the struggle against some perceived wrong than it is to mobilise around struggles for some alternative future. Hence, it is much more difficult to get people to commit to the structural transformation of building a better society by “embarking upon a path of action whose ultimate consequences cannot be foreseen” (Friedmann, 1987, p. 282). Despite uncertainty about the future outcome of a sustainable food system, professional associations that represent food system stakeholders, at least in America, such as the American Dietetic Association, the American Planning Associations and the American Public Health Association have all supported the claim that while missions and visions for the food system may be different, there is some overlap in the desire to support a more sustainable food system (Pierce-Quinonez,
Consequently, the food system is able to bring diverse groups and professions together through an understanding of a common sustainable food future and its ability to interact through various entry points of the food system to pursue social, economic or environmental interests of sustainability. The sustainability lens will be a helpful tool from which to examine various food issues in the next section below. Binaries, tensions, and dichotomies will continue to exist in the food system, but acknowledgement through a better understanding of their wider implications will allow food actors to move past these contradictions and focus on the commitment of reimaging the transformative potential as to what a sustainable food system might be (McClintock, 2014).

2.3.2 Food Issues

Our close relationship with food and its interdependent nature with other sectors of society illustrates the importance of having a comprehensive understanding regarding how the food system impacts environmental, economic and social factors. A variety of debates challenging the root cause for food issues are complicated further by the task of trying to define what a ‘food issue’ actually is. To define food as a single issue would clearly negate the realities of its multifaceted nature (Morgan, 2015). However, framing the food issue is important to establish an understanding of how food is conceptualised and used in society. The extensive ways in which food impacts areas of societal functions take on numerous forms, including culture, politics, and ecology. It is helpful to categorise them through the three pillars of environmental, economic and social considerations as a strategy to organise the various food issues and identify sustainability goals and objectives. Hinrichs (2003) argues that the concept of sustainable food systems provides opportunities to move between theory and practice in a reflective manner, which allows society to envisage and create more sustainable ways of transforming the conventional food system. The importance of linking theory to practice will be demonstrated through providing examples of environmental, economic and social food issues that occur in society and using them to classify how to sustainable food system transportation could be achieved.

Environmental Food Issues

The environment is the foundational building blocks for maintaining a functional food system (Pierce-Quinonez, 2012). However, the conventional food system continues to externalise the costs of its effects on the environment, escalating environmental food issues including water
scarcity, decreased biodiversity, land and soil degradation and increasing climate change conditions (O’Kane and Wijaya, 2015). One’s ability to make a meaningful difference to the interconnected, unwieldy and often global effects of environmental food issues can be frustrating from a local level perspective (Metcalf, 2012). For instance, the globalised conventional food system encourages food products that travel great distances to reach its final destination (Sundkvist et al., 2005). It is estimated that each year 200 billion metric tonnes of food are transported each year globally (Konieczny, 2013). This requires the use of finite fossil fuel resources and consumes additional energy to transport products around the world. It has also been proposed that up to 30 percent of the world’s energy needs are used for food production (Azapagic, 2015). Below a Table 4 provides examples of environmental impacts that are cause as a result of the unsustainable practices of the current conventional food system.

**Table 4 Explanation and implication for environmental food issues**

<table>
<thead>
<tr>
<th>Environmental Food Issue</th>
<th>Explanation and Implication</th>
<th>Reference</th>
</tr>
</thead>
</table>
| Segmented nature of global food production | **Explanation:** When food resources are taken out of the environment that they are produced in, the relationship between different ecosystems components risk the inability to function properly.  
**Implication:** Habitats have been lost and entire breeds of animals and wildlife have vanished as a result of creating specialised agriculture, further intensified by the promotion of mono-cropping and interference by GMOs. | (Sundkvist et al., 2005). |
| Intensification of agricultural farming | **Explanation:** Agricultural operations increase the inputs into the environment through the use of added fossil fuels, inorganic fertilisers, pesticides and additional fodder.  
**Implication:** Intensified eutrophication from overuse and outflow of phosphorus and nitrogen from agricultural practices has led to the pollution of rivers, streams, suffocating the oxygen in the water which create algal bloom and kill marine life in lakes and rivers. | (Sundkvist et al., 2005). |

As the public become increasingly aware of the mounting number of environmental food issues, it will reach a level of concern whereby people decide to take action surround a particular issue that they hope to resolve (Metcalf, 2012). As a result of acquiring the knowledge by learning
about environmental problems, this evokes a sense of shared responsibility. Both mainstream media attention and the influence of others who advocate more sustainable and environmentally conscious food practices helps to defuse messages about the impact of the conventional food system on the environment (Metcalf, 2012). By taking action, there is no way to shift the denial that these problems are happening to another generation. In a speech by President Barack Obama in 2009, he stated the ‘age of responsibility’ is here and “we must critically examine the extent of individual and institutional denial that enables us to maintain the energy intensive material consumption patterns that dominate our daily lives” (Metcalf, 2012, p. 16). The tipping point that signifies the build-up of support around environmental food issue is seen at an example for how and why people decide to socially mobilise around environmental food issues (Metcalf, 2012). The idea that localised or individual choice can make a difference is a powerful and emancipatory feeling. The common phrase “think globally, act locally” provides the encouragement needed to being one’s individual decision to make a conscious effort through daily food choices (Metcalf, 2012, p. 20).

**Economic Food Issues**

Shortfalls of the conventional food system have led to numerous economic ‘food issues’, instigated by ‘big business’ that are driven by the large-scale, mono-cropping, profit orientated and market dominated characteristics of the conventional food system (Hinrichs, 2003; Campbell, 2004). As food is primarily governed by the markets under corporate control, food is considered a growth-orientated industry (Berman, 2011; Paci-Green and Berardi, 2015). Its principle drivers of increased revenue and the expansion of agro-food trade do little to uphold any moral obligations to family business owners or individual’s jobs (Clendenning et al., 2016). The label ‘Big Food’ portrays this contentious issues as corporate greed produces unjust, outsized and disempowerment to people (Booth and Coveney 2015). Table 5 below provide examples of economic food issues.
### Table 5 Explanation and implications for economic food issues

<table>
<thead>
<tr>
<th>Economic Food Issue</th>
<th>Explanation and Implication</th>
<th>Reference</th>
</tr>
</thead>
</table>
| Commodification of food                                | **Explanation:** Is a market-led progression that is highly profitable through fixing food as a tradable commodity.  
**Implication:** Helped to establish the invisibility of food as a problem especially in an urban setting. Concern around the apparent disassociation that individuals have with where their food actually comes from. | (Sonnino, 2009; Booth and Coveney, 2015). |
| Small number of multinational retailers control the majority of the food system. | **Explanation:** Corporate companies such as supermarkets, company brands and fast food outlet stores hold considerable power and influence over the way the food system operates.  
**Implication:** People have become excluded from every stage of the food chain other than consumption. | (Booth and Coveney, 2015). |
| Governments in the global north provide uneven subsidies and trade policy relating to food. | **Explanation:** Aimed to ‘prop up’ aspects of food production.  
**Implications:** By default, activities by multinational companies have the potential to force out local growers, which can compromise the local market economy and hinder the livelihood of residents by affecting local employment and the operation of small-scale, diverse farming businesses. | (Campbell, 2004; Clendenning et al., 2016). |
| Traditional intergeneration succession process is drastically shifting | **Explanation:** As some multigenerational farmers are moving on to pursue careers other than farming, first generational farmers are inspired by the opportunities of the local food system.  
**Implication:** Without the transfer of land between family members, the likelihood of land being sold to nonfarm interests increases. Consequently, first generation farmers do not have the capital equity to purchase established and large packets of land to grow a substantial amount of food. | (Clark et al., 2012). |

The promotion of local food systems has been acknowledged as important activities to pursue in light of community and economic development benefits and to addressing environmental
issues such as land preservation, environmental conservation and urban greening (Kremer et al., 2012). A local food system can be defined as “a collaborative effort to build more locally based, self-reliance food economies – one in which sustainable food production, processing, distribution and consumption is integrated to enhance the economic, environmental and social health of a particular place” (Kremer et al., 2012, p. 148). However, as mentioned in section 2.2.2, state governments neoliberal mechanisms to encourage a capitalist society has been legitimised by the construction of successive corporate food regimes and characterised of the conventional food system (Clendenning et al., 2016). In order to discontinue the negative effects, caused by the structures of unjust and unsustainable economic food practices, a transformation of the current model must take place.

**Social Food Issues**

For the purpose of informing this study, a focus on the social issues that exist within cities will be address primarily with relation to the issues of urban society, as Sonnino (2009) states “Nowhere is the current food crisis more visible that in cities” (p. 426). Pressure from a growing urban population, and subsequently expanding urban areas, vulnerable oil prices, climate change and competing for land and water resources add to the serious and complex nature of social food issues that occur within the food system (Grant, 2011; Clendenning et al., 2016). For example, the availability of food is considered as a basic human right – stated in 1948 under the UN Declaration of Human Rights (Fresco, 2009; Morgan, 2015). However, the eradication of hunger as a food issue is no longer at the top of the ethical agenda (Morgan, 2015). Much of the literature talks of the ‘rights’ based approach. This compels political, economic and social structures to question how to establish a more ‘just urban food system’, aimed at redirecting solutions away from further embedding the stigma of charity or welfare (Morgan, 2015; O’Kane and Wijaya, 2015; Clendenning et al., 2016). Table 6 below provide examples of social food issues.
Table 6 Explanation and implication of social food issues

<table>
<thead>
<tr>
<th>Social Food Issue</th>
<th>Explanation and Implication</th>
<th>Reference</th>
</tr>
</thead>
</table>
| Unjust food system                             | **Explanation:** Food justice relates more specifically to the disproportionate inequalities and injustices that continue to be served to marginalised groups of certain ethnic, race, gender, class and socio-economic status.  
**Implication:** The construction of a globalised food system, coupled with the impacts of people’s removal from land, the use of pesticide and genetically modified food products, is one example of the cause for uprise by peasant farmers and low-income communities who have been damaged by the corporate food industries. Specifically, the La Via Campesina food sovereignty movement has received unprecedented support throughout 70 countries and 150 local and national organisations, representing the 200 million farmers who have had their labour exploited or lands removed as a result of the activities of the dominating conventional food system. | (Holt Giménez and Shattuck, 2011; Alkon, 2012; Clendenning et al., 2016) |
| Urban Poor and food insecurity\(^9\) and ‘food deserts’\(^10\) | **Explanation:** Escalated in part due to rapid urbanisation. Only a small amount of the population now farm, and with little room in cities to do so, more citizens are reliant of spending their income on buying food, which adds to the reliance people have on the current constraints of the conventional food system.  
**Implication:** World hunger grew in 2007 by 75 million people and which currently sits at a total of two billion under-nourished global citizens. ‘Higher poverty’ households are increasingly subject to exposures of market pressures that often interrelate with other factors such as unemployment, lack of transportation | (Morgan and Sonnino, 2010; Paci-Green and Berardi, 2015; Clendenning et al. 2016). |

\(^9\) Food security is defined as such a time “when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and the food preference for an active and healthy life” (Morgan, 2015, p. 1383).

\(^10\) ‘Food desert’ is used to explain areas in the city which do not provide enough opportunities for its residences to purchase fresh and healthy food. Rather the readily available junk food is often more affordable and accessible to residents in these areas (Eckert and Shetty, 2012; Clendenning et al. 2016).
options, civil unrest, or natural disasters. For example, one study found that if 30 percent or more of a household wage was used for rent, then that family is more likely to be at risk of food insecurity – as there is less available income to spend on food.

| Food sovereignty | **Explanation:** An emphasis on sovereignty and culturally appropriate food systems are highlighted as a pivotal part of traditional food practices (Mahinga Kai), as recognised by Māori – the indigenous people of New Zealand. Many Māori customs are built around the “gathering, planting, harvesting, cooking, preservation and storage of food”, communally distributed throughout their tribes and is essential for greetings and other celebratory formalities.  

**Implication:** Like many indigenous cultural histories, Māori are struggling to retain their ability to protect their local food sources and knowledge of their food system and cultural practices. In addition, due to colonisation and urbanisation, the loss of land, clearing from farmland, and contamination from industries in traditional gathering sites has left many gathering sites inappropriate for current and future resource use.  

(McKerchar, 2014; Hutchings, 2015). |

Marginalised groups believe that social, rather than individual (consumer) alliances will best address the joint discrimination experienced by the capitalist conventional food system (Holt Giménez and Shattuck, 2011). Food sovereignty organisations seek to resolve the exploitation of labour and restore important cultural practices back into society (Holt Giménez and Shattuck, 2011; Hutchings, 2015). Food requires an understanding of the larger political and structural constraints associated with food issues (Clendenning *et al.*, 2016). As people and communities become conscientious and identify similarities of shared inequalities, and are lacking a sense of community around, development of a minority struggle, overlaid with a sense of community can stimulate the agency needed to change the system to become more equitable (Metcalf, 2012). Therefore, critique of society must come *from below* by individuals and their communities order to change the situation that social food issues are creating for citizen. Those structural changes must come from radically rethinking how people interact with the food system and will entail complete transformation of the current conventional food system model.
Summary

The various tensions and contradiction which exist in the food system provide awareness for why food issues are conceptualised in particular ways and what motivates stakeholders to socially mobilise around certain food issues. This section has argued that in order to move towards visions of an alternative food system, ‘unbinding’ the binary concepts and looking at the complexities and interconnected nature of foods social, economic and environmental issues in a more integrated and holistic manner, is essential for overcoming the difficult consequences that even initiatives with the best intentions present. It is important to realise that an alternative food system must go through the same rigorous scrutiny and is not immune to its own issues and inequalities either. Transformation requires a whole new understanding of how an alternative food system might function, and comprehension of the multitude of issues that aim to be addressed in the process, as discussed in this section. The next section provides the strategies that stakeholders have undertaken to help the process of achieving social mobilisation in order to create a sustainable food system.

2.4 Strategies for Sustainable Food System Transformation

Transformation of the conventional food system requires flexible mechanisms that everyday people can easily understand and engage with (Friedmann, 1987; Levkoe, 2011). As explained in the previous section, the different variables that exist in the food system must be able to be addressed in the appropriate manner. This involves the harnessing of social mobilisation and a holistic understanding of the food problems at hand. Both formal and informal tools are currently being devised and executed, which have been argued to serve different purposes, but ultimately are ‘on the same side’. These tools must coordinate as part of social mobilisation towards efforts of radical structural change to an alternative food system.

This section will make reference to Friedmann’s (1987) transformative theory explaining strategy and an investigation of the types of alternative food mechanisms that can help with the process of food system transformation. Transformative theory concludes that ‘suggestion of a “best” strategy for overcoming the resistance’ of an established power is essential in the context of creating sustainable food system transformation – although explored in this section, Chapter 7 will provide the strategic recommendations for Dunedin’s potential for sustainable food system transformation at the end of this thesis paper.
2.4.1 Informal Transformative Food Mechanisms

Throughout this research, many informal alternative food initiatives, networks and movements have been alluded to, such as urban agriculture, community gardens, community supported agriculture and farmers’ markets. Yet, how do each of these activities contribute to the accomplishment of transforming the conventional food system to an alternative model of sustainability? Previous research suggests that social movements require a multitude of strategies to work towards accomplishing its goals. However, it is unclear exactly how all of the strategies are brought to work together as opposed to against each other (van Bommel and Spicer, 2011). Friedmann (1987) proposes six suggestions for social mobilisation by those who are engaged in the struggle from below – citizens that have chosen to participate in an alternative and socially organised group – can use to build a foundation through which to expand outwards into more global territories. The author states; “Although these struggles must eventually be carried beyond the confines of local communities into the world, the strength and vitality of the movement as a whole are drawn from its myriad struggles at the base” (1987, p. 396). Accordingly, the idea of necessarily scaling sustainable food initiatives up and out has been proposed by Connelly and Beckie (2016), who argue that large retail outlets are capitalising on the demand of consumers for food that is, for example, ‘local’. This quick response by the reformist food regime model to maintain control of the conventional food system threatens the transformative process of the alternative food stakeholder to be able to reimagine what the operation of a completely sustainable food system might look like. Strengthen efforts of scale up and out requires a durable foundation which Friedmann (1987) suggests will require six concrete tasks to the radical planner. As all people actively engaged in the struggle for transformation of the conventional food system are considered radical planners, these points are of help to its cause;

- Selective delinking, collective self-empowerment and self-reliance
- Dialogue, mutual learning
- Cross-linking, networking, building coalitions
- Thinking without frontiers
- Meaning, purpose, practical vision
- Strategic action

A stance in opposition to the status quo is often perceived as an act of civil disobedience or plot to obscure some decision or activity. However, the people’s struggle has begun to take a more
organised approach, whereby ‘informal’ relations have developed around visions, projects and goals (Wakefield, 2007).

Informal mechanisms for action are primarily community lead. For example, the concept of urban agriculture11 has gained in popularity with attempts to ‘re-embed’ the food system back into the urban environment by concerned citizens (Morgan, 2015). The motivation by actors to take up urban agriculture includes personal food consumption. This motivation then drives initiative such as personal/ community gardens, commercial purposes, for beehives on the rooftops for restaurants, nurturing social capital through food education programs or support more generally for the construction of an AFN (Morgan, 2015).

The concept of urban agriculture reflects a number of Friedmann’s (1987) points of strategic advice. Firstly, he argues that ‘selective delinking’ from the conventional capitalist system must be met with both ‘self-reliance and collective-empowerment’ by making conscious decisions about where you put your time, energy, and skills. By cooperating with like-minded people, groups are able to share space, skills and save on time, which are elements that have also been fostered through other alternative food initiatives or networks such as community gardens and farmers’ markets. These activities work as mechanisms to facilitate experts. For example, to teach communities about food practices, fostering civic engagement while providing the inclusive spaces where people can share their time to actively partake in alternative food activities and social learning (McClintock, 2014; O’Kane and Wijaya, 2015; Dwiartama and Piatti, 2016). ‘Dialogue and mutual learning’, Friedmann (1987) explain are based on trust and the relationships that are nurtured through communication. Through meaningful dialogue, all actors gain understanding about other’s perspectives. This creates synergies around knowledge which allow for mutual learning and mutual benefits between parties (Friedmann, 1987; Campbell, 2004). This process is one area that may be suited to more formal organisations and coalitions explored further in section 2.4.2.

The examples indicated, and many other initiatives such as local food networks also enable Friedmann’s (1987) emphasis on ‘cross-linking, networking, and building coalitions’ in

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11 Urban agriculture encourages a variety of small incremental modifications to the cities landscape and its vacant spaces through activities such as farmers’ markets and community gardens, assisting with greater access to fresh and healthy food for its residents (Holt Giménez and Shattuck, 2011).
informal ways which together form political coalitions that ultimately aim to dominate the state and corporate economy.\textsuperscript{12} Although often criticised as being weakened due to a lack of clear or succinct agreement on goals or beliefs, Wakefield (2007) suggests that many informal arrangements may actually serve the function they were intended for. Thus, further contributing to a more diverse and dynamic network that is grounded in the contextualised situations of specific cultural and political settings. An example was determined in the importance of relationships building at farmers’ markets. A studies found that farmer’s markets can encourage interpersonal relationships such as trust, reciprocity, and feelings of appreciation, built on a collaborative understanding of shared values about good quality, local food (O’Kane and Wijaya, 2015). Likewise, Dwiartama and Piatti (2016) criticised the notion that a mainstream alternative food system should consist of one coordinated and agreed upon idea of how to achieve transformative action. The authors instead stressed that food security is never actually achieved – “it is always in the making”, which suggests that approaches to dealing with this food issue, are always changing (2016, p. 158). Addressing the multifaceted food issues as described in section 2.3 requires the reimagining of how the complexity of food and food issues should be addressed. Transformative practices will indefinitely occur through multiple avenues to create an alternative, adaptable and more sustainable food system (Brinkley, 2013).

This leads to one more of Friedmann’s (1987) tasks for transformation – ‘thinking without frontiers’, which aims to question set boundaries that are constructed in society, such as knowledge about production. Although practice must be guided by the appropriate theory, if divorced, both become meaningless (Friedmann, 1987). Guerrilla gardening is an example of both an initiative and mechanism that moves beyond the ideas of theory and put into practice alternative ways of beautifying neighbourhoods and increasing biodiversity in the city (Adams, 2015). Crane (2013) explains guerrilla gardening is a form of self-determination, and an expression of using non-traditional methods which illustrate how sustainable communities are created, rather than planned or managed (Crane, 2013). The concept is often portrayed as illegal, as actors aim to change urban landscapes through planting seeds or trees without permission from the authorities (Adam, 2015). However, this small-scale act of individual expression has the potential to move beyond the form of more formal structures such as participatory planning to embrace the grassroots initiatives by actors to produce new, open and creative spaces which reflect personal interests for greater sustainability within the local food

\textsuperscript{12} Local food networks are a reflection of common concerns by stakeholders who seek to take back control of the growing, processing, distribution and sale of foods (Sadler et al., 2015).
system (Crane, 2013). Friedmann (1987) states that when people engage in trying to achieve set purposes, “you suddenly discover a firm criterion that helps you to interpret the world” (p. 397). This point is also central to the idea of creating ‘meaning, purpose, and practical vision’ described as Friedmann’s next task for supporting transformative action.

To elaborate, the task of ‘meaning, purpose, and practical vision’ refers to countering the badly fragmented aspects of daily life experiences that make it difficult to cohesively pull together one’s understanding of the meaning of life (Friedmann, 1987). However, the assumption that our lives are purposeful and require drivers to strive for set objectives and goals are understood through the idea of a defined problem (Friedmann, 1987). The potential to bring diverse groups together for the purpose of social change is created when actors are able to understand both their own situation and to correctly recognise efficient devices for pursuing a realistic vision. One significant and well-developed vision that has been suggested in part to instigating the idea of an alternative food system is the organics movement (Metcalf, 2012). The vision of the organics movement has become a thriving success due to its principles of more sustainable, safer product, that has greater levels of nutritional value (Park, 2011). Guthman (2003) describes its ‘practical vision’ as ‘ethical eating’, which reflect other initiatives such as vegetarianism, Fair Trade and farmer-consumer arrangements. In addition, organic labelling has been established as a device to install a strict set of legal standards which must be met during the farming and production of organic food (Zikeli et al., 2014). The purpose of organic food is to consider a holistic approach that involves the fertility of soil, the reduction of inputs and grown at a local or regional scale (Zikeli et al., 2014). Organic food is free from genetically modified organisms, pesticides, artificial fertilisers and insecticides and food is perceived to be healthier because of what it does not include, rather than what it does (Henryks, 2015). Friedmann (1987) states “the definition of a problem, the search for an appropriate strategy, and a clear grasp of the values to be realised in practice” are what pulls food actors out of their state of passive compliance and into social mobilisation for a particular cause (p. 399).

Lastly, ‘strategic action’ itself completes Friedmann’s (1987) final task for radical planners to consider in pursuit of radical transformation of the conventional food system. At this point, the informal mechanisms may be strengthened by support from formal food mechanisms which have been devised through municipal, policy or scientific processes often in response to the informal activities which has occurred by community social mobilisation (Patel, 2009).
2.4.2 Formal Transformative Food Mechanisms

As previously mentioned, traditionally food is dealt with through zoning and planning that effectively regulated food production out of cities through plans and policy strategies (Brinkley, 2013). It is only recently that this has changed; Pothkuchi and Kaufman (2000) highlighted the lack of attention that food had received from formal planning practice, research and education. Formalised planning mechanisms often hinder rather than facilitate informal food mechanisms that attempt to reintroduce food planning back into the city (Brinkley, 2013). To some, food planners are those professionals who work to integrate food policy and strategic action into mainstream planning agendas, while more broadly speaking, the ‘food planning community’ is “anyone who is working in, or engaged with, the food system with the aim of rendering it more sustainable with respect to social, economic and ecological effects” (Morgan, 2009, p. 342). Brinkley (2013) argues that many planners now advocate for the strengthening of ‘bottom-up’, community-driven programmes such as ‘food hubs’ that provide physical spaces for local growers to directly connect with retailers. Accordingly, the formal mechanisms described below are considered strategies for all stakeholders who are socially mobilising against the negative effects of the conventional food system. The aim for greater transformation for food system sustainability is so that it can be installed as the dominant food system on a macro scale as well as at the micro level, localised communities.

**Food Systems Planning and Food Policy Councils**

Food systems planning aims to manage the complete life-cycle of food from the management of natural resources, agriculture, crops, right through to packaging, home consumption, restaurants, waste and reuse (Freedgood et al., 2011). As the food system is complexly interrelated, it is important to encapsulate the entirety of how the food system is currently managed in order to consider the long-term creation of sustainability throughout all levels and its many processes. In addition, food system planning seeks to facilitate the various stakeholder groups and actors involved in food growing, production, processing, distribution, consumption and disposal as a means to establish holistic and sustainable food practices (Freedgood et al., 2011). To do this, planners use a range of mechanisms to engage with the variety of participants such as residents, civic officials, businesses, farmers and other planning professionals all working at different levels – the individual, local, regional, national or international food involvement (Freedgood et al., 2011). For example, food policy councils are an institutional form of engagement between local governments and civil society (Morgan, 2015). Their function is to recognise, monitor and address the large variety of food related problems which
exist in the city (Hassanein, 2003). They do this by seeking to introduce the concept of food democracy and food citizenship through formalised and organised appeals to support community food initiatives, undertake food system assessments, to repair fragmented relationships or foster new ones (Hassanein, 2003). In addition, they advocate to reinforce policy that supports greater food democracy by linking food to local government policy (Morgan, 2015).

Democracy has been established as an essential part of transformation towards an alternative food system that delivers a more sustainable food system for social, economic and environmental domains. However, Morgan (2013) warns that recognition of food policy by local governments does not always materialise into action and tensions around controversial food policy require crucial public support. Furthermore, Pothkuchi and Kaufman (1999) state that food policy councils are often “project orientated, resource poor and depend on charismatic personalities or visibility, and [are] vulnerable to political winds” (p. 220). Although food policy councils have the potential to deliver coordinated and targeted action to addressing food issues at the local level, their lack of resources and reliance on individuals driving the process severely limit its capacity to produce a comprehensive understanding of the local food system and its needs (Pothkuchi and Kaufman, 1999). Therefore, food policy councils cannot act alone and must reach out to community groups, other professionals and the business sectors who can assist with different areas of socially mobilising to transform the conventional food system.

**Food Strategies**

Food strategies are another formal mechanism that offers an “official plan or roadmap that helps city governments integrate a full spectrum of urban food system issues within a single policy framework” and are embedded with goals of sustainability (Mansfield and Mendes, 2012, p. 38). The wide variety of actors, interests and levels of power which exist in the struggle for an alternative food system requires the negotiation of physical spaces, people and their values (Barthel, 2013). The strategies can provide legitimate weight to decision makers by drafting real advice and identifying gaps regarding current shortfalls of the conventional food system (Morgan, 2015). Therefore, each food strategy has its own unique goals an history which influence its evolution and success, most commonly from a bottom-up, or top-down process (Morgan, 2009). The London Food Strategy is a well-known example of how a major city has attempted to take a holistic view to addressing the diversity of food issues and implement activities specific to its situation, location and the multitude of tensions. It is also trying to
prioritise and balance the concerns of health, economy, environment, culture and food security for its citizens (Reynolds, 2009). Because food strategies must come to an agreement on the goals and methods for achieving particular outcomes, some views will be excluded, while others advanced which can cause tension and conflict during the development and execution of the food strategy (Barthel, 2013). Inequalities in the way that different stakeholder groups are able to engage with agenda setting or having their interests heard is impacted by the extent of resourcing, knowledge and political support that is available to particular people in society. Food strategies have been criticised for doing little to address the underlying structural cause for important food issues such as hunger and poverty, nor challenging the supermarket powers that remain firmly functional within the corporate capitalist framework (Morgan, 2015). However, this research argues that various AFIs, AFNs, and AFMs that seek to create an alternative food system require tools and strategic collaboration between a range of mechanisms to meet a variety of needs if the ability to socially mobilise and transform the conventional food system is to succeed.

**Food Charters**

A food charter is a “statement of aims which bring together businesses, practitioners and other bodies involved or interested in sustainable food systems” (Hardman and Larkham, 2014, p. 400). This formalised food mechanism brings diverse groups of people together to establish a set of common agendas, similar to food strategies and even food policy councils. However, a food charter specifically sets out the principles by which the actors should adhere (Hardman and Larkham, 2014). For example, Toronto, along with its food policy council and Toronto Food Strategy, has developed one of the first city food charters. It seeks to promote food security among other social, economic and environmental concerns through commitments to engage with particular actions in pursuit of outcomes some of which aim to relieve hunger by ensuring that all people have access to healthy and nutritious food to eat (Benham, 1998). Likewise, the London Food Strategy which was implemented in 2006, established the *Sustainable Food Cities Network*; an extensive food programme which sought to encourage over 50 towns and cities to develop a sustainable food program (Morgan, 2015). One condition to becoming a member and agreeing to partake in the programme, was to sign and follow the principles of the sustainable food charter (Morgan, 2015). The principals of this particular charter read: “health and wellbeing for all, environmental sustainability, local economic prosperity, resilient communities and fairness in the food chain” (Morgan, 2015, p. 1389).
Although aspirational, charters aim to provide a vision for re-imagining what a sustainable and alternative food system could be, and acknowledging this visionary step is essential as a precondition for the potential to transform the food system (Morgan, 2015). Sadler et al., (2015) state, however, that often groups can become narrowly focused on implementing the food charter, without looking to the wider applications of its purpose. Thus, a food charter is one of a range of mechanisms that can be used to socially mobilise people around sustainable food system transformation. Nevertheless, it is not practical to rely on this or any one approach for engagement with the complex and interdisciplinary factors that exist in the food system.

2.5 Conclusion

The chapter has argued that the complex and multifaceted issues that result from the conventional food system can only be adequately addressed through radically transforming the current structures of the capitalist food system model. As early as 1870 this model began to construct an industrialised, globalised and commodified food system, distancing producers from consumers and contributing to greater social and environmental injustice on a global scale. Transformative theory provides a way to understand the process of change and provides a series of complex statements and tasks for radical planners to consider in their collective struggle towards social mobilisation. A strategy to enable both formal and informal food action is strengthened through the linking up of different food activities that are also able to exist as different categories of social mobilisation practice. The different levels of social organisation must work in unison with both incremental steps and radical structural change working simultaneously. This allows the full potential of radical food system transformation to build an alternative food system that is socially, economically and environmentally sustainable. Chapter 3 provide the methodological approaches undertaken to conduct this research. Chapter 4 will then introduce the case study of Dunedin and identify key players and stakeholders who are actively involved in addressing food issues in the city, drawing on their motivations and values to understand why they have socially mobilised towards transformation of the conventional food system.
Chapter 3: Organisational Approach to Research

- *Methodology*

*The world we live in is nevertheless, a world we ourselves have made, and because we are its makers, it lies within our collective powers to transform it.*

- John Friedmann (1987, p.353)

### 3.1 Introduction

This chapter will outline the methodology that was adopted to complete the research aim and supporting focus questions. A description as to how the research was approached will first be provided with an explanation of how Friedmann’s (1987) transformative theory was used to inform the theoretical framework and underpin this thesis. The methods included a single qualitative case study analysis which investigated a variety of actors as part of larger food stakeholder groups in Dunedin. They were all interested in or actively responding to a range of different food issues as a means for social change through the transformation of the conventional food system. The research design was carried out through semi-structured interviews, an investigation of policy documents relating to food in Dunedin and a comprehensive literature review exploring current debates and knowledge surrounding social mobilisation towards the transformation of the conventional food system. Ethical approval was obtained in order to undertake the research from the University of Otago. A copy of the information sheet and participant consent form is provided in Appendix A. The final two sections’ will discuss the ethical considerations and limitations of the research. Overall the chapter will provide a rationale for the methodology and approach taken for this research.

### 3.2 Research Approach

This section will outline the approach taken during this research project. The research is considered as exploratory research in that it “aims to discover what participants think is important about the research topic” (Matthews and Ross, 2010, p. 222). In particular, the central rationale for interpreting this research was informed by Friedmann’s (1987) theoretical framework of transformative theory; as it provides an understanding about how to carry out the transformative process of undertaking structural change to the conventional food system. The process includes a guide that can be applied towards achieving a radically alternative model of
a sustainable food system. As the quote above highlights, we have the collective means to change the adverse effects that are produced by the conventional food system. The research took a qualitative approach to ensure that actors values, beliefs and vision for Dunedin’s food system were appropriately captured and contextually examined. A single case study approach was used during the research that looked at multiple stakeholders that were working to change the food system in Dunedin City. The point was not to be extensive in this investigation by engaging with every actor who is involved in Dunedin’s food system, but rather a wider representation of those food actors who are contributing their efforts towards sustainable food system transformation. Table 7 below reiterates the research aim and focus questions provided to inform the research.

Table 7 Research aim and focus questions provided to guide the research

<table>
<thead>
<tr>
<th>Aim</th>
<th>To explore the ways that stakeholder groups have socially mobilised to address food issues in the Dunedin context, to understand the potential for sustainable food system transformation and promotion of social change.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus Question 1</td>
<td>Who are the key players involved in addressing food issues in Dunedin, what has motivated their engagement and what form of action did they take to transform current food practice in the City?</td>
</tr>
<tr>
<td>Focus Question 2</td>
<td>How/why have relationship or partnership arrangements formed between different stakeholder groups in an effort to socially mobilise around food for the creation of a more sustainable food system in Dunedin?</td>
</tr>
<tr>
<td>Focus Question 3</td>
<td>What barriers and challenges have developed in relation to stakeholder’s inability to effectively mobilise towards transformation of the conventional food system?</td>
</tr>
</tbody>
</table>

3.2.1 Theoretical Underpinning

Friedmann’s (1987) ‘transformative theory’ was used to inform the research as it provides an understanding for how transformative processes can radically change society. Radical planning focuses on challenging and changing the deep, structural constraints imposed by the capitalist society through encouraging citizens to end their passive outlook on life and socially mobilise around the importance of emancipation and the redistribution of people’s rights (Holt Giménez and Shattuck, 2011). Radical transformation has been argued as “the great oppositional movement [that] seeks to reclaim what [industrial] capitalism has taken away”; the ability or desire for people to meaningfully engage in the pursuit of both their collective and own self-interests (Friedmann, 1987, p. 387). Furthermore, the theory helped this research to organise the forms of social mobilisation that were occurring within Dunedin’s food system into
categories of particular types of responses depending on their style of engagement. For example, spontaneous uprising, local action group, networks, coalition, and formal organisation were the five groups that illustrate different means of social mobilisation. The research argues that each category is interlinked and should work in unison with response to different food situations, rather than as incremental and isolated steps of participation. Only then will the potential for the transformative process towards the goal of social change be recognised.

In relation to food issues and the structural constraints, radical transformation has the ability to coordinate food actors to socially mobilise towards generating an alternative food narrative which challenges the negative impacts of the industrialised, conventional food system (Levkoe, 2011). To examine the level of social change, the thesis analyses how stakeholder groups are reforming current food practices that continue to work within a neoliberal capitalist model, or aim to radically transform societies understanding about what a sustainable food system should look like and how it should be achieved (Holt Giménez and Shattuck, 2011). As clarified in Chapter 2, reform has been acknowledged to respond to the neoliberal model of the conventional food system by making small adjustments to satisfy the public needs in order to maintain the dominant functioning of the corporate food regime (Holt Giménez and Shattuck, 2011). Radical transformation calls for a complete change of the current food systems operation, most prominently through the pressure provided by the collective force of alternative food practices known as the food movement. It involves a shift in power and control away from corporate interests towards people as both producers and consumers. An alternative food system demands greater rights to food and food justice for all citizens, especially those marginalised and oppressed groups that the conventional food system fail to address. Reform is not treated as obstructive or ineffective in this transformative process; rather it plays a role in making small changes in preparation for the larger structural change necessary. Friedmann (1987) states “rather than destroy the current system, it gradually questions and undermines the reality on which it is built. This may prove a more effective strategy in the long run” (p. 403). As was outlined in Chapter 2, Friedmann (1987) defines transformative planning as a group of complex statements about the world that seek structural transformation of a system by:
• confronting structural problems around capitalism at a global scale
• providing a critical interpretation of existing realities and relationships which reproduce problems within the system
• predicting probable future outcomes of the issue in absence of the transformative struggle
• offering more desirable outcomes, achieved through emancipatory practices
• proposing the ‘best’ strategic approach for overcoming entrenched powers to obtain goals

In the context of food, the points above are used throughout this thesis in the relevant chapters to demonstrates how radical transformation works to implement structural change, challenging the well-constructed conventional food systems by dismantling corporate agri-food monopolies and demanding food sovereignty and greater citizen control (Holt Giménez and Shattuck 2011). Thus, the research aims to determine how stakeholders come together through social mobilisation to address problems in the conventional food system. A qualitative approach is used to consider how interested stakeholder groups have valued food, defined food issues and are engaged in the active struggle to address particular shortfalls of the conventional food system. Identifying areas of convergence and divergence around specific food issues will assist in determining the potential for stakeholders to coordinate for food system transformation and greater social change.

3.2.2 Qualitative Case Study Approach

The research took a qualitative case study approach of Dunedin City, as this method was able to accommodate and shed light on the many experiences, feelings, opinions and beliefs that stakeholders have expressed towards the conventional and a more sustainable food system (Matthews and Ross, 2010). As a single case study, the research was also able to provide a holistic and detailed account of stakeholders’ engagement with food issues within one particular location, including how each actor conceptualised food issues and how they responded to those issues (Bryman, 2012). Dunedin as a single unit was explored as a particular example that provides the opportunity to understand the wider applications of its contribution to the global idea of food system transformation. The location of Dunedin was chosen for practical reasons as this is the place where the researcher both studies and lives. It, therefore, reduced the cost of the research and time limits that had been set. The boundary of Dunedin City was also used to
maintain the scope of this case study within a set geographical location and the site was recognised as a place where a number of food actors and alternative food activities were being established throughout the City. Examples range across formal to informal initiatives. These included the recent establishment of a ‘Food Resilience Business Advisor’ position within Council and examples of residents socially mobilised action around two distinctive food events or ‘crises’ – the Holy Cow Raw Milk Business closure and the Taieri Sustainable Market Garden Group’s interest in a berry farm for sale in Outram. These last two examples came to fruition during the research period, both of which will be analysed with various other food actions which exist in the case study of alternative Dunedin food endeavours. The food initiatives that are discussed in this research were chosen as a result of their association within the three pillars of sustainability. Initiatives that were concerned with addressing environmental, economic and social food issues in the Dunedin context was an important way to establish a framework around conceptualising food problems in Dunedin and determining what motivated people to socially mobilise around particular food problems.

Hay (2014) describes case studies as “an intensive study of a single unit for the purpose of understanding a larger class of (similar) units” (p. 81). The single case study of Dunedin will be used to understand transformative processes that occur when people socially mobilise in the pursuit of social change. Furthermore, case studies contextualise knowledge about the world within specific examples which Flyvbjerg (2001) explains as phronetic research. It involves context-depended judgement based on the multifaceted situations that people may find themselves in, which “enables an infinite number of “moves” to be made, adapted to the infinite number of possible situations which no rule, however complex, can foresee” (Flyvbjerg, 2001, p. 136). Dunedin has context-specific situations which are unique to this case study. The way that its citizens have chosen to address particular food issues are distinctive to the place of Dunedin and require knowledge about certain elements of the City to make a judgement on what is the most appropriate method for resolving different problems. Elements that can influence people’s judgement around food may include cultural traditions, climatic realities or community’s values.

13 Aristotle’s concept of phronesis can be understood as ‘practical wisdom’ whereby it is a “true state, reasoned, and capable of action with regard to things that are good or bad…” (Flyvbjerg, 2001, p. 2).
One criticism of the case study approach highlights the failure of single case studies to produce more generalised claims that can relate back to other cases, as was established above, studies are highly context-specific and influenced by particular variables specifically in that case (Bryman, 2012). However, Flyvbjerg (2001) explains that the details found in ‘concrete cases’ expose that truth and the meaning about that particular phenomenon in its proper context. Friedmann (1987) supports this claim in relation to transformative theory, as it is an oppositional practice that is set in a specific local, used to reflect the firsthand experience that informs the theory of radical practice. The specific understanding for each case example helps to establish “the larger, international and global context in which phenomena can be appreciated for their general and conceptual significance” (Flyvbjerg, 2001, p. 136). The case study approach therefore suitably coincides with Friedmann’s (1987) application of transformative theory, which he explains is “always and necessarily contextual” and which “must never be allowed to harden into dogma but must remain open to even fundamental questioning and reconceptualisation” (p. 394).

A qualitative approach was considered the most appropriate method for inquiry, as different groups respond to food issues in a number of ways and the diversity of values and contradictory views that people have around food solutions can be difficult to comprehend. Qualitative research interprets values and emotions as a primary focus for understanding the meaning of human experience and their environment (Hay, 2014). Furthermore, a qualitative analysis also aims to identify and explore the structural realities that people live within (Hay, 2014). Structures restrict or enable certain behaviours which can affect individuals experiences such as economic, political, cultural or social structures (Hay, 2014). The structural constraints of the corporate food regime were discussed in Chapter 2, which play a significant role in people’s ability or inability to socially mobilise around the transformation of the conventional food system. Addressing structural barriers will be essential for individuals to attain self-emancipation and collective social change. Therefore, the qualitative approach seeks to clarify existing realities and relationships by analysing the types of barriers and challenges that exist between different stakeholder groups and their involvement with achieving an alternative food system (Hay, 2014).

Interpretation of relationships can have multiple meaning, depending on the specific lens that is applied to the analysis – in this case transformative theory (McClintock, 2014). Therefore, it is important to note that “a case can be neither entirely unique nor entirely representative of a
phenomenon” (Hay, 2014, p. 86). The qualitative case study approach aims to add to the body of literature that is interested in the practice in the transformation of the food system, while also providing some insight into specific food issues and the structural constraints within the Dunedin context. Further suggesting for how food system sustainability could be achieved both at a local and global scale will be explored through the research's qualitative case study approach.

3.3 Research Design

The purpose of the research design for this study is to achieve the thesis aim and answer the three key focus questions as stated above in section 3.2. The literature review in Chapter 2, provided justification for the study explaining the use of transformative theory to understand how the transformative process of radically changing the current conventional food system to a food system that is holistically sustainable may occur. Relevant literature was examined as part of the secondary data collation and used to guide the primary data collection. The secondary data collection informed the semi-structured interviews and subsequent data analysis for interpretation of the research project. Both the research approach and design enabled key themes, current alternative food practices, challenges and barriers, and the visions of a sustainable Dunedin food system to be collected and examined through a thematic approach discussed below in section 3.3.4. This section will also discuss both the limitations, positionality and ethical considerations of the research project.

3.3.1 Interviews

Interviews provided the main method for collecting primary research data in this study. Semi-structured interviews were determined as the best method as they provided flexibility with which to inquire and further understand different stakeholders’ motivation for social mobilisation. The semi-structured interviews followed a general line of questioning that had been informed by the literature but which could easily adapt depending on the direction of conversations (Valentine, 2005). The advantage of this method is that it produced conversations which articulated personal opinions and experiences by actors who have taken action to address food issues or who were involved in food initiatives throughout the City (Matthews and Ross, 2010; Hay, 2014). However, caution must be taken with this method of semi-structured interviews so as not to potentially influence the thoughts or views of participant responses by providing one's own opinion or definitive conclusion (Hay, 2014). During each interview, care
was taken to reiterate and verify the participant's response and to check for any misinterpretation by the researcher.

Questions were controlled by the researcher, but they allowed for informal comments to facilitate and support interviewees to elaborate on points of interest. The semi-structured approach helped guide the researcher by ensuring that open-ended topic questions were asked to ensure the research was consistent but also provided interview participants with the opportunity to guide the researcher to avoid any sensitive topics throughout the interview (Hay, 2014). The design of semi-structured interviews also helped to analyse the type of language which different participants used to describe the topic of food both in the context of Dunedin and in relation to larger global level concerns. This helped to identify key themes and views that were either convergent or diverged to other food actors in Dunedin. The process also allowed the researcher to determine what information was or was not relevant for addressing the research questions (Hay, 2014).

Participant selection began by identifying stakeholders who were involved in either addressing food issues or involved in new or alternative ways of responding to the conventional food system. Accordingly, a snowball sampling technique was selected, which identified initial participants who then provided names of other individuals and stakeholder groups working in the field of accomplishing sustainable food system transformation. Appendix B contains the list of stakeholder groups and organisations which were interviewed as key informants during the research project. Each Key Informant (KI) that was interviewed had a particular interest in a food issue or response within the framework of the three pillars of sustainability and were involved in an alternative or local food initiative or action. The aim was to seek out diverse opinions by interviewing a range of participants that were actively involved in a variety of environmental, economic and social food groups and organisations. A variety of different key informants enabled the researcher to draw out tensions and contradictions around the conceptualisation of food issues; food values; the types of relationships were emerging; and the level of coordination between groups, as interpreted by peoples' engagement in Dunedin's alternative food spaces. A total of 24 KI’s were interviewed during face-to-face interviews with interviews lasting between 20 minutes to an hour in duration. Interviews were carried out during the month of August from the 1 to the 22, 2016. Interviews were recorded, transcript and coded according to common themes which emerged from the data, guided by the literature review and that was relevant for analysing the research aim and three focus questions.
3.3.2 Simple Observations

Simple observations were undertaken as part of the research methodology to collect primary data. Matthews and Ross (2010) indicate that simple observations as a method to collect data, which involve the researcher not becoming a part of the process that is being researched, but rather an objective outsider. Observations were undertaken at two meetings which occurred during the time of the research. The first meeting was an informal gathering of stakeholders who were engaged in the TSMG group that met to discuss the way forward for addressing the sale of the McArthurs Berry Farm. The meeting took place on 17 August 2016. The second was a seminar event which was held by Ahika Consulting titled ‘Rethinking how we VALUE food’ and included five short presentations and a question and answer session by people who are active in transformative food practices both in Dunedin and within New Zealand. The seminar was held on 30 August 2016.

3.3.3 Secondary Data Analysis

Secondary data was collected to assist the analysis of the case study of alternative food activities in Dunedin. Primarily, a literature review was undertaken which investigated and critically analysed the various ways of conceptualising food issues, type of tensions and debates focused on the theme of environmental, social and economic food issues and critiques of the conventional food system through an understand of both formal and informal mechanisms used to challenge its dominant form. The literature review also established the theoretical framework, which has been used to evaluate the potential for transformation of the conventional food system in pursuit of social change. Limited secondary data was collected via websites and documents online, which supported and informed key informant interviews and built upon the various engagements by food actors in Dunedin’s alternative food spaces. This style of data has been described as ‘organisational data’ by Matthews and Ross (2010), which includes a broad collection of both official and unofficial data from various institutions. A collaboration of primary and secondary data can assist in a better evaluation of establishing the potential for sustainable food system transformation in Dunedin as a result of information supported by this method.
3.3.4 Data Analysis

The data analysis took a thematic approach, whereby “a process of segmentation, categorization and relinking of aspects of the data prior to final interpretation” was carried out. The aim was to gain a complete understanding of the values, concerns, experiences and future prospects Dunedin’s alternative food system, as expressed by the participants (Matthews and Ross, 2010 p. 373). From this point, themes and key messages were able to be extracted from the data, based on commonly repeated words, typologies or phrases. The thematic approach provided a base from which an analysis of the data was evaluated to inform how social mobilisation and relationships have been established in the context of Dunedin City. It was essential to remain grounded in the raw data so that the researcher directly reflected what different respondents intended their messages to represent, as it can be difficult for researchers to give justice to what participants have express and risk misinterpreting information in the final report (Matthews and Ross, 2010; Bryman 2012). Therefore, reference back to key literature from Chapter 2 was an essential part of informing the results and discussion of this study. Careful consideration was taken to contextually represent the key informants’ interviews. The relationships and key messages that were used to inform the research aim have been considered through a robust process of thematic analysis, with interviews grounded in the secondary data analysis. A robust process enables credible representation of the data and account by the participants to ensure results were fairly delivered and data was used appropriately to understand the research aim and its wider theoretical contribution to the literature.

3.4 Limitations

Limitations to the research methodology’s approach and design must be acknowledged in order to highlight its transferability to different case studies and context (Hay, 2014). Furthermore, the credibility of the research is improved through the recognition of limitations that the researcher had as it provides an understanding of what was and was not practical when undertaking the research. The researcher understood that not every stakeholder group or food actor who is interested in addressing issues with the food system, or who is involved in food initiatives was contacted and provided the chance to give their opinion or experience on the research topic. As much as possible, a range of social, environmental and economic responses were sought. The groups included various actors from volunteers, businesses, not-for-profits, public servants and service providers who were contacted in order to gather a variety of views and perspectives on the research of alternative food action in Dunedin. However, the purpose
of the research was not to be extensive. Rather the objective was to gain an understanding of the various actors and activities that addressed food issues in different ways to explore the extent of social mobilisation within Friedmann’s (1987) five categories (see section 2.2.3). A broad range of stakeholder groups and individuals were interviewed to ensure that ample coverage to understand different food issues and values, different motivations for involvement, and people’s interpretation of a sustainable and alternative food system were captured. The point was to gain a complete understanding of Dunedin stakeholder’s that are involved with alternative food to determine the potential for sustainable food system transformation and the promotion of social change in the Dunedin context.

Moreover, Hay (2014) explains that often those undertaking research integrate personal values and beliefs into the research which can influence both the reason for study and the way that the research is interpreted. In addition, qualitative research is limited in the degree to which the researcher can genuinely see the line of inquiry from the viewpoint or worldview of the participants (Bryman, 2012). For this reason, acknowledging the researcher’s positionality exposes any preconceived ideas regarding what the researcher may be able to achieve objectively or what they expect to find. Positionality is created through the connections that the researcher has with those who are being researched (Browne et al., 2010). Thus on reflection, the researcher would disclose that no prior association with any of the key informants had been made before the commencing of this research project. In light of this, the researcher could be considered an ‘outsider’ to any of the involvement that has occurred with different alternative food activities in Dunedin (Hay, 2014). Nevertheless, during the research two opportunities arose to take part in a meeting and a local event that was attended by a number of the key informants and involved a large number of other food actors that had been interviewed also. These encounters allowed the researcher to converse and hear opinions from a wider variety of actors that had not been previously interviewed. Attendance at these events provide observations that assisted in drawing conclusions about the overall relationships and initiative that were occurring in Dunedin's alternative food spaces.

3.5 Ethics Considerations

The research project obtained ethical approval before any research was conducted through an approved Category B ethics form. Māori consultation also occurred prior to the start of the research. Ethics approval was necessary to ensure the research study and the approach of inquiry were suitable for conducting semi-structured interviews with members of the public. In
particular, care was taken during the design of the research to ensure that participants anonymity was protected and confidentiality of key informant’s information remained secure. Recordings and transcriptions of the semi-structured interviews and simple observations provided for the entirety of the primary data collection. Therefore, it was essential that key informants were aware of their rights as participants. This was accomplished first by providing each key informant with an information sheet about the research aim and line of inquiry (example in Appendix A). This form also highlighted that participants could withdraw statements or entirely from the interview at any time (before, during or after) without being put in jeopardy or at any disadvantage to themselves. This point was also indicated verbally by the researcher at the beginning of each interview. In addition, a consent form was signed by every participant before the interview commenced, stating their acceptance to partake and understanding of their rights.

3.6 Conclusion

This chapter has provided a detailed account of the methodological approach and design taken for this research. Both explanation and rationale were given for undertaking the research through the theoretical framework of transformative theory. The qualitative case study of a single location was clarified as the most appropriate way to address the research aim and the key focus questions, which further complemented the theoretical framework of transformative theory moreover. Primary data was collected through semi-structured interviews with 24 key informants from various positions in the food system, which included social, economic and environmental viewpoints from both formal and informal groups. Simple observations were undertaken at two local Dunedin meetings. Secondary data primarily involved a literature review but was supported by organisational data from documents that addressed food in more detail in the Dunedin context. Limitations and a way to address concerns throughout the research were identified. Lastly, ethical considerations were highlighted and remedied through the approval of the ethics B form and Māori consultation form.

The following chapter will provide an outline of the Dunedin context as the case study for this research and will act as the first results and discussion chapter to determine how social mobilisation has occurred.
Chapter 4: A Story of Dunedin Food

- Results and Discussion

The relevant actors in this struggle for a new society are individual households that have opted for the alternative; organised social groups based in the local community; and larger more inclusive movements, not bounded by territorial limits.

- John Friedman (1987, p. 395)

4.1 Introduction

The alternative food initiatives in Dunedin provided the case study for this research. This chapter will contextualise the circumstances of Dunedin’s food system in relation to the motivation for stakeholder mobilisation towards an alternative food system. The aim is to fulfil the requirements of the first focus question; who are the key players involved in addressing food issues in Dunedin, what were their motivations and what form of engagement did they take to transform current food practice in the City? As discussed in section 2.3 many diverse food issues come into a contradiction in the food system that are difficult to balance. Section 4.2 provides a simplified approach to organise them into the three aspects of sustainability – environmental, economic, and social, based on prominent food issues and the way that mechanisms and local food initiatives are used to address various problems. Tensions around food values will be discussed in section 4.3 as this factor is an inherent part of both sustainability and the food system. Lastly, section 4.4 will draw on the two food stories that have brought attention to the multitude of food issues in Dunedin. The two food stories of Holy Cow and the Taieri Sustainable Market Garden demonstrates the use of food as a catalysis to bring diverse groups together with the potential to then build traction for mobilisation around common goals of social change – in particular the potential for sustainable food system transformation. The end of this chapter shall identify the key players and categorise their engagement into Friedmann’s (1987) levels of social mobilisation. The following Chapters will explore how the categorised groups work together, the relationships form and the challenges and barriers that inhibit or enable the transformative process towards a more sustainable food system.
4.2 The Sustainability of Dunedin’s Food System

A recent review regarding issues with Dunedin’s food system was presented in a ‘Food Resilience’ report compiled by the Dunedin City Council (DCC, 2015). It revealed that like many other cities, Dunedin is exposed to an array of interconnected impacts that make its food system vulnerable, including global price shocks caused by major disasters, peak oil projections or the global financial crisis (DCC, 2015). The sustainability of Dunedin’s food system should be measured by its ability to establish an equitable balance between environmentally sound, economically viability and socially just food practices for its citizens and the global community (Hassanein, 2003). Friedmann (1987) states clearly that social; mobilisation begins at a point of social critique, and the way that critique is recognised is through the establishment of a defined problem. This section will provide examples of defined problems that are contextualised within the city of Dunedin through the sustainability lens of environmental, economic and social. The purpose it to broadly outline the diversity of issues and concerns related to food. However, as food issues are interconnected and complex, there may be multiple initiatives that are required to address various food issues in different ways.

4.2.1 Environmental Soundness of Dunedin’s Food System – Issues and Initiatives

Dunedin is situated on New Zealand’s east coast of the South Island within the region of Otago (see Figure 2). It is the largest city in New Zealand by area and encompassing a total area of 3,340km² (DCC, 2004). Approximately 95 percent of Dunedin has been zoned rural, and much of this land provides productive and diverse natural environments that contribute to the city’s economy through farming, forestry and tourism (DCC, 2012). Excluding the coastal environment, Dunedin has been known in many areas to be largely water deficient, which can limit land use as streams are vulnerable to drought and irrigation draw off (DCC, 2004). In addition, there are a number of areas in Dunedin that consist of high-class soil quality, specifically the Taieri and Dunedin’s north coast are considered important growing areas (DCC, 2004). However, the rural environment and its resources face growing challenges as they compete against the changing nature of economic activities and affordable infrastructures such as residential development (DCC, 2012). The motivation for stakeholders to engage in alternative food practices has come in part due to an increasing awareness that the local Dunedin environment is being compromised. In addition, global concerns surrounding the future sustainability of finite resources and the natural world were mentioned by key informants as an
important driver to take action towards the transformation of the conventional food system (Fresco, 2009).

Key informants felt strongly against the mounting environmental issues that were occurring in sectors within the food system. In particular, the effects of food waste, water pollution, resource exploitation and soil degradation were mentioned as important drivers for engagement in alternative food practices by key informants. For example, the issue of food waste and its impact on the environment have been stated in Dunedin’s Waste Management and Minimisation Plan.

Figure 2 Map indicating the location of Dunedin within the South Island of New Zealand (Local Government New Zealand, 2010).
2013. Key informants were aware of the problem that the improper disposal of food waste posed on climate change and other finite resources when food is wasted. Key Informant 3 explained; “I think it’s something like 30 percent of foods that is grown, doesn’t even make it to be eaten, even on a global basis.” The key informant stated their motivation for engagement was that; “for me, it’s just reducing it [food waste], for other people it’s about saving money, for other people it could be the carbon emission aspect to it…” Similarly, Key Informant 17 stated their unease in regards to food waste, expressing; “I’m definitively quite green so I like the thought that we’re not wasting, you know what are the stats? There is over a quarter of everything’s that’s produced that is wasted.” Both quotes highlight dissatisfaction with the environmental impacts that food waste causes as a result of not looking holistically that the entirety of the food system. A number of mechanisms have been established to both raise awareness and actively address the issue of food waste in Dunedin. For example, the Dunedin City Council (DCC) has supported both the launch of a new national behaviour campaign – LoveFoodHateWaste and provided building space for a social venture - FoodShare that redirects perfectly good food from being disposed of by supermarkets and other food retail and redirects it to those who are food insecure.

The problem of soil health and the contestation for land as a resource to grow food on has been asserted as another important environmental issue for key informants. Dunedin’s first District Plan (which is currently under review) did little to recognise the vastly different characteristics of the City such as its diverse landforms, land-use and climatic variations. Dunedin's urban areas increasingly encroach the rural boundaries and in particular places such as Waitati, Waikouaiti, Middlemarch and Mosgiel which sits within the Taieri Plains have been threatened (DCC, 2012). This is an example of how traditional planning tools such as plans and policy in the past have failed to appropriately address the interconnected nature of the food system with other planning activities such as subdivision and land-use practices (Pothukuchi and Kaufman; 1999). As a result, degraded soil and increasing developments of rural land has left the City in tension over the limited space for the purpose of activities such as growing. For example, Key Informant 15’s concern was that “there’s not a lot of high-class soils around Dunedin and in terms of food security and local food, they haven’t got a lot of land, well the whole Taieri Plain

14 The plan highlighted that organic matter including food and vegetation waste that is sent to landfill releases methane gas during decomposition which contributes to the total emissions that the country can be taxed on (DCC, 2013).
15 https://lovefoodhatewaste.co.nz/
http://www.foodshare.org.nz/
of course but … Mosgiel’s on high-class soils.” This issue was supported by Key Informant 12 who highlighted the “limited pockets” of the highest grade of class A1 soil in Dunedin. Furthermore, the remediation of soil health is problematic in itself as Key informant 12 further explained; “… despite the RMA mention of protecting soils, the councils don’t seem to understand... it could take 100 years to get [it back to high quality], you know, the whole soil knowledge is really poor.” The difficult position of providing enough good quality land for producing food is met with tensions of environmental soil quality, the scale of growing enough food for its citizens and the social demands of increased housing developments, especially population growth on the Taieri (Elder, 2013). This puts pressure on the different activities that land can be used for which competes with space to grow food. A number of organic growers exist in the Dunedin area who are conscious of soil health and environmentally responsible growing and an organic food business Taste Nature is also used as a mechanism to provide Dunedin residents with access to locally grown and organic food products and producers of that food a reliable and loyal customer base.16

The relationship between agriculture, food and water continues to exist as a multifaceted environmental issue in Dunedin and on the global stage (Azapagic, 2015). Activities that impacted water were observed from a number of different perspectives by key informants who raised concerns with factors such as the scarcity of water and water pollution impact on food and marine stocks such as fish and cockles. With regard to water scarcity, Key Informant 11 expressed; “… we must put something in place…, because we know where Dunedin’s water comes from, it gets tight. And you need to grow food, and you need water.” Another point Key Informant 11 emphasised was that; “The world’s changed, there are far more people taking, far bigger boats, far bigger nets, far bigger commercial take. Like the harbour, I mean the… whole commercial take on tuaki, on cockles, Southern Clams. So here you’ve got this thing were a commercial take has come on to what was our traditional fisheries, harvesting.” Both points above touch on values of preservation and the need to protect resources to be able to collect and produce local food. Similarly, the environmental importance of the water resource in enabling cultural food practices was also emphasised by Key Informant 4 who explained for example that cockles were a traditional food items for one of Dunedin's marae which had been recently threatened by an activity

16 http://www.tastenature.co.nz/
The organics growing industry has been suggested to encourage gentrification as only the wealthy classes are able to afford its produce (Guthman, 2003).
Port Otago when they wanted to dredge the harbor to bring bigger ships in, the problem is, right on one of the sides where they want to dredge is the cockle beds. Now Otakou [Marae] are known for, so when you come to the marae obviously we need to be able to provide food to your guests and different marae can provide different types of food and so for Otakou it’s the cockles, is what they are well known for…

This point reiterates the interconnected links inherent in a sustainable food system as social, economic, cultural and environmental food issues are in tension with this example as food sovereignty that has been explained as the right to feed oneself in dignity through self-determined food systems (Morgan, 2015). This includes the right to access safe and culturally appropriate food from the rivers, lakes and oceans which in this case was under threat by a company who wished to alter the Dunedin harbour in order to get larger ships in. Historically, there is much contention in New Zealand surrounds Māori’s right to the natural resource of fisheries (Te Ara, 2016).

In addition, many people are aware of the tension between dairy farms and the impact it is having on the natural environment. It is the issue of waterways specifically which has gained increasing attention in the New Zealand and Dunedin context surrounding water contamination (ORC, 2009). Key Informant 24 expressed one of the motivations for why people may have got behind the Holy Cow incident (introduced in Chapter 1 and further addressed in section 4.4), was that “a lot of people feel quite grumbly about the dairy industry… a more mainstream grumble…” Issues surrounding detrimental environmental practice in the dairy industry has been highlighted as a particularly well-known problem in New Zealand (Doole et al., 2015). However, in direct response to the mounting criticism of dairy's impact on water, Key Informant 19 explained;

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17 Otago Regional Council (who is also part owner of Port Otago) have granted a resource consent for Port Otago to deepen, widen and maintain the lower harbour channel (ORC, 2016).
I get a bit grumbled too when I hear that sort of bloody dairy farmers pollute, like everything’s deliberate. And it would be fair to say that some of them aren’t particularly environmentally responsible and I think those farmers do need a good kick up the bum. Um, but a lot are trying to be within the constraints of what they can be, but if they’re not paying their bills, um then they get pretty tight. It’s not cheap stuff, like fencing and things, it’s expensive. So who pays for that?”

The above passage highlights the interconnected and complex structural problems which exist in the food system. Not only is the dairy industry negatively affecting the environment but farmers are not in a position to financially address this problem as they must continue to compete by producing a commodity whose price is subject to the global market. As highlighted in Chapter 2, the capitalist conventional food system demands the delivery of efficient and cheap food products at the expenses of local farmers and the environment (Lamine, 2015; Booth and Coveney, 2015). One initiative that has been proposed in Dunedin is the development of a food labelling scheme that would be awarded to farmer’s food products that meet particular environmental attributes, in return, farmers could sell their meat at least locally at a premium to remain economically visible. However, again the tensions of class gentrification around food products are at risk, similar to organics whereby only a certain socio-economic group can afford this food product.

4.2.2 Economic Viability of Dunedin’s Food System – Issues and Initiatives

The Dunedin Economic Development Strategy identifies its hinterlands and extensive agriculture as a prosperous opportunity for the city (2012a, p. 4). After the discovery of gold in Otago, the region experienced larger settlement numbers than any other province in New Zealand, which contributed to the development of its urban areas and advanced farming estates (DCC, 2004). However, recent economic growth has been limited over the past decades, and the city risks losing business, skills and other investment to faster-growing economies (DCC, 2012a). The food services industry in Dunedin, combined with accommodation contribute to 2 percent of the City’s annual GDP and provides 8.1 percent of employment (DCC, 2015). While the primary processing sector in Otago provides $288 million to national GDP, with $240 million dollars from food and beverage processing contributing to the economy (DCC, 2015). Dunedin’s Spatial Plan (2012) recognises the potential as a city, is well resources if access to food is sustainability managed now and into the future.
One food issue which interacts with a significant number of other economic food issues is the low number of local food producers in its locality, especially fresh fruit and vegetables (KI8). As disused in Chapter 2, a problem with the conventional food system is that it can compromise local market economies through globalised corporate demands to obtain larger volumes and much faster quantities of food than family farms are able to produce (Campbell, 2004). As a result, the industrialisation of the food system has meant small-scale farms lose their viability, as they cannot compete with the efficiency of mechanised farming further risking the succession process of family farms being handed down through generations (Clark et al., 2012). This has been the case in Dunedin as growers age, coupled with a lack of the younger generation interested in careers of food growing, especially horticulture, there is no one who is interested in taking up the business. Key Informant 20, for example, stated; “as current producers get older, selling their businesses, or can’t sell their businesses because nobody wants to commit to it.” In addition, those limited students of horticulture are further restricted in Dunedin without access to available placements on farms for work experience. KI12 explains; “… as part of our horticulture program… [we] do work experience, it’s you know, there’s very few people who I have connections with who would have land and are able to supervise… who could take a student within, close in the Dunedin area.” The key informant also explained that the highly mechanised farming techniques used today are not an appropriate scale for a beginner of smaller or non-conventional vegetable growers to learn skills. Table 8 provides an example of the wide degree of key informants that have concerns about the lack of local growers in Dunedin which this research highlights as a keystone in this community to beginning sustainable food system transformation.
Table 8 Recognition of the lack of local food growers in Dunedin

<table>
<thead>
<tr>
<th>Key Informant</th>
<th>Recognition of the lack of local food growers in Dunedin</th>
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<tbody>
<tr>
<td>KI1</td>
<td>“…one of the real issues locally at the moment are there aren’t very many small growers, small scale growers...you know you can talk about local food and all the rest of it, food resilience, but the bases of resilient local food is small to medium scale growers in proximity to an urban centre and that’s really what we don’t have.”</td>
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<tr>
<td>KI2</td>
<td>“Like if I was going to set up an organic vegetable distribution scheme in Dunedin tomorrow, I would import probably 80-90% of the food unless I was going to grow it myself… there is literally no one growing food in Dunedin right.”</td>
</tr>
<tr>
<td>KI15</td>
<td>“And their worried at the Farmer’s market because they haven’t got a lot of young growers coming through.”</td>
</tr>
<tr>
<td>KI16</td>
<td>“This is all very well having food resilience and doing a bit but there isn’t the capacity in the producers, the local producers to produce enough food that the city needs to supply the city.”</td>
</tr>
<tr>
<td>KI20</td>
<td>“I suppose the biggest issue with local food is we are all small. We can’t supply everybody…there use to be 25 vegetable growers in Outram, now there’s two... so you know.”</td>
</tr>
<tr>
<td>KI22</td>
<td>“…in terms of what we are consuming in Dunedin we are really emphasising the local but again, we need to define local because the reality, is if we only wanted to eat the fresh produces that’s grown in Dunedin there’s not enough.”</td>
</tr>
</tbody>
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In light of this important issue, the research has come across a significant gap between large-scale commercial farming and smaller scale local food production. The question then, is where are the next generation of growers going to come from. Key Informant 8 expressed “… more and more there is a disconnect… so corporate farming is huge and probably… unless something is done, it’s absolutely the way of the future.” As the pressure of more globalised food production has comprised greater distance between producers and consumers, the argument of a world with “food from nowhere”, rather than “food from somewhere” may become a more likely reality. Evidently, a lack of understanding by consumers about where their food has come from has implications for stimulating numerous other food issues. These included a vulnerable food system which the majority of the population is reliant on and citizens who are complacent about food inequalities such as food justice and escalating environmental impacts. Research from the literature suggests the further distanced one is from the problem the less likely they are to commit to changing it (Toth et al., 2016). This has implications for social mobilisation against the detrimental effects of the conventional food system, as a lack of awareness or
directly negative impact on residents will decrease peoples’ commitment to the pursuit of an alternative food system

Friedmann (1987) emphasises that to socially mobilise, action must begin with individual commitments and local level visioning as a strong base that can then be expanded upwards to genuinely challenge the conventional food system towards sustainability. The gap of a shortage in local growers and the lack of opportunities to be properly trained in small-scale and alternative growing methods should, in fact, be looked as a prospect to grow the Dunedin economy and reduce unemployment especially youth unemployment in the city. Compared to New Zealand, Dunedin has a slightly higher youth and elderly population’s, a greater level of qualified people in the city, but more people are on lower incomes and on average do not earn as much as the population New Zealand as a whole (Statistics NZ, 2013). Therefore, a link between youth, the highly educated and even the elderly, many of whom has been found to garden may find collaborative ways to reintroduce a foundation of growers to create the workings of an alternative and more sustainable food system. One initiative in Dunedin doing just that is Farm Hand, a program run through the Malcam charitable trust that provides skills and personal development to youth through engagement with the land and practical learning. Key Informant expresses the benefit of this program stating;

…we give them, there’s different outcomes, some young people have grown on an emotional level…they have a better understanding of themselves…we build people’s self-awareness, young people have seen way more diversity in the types of jobs they can do which they didn't know beforehand.

The potential here is inclusive of environmental, economic and social factors that address a defined problem of limited local growers that could be utilised through the support of local initiatives such as farm hand, linked to other institutions such as local high schools and Otago University, which many key informants had connections to as well.

4.2.3 Social Justice of Dunedin’s Food System – Issues and Initiatives

Dunedin’s population sits at 120, 249 people as of the last census results in 2013, which ranks the City as having the 5th largest population out of the 67 districts in the country (Statistics NZ, 2013). Over 94 percent of people live in the City’s metropolitan areas, and the city continues to experience low population growth (DCC, 2004; DCC, 2012). Dunedin’s unemployment rate is higher than the average of New Zealand’s 7.1 percent, at 7.5 percent of those without work
(Statistics NZ, 2013). And in 2009, New Zealand had the fastest rise in food prices out of any OECD country, at 42.5 percent since 2000 (DCC, 2015). Accordingly, Clendenning et al., (2016) highlighted that unemployment among other contributing factors such as increased housing prices can contribute to people becoming more food insecure, as was established in Chapter 2.

Key informants indicated their experiences with food insecurity in Dunedin as a motivator for deciding to engage with alternative food initiatives and to help address this social food issue. For example, Key Informant 17 stated their reason for joining the organisation FoodShare; “I’d been doing meals on wheels for some time, and I realised there was huge food insecurity within this city… having delivered meals on wheels in South Dunedin and some of the things you saw broke your heart, and so I came and offered to volunteer.”18 As indicated above in section 4.2.1, FoodShare is a new alternative food initiative, founded in Dunedin that has expanded to Auckland that ‘rescues’ food from commercial retailers that are no longer legally able to sell it and redistributes it to social agencies to distribute into their communities. Key Informant 3 explained the FoodShare model is exceptional because it weighs all food that comes in and out of its premises. It then records the statistics which in turn part of its success as they can see how much food has been diverted from landfill, and how many meals they have given to those in need of food packages. The food bank is another well-established tool that has been used as a mechanism by Presbyterian Support Otago to engaged in a deeper understanding of what is causing people's food insecurity.19 Key Informant 5 explains;

We always offer them a social worker or a budget advisor if they want to have a conversation… from there if they come in twice, then the third time we definitely request that they see somebody… There is a lot of things that go on behind the scenes of people needing food and those are the things around poverty and issues around other things that concern us and interest us and having the foodbank and giving people food is one thing, but it's about what is enabling them or what is keeping them in that position that they actually need to come to a food bank in the first place.

18 Meals on Wheels is a home food delivery service that is provided for by the New Zealand Red Cross - https://www.redcross.org.nz/what-we-do/in-new-zealand/meals-wheels/.
19 Presbyterian Support Otago is a non-governmental social service provider that is supported by the community to provide a variety of service to people such as aged care and family help.
Thus working with a defined problem such as food insecurity provides stakeholders to more tangible understand what steps might be necessary to address it as well as engaging with other issues that are interrelated in society.

4.3 Food Values in Dunedin

The creation of a sustainable food system is complicated by the inherent tensions around interest and values that stakeholders use to conceptualise food issues (Hassanein, 2003). Key informants have expressed that the various ways in which people value food is a testament to their commitment to participate in alternative food practices or not. Key Informant 18 expressed frustration at the attitudes towards buying local or organic food, saying “…that’s another sort of tension that we deal with really, people… saying they value local or food produced sustainability but going to the supermarket where they know that people are paid poorly and treated not so well.” However, to encourage greater social mobilisation against the conventional food system, a clear understanding and commitment to certain values that an alternative and more sustainable food system might look must be recognised (Friedmann, 1987; Forssell and Lankoski, 2014; Dwiartama and Piatti, 2016). Furthermore, changing the structural barriers of the corporate food regime begins with the individual and is important to install in people’s minds. This section will draw on a number tensions around people’s perspectives on food in the Dunedin context. The aim is to help to establish what has motivated people to take action towards food system transformation and the creation of a more sustainable food system. It provides an outline of what Dunedin citizens value as their idea of an alternative food system and how this can be used to bring people together towards similar visions and goals.

How food was valued is central to many key informants debates around their motivation to actively engage in alternative food activities. Key informants expressed various food values that included environment, economic and social reasons for people to advocate for change. Table 9 provides an outline by key informants regarding food values and interest for change.
Table 9 Food/interests as motivators for involvement in alternative food activities

<table>
<thead>
<tr>
<th>Key Informant</th>
<th>Food Values/ Interests as Motivators for Involvement in Alternative Food Activities</th>
<th>Environment, Social or Economic Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>KI12</td>
<td>“I mean students are coming with a growing interest in um food issues and food security and so wanting to know how to grow food, in a health and sustainable way. So I’ve definitely seen a rise in that interest.”</td>
<td>Environment</td>
</tr>
<tr>
<td>KI13</td>
<td>“I think making sure that we make sure what we are producing and exporting you know, is as environmentally friendly and so forth as it can be.” “…my particular focus is to encourage them to eat foods that are, you know, more environmentally sustainable.”</td>
<td>Environment</td>
</tr>
<tr>
<td>KI18</td>
<td>“But also its an environmental factor. Like they don’t want to be supporting a system that’s destroying the earth that produced the food.”</td>
<td>Environment</td>
</tr>
<tr>
<td>KI19</td>
<td>“So where I’m angling towards now is developing a provenance labelling scheme for farmers, with environmental attributes…yeah, biodiversity management and water quality management… what I’m aiming for that to do is drive environmental improvement.”</td>
<td>Environment</td>
</tr>
<tr>
<td>KI22</td>
<td>“In a perfect world. Obviously in a perfect world the goal would be for all farming production to be organic and you know using the environmentally sustainable methods.”</td>
<td>Environment</td>
</tr>
<tr>
<td>KI13</td>
<td>So if they improve and become more efficient in terms of reducing waste or branding themselves or having this image as being a good corporate social responsibility, is there any tangible economic benefit for doing that from sort of a Chinese consumers point of view.”</td>
<td>Economic</td>
</tr>
<tr>
<td>KI7</td>
<td>“…we put it [Food Resilience Business Officer] into the economic development budget. And that meant that people could understand that more broadly than just, than food resilience. And people who are focused almost entirely on economic development to the extent that…then they could support it because it was going into the economic development budget.”</td>
<td>Economic</td>
</tr>
<tr>
<td>KI8</td>
<td>“…economics, I mean well the council for example like we tried to quantify the amount of money the market brings into the city, because that’s the sort of thing they sit up and listen to.”</td>
<td>Economic</td>
</tr>
<tr>
<td>KI22</td>
<td>“And part of that also is supporting local businesses, coz obviously if you support a local business, maybe over a</td>
<td>Economic</td>
</tr>
</tbody>
</table>
At the heart was the appeal for an alternative food system, was a desire for others to look at food in a different light than was being portrayed as a commodified object at the disposal of a corporate food system – in essence, reimagine what a sustainable food system might look like. Key Informant 16, for example, stated:

... the idea that having food that is less than perfect is absolutely fine... that philosophy about buying things that are a bit cheaper which the supermarkets don’t touch because they are slightly non-standard, or they don’t look fabulous...would be good to establish in people’s minds.

In response to providing a different way of growing food, Key Informant 18 described the holistic approach that growing organically can provide for ‘re-humanising’ the food system;

I mean organics comes down to how the food is produced, the sort of system that is used to produce the food... it starts with the soil basically and how the soils treated, but everything kind of comes from that and it’s to do with the human system around the food and the way its distributed and the relationships between the growers and the distributers and the customers and so it goes on. So there is the whole system around it.

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<table>
<thead>
<tr>
<th>Key Informant</th>
<th>Quote</th>
<th>Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>KI15</td>
<td>“So the foodbank is run... it was set up under Presbyterian support Otago and family works is the social service provider.”</td>
<td>Social</td>
</tr>
<tr>
<td>KI17</td>
<td>“Um and you offer a solution to people that they can get involved in to make our community better and people put their hands up and come and help. So for me, that’s actually been a huge motivator.”</td>
<td>Social</td>
</tr>
<tr>
<td>KI22</td>
<td>“I mean if you look at the research around community gardens, the number one reason is for that social side of it rather than the produce.”</td>
<td>Social</td>
</tr>
<tr>
<td>KI23</td>
<td>“I’ve come from a more social policy perspective anyway where I’m regenerating neighbourhoods that really need it, does a lot for making a city great.”</td>
<td>Social</td>
</tr>
</tbody>
</table>
However, tensions arise as may key informants believe that one of the greatest reasons for remaining within the framework of the conventional food system is that we do not pay enough for our food. Key Informant 19 explained; “I mean I think one of those real thorny topics is how you value food. But then there’s that difficult position… in that, a whole portion of our population can’t afford to pay anything more than what they are. So I’m talking about raising the cost of but it's not that easy.” Reimagining what a sustainable food system could be is one thing but having the liberty to choose is not that simple. People must balance their budget with their food values which is difficult to do if one is not in the financial position to do so, as has been established with food insecurity present in this City. Key Informant 14 captures this tension by stating:

…it’s the value of food for me is the biggest one… we think food is really expensive, and actually, it’s not expensive enough because we are not paying the producers what they need to be paid. And that for me is the biggest single, huge hurdle that we have got to get over. And I don’t know how you try and tell people who are living on a budget, who are living on the bones of their ass that actually, food needs to cost more than you are currently paying for it. Because what you’re buying is actually shit, and I don’t want to be the one to say that, because who am I to judge, who am I to say that, when actually these people have got to be able to buy food and feed their families and its really difficult.

The tensions above in part are a result of historical and contextualised ideas about what individual people now expect the food system to provide. For example, supermarkets that are supplied by the large scale corporate food chain have the ability to lower food costs which has allowed people to buy food much cheaper, further lowering expectations about the price of food. However, the way that the current conventional food system is structured has also contributed to the misalignment about the value of food, as it continues to reinforce the removal of people from the food system as discussed in Chapter 2. Due to the removed nature that many consumers now have with their food, there is a lack of understanding about the time, effort and risks that go into producing food that is environmentally and socially just. Thus people are not prepared to pay more for their food than the price that is offering the lowest cost.
The way that people begin to shift these perceptions about food values will depend on the extent of knowledge that they have about valuing food in a particular way and the process that have gone into its production. A number of key informants talked of educating the general public for example, Key Informant 12 stated; “I think for me to get that wheel moving, it’s about that education of normal regular people, to get them to think about, we can’t do everything conveniently, but if you’re going to do it conveniently, put your money somewhere that’s making a difference.” However, the approach to gaining greater social mobilisation is difficult as Key Informant 1 explained; “Even though I think that you should do it, I’m actually sceptical about how much effect it will have. Because I think one of the problems and this is true for organics as well is that people really hate people preaching to them and that unfortunately is how they see these things.” It is evident there is always going to be an array of differing values and perspectives regarding food;

*Obvious conflicts will be I guess between local business owners who see it, promoting a strong local food network as having real economic benefits as its primary driver. It’s not a bad thing, I mean it’s understandable, businesses you know. But it’s a completely different reason you know to what sort of the policy makers will be thinking, to what environmental, you know, sustainable activists will…* (KI13)

However, exposing those inherent tensions and conflicts will firstly help individuals and particular groups understand the contradictions in the food system (McClintock, 2014). And secondly beginning the conversation with those who are interested and actively involved in transforming the convention food system is a base through which to discuss the appropriate steps to overcome such conflicts with more coherency around a clear vision for a sustainable food future. Key Informant 22 explained;

*… there is just huge value in coming together as a group and having those conversations… but I guess it’s just as much a power in coming together as a group and understanding where everyone is coming from and so yeah we are not necessarily in opposition even though some things aren’t going to be perfectly aligned.*
4.4 Two Stories on Dunedin Food

In Port Charmers, a local raw milk dairy farmer has been forced to shut down operations by the Ministry of Primary Industries after one of their heifer’s tested positive to bovine tuberculosis (Brown, 2016). At the other end of the City in Outram, a group with the proposed name of ‘Taieri Sustainable Market Garden Trust’ has coordinated around the proposed sale of one of the last market gardens on the Taieri, (Figure 3 for location details). This section provides the background of both experiences, describing the diversity of participants in their motivation to mobilise, and the complex predicaments that see food as an entry point through which people can engage with a multitude of other issues surrounding the transformation of the current food system practices.

Figure 3 Location of place that the two food initiatives began; Outram and Port Chalmers
4.4.1 The Story of Holy Cow

The small-scale raw milk operation near Port Chalmers opened in 2002 and had been running for just under fifteen years before information was received that the milk was no longer able to be sold, see Figure 4. As explained in Chapter 1, this was due to the positive test of bovine tuberculosis (TB) by one of the cows that was not part of the milking herd (Rae, 2016, KI24). The one cow that had tested positive had been euthanised, leaving the farmer with few options for the remaining herd of 70 cows. Mr MacNeille (the farm owner) stated; “I spent, let’s just say… 60 hours a week with these girls” (TVNZ, 2016). An article by TVNZ (2016) reported that MPI Director for Animals and Animal Product Mat Sytone responded that “while the ministry sympathises with the farmer, the most important thing was protecting customer’s from risks.” The farm had begun with a modest herd. However, as word spread, the popularity of the farm that sold raw milk down Reynoldstown Road gained traction, as more people enjoyed the trip out to buy from the honesty box system that was set in place. KI24 explains; “I don’t think they ever planned to make any money, I think they just sort of had some cows and started making milk and some people got some more, and then more people just kept coming and so they had to keep making more milk.” The appeal by customers to purchase raw milk has been attributed to the owners welcoming and friendly business, the nostalgia of remembering milk that was once delivered with the cream on top and the unadulterated nature of the product (KI24). The issue of growing distance between producer-consumers by conventional food system methods was evidently resisted by food actors in this instance, as those who had committed to the drive out to the raw milk farm held particular food values around freshness, supporting local farmers and the perception of a ‘safe’ and healthier food product.
However, on March 1 2016, a new regulation had been administered by the Ministry of Primary Industries that more stringently controlled the sale and distribution of raw milk, along with various other actions, in order to reduce the potential health risks resulting from its consumption (Ministry of Primary Industries, 2016). Enforcement of the new regulation combined with the discovery of the TB incident left the owners of the raw milk farm unable to see any viable way to continue their business. The outcome following the discovery of TB had left the owners prohibited from selling milk from their farm for up to six years. Furthermore, relocation was forbidden, as no cows could leave the property from the risk of spreading the disease, other than for slaughter (Rae, 2016, K124). One key informant expresses in relation to the Holy Cow incident that;
The timing was really interesting as well, because it was only in April [March] this year that they brought in new legislation and rules around anyone who was selling raw milk. And a lot of people felt that, they hadn’t outlawed it, but they made the verification process so complex and expensive that it had essentially put a lot of people out of business. (KI24)

The current political environment has been highlighted by another key informant who stated; “The MPI and the government is very outward focused in their policies and they are very explicit in increasing export as a primary goal for New Zealand” (KI13). Both quotes above strengthen the argument that social change must be instigated from below as Friedmann (1987) has emphasised in Chapter 2. Out of desperation, the owner initially prepared to slaughter the remainder of the herd, before a second option became available due to the mobilisation of a group known as the ‘Friends of Holy Cow’.

It was interesting as to why this group decided to mobilise around this issue and how it was able to gain such significant and successful media attention. There was a considerable sense of urgency with the decision at hand that forced people to act fast and organise themselves around a common goal, which in this instance, was the first step of simply raising enough money to pay for the feed and upkeep of the herd of cows. KI24 recalls the owner “was in this weird process of trying to decide which cows to get rid of. And he was like, ‘I’ll try and hang on to some for a while’ but he couldn’t stop thinking about the fact that they were all really related and they all had stories and stuff…” Once word of the owners’ situation became public, a groundswell of support for the established group which became known as ‘Friends of Holy Cow’ exploded onto social media, locally, nationally and internationally. The use of social media, in this case, was a tool that utilised the situation particularly well. Engagement on social media escalated from a closed Facebook group of around twelve people that now sits at around 760 members, to a ‘givealittle’ page that was set up and raised $15,784 dollars. A banquet was held to raise money for the cause, which included a number of other local grower businesses and key players of the City’s food community interested in the farmer’s struggles (KI1, KI7, KI14, KI18, KI19, KI24). National news stations took up the story including TV3 New, One News, national journalist John Campbell, Radio New Zealand, ‘Stuff’ (an online newsfeed) and The Otago Daily Times ran a number of articles. Even as far as Australia, reports were coming out around the story of Holy Cow and the support it had received. Further afield,

20 https://givealittle.co.nz/cause/holycow
KI24 explained the farmer “heard from his brother-in-law who he hadn’t spoken to since… 1983… and also another couple got in touch… who were from America and now lived in Switzerland who went to college with Merrall and Alex.” Not only did the story of this food incident provided a chance for individuals to connect around food, but reconnect as well.

This gave the farmer both the time and money needed to propose a plan to start a cooperative local milk business at the property (KI24). The reasonably small size of Dunedin meant that the interpersonal relationships between many residents helped word of this situation spread fast as well, however, social media provides an essential vehicle for motivating people to become actively engaged in addressing important food problems as well. The opportunities that this form of public mobilisation represents towards Dunedin's food system transformation demonstrates the willingness and support of others to create different alternatives to the conventional food system in a desire to generate sustainable food practices.

4.4.2 The Story of Taieri Market Garden’s

Historically, the Taieri has provided Dunedin with much of its produce. However, the final two market gardens left on the Taieri are currently up for sale (Mercer, 2016). In particular, Outram contains some of the City’s highest class of soil which is rich with alluvial deposits (see Figure 5) (DCC, 2004). The area of Outram is known for its market gardens and the iconic Berry Farm of McArthurs, which is also part of the popular Otago Farmers’ market and has seen the farm handed down through generations, continuing the line of this successful business (Mercer, 2016; KI20). A group loosely calling themselves the Taieri Sustainable Market Garden (TSMG) group, has formed as a number of concerned individuals fear that lack of interest in the McArthurs Farm by potential growers, may result in the closure of the market garden and the further loss of the City’s depleted local food growers and their land. In addition, uncertainty about what other land-use activities may take its place such as conversion to pasture for dairy or subdivision for housing has prompted their mobilisation (KI15). One member expressed that the motivation for their engagement was that; “there’s not a lot of high-class soils around Dunedin, and in terms of food security and local food, they haven't got a lot of land, because Mosgiel's on high-class soils” (KI15). Another declares that “this other thing [McArthurs] is too important to let slip by” (KI9). This incident has left the group with the difficult task of inquiring about the purchase of the land, which is set at about 1.2 million dollars; forming a trust to protect the land; and organising a separate social enterprise that would work as a business in order to sustain the running of the market garden business (KI9, KI15).
Support for this initiative has been conveyed through a number of different food groups in Dunedin. They understand the implications what the loss of this important business would mean to local food in Dunedin. People have been motivated by their understanding of what the area is well-known for; growing. KI2 explains; “when you talk to people about the Taieri, especially the older generation that knows there used to be Market Gardens on the Taieri… you can feel it. There is support in this town.” The issue expressed by many key informants is that there are not enough small to medium sized growers in Dunedin City, and there is not enough appropriate growing land left to train people through work experience, who are interested in getting into market garden work (KI12, KI2). KI1 stresses this point; “Well we do have a farmers’ market here and one of the real issues locally at the moment are there aren’t very many small growers, small scale growers.” To make matters worse, as growers age, there is no one willing to take on this work anymore, as it is labour intensive and farmers receive very little profit in return. One grower explains; “as current producers get older, selling their businesses, or can’t sell their businesses because nobody wants to commit to it. Well, they do and then it ends up in a subdivision or a dairy farming. Taieri or anywhere, even up central you know. Nobody wants
to” (KI20). The degree of interest in this initiative is strong. However, a clear path to understanding how to solve this food issue is highly complex and at a scale that is proving much bigger than the resources available to the TSMG group.

Similar to the story of Holy Cow, the incident of the Taieri Market Garden was also meet with a considerable amount of urgency to it. The group began with an initial meeting that included a number of key food actors in Dunedin and the formation also of a Facebook group. An organised group meeting was later held that saw council members, local café owners, community educators and growers alike attend this meeting. News of the McArthurs farm being for sale was the motivation for people to decide that this was an issue worth fighting for. However, regardless of the outcome at the McArthurs Farm, this initiative has sparked people's interest in actively pursuing the cause to protect the Taieri’s precious growing land and provide educational space for youth and those interested in a career of market gardening. A recent article written in an Outram community’s local newsletter asks the question “What now for Outram’s Green Gold?” and KI15 exclaims their interest is multifaceted, and much more than just providing food for the City of Dunedin; “Because it’s much more… even if we didn't get to buy McArthurs, we would still need to have some land somewhere.” This statement is exemplary of food being used as an entry point through which greater social and environmental issues can be negotiated. The Taieri Market Garden initiative is about something much bigger that the sum of its parts, as has been expressed by other key players in Dunedin regarding other initiatives at play in the City (KI8, KI18).

4.5 Conclusion

The context of Dunedin has influenced how stakeholder groups have approached particular food issues in the city. The overview of issues and food values are examples of the way that people have mobilised around food. The recently mobilised groups of Holy Cow and TSMG group have presented an opportunity to engage with complex and widespread food issues that exist both at a local and global scale. However, the question remains as to whether this momentum of the socially mobilised communities will last? The next Chapter will explore, through Friedmann’s (1987) categories of social mobilisation. The different stakeholder groups that exist in Dunedin and the way that each group's relationships have been established and could better work together, against defined problems and towards a common shared interest of transformation of the conventional food system to an alternative model that is sustainable.
Chapter 5: Stakeholder’s Mobilisation Around Food

– Results and Discussion

*The question is whether we are jointly responsible for the conditions of our lives, having in common certain interests and concerns, or whether, in the final analysis, each individual, each corporate entity, and each social aggregate must go its own way in a Darwinian struggle without pity.*

- John Friedmann (1987, p. 13)

5.1 Introduction

This chapter will present the results and discussion for the research’s second focus question, how/why have relationship or partnership arrangements formed between different stakeholder groups in an effort to socially mobilise around food for the creation of a more sustainable food system in Dunedin. The five categories derived from Friedmann’s framework of social mobilisation and in Table 2; spontaneous uprising; local action groups; networking; coalitions and formal organisations are used to analyse the development of individual and group responses to food problems that may be scaled up and out through society. Each category is essential for transformative processes as they will incur different opportunities and challenges which may be assisted by the other level of social movement. Imposing an alternative and more sustainable food system in Dunedin will require the motivation by individuals and groups to engage in the various AFIs, AFNs and the connection of the loose affiliation of groups that make up the city’s local food movement. Proceeding from the ‘spontaneous uprising’ of the two stories of Dunedin food described in Chapter Four, both Holy Cow and the TSMG group represent catalysts for social mobilisation by an array of food actors, as discussed in section 5.2. The apparent arbitrary arrival of Holy Cow and TSMG group are essentially the result of the interconnected food issues and organised responses through various AFIs formed by ‘local action groups’ that have mobilised in response to localised negative impacts of the conventional food system. A variety of local action groups will be described in section 5.3. Accordingly, the work achieved by individuals and AFIs may be strengthened by networking and the establishment of AFN’s in Dunedin, which will be elaborated on in section 5.4. To capture and encourage future momentum of these activities, a coalition to stabilise Dunedin’s local food movement must be fostered as explained in section 5.5. Lastly, the production of a sustainable food system in the
Dunedin context requires more formal organisation, to restructure around the institutionalisation of a normalised alternative food system (AFS). The AFS should be dictated by socially just, environmentally sound and economically viable operations, which will be elaborated on in section 5.6.

As previously discussed in Chapter 2, transformational practices occur when all actors are socially mobilising, at various levels, and at the same time to address the array of complex issues that exist in the current food system. In particular statement number 4 of transformative theory is to “elaborate images of a preferred outcome based on an emancipatory practice” (see Table 1). Therefore, this chapter provides an elaborate image of how and why relationships were formed around social mobilisation. It is argued that through emancipate images to transform the conventional food system and to promote social change will be achieved as a result of groups acting at each of the levels of social mobilisation. The challenge then, is to retain this momentum towards transformative power. Friedmann’s six tasks for social mobilisation (selective delinking, collective self-empowerment and self-reliance; dialogue, mutual learning; cross-linking, networking, building coalitions; thinking without frontiers; meaning, purpose, practical vision; and strategic action) will be drawn upon to demonstrate that building strategies around relationships allows stakeholder groups to increase the effectiveness of this local food movement beyond what could be achieved as individuals. Providing a strategy that can ensure each level is working fluently and in agreement to establish common food values, defined food problems and a clear direction, will facilitate the transformative potential for the delivery of radically alternative, sustainable food system transformation for Dunedin City.

5.2 Spontaneous Uprising as Social Mobilisation

This section will unpack and critically assess the relationships formed through the apparent spontaneous uprising by stakeholder groups in the two cases of Holy Cow and the TSMG group. Friedmann stated that spontaneous uprising is a category of social mobilisation, formed as a result of people’s grievances, often dramatised and rarely able to be sustained. However, this thesis argues that if the momentum gained by these events can be captured within the wider context of social mobilisation that is occurring through various other food activities, then the potential for sustainable food system transformation increases. How and why relationships were formed around the Holy Cow and TSMG groups will be explored to determine the extent that is has occurred in the Dunedin context.
5.2.1 Mobilisation by Holy Cow Participants

As has been addressed in previous chapters, the Holy Cow incident saw the Ministry of Primary Industries enforce regulation on a local farmer by shutting down the farm gate, raw milk business after the discovery of TB in one of the non-milking cows. This action received an immediate response by an outraged public, as well as media attention that documented the upsurge of support which thus allowed the farmer to consider alternative options for continuing with more sustainable production of local milk for residents of Dunedin. The literature states that social movements begin at a point where people feel “a double burden of oppression and a dim awareness of this oppression” (Friedmann, 1987, p. 257). Table 10 provides recognition by other key informants who indicated that this event raised awareness around the importance of creating a more sustainable and local food system in Dunedin, particularly regarding distancing of food sources and the growing value that citizens have put on local food supplies. Likewise, Key Informant 24 stated; “I think that is partly why people got interested... it was that kind of David and Goliath kind of feel.” People felt inclined to help as the portrayal of a single farmer, up against the MPI rendered a cause worth fighting for.

Table 10 Holy Cow incident raised awareness and support for social mobilisation around a sustainable food system

<table>
<thead>
<tr>
<th>Key Informant</th>
<th>Holy Cow incident to raised awareness and support for sustainable food system transformation</th>
<th>Relevance to food system sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td>KI7</td>
<td>“…we do have you know a show of support recently around the local milk producer. I think that was pretty special… it shows how much people really value local suppliers in Dunedin. It seems like there’s a verging interest in that.”</td>
<td>Dunedin communities value local food suppliers.</td>
</tr>
<tr>
<td>KI16</td>
<td>“I mean the other interesting thing… the Holy Cow initiative, is that the closest milk [processing] service is in Edendale. Now that is a long way from Dunedin. So there isn’t anywhere I don’t think that you can buy fresh milk.”</td>
<td>Food issue of distance to local food source.</td>
</tr>
<tr>
<td>KI19</td>
<td>“I think there’s a lot of consumer support for such initiatives [a local food label], the initiatives have just got to be put before them. Merryl’s milk farm is a great example.”</td>
<td>Igniting significance of food issues and solutions</td>
</tr>
</tbody>
</table>

People who were directly involved in trying to save the milk farm were upset that there would no longer be access to this local milk product. The encroachment of customers right to buy raw
milk provided the initial motivation for people to mobilise in some way. Support either through monetary means, time or personal services to contribute ideas for the construction of a viable alternative for the continuation of local milk supply were provided. The direct producer to consumer connection at the farm gate had built up rapport around the raw milk food business which also prompted the initial outrage that led to action. O’Kane and Wijaya (2015) provide similar experiences based on research at a farmers’ markets. The authors found that relationships between stall holders and customers became personable connections that developed well beyond the simple exchange of food to include among other aspects, the enjoyment of the social interactions that occurred in that place.

A comparative connection from O’Kane and Wijaya’s (2915) study can be made for Holy Cow, as the mobilisation reflected a level of friendship that went above and beyond simply just customer loyalty. This was evident in the community dinner that was arranged to raise funds for the upkeep of the cows and included people from across the whole of Dunedin. The spontaneous emergence of this incident proved that relationships were invaluable in the context of stakeholder mobilisation. Sustaining this local milk farms continuity demonstrated the huge amount of support for the farmer, their cows and the customer’s preference for raw and local milk. The strong community connections had been fostered over the 14 years of the farm's operation and the fact that the farm was located within the community that the farmers were actively involved in themselves. Key Informant 24 described; “there were also different communities. And part of what I think helped with Holy Cow was that we had all the customers, but then you had a whole lot of Steiner [school] people kind of got behind it… and then there were all these horsey people…” All the support was of a voluntary nature to ensure the farm would continue to sell local milk and remain a viable business for its owners. However, it was never solely about saving the raw milk product, as people were genuinely concerned for the well-being of the farmer and the cows as well. Key Informant 24 explained; “there was a note up there [on the fridge] just saying that he was absolutely heartbroken and that they’d been shut down by MPI and someone posted that into the Dunedin Locavore’s Facebook group… the following morning all these people had said what shall we do, what shall we do…”21 The event caused an instantaneous uprising of social mobilisation in Dunedin, meet with direct urgency in the farmer’s need to find a way to pay for the upkeep of the cows while they discussed the future of the local milk business. What became evident from this story is the developed

21 ‘Locavore’ is a term used for someone who participates in the local food movement with an aim to relocalise the food system (Metcalf, 2012).
transition from each individual relationship with the farmer themselves towards a sense of collective group mobilisation due to an understanding by people of this particular crisis has occurred to everybody.

The shock of this unfortunate and unanticipated event activated a wide group of Dunedin residents who took control of this particular food issue and coordinated action to pursue an alternative food opportunity for the City. Organisation began around the formation of a cooperative business to ensure further production of local milk from the farm was sustained which included setting up a commercial kitchen and pasteuriser. In addition, work had been previously started with a PHD student at the University of Otago that was investigating a form of milk processing and “the university have kind of made noises about potential funding for a pilot program” (KI24). Without the close connections of producer/consumer relationships and the connection that customers had with other institutions in Dunedin such as Otago University, social mobilisation by citizens would not have occurred and a local milk supplier would have been lost. This form of spontaneous uprising by citizens in Dunedin around the Holy Cow experience has been used to stimulate discussion by residents around the wider issues of local and sustainable food for Dunedin. It has been drawn on by key informants as an exciting new space of sustainable food system possibilities. One key informant expressed this hype; “there are some really exciting things happening actually. There is the new initiative out at Port Charmers with the dairy [farm]… Holy Cow. So we have been customers of theirs for years, so that's quite exciting” (KI18). The incident of Holy Cow has provided an opportunity for Dunedin residents to socially mobilise around a particular food issue that was initially resolved through the formation of collective action. Furthermore, Dunedin people have been exposed to the transformative potential of challenging the structures of the conventional food system through the joint effort witnessed by this form of social mobilisation. Ultimately the event has created excitement around the potential to obtain alternative ways of accessing another local food product for the city - milk.

5.2.2 Mobilisation by Taieri Sustainable Market Garden Group

Citizens who became interested in the Taieri Sustainable Market Garden Group were prompted by the information that a local vegetable farm was for sale. Similar to above, concern about this sale started a conversation around food and sustainability issues, at around the same time as Holy Cow. The group’s concerns were stimulated by the potential loss of land; high-class soil quality; and most pressing at the time – the future existence of McArthurs Berry Farm, as one
of the last market gardens on the Taieri. KI15 described: “[there] was the fear, that maybe the DCC, because of the housing demand, might try and rezone [the farm].” As a result of a number of worries, an early meeting saw a number of concerned Dunedin residents form a small working group to discuss an approach to addressing what they saw as a sizable threat to the future viability of providing Dunedin residents with access to local fruit and vegetable products. Key Informant 15 recalled that back in the 1970s green grocers and the grower’s auction system were slowly pushed out through the introduction of supermarkets and their condition of requiring larger quantities of food that the smaller growers could not provide or sustain. Chapter 2 and 4 have highlighted the various food issues which have appeared as a result of the globalised food regime including the continual distancing of people from the origin of their food sources. However, this particular event signified a final loss of significant market gardeners in the City.

As mentioned in earlier sections, the case of the McArthurs Berry Farm does not sit in isolation from a large number of other food issues or initiatives which exist in the Dunedin context. However, it did provide a catalyst for stakeholder’s collaborative action to mobilise and discuss alternative models of interacting with the food system. Chapter 4 provided an overview of Dunedin food issues in section 4.2, for example, an ageing grower’s population, farm and horticulture programmes that are struggling to find appropriate places for students to obtain work experienced; and the low level of interest by youth to pursue market gardening as a prosperous career choice. Accordingly, there is a threat that the future of local fruit and vegetable growers in the City will cease to exist. This scenario indicates only one aspect of the interconnected and complex nature that food postulates for the future sustainability of the Dunedin food system. Therefore, it could be argued that it is not so much an issue that one farm itself is up for sale, but rather that it is occurring in this particular context among an array of other interrelated food issues – such as a lack of growers and an aging growing population - that has caused this event to impose greater threats on the sustainability of Dunedin’s food system.

Realisation in the significance of this event - McArthurs on the market - was validated by the large degree of interest by different stakeholder groups such as local councillors, Outram residents, local growers and education facilitators who took note of this incident. People identified with a variety of important food issues and highlighted the many connections this situation accentuated for the City. These connections included the desire to protect the high-
class soils of the Taieri Plains, secure and promote local growing in Dunedin as well as increased supply of local food to the City. As a result, the small working group mentioned above, received much support at a local meeting held in August of this year (2016) aimed to determine the purpose and focus of the Taieri Sustainable Market Garden Trust. The proposal was to purchase the land and turn the farm into a social enterprise business which would continue to run as a market garden, while also being used as a place for education, research and experimentation for more sustainable growing practices on the land.

From observation, the meeting included KI’s 1,2,7,9,14,15, and 22, with a further number of key informants who had been contacted and were aware of this project; KI’s 8,12, 13, 18, 19, 20. As demonstrated by the high attendance rate and conversation at the meeting, it was evident that a lot of food stakeholder groups were optimistic about the potential this project could have to contribute to a more sustainable food system for the City. However, the discussion surrounding finer details of what the project may entail, proved much more difficult in reality to achieve, as the discussion highlighted some of the competing tensions of the stakeholders involved. For example, was this project about being completely organic or was it more important to ensure access to grower education; was it essential to purchase the property of McArthurs Berry Farm or would any site of land be suitable for this project; and was this social venture primarily about education; stewardship of the land; providing local food to Dunedin residents or the development of a farm model that can be looked upon as ‘best practice’ for farming sustainably and an alternative food exemplar? Key Informant 2 talked about the different ways that people were interpreting the vision of this project stating that they intentionally threw the question into the conversation regarding whether this issue was about growing on the Taieri or Dunedin’s food system or wider sustainability issues in general. Friedmann (1987) highlights that often within social mobilisation strategies “[t]here is no lack of visionary models. The difficulty is getting people to agree on which of the many futures that seem attractive and possible they should commit themselves [to]” (p. 282). The author further acknowledged that a commitment to structural transformation forces stakeholders to step into the blind unknown and deal with the consequences that particular choice could generate. Build-up around the McArthurs Berry Farm situation provided a distinctive entry point for stakeholders to engage in other important issues such as stewardship of land and soil on the Taieri and safeguarding local and resilience food systems in Dunedin.
The willingness of stakeholder groups to come together at the meeting in August was a positive indication that people were interested in the sustainability of local food and saw this incident as an opportunity to address a number of food issues in the City more broadly. For example, a councillor and members of the DCC, local business owners, trustees of the Otago Farmers’ Market, others involved in local food initiatives such as a food box scheme, educator for youth growers, Outram residents, and chefs were brought together to talk about access to local food, the future of growing in Dunedin, a need for physical spaces to train people in more alternative methods of growing and awareness of where their food has come from. There was an interesting tension in that although people wanted to help, no one was willing to entirely commit to the project. Actors were hesitant around the amount of work this project realistically involved, the time that would be required and its odds of success. But this issue presents clearly the complexities and struggles that stakeholders face in creating a more sustainable food system and the difficulty to achieve structural change of the conventional food system.

Summary
The spontaneous uprising of both Holy Cow and TSMG group were initially unplanned responses by individuals who were connected through the emergence of these events and began to socially mobilise. However, these cases do not exist in isolation and are a result of the numerous other alternative food activities that has been formed in the Dunedin context. The multitude of food issues that both incidents represent and the expression of food values that may be activated by their response, acts as a base of individual grievances that may be used to capture the potential for transformation of the conventional food system. Although these events have not yet radically transformed the food system, both events have fashioned an instantaneous change in people’s understanding of how the food system currently operates and what they would like the food system to be. The prospects of a new local milk cooperative and a project aiming to save a local vegetable farm begin the conversation around constructing a more sustainable food system for Dunedin. As a result, the relationships formed through these spontaneous uprising contribute to the social mobilisation that is occurring through local action groups in AFIs towards sustainable food system transformation in Dunedin.

5.3 Local Action Groups as Alternative Food Initiatives

According to Friedmann’s (1987) social mobilisation framework, local action groups form around particular public issues, are isolated responses but which form the struggles of the lower-level links by individuals and groups for social change. AFIs aim to challenge the corporate-
led food industries through activities that provide feasible local solutions around food (Levkoe, 2011). This section will look at examples of how local groups are responding to a range of food issues and solutions for Dunedin City to determine the extent that they provide an alternative solution to the conventional food system. Some local food initiatives serve a specific purpose in Dunedin, while others are part of a larger nucleus of wider social movements. Discussion around how food projects and activities have been formed will be explored as tangible expressions of how different individual groups are socially mobilising around food. Understanding how and why stakeholder groups decide to confront certain failings of the conventional food systems provides insight into the ways that they are contributing to an alternative food system. Thus, the formation and support of alternative food initiatives provide the foundation for potential networking between actors, which will be elaborated on in the subsequent section.

Numerous food projects and initiatives have developed in Dunedin in recent years. Some contribute to well-established food initiatives in the City like the foodbank, others are a local expression of wider social movements that are happening around the world, such as the North East Valley ‘transition valley project’ that is connected to the global transition town movement. Community gardens, food box schemes, environmentally conscious café and restaurant businesses as well as community engagement projects such as the planting of fruit and nut trees, seed saving projects and education around grafting and pruning are all Dunedin examples of individual initiatives that began with a purposeful effort to address the social, environmental or economic effects of the conventional food system. Although each food initiative is an example of groups actively taking charge of a particular food issue, the extent to which they are challenging conventional food practices is more difficult to determine. AFIs are generally thought of as contributing to system changes through intervention with one or more specific food issues. They rely on personal integrations and commitments to support the overall process of transformation, which in this case is the transformation of the conventional food system.

5.3.1 Local Action Groups Reformist Action

Through Friedmann’s (1987) social mobilisation category of ‘local action groups’, action by people can begin with the realisation of a good idea, the acknowledgement of a specific food problem and a way to solve it. Although briefly mentioned in section 4.2.1, one example of a food initiative with a good idea and a specific problem was the development of FoodShare. FoodShare is a new social venture that redirects perfectly good food that supermarkets are
compelled to dispose of, away from landfill and into the hands of Dunedin citizens who suffer from food insecurity (KI17). Key Informant 17 explained; “[the founder] saw two big problems, one of them being food insecurity within our city…And then she also saw that perfectly good food was being wasted.” The problem was easily identifiable and used a very targeted method for engagement. The concept was also not difficult for everyday people to understand and this particular initiative provides tangible data like ‘total meals equivalent’ and the ‘monetary value of resecured food’ that show its progress.

The FoodShare example demonstrates an initiative which aimed to address both social and environmental issues that have been created due to the current way that the conventional food system operates - the environmental impact of food waste and people’s inability to access sufficient food. FoodShare could be argued to work as a reformist mechanism as it engages with the negative effects of food, but not necessarily the cause of the food problem, allowing the capitalist functioning of the corporate food system to subsist. Therefore, the level that this local solution provides an alternative initiative that challenges the conventional food system is limited. Where it does prevail, however, is in exposing a number of issues such as food waste and food insecurity to people and society in order to highlight food issues which exist within the current food system. A similar national campaign which has recently launched, LoveFoodHateWaste which supports the claims made by FoodShare, creates a greater presence of dissatisfaction with the current functioning of the conventional food system.

As was determined in the literature, Levkoe (2011) highlighted that alternative food initiatives have been criticised for failing to address the interconnected nature of the food system by focusing on food issues in isolation. However, others argue their vital function is to address one food issue, very well, that other AFIs do not (Hassinein, 2003). Foodbanks have also been highlighted as a reformist action, as they provide a very specific service that aims to address the particular food issue of food insecurity and hunger but not directly structural challenges of poverty (Holt Giménez and Shattuck, 2011). Key Informant 5 stated; “The first couple of times we let people come in, and they can get a food parcel…the third time we definitively request that they see somebody…because then it's a longer term issue.” Presbyterian Support Otago, which administers one of Dunedin’s Foodbanks, assist with individual cases by providing help for its communities; however, its primary function sits within the capitalist constraints of the neoliberal food regime. The place of a local food initiative is still valuable, in that it establishes a growing awareness of food issues and provides a service that elevates food problems for its
citizens. However, it does not challenge the structural change that is required for transforming the conventional food system.

5.3.2 Local Action Groups Progressive Action

Lack of access to fresh and healthy cheap fruit and vegetables has been highlighted by one other group in Dunedin as a problem. Consequently, they have provided a local food initiative called the All Saint’s Food Box scheme which is an initiative that aims to provide affordable and seasonal fruit and vegetables to families and the community. One key informant explained; “[s]o the people come in, and you can get three bags, a family pack which is twelve dollars, a couple’s pack which is six or a single for three [dollars]” (KI9). Although this initiative does address the issue of fresh food access, it is reliant on food from Christchurch and the big auction system again highlight that individual initiative are often isolated to addressing one food issue. And this initiative further continues an issue often labelled as ‘food miles’, which creates other social and environmental issues as it has come from further distances. Key Informant 11 states;

… so the fruit and veggie coop, all saints, this is not local food – fruit and veggie – this is coming from the market. But the difference is they charge three, six, and twelve dollars. It’s very minimal, but their philosophy… is, if you don’t put a cost, and people can’t contribute to buying their food, they are getting it, then you’re disempowered… so the key word that [is used] is dignity.

The quote above forms an example of part of the progressive food movement, which seeks to implement social justice issues into an alternative food system model. Food justice is attempted by trying to decouple the food from the profit orientated markets such as supermarkets and reinstalling fruit and vegetable accessibility into the local communities who need it the most, for example through food box schemes. Furthermore, the use of the words empowerment and dignity provides a clear notion that this particular food initiative resonates with the UN Declaration of Human Rights statement of the right to feed oneself with dignity (see section 2.3.2). The All Saint’s Food Box are not providing free food aid, rather a more equitable way of accessing the basic food necessities. Friedmann (1987) states that the ultimate goal for transformative processes is societal emancipation. Therefore, although the initiative does not engage in addressing the problem of a populations growing distancing from its food source –or
how the food is produced, it does aim to appoint greater food justice into the local solution that is provided by the food box.

5.3.3 Local Action Groups Radical Action

Holt Giménez and Shattuck (2011) suggested that the transformative potential of the food system could be strengthened through an alliance between progressive and radical food responses. Although it is difficult to see the contribution that one food initiative provides for the transformation of the conventional food system, key informants are motivated just to start by getting involved. Key Informant 9 explained; “if we could get one or two projects happening and also just small gains along the way…” this would be a start. The research found that people engaged in particular alternative food initiatives are also motivated at the local level by their ability to establish personal connections, personal growth and as a mechanism to directly benefit their personal circumstances. For example, the simple pleasure of enjoying working in the garden was mentioned as a driver for personal engagement in growing food. Table 11 provides further evidence of this. However, with statements such as ‘building connections’; ‘empowering’; and ‘build neighbourhoods around the food’ mentioned below, it is clear that the low-level links of community connections are beginning to form the essential drivers for engagement in AFIs that contribute to the radical transformation of Dunedin's food system.

Table 11 Reason for local action groups to form alternative food initiatives in Dunedin

<table>
<thead>
<tr>
<th>Key Informant</th>
<th>Reason for local action groups to form alternative food initiatives in Dunedin</th>
<th>AFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>KI6</td>
<td>“doing traditional gardening for reasons that it seemed like a sensible thing to do, and that eating vegetables is good. And making it available to those who don’t have gardens of their own is another thing that seemed like an excellent idea”.</td>
<td>Community Garden</td>
</tr>
<tr>
<td>KI10</td>
<td>“It’s building connections…getting to know our neighbours, skill sharing around that, so that’s my main interest there I guess, just sort of informal”.</td>
<td>Community Fruit and Nut Orchard</td>
</tr>
<tr>
<td>KI11</td>
<td>“I’m a really strong believer in making sure it [fruit] gets used and we tend to come away from those preserving days with a lot. So that’s um really are about empowering and empowering”.</td>
<td>Fruit Preserving</td>
</tr>
<tr>
<td>KI14</td>
<td>“We’re going to turn it more into a neighbourhood food harvest. So the aim is to build neighbourhoods around the food”.</td>
<td>Fruit Harvest</td>
</tr>
</tbody>
</table>
One key informant stated; “I'm sort of involved to be honest, on more selfish reasons. For my own access to food” (KI21). However, the key informant acknowledged their motivation came from an understanding that in the future, it will become increasingly difficult to access good food from supermarkets, as food miles were an issue and being able to control which sort of pesticides have been used on their fruit and vegetables is beneficial. Furthermore, one prominent initiative, which has connections to an array of local food initiatives in Dunedin was the ‘Transition Valley 473: Community Orchard – 1000 Fruit and Nut Trees Project’. The project is a sub-section of the larger Transition Valley 473 initiative which comes out of a new social movement known as Transition Towns.22 The Transition Towns Movement is grounded in the argument that “change happens at the local level where individuals feel empowered to act” (Martindale, 2015, p. 916). This project’s aim is to plant fruit and nut tree’s throughout their neighbourhood as part of the plan to look after their community in the future; “when food and its transport become increasingly expensive” (Transition Valley 473, 2016). Key Informant 10 explained;

The orchard side of it, we decided to work alongside the DCC and negotiate being able to plant fruit and nut trees on public land. So we could have done guerrilla type gardening, but we wanted to shift their thinking about what was acceptable to grow on public land. Because really at the moment, the regulations, they don’t, have really prevented the council from planting fruit and nut trees on that land.

The fact that the community orchard groups are engaged with trying to shift the status quo provides evidence of attempts to radically transform the structures of conventional food planning methods by demanding food be implemented into everyday landscapes and familiar public places. Social mobilisation by this group was twofold as is served a specific purpose of safeguarding the future of food for generations to come in the locality of North East Valley through the planting of fruit and nut trees on public lands. This initiative also had a wider goal of exposing the need to change societies behaviour around what is an appropriate way to engage in sustainable food practices in society. The community orchard example offers progression

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22 Earlier social movements aimed to socially mobilise around notions of culture and identity such as feminist, postmodernist and post-structural approaches, whereas new social movements promote broader ideas of protecting the environment and equal rights for minority groups (Levkoe and Wakefield, 2014).
towards a radically different way of thinking about the food system (by reintroducing it back into the city). It also provides opportunities to engage with linking food to other transformative initiatives through scaling up and out through different sectors of society, which is accompanied by the idea of networking, expanded on in the following sector.

Summary

The extent that local action groups are contributing to AFIs varies and include reformist, progressive and more radical attempts at addressing food issues and shifting the status quo, respectively. All those people who are actively involved in local food initiatives are bringing greater awareness to Dunedin citizens through events, community projects and public campaigns. A greater strengthening of social mobilisation by local action groups around the activities pursued through AFIs will occur through different networking relationships and arrangements.

5.4 Networking in Alternative Food Networks

As mentioned above, Dunedin has experienced an increase in the number of AFIs that have emerged in the City. The ability for social mobilisation to gain further momentum is by scaling up AFIs through networking – specifically alternative food networking. Networks can be used to deliver an important next step in organising larger groups of people, beyond what is possible by individuals to mobilise for social change. This section will detail the types of networks which have been established in Dunedin in order to demonstrate how food stakeholder groups have attempted to coordinate efforts around establishing a more sustainable food system. Alternative Food Networks, as discussed in the literature, are particularly interested in building strong relationships between people and groups, markedly through social learning and capacity building. The analysis of interactions between networks are considered in this thesis through Friedmann’s (1987) framework once again, which described networking as more of a voluntary arrangement that remains both informal and locally grounded in actors struggle with the conventional food system. Together, alternative and local food networks are identified as an important part of food system transformation (Levkoe and Wakefield, 2014).

5.4.1 Our Food Network

Networks are used to determine the web of stakeholder interactions that are forming around alternative and local food initiatives in Dunedin. Levkoe and Wakefield (2014) recognise that
networks are an essential element for social mobilisation through their ability to build alliances, facilitate a diffusion of ideas and practice as well as establish a more legitimate and democratic form of organising local food movements. Thus, the merging of progressive and more radical food initiatives may be undertaken through engagement with networks to encourage the transformative processes of Dunedin's local food movement. In particular, Our Food Network (OFN) has engaged with various other organisations, local council, individual growers and anyone with an interest in connecting local people together to support in the promotion of local and more sustainable food relationships. Its conception initially came out of two local food forums which had been held in November 2012 and August 2013 (Haylock, 2015). A third forum set up the food network and identified issues and potential projects that should be addressed by the group (KI1). It is an informal, local volunteer group of people in Dunedin who are interested in stimulating “the production, distribution and consumption of local food and in that way contribute to the building of a resilient and prosperous community” as is stated on their Facebook page and in their brochure, see Figure 6.

The group has a 400-member e-mailing list that shares information and which has a core group of members that discuss and activate ways to support local events and projects. For example, their recent activities have involved a local seed saving network and a harvesting project that has linked to other AFIs that has been started by communities. Their involvement in supporting the ‘Harvest Celebration’ which was an event run at the Otago Farmers’ Market demonstrates collaboration in the City around promoting sustainable food values. Key Informant 9 described that both groups (OFN and the Otago Farmers’ Market) came together to stimulate public interest around the harvest season which allowed customers to buy apples from the market and experience using an apple presser that would juice their fruit to celebrate the harvesting. Key Informant 9 explained; “Now probably one or the other could have done it on their own, but you know… they were all in it together.” This example demonstrates Friedmann’s description of networking in that ‘from time-to-time’ local action groups are able to mobilise around larger activities as a means to contribution to greater food sustainability in the City.

The interactions amongst different food groups have led to the development of effective and strong relationships between food actors in Dunedin as a result of collaborative activities that have been set up in the City. OFN has had further success through the employment of an ‘ideas into action’ facilitator, whose aim is to develop and grow local projects to become long-lasting, viable activities for people to run in their communities (KI14). The role began at the start of
2016, and a number of other interested food actors have been actively involved with this facilitator. It has provided stakeholder groups with an employed community advocate through which they can approach regarding lower-level grass roots food initiatives. One key informant expressed their understanding of how a role such as the ‘ideas into action’ facilitator can assist social mobilisation around food issues and initiatives;

…you have got projects and…you need a certain type of, if you have someone who’s the funding guru… someone [the ‘ideas into action’ facilitator, they are] excited about so much stuff. If you come to them and say I want some funds for waste or whatever, I want to run this campaign, they would be like sweet, I’m going to go and try get some money.

Figure 6 Principles of Our Food Network group
Many key informants were directly engaged with OFN, some were in regular contact with core group members of the network, while others were simply aware of the network and received emails from them informing of food related information or events. OFN has played an important role in food activism for the City through its involvement in many projects, events and local council lobbying. Furthermore, the creation of the ‘Food Resilience’ document by Council and consequently the instalment of the Food and Business Advisor Position which is a formal council position, discussed further in section 5.6, would have unlikely become a reality without the persistent and proactive appeal made by OFN. As Key Informant 7 recognised; “well I think we have been very lucky, like the Our Food Network, those guys have been awesome in terms of the lobbying, so without those guys, I doubt we would have [the Food Resilience and Business Advisor] position.” Therefore, the benefits of networking are evident from the examples provided above which have achieved much more together than could have been attempted by individuals or any one local food group.

5.4.2 The Otago Farmers’ Market

Networking and AFNs have an advantage of being part of a wider collection of people who feel connected by a commonly shared identity (Levkoe and Wakefield, 2014). The Otago Farmers’ Market has a distinctive identity which can also be considered an AFN between small-scale growers, local businesses and the Dunedin public.23 Key Informant 8 captures the essence of the market as an alternative food space where people can make connections through their food and with each other;

*I think in Dunedin we are so fortunate that people just love, love, our market but we can continue to let people know why the farmers’ market represents such strong food values and that people get a chance to talk to the people that grow their foods so you know it's not all organic at the market, but they can talk to the vendor if they feel and have a trusting relationship with the vendor and it makes them feel better about the food that is spray free or even just grown with love, just whatever.*

Levkoe and Wakefield (2014) declare that the point is to understand the patterns which have emerged among different actor’s interactions and not just the specific attributes of individual

23 http://www.otagofarmersmarket.org.nz/
groups. Unlike OFN, the Otago Farmers’ Market can provide a physical space through which people are able to interact and use it as a platform to engage in alternative food practices. For example, Key Informant 3 discussed the success of a local student from the Otago Polytechnic (a local educational institute) who began a business venture at the Otago Farmers’ Market and successfully uses by-products from other food businesses such as Cadbury’s (a chocolate factory) and Emerson’s (a well recognised brewing company) to market products like cookies and sweet treats. Other informants discussed the opportunities that the Otago Farmers’ Market has provided for new food businesses and economic value for the City by tourists and the support of small-scale local food producers (KI8; KI20). The Otago Farmers’ Market also enables networking between local growers at the market who used their alliance to match their prices with the cost of food from the supermarkets. The vendors worked together as Key Informant 20 explained:

…the veggie side of the market do help each other very well and complement each other. If we know we are going to be short of one thing, that Bridon are going to be short of cauliflower they will ring up McArthurs and say to him ‘look have you got more cauli’ ‘yip I can bring more cauli this week’. Instead of them all bringing everything and taking stuff away.

This collaborative effort between vendors at the market is an example of what Friedmann (1987) deemed necessary through the task of ‘selective delinking’ from the conventional food system, ‘collective self-empowerment and self-reliance’ (see section 2.4.1). The vendors are competitive between themselves but are also collectively supporting each other's viability by fighting ‘on the same side’ of the food system. Vendors at the market enable the reimagining of what an alternative food model might look like, in contrast to the conventional food system characteristics of industrialised, globalised and centralised food production. It provides a physical space for people to engage with each other and support the type of food system that aligns with their food values of sustainability and environmentally conscious food choices. Thus, it was apparent that food actors in Dunedin see the benefits of networking firstly to support local food initiatives become successful and viable projects. And secondly, as a way to further support the type of food system model that they believe in.
Summary
Networking through the promotion of an AFN is helpful in providing greater collective action towards common goals of sustainable food system transformation – more than could ever be achieved individually. The relationships that are established through stakeholders who support each other’s local food initiatives and business ventures provides a stronger and more organised front against the well-developed structures of the conventional food system. Stronger still, are the commitments made by groups through coalitions which provide the loose outline of a local food movement for Dunedin City, further discussed below.

5.5 Coalitions and Dunedin’s Local Food Movement

In Dunedin, coalitions are being formed and a local food movement has begun to take shape, similar to what Wakefield (2007) described as a “loose alliance of actors concerned with a variety of food issues” in Canada’s mobilisation around food (p.333). As was described in the previous sections, this is evident in Dunedin due to the recognition by citizens who have become interested in food related issues, with support regarding the spontaneous uprising of particular food ‘events’, the increased number of alternative food initiatives in the City and the formation of successful food networks and their affiliation with other connected food initiatives. The idea of coalitions in the setting of social mobilisation refers to the ‘joint undertakings’ of either local action groups and/or formal organisations (Friedmann, 1987). To draw from Chapter 2 once more, Friedmann (1987) explains that “coalitions are possible when objectives are convergent, or as is more generally the case, when separate but parallel objectives can be effectively pursued through a joint effort” (p. 274). Therefore, this section will look at how Dunedin’s food stakeholders have begun to form alliances with each other for mutual gain, support, and resources that aim to enable movement towards challenging the conventional food systems dominant framework. Specifically, following the previous section which talked of the network group ‘Our Food Network’ and their employment of an ‘ideas into action’ facilitator. This process was an act of coalition building with a group known as Sustainable Dunedin City.\(^{24}\) Firstly, regarding how the position was legitimised through collaborative efforts and secondly due to the realisation that each organisation needed to support the other towards social mobilisation in order to engage in transformative practices – both in food and wider sustainability agendas.

\(^{24}\) Sustainable Dunedin City is a society that is engaged with the promotion of ‘a positive, secure and sustainable future for Dunedin City’. They are an incorporated society which relies on donations and grants for undertaking particular tasks.
A form of coalition has been established between OFN and Sustainable Dunedin City. As OFN is an informal group, they did not have the official capacity to employ the ‘ideas into action’ position. However, they have received a number of grants from the Dunedin City Council, Dunedin Rural Development and also Sustainable Dunedin City to provide funding for the ‘ideas into action’ position. Key Informant 1 explained; “being an informal group and... in order to employ somebody, we actually had to get into a strategic alliance with Sustainable Dunedin City – now Sustainable Dunedin City is actually an incorporated society and of course the advantage of that is that they actually have to have a treasurer and they have to have financial accountability.” The position of the ‘ideas into action’ facilitator could not be funded without a more formalised arrangement that Sustainable Dunedin City had attained and which OFN required in order to employ the ‘ideas into action’ position.

Interestingly, Sustainable Dunedin City had also been experiencing some difficulty in the low level of interest by its members and commitment by the volunteer committee leading to a conversation around the potential to ‘wind up the society’ (Sustainable Dunedin City, 2016). Key Informant 2 expressed; “the issue is, they basically need committee members because it's about to fall down, and wrap up and I think everyone's going no, but if everyone is saying no, then who's actually going to do it?” In other words, no one wanted to see Sustainable Dunedin City dissipate, but everyone is overextended by their own local groups. The difficult task to commit time or effort to yet another organisation (such as support for Sustainable Dunedin City) would be impractical. However, people also recognised, the even greater difficulty there would be in trying to completely start a new group that represented sustainable action for the City. Friedmann’s (1987) task of ‘cross-linking, networking and building coalitions’ provides an essential step towards social mobilisation by groups to challenge the conventional food system and has been applied in this instance. The cross-linking of visions and ideas by the two groups demonstrates the interconnected way that food is linked to many other aspects of society.

…there’s a question of do you… start a new trust that has this vision that everyone can become of it, or actually are you going, well there’s actually a structure in place you know, maybe it needs a new name or whatever, but like the vision is actually there. All to do with, you know it is sustainability but it is about talking about food security, it’s taking about climate change, all these things are interchangeable you know, all intertwined. (K12).
Furthermore, the value of fostering a group like Sustainable Dunedin City provides prospects for refocusing the existing group of Sustainable Dunedin City towards a reinvented umbrella organisation for informing the public on all things sustainable – including the sustainability of Dunedin’s food system. For example, Key Informant 2 and other interested citizens realised the potential an umbrella organisation like Sustainable Dunedin City could provide for encouraging the social mobilisation of food and wider issues of sustainability in Dunedin;

_You know with the food network and like things starting [other food initiatives] and… then you get all these different newsletters and it’s like well… where’s the umbrella organisation that’s holding all of it together and… that’s where I see huge potential for, like especially because Sustainable Dunedin City is under the brink, it needs re-visioning you know, it needs new people and it’s like ok here, let’s start new fresh and see what can come out of it._

An extract from the Sustainable Dunedin City newsletter has since expressed “a successful AGM on Wednesday, with the positive outcome… the committee received a number of messages of encouragement and offers of practical help from SDC supporters” (Sustainable Dunedin City, 2016). Therefore, it may be anticipated that Sustainable Dunedin City has reorientated its purpose towards a meaningful and practical vision as was described as one of Friedmann’s (1987) six tasks for assisting with radical change.

Members from OFN have begun to look at forming closer relationships with Sustainable Dunedin City, with a potential merger of some description – although there was an emphasis to remain completely separate from council (KI1). The literature found that it is important to ensure that different groups are able to collaborate without wasting effort on always establishing new shared values (Dwiartama and Piatti, 2016). ‘A single world view’ is neither practical nor completely advantageous to address the wide variety of problems and various solutions necessary for transforming the conventional food system (Levkoe and Wakefield, 2014, p. 316). This situation offers an example of how coalitions can be used effectively to pursue certain interests that can coexist but which remain separate in essence. Therefore, the research would suggest that coalitions can be formed without the need to jeopardise the visions, objectives or identity of each group. However, the strength in joining forces provides Dunedin with greater
capacity to enhance the transformation potential of the conventional food system and other important issues that may be addressed by creating a more sustainable food system.

5.6 Formal Organisations and Prospects of an Alternative Food System

Formal organisations provide a link between the grassroots effort of local action groups and a more legitimate presence in the community through their association with other professional groups in society (Friedmann, 1987). Likewise, as discussed in Chapter 2, the institutionalisation of an alternative food system both in policy and practice, and allowing for greater flexibility for the many ways that people could become involved in food issues and solutions, was paramount for the success of creating a transformative process towards food system sustainability. This section argues that formal organisations are an essential part of the social mobilisation strategy described in this chapter. However, it is the collaboration of all those stages of stakeholder action from the spontaneous uprising of food incidents, local and alternative food initiatives, AFNs and the momentum of Dunedin’s local food movement, working together through the relationships that are established which will create the greatest potential to socially mobilise towards transformation of the conventional food system and the promotion of social change.

The final category - formal organisation of social mobilisation - can be used to provide the added pressure needed to challenge the dominant structures of the conventional food system. Food organisations can carry greater political weight with local decision making and provide the supplementary drive of a strategic direction for sustainable food system transformation. As explained in Chapter 2 examples of, formal mechanisms that are used to address food issues include food policy councils, food strategies or food charters. Those mechanisms strategically stakeholders through the process of food system transformation (see section 2.4.2). However, Friedmann (1987) warns that formalised engagement comes at a price due to its inherent connection with state government and legitimised processes. It becomes more difficult for formal organisations to engage in radical transformation of a system as they must adhere to the political will of the dominant structures. Thus, interconnections between formal and informal mechanism are essential for enhancing the transformative process.

This research found that the momentum around the talk and involvement in an alternative food system in Dunedin gained traction after the instalment of a recently appointed and formalised council role of the ‘Food Resilience Business Advisor’ (Food Advisor), coupled with the
previously mentioned ‘ideas into action’ facilitator for OFN. Key Informant 14 describes the build-up around alternative and local food action in Dunedin;

…[they] started at the same time (Food Advisor and ‘ideas into action’ Facilitator), which is incredible because [they] are both on the same path but [they] are kind of coming at it from different angles… so I feel really strongly that we’ve got a lot of good people…we’re supported by Sustainable Dunedin City…OFN… FarmHand25, FoodShare, so all of this connection has come together with all of this support and we actually wanting to see this work and we want to be a part of it. And neighbourhood support26 has gotten behind us, so it’s phenomenal and its happening.

The Food Advisor role had essentially been lobbied for by the OFN group who had insisted the Food Resilience report be undertaken by council to determine the implications of greater food resilience for the City. The Food Resilience (2015) document acknowledged councils position to enable;

i. A more coordinated internal approach to food-related issues and opportunities; and

ii. Engagement with city stakeholders, exploring options and mechanisms to address the challenges, risks and opportunities in this area.

The Food Resilience document prepared three options for consideration by council, one of which included an agreement to resource a food resilience coordinator that would “oversee the development and implementation of a food resilience plan and activities” which was accepted (DCC, 2015, p.1). Thus far, a project has been recently set up by the Food Advisor called the ‘Good Food Dunedin Alliance’. The idea of this group – similar to a food policy council in style (see section 2.4.2), will incorporate a collaborative partnership between various stakeholders who have different food views and agendas in the City such as those mentioned by KI14 above. One key informant believed this group will work well as an alliance as explained;

25 FarmHand provides a free 13-week programme aimed at educating and connecting young people with permanent basic farm skills and personal development. http://www.farmhand.org.nz/

26 Neighbourhood Support New Zealand is an incorporated society that aims to make homes, streets, neighbours and communities safer and more caring places to live. http://www.ns.org.nz/
I see it as an alliance…but you know it’s actually about connecting, alliances, and… getting some traction if you like, maybe in one or two new initiatives and it might be like, not everyone believes in food labelling um but it’s also about promoting, as we talked about before, café’s here, even at the supermarket, Otago growers or whatever. (KI9).

The value of establishing connections and building alliances between formal and informal organisations was further supported by Key Informant 22 who expressed; “our end goal … will be working with everybody whoever they are in that spectrum” that are interested or concerned with changing the current flaws of the conventional food system. This project will be essential for assisting in further social mobilisation by interested citizens as the aim is to set up a definition of what ‘good food’ means to Dunedin in a way that is inclusive and visionary for the City (KI22). The argument which was proposed in earlier sections of this chapter; to ensure that collaboration around food processes remains flexible to accommodate the various group identities and goals, is reflected through the representation of different food actors in the ‘Good Food Dunedin Alliance’. Nevertheless, there was also a sense amongst key informants that a general acceptance of the core ideas such as sustainable, democratic and resilient food practices would be required for the promotion of an alternative food system. In this respect, stakeholder views would be similar or at least ‘on the same side’ of pursuing an alternative food system model. Table 12 below shows the extent of different conversation and coordinated action that key informants believe is occurring and should continue to by fostered by food stakeholders in Dunedin.
Table 12 Dunedin stakeholders coordinating from different angles formal/ informal groups.

<table>
<thead>
<tr>
<th>Key Informant</th>
<th>Dunedin stakeholders are coordination from different angles between formal and informal groups to socially mobilise around a more sustainable food system.</th>
</tr>
</thead>
<tbody>
<tr>
<td>KI7</td>
<td>“I think that’s had a couple of benefits I mean [the Food Advisor], even in that team (Economic Development team for DCC) is shaping the conversation around food, which is really helpful. And what food resilience might look like within an economic development frame.”</td>
</tr>
<tr>
<td>KI8</td>
<td>“…that’s happening more and more of those[coordinated] talks you know; I believe they are.”</td>
</tr>
<tr>
<td>KI13</td>
<td>“…these community stakeholder forums and they tend to be really sort of collaborative and everybody sort of is working towards a common cause. And I guess something like local food is that it’s in everyone in the room’s best interest to, in some way, to sort of promote this and it’s just that people have got different reasons and ways and ideas about how to do it. But I guess it’s sort of identifying that common, you know what it is that we are working for.”</td>
</tr>
<tr>
<td>KI14</td>
<td>“… trying to get that [sustainable food] message across, because that’s a really difficult one.”</td>
</tr>
<tr>
<td>KI18</td>
<td>“The thing about certification, is it gives you a standard. So you’re all speaking the same language…. And so when you put a stand in, it’s really clear and it puts a common language in there. Personally I’m really for it.”</td>
</tr>
</tbody>
</table>

Summary

Friedmann (1987) proposes that no single form of organisation or category of social mobilisation is sufficient to bring about radical social change. In relation to the transformation of the conventional food system, this would apply in the Dunedin context as has been argued throughout this section which requires both the flexible (informal) and (formally) institutionalised notion of an alternative food system for Dunedin residents. Key informants in the form of food actors and stakeholder groups are recognising the relationships and connections that are beginning to transpire around the creation of a more sustainable food system. However, Dunedin is a single City in New Zealand and the ability to engage in sustainable and alternative food conversations at both vertical and horizontal scales must reach all aspects of policy and practices to achieve structural transformation (Levkoe, 2011).

5.7 Conclusion

The evidence and discussion brought forwards in this Chapter aimed to expose the various individuals, groups and organisations that are working at different levels and addressing
different types of food issues. The examples provided above and discussed are by no means the extent of all the groups in Dunedin who are engaged with process of social mobilisation around food practices. Rather, each section intended to illustrations that Dunedin has all of the ingredients necessary for Friedmann’s (1987) social mobilisation ladder that works together towards the creation for social change. Key informants are becoming more aware the closer connections that are occurring in the Dunedin context around sustainable food system mobilisation in pursuit of transformation some of which were instantaneous events such as the Holy Cow and TSMG incidents. However, challenging the conventional food system continues to encounter many tensions and barriers along the way. The many groups in Dunedin continue to hit roadblocks for social mobilisation which will be highlighted in the follow chapter.
Chapter 6: Tensions and Barriers for Social Mobilisation

- Results and Discussion

"Capitalism: production was separated from consumption – “This curious arrangement led to a conceptual separation of what people called ‘work’ from ‘life’, with the latter set equal not to what households produced for themselves, but to what they could afford to buy – ‘life’ was put on sale.”"

- John Friedmann (1987, p. 349)

6.1 Introduction

This chapter will provide the results and a discussion regarding the tensions which exist in Dunedin’s alternative food spaces and the barriers that restrict the social mobilisation by people to achieve food system transformation. Focus question number three regarding what barriers and challenges have developed in relation to stakeholder’s ability to effectively mobilise towards the transformation of the conventional food system, will be addressed. As explained in earlier chapters, the food system has been characterised as complex, interdependent in nature and includes an array of contradictions and tensions. This has become evident in the different approaches that individuals and groups take to address the shortcoming in the food system. The strength of the conventional food system has been highlighted as a significant barrier to the transformation of an alternative food system as it maintains the status quo of unsustainable food practices. As is evident in the above quote, Friedmann’s understanding of transformative processes state the structures of capitalist society are activity resisting change through ‘the reproduction of the dark underside of the system (see Table 1). Evidently, time, money and resources proved to be a large barrier for enabling local action groups and organisations to pursue meaningful change. And lastly, stakeholders that mobilise around changing Dunedin’s food system remain a small minority group of people. Stakeholder action in the local food moment has occurred primarily due to grass roots initiatives, community level engagement - driven by volunteers, and some momentum by employees at the formalised local level, that are on limited contracts. The aforementioned both challenge and threaten the long-term commitment that is required to confront the structural norms and food issues associated with the operations of the current conventional food system. The tensions and barriers will be
explored in relation to Dunedin stakeholder's ability to mobilise around food system transformation and the creation of social change.

6.2 Entrenched Nature of the Conventional Food System

As was mentioned previously in Chapter 2, the successive and well-established constructs of the corporate food regime have led to the formation of mounting social and environmental injustices, the dismantling of local food economies and the greater distancing of people from understanding where their food has come from. However, it is also the most accessible, convenient and cheap way for people to acquire food, especially in the global north (Morgan, 2015; Booth and Coveney, 2015). Through the research in Dunedin, key informants declared that access to a cheap and abundant food is now considered the norm, with little consideration by people to understand the impacts that this food has caused on other aspects of society. Consumers entrenched ideas of how the food system currently functions make it more difficult to reimagine an alternative food system or explain why it is necessary. The conspicuous nature of current reformist practices ensures the current food system has installed minor adjustments to the neoliberal model in order to mainstream niche markets such as organic and fair trade. Thus, the dominant position of the conventional food system continues to be a significant barrier as its structures actively resist change through such reformist methods. Below, the dominant structures of the conventional food system including consumer acceptance and industry will be discussed as barriers towards the potential for food system transformation and the promotion of social change.

6.2.1 The Dominant Food Structure and Consumer Acceptance

As mentioned above, the entrenched structure of the conventional food system itself is a significant barrier for stakeholders who are actively seeking to transform the food system. Key informants stated there is a need to address how people conceptualise food, food values and their acceptance in the current form of how the food system operations. Much of the conventional food system is appealing to people as the current model can offer cheap, accessible and an array of food options. However, a discussion in this section looks at how the challenges of establishing fair prices and more sustainable consumer values can be difficult for people, especially lower socio-economic groups whose daily life struggle is made easier by the convenience that the current food system provides.
Key informants argued that the corporate-led food industries have encouraged the era of cheap, convenient and readily available food, at the expense of sustainable food practice and the health of citizens. People trust the conventional food system – “they think if they are allowed to sell it, it can’t be bad for you” (KI1). This is problematic for stakeholders who are promoting an alternative food system, as it is not just the structural food changes that are required, but at some point, people’s belief systems must also be questioned. In particular, the idea of trying to support food from a sustainable food system model is a greater challenge by those from lower socio-economic families who are struggling to provide enough food each week as it is.

The current structure of the conventional food system suits a large portion of the Dunedin population who may be confronted with complex lives. Hence, they are unable to focus on the sustainability of the food system as they are more worried about the struggles of everyday life. Key Informant 9 explained the circumstances of trying to establish a gardening support group VIMBY (Vegetables in My Back Yard), but stated; “I learnt so much about how complicated some people's lives are”. Table 13 below captures the tension between the need to establish a more sustainable food system and the day-to-day struggle that different food issues present for residents, primarily low-income earners which act as a significant barrier towards social mobilisation around food. Table 13 shows that the operation of the conventional food system suits the lifestyles of many people who are coping with the struggle of everyday life. Key informants recognised that anything that makes people’s lives harder is going to be a barrier by those who are suggesting an alternative model for the food system. As Key Informant 19 stated; “I think it’s only the truth that we do need a certain amount of convenience in our lives. And only the real hard core will take the harder route. That’s the unfortunate thing and that’s the truth.”
Table 13 Features of the conventional food system as a barrier to social mobilisation around food issues.

<table>
<thead>
<tr>
<th>Key Informant</th>
<th>Features of the conventional food system as a barrier to social mobilisation around food issues.</th>
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<tbody>
<tr>
<td><strong>KI4</strong></td>
<td>“…it comes back down to simple things such as low wages for a lot of people as well, you know not being able to afford vegetables and getting stuff that’s cheaper. Whauna think it’s easier to go get a loaf of bread and five dollars’ worth of chips. That probably costs them six dollars…Time involved in having to prepare food when it’s easier to go get takeaways.”</td>
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<tr>
<td><strong>KI5</strong></td>
<td>“…but the first money anything comes out of is the food money slot, they reduce the amount they spend on food to cover the cost of this child going to camp… um the warrant being paid on the car, because they need the car to get everyone to work or to school… to keep the life functioning. So the food money is the flexible money and that is the first thing to go.”</td>
</tr>
<tr>
<td><strong>KI18</strong></td>
<td>“99 percent of customers want the convenience and so the biggest challenge we have had to face is ok how much do we give into that…”</td>
</tr>
<tr>
<td><strong>KI9</strong></td>
<td>“…they are really absolutely focused on providing the best value fruit and veggies for families. They don’t really care, well it’s not that they don’t care where it comes from, but it’s not their focus.”</td>
</tr>
<tr>
<td><strong>KI23</strong></td>
<td>“…the way behaviour dynamic changes in houses is interesting as well, like that fear of waste in a low income family and you have got three kids from like 3-6, you don’t want to make something that’s organic and fresh and healthy if they’re not going to like it. You can’t afford to waste food… When you’re so stressed and you’re a single mum, just keeping your kid’s happier is easier.”</td>
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Similarly, Key Informant 1 explained; “you are fighting against a very very well organised marketing system which actually fits within the current economic paradigm… the conventional system, it’s just too well entrenched.” The dominance of the conventional food system was also mentioned as an issue by Key Informant 18 regarding the constant struggle that alternative food initiatives have to endure as the subordinate model of the current food structure. They stated, “the [conventional] system, everything goes against us, you know, everything, so that’s what we are in and that’s why you’re never at the edge, pushing the boundaries” (KI18). The informant explained that they were always just trying to remain a feasible business while struggling to compete with the service that supermarkets can provide. To engage with large scale transformative efforts, another informant expressed that in order to challenge and ‘push the boundaries’ of the conventional food system, you would need to approach widespread social change as well. The interconnected reality of trying to adjust one aspect of the food system will directly impact another, as they explained in relation to paying an appropriate price for sustainability grown food;
… the idea of a restaurant saying I’m prepared to buy organic… making those connections… paying a price it is worth… but that means in order for me to meet my end, if I was really going to make money on organics… make that business model work, umm it would need to change the culture of the restaurant and how they run their business, which then means they have to adjust their prices and then you’d have to change the culture of the whole town of being prepared to pay the price that food is actually worth, right. (KI2)

These dominant structures of the food system connect interdependently with most other sectors of society, as the above statement suggests. It has been established in the literature that this current model comes at a cost, with social, economic and environmental consequences (Hassanein, 2003). However, the acceptance by consumers in the commodification of food which demands cheapness and abundance is an entrenched barrier for stakeholders who aim to change the way the food system functions and how people value food. One key informant explained, for instance, that they cannot compete with the conventional food system if the price of food is the only thing that customers valued (KI18). To support this claim Key Informant 14 stressed in relation to how food is valued;

I think that’s what we have got to change. I think for me to get that wheel moving, it’s about that education of normal regular people, to get them to think… put your money somewhere that’s making a difference. Put your money there and support them [alternative food businesses] to make your life more convenient… make the effort. And that’s what I want to see change.

In addition, misrepresentation of some alternative food initiatives can further restrict stakeholders from creating awareness and promoting engagement around sustainable food options in support of transformation for an alternative food system, discussed in section 6.4.2 of this chapter. Friedmann (1987) states that social mobilisation begins with the people from below, yet this proves to be much more difficult as most people who are still struggling to manage the stresses of everyday life are often unable to either afford the time or money to engage in the practices of sustainable food system transformation.
6.2.2 Industry Barriers

Key informants were aware that industry and corporate food companies can influence or restrict how stakeholders can approach certain food issues or social mobilisation in pursuit of systems transformation. Accordingly, a number of food initiatives and the framing of food problems were approached with caution regarding how the food industry might react to the promotion of particular food solutions. Key Informant 23 stated; “health is full of campaigns that no one listens to, causes like Junk Free June has taken off, and got a little bit of traction… We promote Dry July and all those sorts of things. Obviously industry, we have to be careful… about supporting things.” As explained in Chapter 2, the food industry has control over large portions of the food system and monopolies the markets through their centralised power and as the quote above suggests, the ramifications could prove problematic for those who are trying to challenge it (Booth and Coveney, 2015). Another key informant explained; “we work a lot with the food industry and… our students have to do projects with industry, and I have to be quiet, a little bit careful sort of with what I say in terms of upsetting too many people” (KI13). Both comments suggest that some stakeholder groups must be ‘careful’ not to offend the big food industry and its companies. As previously discussed in section 5.6 a food actor who works within the social mobilisation category of formal organisations, is often restricted by the inherent relationships that they have with working within state operations and its support for the current neoliberal food regime model. Notably, both key informants above were more formalised organisations, who had commitments to uphold through their positions. By comparison, stakeholder groups such as activist groups would not see this as a barrier but rather an opportunity to react to the dominant constraints of the conventional food system. As have been previously stated by Friedmann (1987) the beginning of any social mobilisation is the practice of ‘social criticism’, whereby ‘moral outrage’ is acted upon and expressed against those ‘artificial’ barriers of society. Therefore, the different levels of social mobilisation can address different issues and potential solutions towards the transformation of the conventional food system.

Key informants also described that the current political and economic climate has influenced how the local food movement is able to engage in trying to achieve transformation towards an alternative food system. One Key Informant explained with reference to formalising more alternative food practices; “they’re struggling because central government is wanting to strip their [local government] powers … it’s all geared towards big business, business as usual, getting bigger, bigger, bigger, you know all the rest of it, profit, efficiency, productivity, all these types of things” (KII). Key Informant 23 from the health sector stated their awareness of
political influences, explaining; “it often depends on the ministry, and who’s in power. So National at the moment are less interested in prevention.” To support this claim further that alternative food spaces are constricted by political and economic agendas, Key Informant 13 stated; “There’s not a lot of funding in that [local food] space so the funding… at the moment New Zealand's food industry is really interested in increasing exports to China in particular, but more Asia in general.” This particular informant continued to explain that the Ministry of Primary Industries and the current National Government is “very outward focused in their policies and they are very explicit in increasing exports as a primary goal for New Zealand.” These results suggest that from a top down approach, the transformative potential of confronting the negative impacts of the conventional food system is significantly hindered. The barriers put up by food system industry businesses highlights the importance once again that a bottom-up approach by grassroots stakeholders must act as the instigator for sustainable food system transformation and the promotion of social change.

**Summary**

The difficulty in challenging large corporate industries confirms the research’s argument of the importance in making use of all food stakeholder groups at different levels. Social mobilisation through the five categories of Friedmann’s (1987) framework suggests that transformative power will occur only when each is working in unison and that no one form will be sufficient for addressing the complex structural problems of the food system. It appears that the formal organisations are more restricted by industry than grass roots alternative food initiatives, who have little to lose by challenging current practices by food industries. Nevertheless, there are a number of barriers that can restrict local action groups from attempting to transform the conventional food system, as discussed further in section 6.3, that formal organisation can assist to contribute towards greater social mobilisation.

**6.3 Funding, Time and Resource Barriers**

Funding, time and resources were considered significant barriers by key informants during this research. Social mobilisation is reliant on the input by all stakeholder groups according to the organisational levels of Friedmann’s (1987) social mobilisation ladder. However, most local action groups and the spontaneous uprising by citizens are reliant on funding, donations and external support such as time and resources. Donated resources such as volunteer time and funding are also important attributes to networking, coalitions and formal organisation which therefore exist conditional to externalised help. Many talked of volunteer burnout and the need
to ensure stakeholders are properly supported for the continuous pressure that is needed to promote sustainable food system transformation. In addition, reliance on an outside source contributes to an unsustainable food system as it is more vulnerable to external pressures that may not be controlled or accounted for. Key Informant 22 expressed this tension, stating:

*So that’s probably the main thing [funding] and otherwise it’s just resource because a lot of people coming together with this group are doing it in their own time, you know its voluntary because they are passionate about it.*

Therefore, in order to achieve long-term food system sustainability, the system must be economically viable in the sense that it can stand alone without dependencies on volunteers, outside influences or political agendas as mentioned in the section above.

6.3.1 Resources as a Barrier for Social Mobilisation

Issues of resourcing can be used to holistically discuss the ability for stakeholders to organise around social mobilisation. Access to time, money, member mobilisation, volunteers, communication resources and experts and staff in formal organisations can be powerful tools to help impact the transformation potential of the conventional food system (Hassanein, 2003). However, lack of access to sufficient resources is considered a significant barrier towards stakeholder mobilisation and actions that are needed to create a sustainable food system. As discussed in Chapter 2, active engagement that seeks to increase the awareness and viability of an alternative food system demands the most appropriate strategy to gain enough movement aimed at challenging the dominant constraints of the conventional food system. The strategy of effective and efficient resourcing is an important barrier to overcome in order to sustain the long-term efforts necessary to challenge the conventional food system.

Key informants recognised that ideas can only get you so far, without the necessary resources to actually make them a reality. Key Informant 18 stated; “we have a core business to run a market you know, so we are ideas rich and resource poor.” With regards to stakeholder mobilisation around food, research results found that in some cases the physical resource which was worth protecting such as land, was in private ownership or not held by those who sought to address the particular food issue. In the case of McArthurs Berry Farm, this presented as a huge barrier for those who hoped to save one of the last market gardens on the Taieri. Other projects required land, water resources, among other aspects to maintain the alternative food
initiative that they were carrying out. Table 14. displays the importance of attaining a variety of resources and the barriers that limited resources created for stakeholder's to socially mobilise.

Table 14 Key informants discuss the barrier of working with limited access to resources

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<thead>
<tr>
<th>Key Informant</th>
<th>Key informants discuss the barrier of working with limited access to resources</th>
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<tbody>
<tr>
<td>KI1</td>
<td>“It hasn’t really happened yet, it’s quite difficult, I mean one of problems is that we still don’t have a website.”</td>
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<tr>
<td>KI2</td>
<td>“…we do have a five-year lease. So technically we can dream, um but with that plan we have to go back to ag-research and say hey this is exactly what we want to do.” “Initially I ran the program, that’s been changed now to me managing the program which is kind of the idea. I mean it was always the idea but I managed and ran it at the start because of resources.”</td>
</tr>
<tr>
<td>KI14</td>
<td>“I’m taping into those networks to get support but I have to literally just like go out and find the resource and so that’s my other, apart from doing education, I’m doing the growing side of things, and how do I get resource support and it’s really hard.”</td>
</tr>
<tr>
<td>KI16</td>
<td>“The third option was the food resilience plan and activities plan. Resource a food resilience officer to coordinate a food plan and develop a website. So they only agreed to the coordinator.”</td>
</tr>
<tr>
<td>KI18</td>
<td>“I think that’s one, a good argument for things needing to be an economic model running something as a business, we have total control over where we put our resources. And in a way, that keeps it real.”</td>
</tr>
<tr>
<td>KI22</td>
<td>“I know with some community garden’s, trying to get water on, or trying to get consent has been huge costs that have then stunted the project.”</td>
</tr>
<tr>
<td>KI23</td>
<td>“…limited professionals, like people interested in it like health organisations whereas sometimes in other parts of the country there’s a bit more of a presence in nutrition. Like at Public Health South they have got point five of an ETF for nutrition. So they don’t really get a chance to do much.”</td>
</tr>
</tbody>
</table>

Table 14. above demonstrates a variety of factors that limit stakeholder groups from addressing food issues. It was also mentioned that social mobilisation must take into account context and should, therefore, be realistic about what can actually be achieved by groups in the locality of Dunedin. Key Informant 22 expressed; “we’re not Auckland, you know we are still a reasonably small City. Um, so we will do what we can…” This referred to the extent to which Dunedin growers could provide enough food for the population of the City. However, the way that particular stakeholder groups organise around the food activities and social mobilisation had to be quite resourceful in how they approach specific barriers and challenges. Key Informant 6 explained;
The way community gardens are organised also depend on who owns the land… but we have you know, 40 beds… that’s as much as we can manage… And our philosophy of how we do things involves the community which is if we want something, we don’t think where can we get the money to buy this, we think well we will advertise in the valley voice and see if we can get that. So this is where the sheds that we got have come from, that’s where we got drainage coil and field tiles because we had to do a lot of drainage there.

The extract demonstrates the innovative ways that stakeholder groups can work around the barriers of access to resources. Moreover, volunteers in themselves were an essential resource that is utilised for efforts to socially mobilise against the conventional food system. However, the extent of reliance what was placed on volunteer help becomes problematic for the creation of a more sustainable food system. Table 15. below demonstrates a number of key informants that highlighted the issue of volunteer burnout, which many individuals and groups experience.

**Table 15 Key Informants discussing the barrier of volunteer burnout**

<table>
<thead>
<tr>
<th>Key Informant</th>
<th>Key Informants discussing the barrier of volunteer burnout</th>
</tr>
</thead>
<tbody>
<tr>
<td>KI1</td>
<td>“The second problem you have is volunteer burnout, where people do it for a couple of years and then they really just you know, other things come up and there’s no reward.”</td>
</tr>
<tr>
<td>KI9</td>
<td>“Everything I do is totally volunteer. You actually just run out of energy for doing volunteer, Because it, hmmm…. because you know, you’re trying and you’re all passionate about the food network, all passionate about the farmer’s market, you know and there is stuff to be done and sometimes we get frustrated that all we sit around and do is talk and we are really keen to get things done, but nothing much happens because we just haven’t got time.”</td>
</tr>
<tr>
<td>KI14</td>
<td>“…because there is a real thing called volunteer fatigue where people get to tired and we can’t rely on volunteers to do stuff that need to happen so in my opinion, we need to find funding to do that.”</td>
</tr>
<tr>
<td>KI18</td>
<td>“…well that’s right, and that’s what happened with Taste Nature. It was run by an old guy and he was sort of burning out and needed to move on, but he was doing it all voluntary. You know 60 hours a week voluntary, and it’s not [sustainable].”</td>
</tr>
</tbody>
</table>

The challenge then, is how to capture the initial surge of engagement made by passionate people that can be maintained indefinitely. The food system has been classed as a ‘wicked problem’, one which is not easily definable and is likely never to be altogether solved (Reid *et al.*, 2012). Both Friedmann (1987) and Hassanein (2011) spoke in Chapter 2 that in relation to food system
transformation, the difficult task of promoting an alternative food system is the uncertainty about outcomes and a commitment to the unknown consequences of such actions.

6.3.2 Funding and Time as a Barrier for Social Mobilisation

For many groups and organisations funding was considered one of the biggest barriers that influenced the ability for groups to socially mobilise around food system sustainability. Without the support of external funding to support stakeholder groups organisations and projects, it would be more difficult to achieve the grass roots level of interest that is necessary to instigate the transformative process needed to challenge the conventional food system. A large majority of key informants made mention of funding, see Table 16. Stakeholder groups relied largely on donations and funding to set up food projects and initiatives. Such activities are important to create the low-links of social mobilisation towards the transition of an alternative food system.

Table 16 Key Informants mention of funding reliance as seen as barrier to engage with alternative food solutions

<table>
<thead>
<tr>
<th>Key Informant</th>
<th>Key Informants mention of funding reliance as seen as barrier to engage with alternative food solutions</th>
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</thead>
<tbody>
<tr>
<td>KI1</td>
<td>“…her job is to just keep security funding so that we can have somebody who has the part time jobs of making some progress with actually what we are doing.”</td>
</tr>
<tr>
<td>KI2</td>
<td>“…so I mean we have to constantly apply for funding obviously, yeah so you have to constantly justify why the work you do, its purpose um and the outcomes in the community and for the young people involved.”</td>
</tr>
<tr>
<td>KI3</td>
<td>“…they put together an application to the Ministry for the Environment for funding to help with this campaign….earlier this year, the grant was given.”</td>
</tr>
<tr>
<td>KI4</td>
<td>“…a really good project I just saw get funded through Te Pūtahitanga which is the Whanau Ora commissioning agent in the South Island, was a group here in Dunedin.”</td>
</tr>
<tr>
<td>KI5</td>
<td>“…we’re non-government…we’re supported by the Presbyterian support, by the community, um we’re not government funded at all for our foodbank.”</td>
</tr>
<tr>
<td>KI6</td>
<td>“We have had grants which we have applied for. So um and that’s good, but we try not for our ordinary running of things to be funded.”</td>
</tr>
<tr>
<td>KI10</td>
<td>“And they fundraise by growing up inexpensive veggie seedlings so it’s a great little stall…that’s another really good group.”</td>
</tr>
<tr>
<td>KI12</td>
<td>“…there’s another group that’s sprung up working on getting funding to buy land for production.”</td>
</tr>
</tbody>
</table>
“now the clocks going to go soon so that will make it more complicated for anyone wanting to do a local qual, if they are seeking government funding and it’s really hard, obviously it costs money to run things.”

KI13 “…it has been sort of bubbling away for quite a while, there was sort of a low key campaign, there was a Facebook site and activities just starting to happen but this year it got some central government funding, sort of its put the campaign on steroids kind of thing.”

KI14 “So a lot of the work I’ve been doing so far is trying to establish funding in order to get projects of the ground so that’s what I’ve focused on doing.”

KI16 “…what I wanted to do was first of all find out what all that research was… and then do a sort of literature review. But they wouldn’t fund that.”

KI17 “the single biggest problem that social ventures come across is funds.”

KI18 “…And getting funding too. Because you know, nothings really much use without funding….”

KI172 “I guess barriers there are always going to be funding, if not most of the organisations are not-for-profit a few private companies, but nearly all not for profit.”

KI23 “However, saying that funding for things like public health and prevention is always a battle. It’s always getting taken for something else. So there is that battle that is always in the health system as well.”

As the results have established, many groups are dependent on funding to carry out the different food initiatives that they wish to do. Throughout the research in Dunedin it became apparent that the relationship between time and resources are often influenced by how much funding a program receives. For example, Key Informant 3 stated; “the campaign runs for three years, the funding is for three years, one would assume at the end of that there will be revisit to the research and kitchen diaries and actually see if people habits have changed.” The informant was refereeing to the latest major food behaviour campaign that has launched both nationally and in Dunedin, LoveFoodHateWaste. It is based on government funding that will likely end in three years. The above statement suggests that the success of changing how people adjust their habits around food waste will be subject to the amount that can be achieved within three years. Therefore, it is not a sustainable food initiative because it is not economically viable as is the issue for many other bottom-up alternative food processes.

In addition, a number of key informants were sceptical about where grant and funding money actually came from;
so government funding and community a lot of it is casino money, gambling money. Now that is problematic at so many deep levels. (KI11)

...if the funding comes from government departments, or local council, there are certain agendas at play as oppose to how do things on the ground get funded. (KI18)

Key Informant 18 continued to explain; “...if you’re getting funding that’s three years somewhere. A lot of things become project based and at the end of them, what happens, and it takes a long time for change to happen.” Food stakeholder groups are continuously restricted by the money, with limited amounts received to support the alternative food initiative that they seek. Accordingly, this impacts how much they can achieve within the limited time frame given, before the funds run out. Whether it is granted from government, donations or fundraising to establish the money necessary for creating alternative food initiatives, this noteworthy barrier is acknowledged as unsustainable by many key informants. As mentioned by key informant 18 above, social change and the ability to transform the conventional food system will take ‘a long time’. The acknowledgement that change is a long-term commitment, further highlights the need to establish alternative food processes that are economically viable and encourage continual engagement by active citizens. In fact, much of the literature stated that this process will be an ongoing critique of society that must be met with organised and sufficient resources to address the food issues and install the incremental step necessary to remedy problems that emerge in the food system (Friedmann, 1987; Hassanein, 2003). With the current state of the alternative food system's reliance on funding, the continual fight against time remains a limiting factor for endured social mobilisation in achieving sustainable food systems practice.

Summary
The interdependent relationship between time, funding and sufficient resourcing is a barrier predominantly experienced by local action groups. Such limitations occur at every level of social organisation. However, people involved with the spontaneous uprising of incidences, AFIs and AFNs that are socially mobilising through the lower links begin with little more than ideas and motivation to engage with transformative processes. They incur very small budgets, which impacts the amount of time they have to carry out their activities and are under-resourced, all of which effects substantiated challenges to the conventional food system. The support of formal organisations can provide some assistance, however, as previously noted, the current political and economic climate focuses on exporting food, rather than facilitating local food
systems sustainability. Thus, the challenge remains that those actors and stakeholder groups engaged in alternative food systems are minority groups in society, as will be discussed in the follow section.

6.4 Socially Mobilised Stakeholders are a Minority Group

Social mobilisation around an alternative food system has increased in Dunedin. However, it is clear that addressing food issues, commitment to alternative food initiatives and stakeholder groups involved in the local food movement, still receive a limited degree of attention by the majority of Dunedin citizens. Friedmann (1987) stated that the impulse for transformation must come from the struggle within the communities themselves through their fight for the liberation of self-emancipation. However, as was established in section 6.2.1, key informants highlighted the daily struggles that many citizens face is often enough to deal with, let alone the burden of seeking abstract notions of structural changes for an alternative food system. Key informant 16 explained that “the majority of people probably just don’t care, as long as they… can feed their families with the minimum amount of money because so many households are constrained by money, and so that makes it hard for them to think of food in a way that it's just outside of feeding yourself.” The research found that only a minority group of people are actively involved in an alternative food system or ‘eating ethically’, which Guthman (2003) described are “consumption practices [that] are driven by a conscious reflexivity, such that people monitor, reflect upon and adapt their personal conduct in light of its perceived consequences” (p. 46). Peoples misunderstanding about food and alternative food practices such as organic foods, can be a difficult barrier to overcome. Below, discussion regarding food actors being a minority group in Dunedin, while also contending with the misconceptions around food and the food system will be addressed as they are tensions which need to be better understood and overcome if food system transformation is to proceed.

6.4.1 A Minority of Stakeholder’s Involved in Alternative Food System

A large barrier continues to be convincing the significant portion of people in Dunedin to socially mobilise around establishing a more sustainable food system for themselves. As mentioned in section 6.2, the dominant structure and features of the conventional food system are seen to benefit the majority of Dunedin citizens, as a convenient, cheap and accessible way for people to get the food they need. Key informants who were actively involved in trying to transform the conventional food system are aware that they are a limited group of people. Key
Informant 1 stated; “It’s really a small minority of the population who are engaged in these types of things.” Although it has been argued that there is indeed a growing awareness of food issues and problems with the conventional food system, the point at which people become actively involved in creating a more sustainable food system is still limited in Dunedin, as has been discussed in the section above.

In addition to the challenge of encouraging more people to become involved in addressing food issues and the negative impacts of the conventional food system, Dunedin's alternative food system does not have the capacity to feed all of those it would need to support. Scaling up food production to match the greater awareness around eating ethically and supporting a sustainable food system is currently not compatible with the small number of growers engaged in such practices. Key Informant 8 mentioned in relation to the Otago Farmers’ Market - stated as ‘the biggest local food collection in Dunedin and Otago’;

...[there] are only a very small proportion in Dunedin that buy their food there, I mean yeah, on a busy day we might have 8,000 people through the gate, but we have got a population [of 120,000], and maybe 1,000 of those are visitors…20-30-40 thousand people go to the supermarket each week. So it's only, it is still good. But it's actually the majority of people who live in Dunedin are not getting that sort of food.

Key Informant 20 supports this statement by explaining that in Dunedin as local growers “…we are small; we can't supply everybody.” As a result, if the demand for alternative food began to increase, the current organisation of the alternative food system in Dunedin would be inadequate to provide the City’s population with the food that they would require. One small example of local food sources gaining momentum in Dunedin includes the rise in popularity of the raw milk farm at Port Charmers. Key Informant 24 noted that as more people became interested in the raw milk product, the amount of traffic using the “tiny little gravel path” was becoming problematic. The volume of cars that were appearing on the road to purchase the milk was “not that safe for a lot of traffic.” This emphasises the interconnected and interdependent nature of creating a sustainable food system. As social mobilisation occurs, it is important to ensure the necessary infrastructure and support is available to accommodate the potential demand for alternative food initiatives and the local food movement. Connelly and Beckie (2016) argue that investment in social infrastructure provides opportunities to scale up “radical and strategic incremental changes by managing associated risks” and is, therefore, critical for
developing a sustainable food system amidst the pursuit for social change (p. 1). This highlights that a more sustainable food system must be created simultaneously within all areas such as production, distribution, and the consumption of food in order to truly challenge the dominant structures of the conventional food system.

6.4.2 Misconception and Uncertainty in an Alternative Food System

Friedmann (1987) explained that commitment towards a transformative society will require some degree of commitment to the uncertain and the unknown. However, the misconception and misunderstanding around what those alternative food initiatives or solutions actually entail, has been determined in this research as a barrier for social mobilisation. As has been discussed in Chapter 4, the value one places on food and the interpretation of food issues influenced whether or not Dunedin citizens felt compelled to engage in alternative food initiatives and solutions. Key Informant 19 explained; “I think probably the biggest barrier would be around, there is probably a reluctance to change into a new system that’s a bit unknown. Its risk.” Risk and uncertainty are an inevitable part of committing to the transformation of an alternative food system (Hassanien, 2003). However, minimising risk and creating awareness to reduce uncertainties around what the formation of an alternative food system might look like that is still seen as a barrier in the Dunedin context. Likewise, to understanding the tensions in the food system, McClintock (2014) argued that understanding why misconceptions around a particular food initiative are occurring in a certain way requires dialogue and communication around different perceptions and positions on food. Key informants talked about ‘breaking down the misconceptions’ around what is trying to be achieved within an alternative food space in order to promote greater mobilisation around creating a more sustainable food system. Key Informant 19 again mentioned this stating; “And I think a big part of it is breaking down the misunderstanding and the barriers. And actually joining up a bit more.” The disconnect that has occurred over time in the conventional food system between producers and consumers has left a gap in the knowledge about where their food has come from, how it is produced and the impacts that the food system has inflicted on social and environmental injustices. Therefore, trying to change it, requires a reconnection in understanding from both the perspectives of the producer and consumer and what their constraints and limitations are with the current capitalist state of the conventional food system. Equally, Friedmann (1987) states that one of the fundamental tasks necessary for social mobilisation to social change will include the action of dialogue and mutual learning in order for transformative practices to take place (see section 2.4.1). Therefore, both misconception and uncertainty around radical food system
transformation remain a barrier for social mobilisation for a sustainable alternative food system. Table 17 provides an insight into the various problems that arose as barriers related to how people perceive the sustainability of food and the misconceptions about what is meant by an alternative food system.

Table 17 Misconception of food issues and the establishment of an alternative food system

<table>
<thead>
<tr>
<th>Key Informant</th>
<th>Misconception of food issues and the establishment of an alternative food system</th>
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<tbody>
<tr>
<td>KI1</td>
<td>“…the thing that you really need to realise with local food is that very often people talk about local food, as if somehow if we do this then we have discovered the meaning of life.”</td>
</tr>
<tr>
<td>KI3</td>
<td>“So the campaign [LoveFoodHateWaste] kind of hopes to dispel those myths’ particularly when it comes to labelling about the best before date versus the use by date.”</td>
</tr>
<tr>
<td>KI8</td>
<td>“…yeah, you have got to be affordable and local food, but then local food, it’s not necessarily cheaper. You know people have this perception that it is but it’s not necessarily.”</td>
</tr>
<tr>
<td>KI12</td>
<td>“So again seasonality, and I think people often don’t, because they’re not familiar with growing and they see the produce all year round, there’s sometimes misunderstanding around why don’t they see things or where could they get that. It’s like you know, we’re not doing corn, it doesn’t grow here.”</td>
</tr>
<tr>
<td>KI14</td>
<td>“And things like Taste Nature, that are a completely organic store that people go, oh it’s too expensive, I can’t afford to buy there and um oh its really inconvenient because I’ve got to take my own bottles, but actually going, you know what, it’s actually not that expensive. If you take your own containers and if you make the effort to buy in bulk, you’ll find its actually cheaper. But its educating people about that and getting them to understand that actually we have to make a change in the way you shop and in the way you cook and change that.”</td>
</tr>
<tr>
<td>KI18</td>
<td>“I mean organics, one of the things about the way its produced is that it is humans that are doing it so its labour intensive and so if you’re paying good wages to people, fair wages and it’s fair to your growers and fair to your customers, um then that’s where there’s a lot of the expense, and that’s why food produced by an organic system often costs a lot more.”</td>
</tr>
<tr>
<td>KI19</td>
<td>“…people not understanding the value around food. You know so therefore, people are often sort of distraught at the idea that its so expensive without really understanding that really a different system was used to produce and distribute this food.”</td>
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</tbody>
</table>
you know we are not prepared to pay more than we do and so you know farmers don’t particularly get paid a lot. Often capital wealth but cash flow minimal.”

“So you know that kind of stuff you can’t ignore either [community gardens] cause that kind of stuff is incredibly valuable as well, um but it maybe means that your kind of need to shift our perception a bit about what it is and isn’t trying to achieve with them.”

Summary
This section has argued that overall social mobilisation towards radical transformation of the conventional food system remains limited in Dunedin due to uncertainty about what an alternative food system entails and the fact that only a small minority group of people within the Dunedin population are engaged in the practice of conscious reflexivity. There is evidence to suggest that there has been increased momentum within Dunedin's local food movement, however breaking down the misconceptions around food will be a significant barrier to achieving food system sustainability. Nevertheless, increased dialogue and collaboration around understanding food issues and solutions have gained in interest by active stakeholder groups with regard to some elements of Dunedin's local food space.

6.5 Conclusion
Understanding the various tensions and barriers which constrain active citizens in Dunedin is important for determining the ability for stakeholders to effectively mobilise around the transformation of the conventional food system. The conventional food system is currently structured to encourage neoliberal market-led processes that are dominated by the powers of industry and multinational corporations. Those external pressures inhibit social mobilisation by implementing reformist changes, rather than allowing for the radical transformation needed by people in their communities who seek emancipation from the wide range of negative effects of a capitalist society – including social injustices and damaging environmental impacts. Food has been argued in this thesis to provide that entry point through which social change may be addressed. However, people engaged with alternative food practices are still a small minority group of citizens in the Dunedin context. Social change is disabled further due to the internal barriers of restricted time, funding and resources that reduce the effectiveness of mobilisation, especially as most of the effort is currently undertaken by volunteers. In order to assemble momentum to increase peoples’ engagement with transformative practices, all levels of Friedmann’s (1987) ladder of social mobilisation categories working to address different aspects of the food system is paramount. This will include breaking down the misconceptions
around the variety of alternative food practices through greater awareness by both producers and consumers regarding how the entirety of the food system functions.

Therefore, in order to challenge the structural powers of the conventional food system, greater awareness of food as a serious and multifaceted problem must be recognised. However, this awareness must withstand time, with the appropriate access to funding and resources that are at present very limited. In other words, addressing the barriers of funding and resource capacities must firstly be addressed to allow more time to create greater awareness around the importance for social change towards an alternative and more sustainable food system. Only then, will active food stakeholder groups be effectively mobilised to challenge the structural dominance held by the conventional food system in pursuit of radically transforming the food system towards holistic sustainability and social change.
Chapter 7: Strategies for a Sustainable Food System

- Recommendations and Conclusion

To help to build a World Community – a political order that will sustain diverging local paths to happiness – must be seen as an important task for radicals.


7.1 Introduction

This research has explored the potential for sustainable food system transformation in the Dunedin context. The research also demonstrates the implementation of theory into practice through the use of Friedmann’s (1987) transformative theory which was provided to help understand the transformative processes required to radically challenge the current structures of the conventional food system, and to reimage what an alternative food system might look like through concepts of sustainability food practices. This chapter will firstly conclude the research finding in section 7.2, to demonstrate how stakeholders have taken action to socially mobilise towards transformative efforts for creating an alternative food system. Secondly, to fulfil Friedmann’s (1987) last transformative theory statement number 5 (introduced in Table 1) - suggest the ‘best’ strategy for overcoming the established powers resistance, will be provided in the form of recommendations in section 7.3. Section 7.4 will provide the significance and implication of the research conducted in Dunedin as a single qualitative case study. Suggestions for future research is provided in section 7.5, followed by the concluding statements of this research in section 7.6.

7.2 The Potential for Sustainable Food System Transformation in Dunedin

The research has claimed that in order to address the many complex and interrelated negative impacts that have occurred as a result of the conventional food system, a complete transformation of how the current system operates is required. Both research findings and the literature reviewed in Chapter 2 have argued the need for stakeholders to use all of the levels of social mobilisation in support for creating sustainable food system transformation and the promotion of social change. The research found that each level of Friedmann’s (1987) categorisation ‘ladder’ (see Figure 1 and Table 2) was actively being engaged with by stakeholder groups in the context of Dunedin. Essentially, this shows the potential for food actors to harness the momentum that has been created through the initial catalysts of the Holy
Cow and TSMG groups incidents. The city holds all the ingredients to challenge the undesirable structures of the conventional food system. The critical question is whether or not Dunedin’s food actors will be able to sustain this momentum through strategic action.

Many of Friedmann’s concrete tasks (see section 2.4.1) have been established through different forms of stakeholder engagement. This will assist with the collaboration towards the practices of sustainable food system transformation. Chapter six provided the challenges and barriers that justified a number of reasons for why the city has not seen evidence of greater radical transformation to Dunedin’s food system. Food has been highlighted as a ‘wicked problem’. Similarly, social change requires a significant length of time, arguably an indefinite struggle that will encounter continue obstacles along the way. The resistance of reformist activities by the market-led structures of the corporate food regime present the active challenges that the conventional food system produces against peoples' effort to radically transform the current way that the food system operated. Barriers of limited time, resources and inadequate funds were found to restrict the groups that are at the coalface of social mobilisation and transformative action in Dunedin, namely volunteer or charity groups but formal organisations were under the same constraints. Below a brief summary is provided to establish what has motivated individuals and groups to socially mobilise and how different relationships have been established in the pursuit of sustainable food system transformation and the promotion of social change.

Dunedin has experienced growth in the number of alternative food mechanisms and local food initiatives which have been established through both formal and informal group organisations. Collaboration has begun to take shape by groups such as the ‘Good Food Dunedin Alliance’ and the coalition between OFN and Sustainable Dunedin City which highlights that many groups are becoming aware of shared interests and desires for a sustainable food system. However, a long-term commitment by community groups from below is essential to provide the initial drive for any socially mobilised action. It begins at a point of societal critique. Defined food problems and the multitude of impacts that food issues have caused to local economies, society and the environment were argued as motivators for individuals and groups to take action in the Dunedin context. Social injustices, disconnection and disassociation around where food has come from, along with pollution of the natural environment were examples for why citizens decided to actively engage with changing the way that they interacted with the current conventional food system. Various AFIIs and AFNs such as FoodShare, Farmhand, the
Otago Farmers’ Market, seed harvesting and fruit tree planning projects like Transition Valley 473: Community Orchard – 1000 Fruit and Nut Trees, were local Dunedin activities that stakeholder groups used as mechanisms to engage with addressing different problems in the City.

The benefit of addressing a range of environmental, economic and social food issues is that it provides a platform by which citizens are able to be brought together to reimagine what an alternative food system might look like. Many key informants talked about reinstalling values of environmental protection, improved local food economies that appreciated local growers and farmers whilst establishing the fundamental need to re-engage with the communities in which we live. Bringing together multiple food values and coming to terms with the many tensions and contradictions in the food system aids the development of social mobilisation in pursuit of an alternative food system through sustainable food system transformation toward the promotion of change.

Presenting the story of two food incidents in Dunedin demonstrated examples of what at first, seemed to be a spontaneous uprising by citizen in Dunedin. However, the research determined that the incidents of Holy Cow and the sale of the McArthurs Berry Farm do not exist in isolation. They were in fact catalysis for instigating greater social mobilisation by a large number of different food stakeholder groups that have been engaged with different struggles separately around food, prior to both events. Holy Cow and TSMG groups represented the multifaceted and interconnected way that people are able to engage with transformative actions and which seek radical social change. Not only did the two groups aim to address the immediate issues that had arose at that time, but it also provided a way through which to engage with various other sectors in society such as addressing soil conservation and local food supplies. The incidents established the beginning of a foundation that may be utilised to build up strength against the dominant structures of the conventional food system.

Mobilised residents in Dunedin are at a point in which they must capture and take advantage of the recent momentum presented by the two food incidents through bringing together the wide variety of groups that are all interested in food and that are engaged in practices of establishing an alternative food system. To reiterate, because the research results found that people were engaged at every level of Friedmann’s (1987) ‘ladder’ categories, the ability to maintain the recent thrust of activity that has occurred in the Dunedin context will depend on the extent to
which groups can coordinate within and between the various levels of social mobilisation. Each has its purpose and its place in the struggle for social emancipation. Furthermore, the degree to which stakeholder groups are able to create a strategic vision for the future sustainability of Dunedin food system must include an inclusive and flexible model that allows for diverse groups to continue to function in the many ways. This will be necessary to address the vast number of food issues that exist in their communities. Groups should maintain different purposes and goals within particular groups, but collectively ensuring that an overall vision of a food system that is sustainable, is the same. The success of all individuals and groups must be recognised through stakeholder’s ability to understand that they are all ‘on the same side' of the transformative process. That more can be achieved together than apart as the transformative potential requires a collaborative effort that is much larger than the sum of its parts.

7.3 Strategic Opportunities for Enabling the Transformative Processes

The research recommends a strategic way forward. For stakeholder groups to harness the recent momentum that has occurred within Dunedin's local food movement, greater coordination between groups is required to radically challenge the dominant position of the current food regime. Therefore, this research recommends the guidance of Friedmann’s (1987) six concrete tasks for radical planners – radical planners include all people who are actively involved in the struggle against the conventional food system. Already, key informants have highlighted a number of opportunities that Dunedin as a city can provide towards greater social mobilisation. Many of which are currently being devised by people. However, it is important to highlight the variety of mechanisms through which the people of Dunedin hope to achieve the transformation of the conventional food system. Greater awareness and recognition by all stakeholder groups of the different ways that a sustainable food system could be achieved, is essential for reimagining what an alternative food system in Dunedin might look like. Table 18 below provides each the six tasks as recommendations and the opportunities highlighted by key informants and informed by the literature presented in Chapter 2.
Table 18 Recommendations of the Research

<table>
<thead>
<tr>
<th>Friedmann’s Task</th>
<th>Recommendation/ Explanation</th>
<th>Dunedin Opportunities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selective delinking, collective self-empowerment and self-reliance</td>
<td>Disengagement from the conventional food system can be achieved when individuals are able to come together as support each person’s ability to become more self-reliant.</td>
<td>KI’s stated that opportunities build greater self-reliance around food could occur through making it easier for citizens to ‘do food’ in the city. For example, through making it easier to establish community gardens through mechanisms like rates relief or better access to water supplies.</td>
</tr>
<tr>
<td>Dialogue, mutual learning</td>
<td>Communication is the key and through an understanding of where different stakeholder groups are coming from, relationships and trust towards each other can be established. In addition, people have a range of different skills that can be utilised to their full potential through sharing them.</td>
<td>Harnessing the large array of skilled individuals in Dunedin who are involved in alternative food practices can be achieved through continually holding food events, establishing food festivals and suggestion for local food labelling has been sought to bring about greater awareness of food issues and solutions.</td>
</tr>
<tr>
<td>Cross-linking, networking, building coalitions</td>
<td>This refers to the cross-linking of informal and formal food goods through networking and establishing support and commitment to one another’s causes by coalition building.</td>
<td>The call for greater coordination by networking ideas was considered an important step for Dunedin through an ‘umbrella’ organisation; a website; and need for the infrastructure a ‘food hub’ or sustainability centre. Providing a registrar to aid with group activities.</td>
</tr>
<tr>
<td>Thinking without frontiers</td>
<td>The way that people think about food must shift towards new ways of engaging with food and addressing food problems. This means moving outside of social hierarchies, academic or professional trainings and into the exchange between the theory and practice “of ideas about the proper direction of practice and its wider meaning” (Friedmann, 1987, p. 399).</td>
<td>KI’s stated that Dunedin was a ‘quite a food centre’ in that a lot of innovative and passionate people exist in the City. Both Otago University and Polytechnic have enable people to implement alternative ways of addressing food problems.</td>
</tr>
<tr>
<td>Meaning, purpose, practical vision</td>
<td>Reinstalling meaning backing to people’s lives around the what is important can be achieved through engagement with actively challenging the food system. However, one must be realistic about what can practically be</td>
<td>Opportunities in Dunedin have taken shape through a number of prominent ‘food’ positions that have been established through both the ‘ideas into action’ facilitator role established through OFN and the ‘resilience food business</td>
</tr>
</tbody>
</table>
Strategic action | Strategic vision is the way that action should be focused to build upon the momentum of the transformative processes as they occur. | The assistance of a food strategy, food plan, or food charter would all aid in the process of enabling food opportunities for the city.

### 7.4 Research Implications and Significance

The purpose of conducting research on a single case study aims to help understand the process of greater social transformation at a global scale (Hay, 2014). Flyvbjerg (2001) explains that phronetic research contextually grounds knowledge about the world through a case study approach. It involves making judgements based on the numerous context specific situations that people find themselves in, which may then inform an infinite number of possibilities for social change. The growing number of issues that are associated with the dominant structures of the conventional food system demand radical redress to effectively alleviate the problems of social injustice, environmental degradation and increased corporate control over many aspects of society. Food provides that entry point through which many diverse groups may come together around concerns in society. The mobilisation by stakeholder groups in the Dunedin context has provided an optimistic illustration of the potential for sustainable food system transformation. The many examples of AFIs, AFNs, food projects, and the recognition of food on the agenda of the city council for example, through the Food Resilience (2015) document, demonstrates that all levels of Friedmann’s (1987) social mobilisation categories are being engaged with. Nevertheless, significant barriers and challenges exist within the transformative processes, as the dominant structure of the corporate food regime actively resists change through reformist acts (Holt Giménez and Shattuck, 2011). However, the significance of this research provides insight into the way that individuals and groups have been motivated to socially mobilise. The research demonstrates the potential for groups to collaborate and strategically coordinate in order to effectively challenge the dominant structures of the conventional food system.

### 7.5 Areas for Future Research

This study has opened up a number of future research areas. The primary research sought to explore the ways that stakeholder groups have socially mobilised to address food issues in the Dunedin context. However, it was also used to understand the transformative processes that can
assist in the implementation of a sustainable food system in the pursuit of social change. As the food system is highly interconnected and reliance on a multitude of other sectors in society such as transportation, waste and water management, it would be helpful to understand how transformative processes occurred in the context of those other areas as well. This would help to expand out the social mobilisation to other sectors which would evidently link up with mobilisation that is occurring by stakeholders around alternative and more sustainable food practices. Furthermore, as this research was a single case study example of a particular context, similar studies of sustainable food system transformation in other cities would provide a greater understanding of the variety of ways that citizens are socially mobilising as a result of dissatisfaction with the conventional food system. As was argued at the local level; that collective mobilisation can achieve more together than could ever be accomplished by any individual, the same applies to this case study. The more studies that highlight individuals and stakeholder groups potential to engage in transformative processes, the greater likelihood for scaling up an alternative food system that assists with promotion of social change.

7.6 Concluding Statements

Food has the potential to bring diverse groups together for the promotion of social change. There is increased dissatisfaction by individuals and concerned stakeholder groups around the growing multifaceted problems that occur as a result of the current conventional food system model. To address the many complex issues, this research has proposed the need for complete structural transformation in order to radially rethink the way an alternative food system could function. Results have shown that in Dunedin, residents and stakeholder groups are socially mobilising at all levels of Friedmann’s (1987) ‘ladder’ of social mobilisation categories, that seek to create a more sustainable food system for the future. Strategic coordination is needed by all individuals and groups, both formal and informal, to sustain the momentum that is necessary to scale this local food movement up the hierarchies and out into other sectors of society to achieve social change.
References


http://www.lgnz.co.nz/assets/South-Island-PNG.png


Ministry of Primary Industries, (2016). Online: Raw milk regulation: New regulations have been developed to help reduce the incidence of illness linked to raw milk.  


Appendix A: Ethics Information Sheet and Consent Form

Reporting Sheet for use ONLY for proposals considered at departmental level

[Reference Number: as allocated upon approval by the Human Ethics Committee] [Date]

CONCEPTUALISING FOOD ISSUES IN THE DUNEDIN CONTEXT
INFORMATION SHEET FOR PARTICIPANTS

Thank you for showing an interest in this project. Please read this information sheet carefully before deciding whether or not to participate. If you decide to participate we thank you. If you decide not to take part there will be no disadvantage to you and we thank you for considering our request.

What is the Aim of the Project?
This research project aims to understand the variety of stakeholder groups involved with issues relating to the food system, the approaches they take and the criteria they use to determine their contribution to a more sustainable food system in Dunedin. The research is being conducted as a requirement for the completion of the Master of Planning programme at the University of Otago.

What Types of Participants are being sought?
In order to gain the perspectives from a range of key actors who are engaged with food issues or are involved with the food system in Dunedin, the researcher will aim to interview between 15 to 20 participants including representatives from community groups and organizations, experts in the field and members of the local council. Contact details may be obtained via the internet from websites, social media sites, staff lists or contacts through my supervisor. Participants may also be asked to refer further participants to be interviewed if necessary.

What will Participants be asked to do?
Should you agree to take part in this project, you will be asked to participate in an informal semi-structured interview at a location and time that is convenient. This process is expected to take between 30 and 60 minutes. With your permission, I would also like to audio record the interview, otherwise handwritten notes will be taken. The interview will then be transcribed and audio recording deleted.

The questions set prior to the interview will refer to general themes that relate to peoples’ interpretation of key issues around food, their motivations for involvement and any challenges they face in responding to such issues. Therefore, the interview is more of a discussion than specific questions which will be used to inform the aim of the research. Participants should be aware that, although the Department of Geography is aware of the general themes to be explored in the interviews, the Committee has not been able to review the precise questions to be used.

In the event that the line of questioning develops in such a way that you feel hesitant or uncomfortable you are reminded of your right to decline to answer any particular question(s).
Reporting Sheet for use ONLY for proposals considered at departmental level

Please be aware that you may decide not to take part in the project without any disadvantage to yourself, and you can withdraw at any time during the interview.

What Data or Information will be collected and what use will be made of it?
Interviews will be audio recorded and later transcribed by the researcher. Unless you provide permission otherwise, personal information will not be kept and participants will be labelled generically. The interview data will be used to ground and contextualise the research, while providing a range of informed viewpoints on the topic. Data will be used for the production of a Thesis as part of the Master of Planning course requirements at the University of Otago. Every attempt will be made to preserve your anonymity throughout, unless you explicitly grant permission to use your identity.

The data collected will be securely stored in such a way that only those mentioned below will be able to gain access to it. Data obtained as a result of the research will be retained for at least 5 years in secure storage. Any personal information held on the participants will be destroyed at the completion of the research even though the data derived from the research will, in most cases, be kept for much longer or possibly indefinitely.

The results of the project may be published and will be available in the University of Otago Library (Dunedin, New Zealand) but every attempt will be made to preserve your anonymity.

On the Consent Form you will be given options regarding your anonymity. Please be aware that should you wish we will make every attempt to preserve your anonymity. However, with your consent, there are some cases where it would be preferable to attribute contributions made to individual participants. It is absolutely up to you which of these options you prefer.

Can Participants change their mind and withdraw from the project?
You may withdraw from participation in the project at any time before being interviewed, during the interview and up to two weeks after being interviewed without any disadvantage to yourself.

What if Participants have any Questions?
If you have any questions about our project, either now or in the future, please feel free to contact either:

*Philippa Mackay* and *Sean Connelly*

Department of Geography

macph845@student.ac.nz and sean.connelly@otago.ac.nz

This study has been approved by the Department stated above. However, if you have any concerns about the ethical conduct of the research you may contact the University of Otago Human Ethics Committee through the Human Ethics Committee Administrator (ph 03 479-8256). Any issues you raise will be treated in confidence and investigated and you will be informed of the outcome.
CONCEPTUALISING THE FOOD ISSUE: A CASE STUDY OF FOOD SYSTEM IN DUNEDIN

CONSENT FORM FOR PARTICIPANTS

I have read the Information Sheet concerning this project and understand what it is about. All my questions have been answered to my satisfaction. I understand that I am free to request further information at any stage. I know that:

1. My participation in the project is entirely voluntary;

2. I am free to withdraw from the project at any time without any disadvantage;

3. Personal identifying information (e.g. audio recordings) will be destroyed at the conclusion of the project, but any raw data on which the results of the project depend will be retained in secure storage for at least five years;

4. This project involves an open-questioning technique. The general line of questioning includes discussion relating to food issues in Dunedin, motivations and responses undertaken to address problems. The precise nature of the questions which will be asked have not been determined in advance, but will depend on the way in which the interview develops. In the event that the line of questioning develops in such a way that I feel hesitant or uncomfortable I may decline to answer any particular question(s) and/or may withdraw from the project without any disadvantage of any kind.

5. The results of the project may be published and will be available in the University of Otago Library (Dunedin, New Zealand) but every attempt will be made to preserve my anonymity.

6. I grant / do not grant* permission to allow the research to audio record my interview (*please circle).

7. I grant / do not grant* permission to allow the research to use my identity (* please circle)

I agree to take part in this project.

......................................................................................................................... ........................................
(Signature of participant) (Date)

.........................................................................................................................
(Printed Name)
SAMPLE QUESTIONS/ TOPIC OF DISCUSSION

Note that interview questions will take an open-ended format. The topics covered within each interview will largely be shaped by knowledge and experiences of the interviewee. However, listed below are some lines of inquiry that will form the foundation of key informant interviews:

- Please describe the work that you/ your organisation has been doing in relation to addressing particular food issues in Dunedin. What do you see as the particular food issue in this context and potential reasoning behind its occurrence?
- What has motivated you to become engaged with this food issue and has this influenced the way that you are able to approach the food issue?
- What are the benefits of taking this particular approach?
- How does your form of engagement hope to remedy or address particular issues and what was your reasoning for taking this particular approach?
- What challenges have you encountered while carrying out this action/ response?
- What barriers or tensions do you see in coordinating with other stakeholder groups interested in different types of food issues?
- What changes or direction would you like to see for future development of addressing food problems or establishing another forms of intervention with food systems in Dunedin?
### Appendix B: List of Key Informants

<table>
<thead>
<tr>
<th>Key Informant</th>
<th>Stakeholder/ Group</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>KEY:</strong></td>
<td><strong>FORMAL GROUP</strong></td>
</tr>
<tr>
<td>KI1</td>
<td>Core Member of Local Food Network</td>
</tr>
<tr>
<td>KI2</td>
<td>Farm Hand Trainer</td>
</tr>
<tr>
<td>KI3</td>
<td>Council Staff Member</td>
</tr>
<tr>
<td>KI4</td>
<td>Local Iwi Representative</td>
</tr>
<tr>
<td>KI5</td>
<td>Local Food Bank Employee</td>
</tr>
<tr>
<td>KI6</td>
<td>Community Garden Member</td>
</tr>
<tr>
<td>KI7</td>
<td>Councilor</td>
</tr>
<tr>
<td>KI8</td>
<td>Otago Farmers’ Market Trustee</td>
</tr>
<tr>
<td>KI9</td>
<td>Community Volunteer of Multiple Food Groups</td>
</tr>
<tr>
<td>KI10</td>
<td>Involved in Local Community Fruit-Tree Plantings</td>
</tr>
<tr>
<td>KI11</td>
<td>Volunteer for Food Box Scheme</td>
</tr>
<tr>
<td>KI12</td>
<td>Living Campus – Otago Polytechnic Lecturer</td>
</tr>
<tr>
<td>KI13</td>
<td>Academic Food Scientist</td>
</tr>
<tr>
<td>KI14</td>
<td>Core Member of Local Food Network</td>
</tr>
<tr>
<td>KI15</td>
<td>Taieri Sustainable Market Garden Concept</td>
</tr>
<tr>
<td>KI16</td>
<td>Council Staff Member</td>
</tr>
<tr>
<td>KI17</td>
<td>Food Rescue Company</td>
</tr>
<tr>
<td>KI18</td>
<td>Organic Food Business Owner and Grower</td>
</tr>
<tr>
<td>KI19</td>
<td>Environmental Farming Consultant</td>
</tr>
<tr>
<td>KI20</td>
<td>Otago Farmers’ Market Trustee</td>
</tr>
<tr>
<td>KI21</td>
<td>Member of Vegetable Growers Club</td>
</tr>
<tr>
<td>KI22</td>
<td>Council Staff Member</td>
</tr>
<tr>
<td>KI23</td>
<td>Dietitian</td>
</tr>
<tr>
<td>KI24</td>
<td>Holy Cow Raw Milk Advocate</td>
</tr>
</tbody>
</table>

**Note:**

**Formal Key Informants:** employed through an institution to undertake the food initiative

**Informal Key Informants:** volunteers or those who relied primarily on funding or donations to operate