



Libraries and Learning Services

University of Auckland Research Repository, ResearchSpace

Copyright Statement

The digital copy of this thesis is protected by the Copyright Act 1994 (New Zealand).

This thesis may be consulted by you, provided you comply with the provisions of the Act and the following conditions of use:

- Any use you make of these documents or images must be for research or private study purposes only, and you may not make them available to any other person.
- Authors control the copyright of their thesis. You will recognize the author's right to be identified as the author of this thesis, and due acknowledgement will be made to the author where appropriate.
- You will obtain the author's permission before publishing any material from their thesis.

General copyright and disclaimer

In addition to the above conditions, authors give their consent for the digital copy of their work to be used subject to the conditions specified on the [Library Thesis Consent Form](#) and [Deposit Licence](#).

Balancing Moni Hua and Mana Motuhake

Iwi Commercial Food Ventures and Māori Food Sovereignty

A Whakatōhea Case Study

Georgia Jean McLellan

A thesis submitted in fulfilment of the requirements for the degree of Master of Science in Geography,
The University of Auckland, 2020.

Ko Tarakeha tōku Maunga

Ko Opape tōku Awa

Ko Mātaatua tōku Wāka

Ko Whakatōhea raua ko Pākehā ōku Iwi

Ko Ngai Tamahaua tōku hapū

Ko Opape tōku Marae

Ko Hopa Te Whero raua ko Huihana Te Arawaera Hopa ōku Tipuna

Ko Joann Bell tōku Māmā

Ko Kevin McLellan tōku Papa

Ko Clarissa Nathaniel tōku Wahine

Ko Georgia McLellan tōku Ingoa

For all those who have been told they are not Māori enough:

“Kāore koe i ngaro, ko koe he kākano i ruia mai i Rangiātea.”

“You will never be lost, for you are a seed sown in your homeland.”

Abstract

Food sovereignty, the right of people to define and control their own food and agriculture systems (Patel, 2009), was a significant part of pre-colonial Māori economies as Māori practised mahinga kai where they lived off the land and were guardians of their resources. Today, after a long period during which Māori were stripped of many of their abilities to exercise sovereignty over their food worlds and food lives, Māori are working to rebuild their food sovereignty in a diverse economies framework (Bargh, 2011, 2012; Amoamo Ruwhiu & Carter, 2018; Bargh, Douglas & Te One, 2014; Fitzherbert, 2015). There is currently a limited amount of research examining Māori food sovereignty in these terms. In response to this research gap, this thesis examines how the relationships between *iwi* commercial food ventures and *iwi* food sovereignty are negotiated and developed using Whakatōhea Iwi as a case study.

This research aims to map Whakatōhea's food economy over time, document Whakatōhea's loss of food sovereignty, investigate the relationship between the Whakatōhea mussel farm and Whakatōhea food sovereignty, and explore food sovereign futures for Whakatōhea. It develops four main arguments:

1. Over time Whakatōhea's food economy has transitioned from a resource-rich diverse economy to an economy dominated by capitalist markets.
2. Whakatōhea has experienced a loss of food sovereignty since colonisation.
3. The complicated relationship between Whakatōhea's mussel farm economy and Whakatōhea food sovereignty is continually being negotiated, but promises opportunities to build a new food sovereignty for *whānau* and *hapū*.
4. Several diverse economic initiatives can foster food sovereignty back into Whakatōhea's food economy.

This research makes several empirical, methodological, theoretical, and political contributions to foster new knowledge around Māori economies and Māori sovereignty.

Acknowledgements

Thank you, Mac Miller, for teaching me that you have to jump in to swim.

Thank you to all the faculty in the School of Environment who have supported me throughout this year, including my supervisors, Nick Lewis and Karen Fisher, as well as Lyndsay Blue.

Thank you, Uncle Ian and Aunty Val, for hosting me in Ōpōtiki.

Thank you to my fellow students and friends, Meena and Mel, for being *mana wāhine* and truly inspiring to me throughout this journey.

Thank you to my friends, who I consider *whānau* for always being there for me and completely understanding me.

Thank you to my parents for raising me to ask questions about the world, and for supporting me wholeheartedly in your own unique ways.

Thank you to my partner for loving me for exactly who I am and putting up with me being a grumpy, poor student for so many years.

I would like to thank my participants Daniel A Paruru, Te Kahautu Maxwell, Jacqui Biddle, Robert Edwards, Leelyn Ruwhiu, Daniel R Paruru, Maui Hudson, Ruka Hudson and Muriwai Kahaki who gave up their precious time to talk to me and without whom this thesis would not have been possible.

Table of Contents

Abstract	i
Acknowledgements	ii
Table of Contents	iii
List of Tables	v
List of Figures	vi
List of Appendices	vii
Thesis Conventions	viii
Glossary	ix
1.0 An Exploration of Food Sovereignty and Māori Economy	1
1.1 Research Question	2
1.2 Underlying Objectives	2
1.3 Significance of The Study	2
1.4 Overview of Thesis	3
2.0 Te Whakatōhea Ō Ōpotiki	4
2.1 Raupatu – Initial Land Confiscations (1860 – 1866)	5
2.2 Moving onto Reserves – 1866	6
2.3 Postcolonial Experience (1866 – Today)	7
2.4 Formation of Whakatōhea Māori Trust Board (1952)	8
2.5 Te Whakatōhea Today	9
3.0 Literature Review	10
3.1 Food Sovereignty	10
3.1.1 The Rise of Food Sovereignty	10
3.1.2 Food Sovereignty: A Global Social Movement	11
3.1.3 A New Food Studies Paradigm	12
3.2 Indigenous Food Sovereignty	14
3.3 Diverse Economies	16
3.3.1 An Economic Framework for Food Sovereignty	16
3.3.2 An Economic Framework for Māori Economies	19
3.4 Māori Economies in Transformation	20
3.4.1 Pre-colonial Māori Economies	21
3.4.2 Post-colonial Māori Economies	21
3.4.3 Contemporary Māori Economies	22
3.4.4 The Taniwha Economy	23
3.5 Food Sovereignty in Māori Economy	25
3.6 Bringing Food Sovereignty Back into Māori Economy	26
4.0 Methodology	29
4.1 Indigenous Research Paradigms	29
4.2 Māori Research Paradigms	30
4.3 A Pākehā Māori Woman	31
4.4 Adoption of Kaupapa Māori Practices	31
4.5 Data Collection and Analysis	35
4.6 Indigenous Voices are Legitimate Voices	37
5.0 Transitioning Food Economies	39
5.1 Pre-colonial: An Environment Dependent Food Economy	39

5.1.1	Historical Knowledge Systems.....	39
5.1.2	Cultural Rituals and Responsibilities.....	40
5.1.3	Connections to Land and Sea.....	40
5.1.4	Commercial Relationships	43
5.2	A Food Economy in Transition.....	43
5.3	A Market Dependent Food Economy.....	45
5.4	A Loss of Diversity	48
6.0	A Loss of Food Sovereignty.....	49
6.1	Land Loss	49
6.2	Loss of Governance.....	50
6.3	Adoption of Western Lifestyles and Attitudes	53
6.4	Shifting Knowledges	56
6.5	Dependence on Global Food Systems	57
6.6	Kai Depletion	57
6.7	A Loss of Food Sovereignty Through Colonisation	62
7.0	An Economy Emerging	64
7.1	Whakatōhea Mussel Farm.....	64
7.2	Trust Board–Iwi Development Tensions.....	67
7.3	Tensions Emerging within The Mussel Farm.....	68
7.4	A Diverse Economy?	69
7.5	A Food Sovereign Economy?	71
7.5.1	Who has Control?	71
7.5.2	Who Benefits?.....	73
7.5.3	Economy-environment Relations?	75
7.5.4	Case for Greater Hapū Involvement	77
7.6	A Compromised Economy	79
8.0	Whakatōhea Food Sovereign Futures	81
8.1	Food Gathering and Growing Initiatives	81
8.2	Environmental Management Initiatives.....	82
8.3	Initiatives to Increase Hapū and Whānau Agency	85
8.4	Treaty Settlement Opportunities	86
8.5	Food Sovereign Futures	88
9.0	Conclusion	89
9.1	Transitioning Food Economies	89
9.2	A Loss of Food Sovereignty.....	90
9.3	An Economy Emerging	91
9.4	Food Sovereign Futures	92
9.5	Addressing Objectives	93
9.6	Contributions.....	94
9.7	Final Remarks.....	96
	Reference List	97
	Appendix.....	101

List of Tables

Table 1 Example of a Diverse Economy (Gibson-Graham, 2008)	18
Table 2 Six Principles of Kaupapa Māori Theory	32
Table 3 Kaupapa Māori Research Guidelines.....	33
Table 4 Kaupapa Māori vs non-kaupapa Māori research approaches.....	34
Table 5 Secondary Data.....	35
Table 6 Interview Participants	37
Table 7 Post Raupatu Food Economy (R. Walker, 2007 & Participants)	44
Table 8 Whakatōhea's Contemporary Food Economy.....	46
Table 9 Daily Kaimoana Catch Limits (Fish)	52
Table 10 Daily Kaimoana Catch Limits (shellfish)	52

List of Figures

Figure 1 Part of the Opape reserve, Ōpōtiki. August 2019	7
Figure 2 Whakatōhea Fisheries Investments (Rout et al., 2019)	9
Figure 3 Indigenous Food Sovereignty Circle (Martens, 2015).....	15
Figure 4 Diverse Economies Iceberg (Community Economies Collective, 2020)	18
Figure 5 Indigenous Research Paradigms (Wilson, 2008).....	29
Figure 6 Beach near Tirohanga, Ōpōtiki. August 2019	42
Figure 7 Waiotahi River, Ōpōtiki. August 2019.....	42
Figure 8 Overlooking Opape reserve lands, Ōpōtiki. August 2019	50
Figure 9 Ohiwa Harbour, Ōpōtiki. August, 2019.....	58
Figure 10 A farm in the Ohiwa Harbour area, Ōpōtiki. August 2019	59
Figure 11 Waiotahi Pipi Beds, Ōpōtiki. August 2019.....	59
Figure 12 Sign warning against shellfish gathering at Waiotahi, Ōpōtiki. August 2019	60
Figure 13 The Opape Rocks, Ōpōtiki. August, 2019.....	62
Figure 14 Map of Whakatōhea Mussel Farm (Rout et al., 2019).....	64
Figure 15 View of the Mussel Farm sea space from Ōmarumutu Marae, Ōpōtiki. August 2019	65
Figure 16 Whakatōhea's Commercial Investments (Rout et al., 2019)	65
Figure 17 Mapping the Whakatōhea Mussel Farm Economy.....	70
Figure 18 Nianias (little black mussels) on the Opape rocks, Ōpōtiki. August, 2019	75

List of Appendices

A.	Ethics Approval.....	101
B.	Letter of Support.....	102
C.	Participant Information Sheets	103
D.	Consent Forms	111
E.	Indicative Interview Questions.....	114
F.	Participant Names	114

Thesis Conventions

1. The word 'Indigenous' has been capitalised in line with the capitalisation of European, and Eurocentric.
2. This thesis uses the terminology 'Aotearoa' to acknowledge the original name for New Zealand.
3. This thesis capitalises the word 'Elder' when referring to Māori Elders to show respect and distinguish the word from Eurocentric understandings of elder, which refers to age.
4. This thesis is written in English, and therefore follows international academic practices by italicising all Māori words that are not proper nouns. An English translation of Māori words is provided in the glossary below.

Glossary

Aotearoa	The Māori name for New Zealand
Hāngī	Earth oven to cook food with steam and heat from heated stones
Hapū	Section of a large kinship group and the primary political unit in traditional Māori society
Hāpuka	A groper fish
Huahua	A type of bird
Huhu grub	An edible grub
Hui	Meeting
Iwi	Tribe
Kahawai	A type of fish
Kai	Food
Kaimoana	Seafood
Kaitiaki	Custodian, Guardian
Kaitiakitanga	Guardianship, Stewardship
Kāka	A brown bittern bird
Kākāpō	A ground parrot
Kākāriki	A yellow-crowned parakeet
Karakia	Prayer
Kaumātua	Older wise person, Elder
Kaupapa	A Māori principal or policy
Kawakawa	A type of tree
Kererū	A Wood Pigeon
Kina	Sea urchin
Kiwi	A type of bird
Koha	Gift, present, offering, donation, contribution
Kōrero	Speak
Kōura Mara	Fermented crayfish
Kuaka	A godwit bird
Kuia	Elderly woman, grandmother, female Elder
Kuku	Green-lipped mussel, greenshell mussel
Kūmara	Sweet potato
Kumukumu	Red Gurnard
Kura Kaupapa Māori	Māori language immersion school
Māra kai	Vegetable garden
Mahinga kai	Food practices and places including sustainability practices
Mana	Prestige, authority, control, power, influence, status, spiritual power, charisma
Mana Motuhake	Autonomy, self-government, self-determination, independence, sovereignty, authority
Mana Wāhine	Strong women
Mānuka	Tea-tree
Maomao	A Type of fish

Marae	The open area in front of the meeting house, where formal greetings and discussions take place. Often also used to include the complex of buildings around the <i>marae</i>
Mātauranga	Knowledge, wisdom, understanding, skill
Moana	Sea, ocean
Moki	A type of fish
Mokopuna (Mokos)	Grandchild, Grandchildren
Niania	Little black mussels
Niu Pole	Pole set up by the Hauhau religious sect for their ceremonies
Pā	Fortified village
Pākehā	English, foreign, European
Pāua	Abalone shellfish
Pipi	A type of shellfish
Pūhā	Sowthistle plant
Rāhui	To put in place a temporary ritual prohibition, closed season, ban, reserve
Rangatira	To be of high rank
Raupatu	Whakatōhea often refer to the colonisation of their land as <i>raupatu</i>
Rohe	Boundary, district, region, territory, area, border (of land)
Runānga	Iwi authority
Tangata	Human being
Tangata whenua	Local people, hosts, individuals, people of the land
Tangi	Funeral
Taniwha	Monster, dangerous water creature, powerful creature
Tapu	Sacred
Taro	Root vegetable
Tautoko	To support, prop up, verify, advocate, accept
Tāwhara	Edible part of <i>kiekeie</i> plant
Te Ao Māori	The Māori world
Te Reo Māori	The Māori Language
Te Tiriti O Waitangi	The Treaty of Waitangi
Tikanga	A customary system of values and practices that have developed over time and are deeply embedded in social context
Tino Rangatiratanga	Self-determination, sovereignty, autonomy, self-governance
Tītī	Mutton Bird
Tītiko	Mud-flat Snail
Titiro	Look
Tohunga	Knowledgeable, expert
Toitoi	Giant bully fish
Tuatua	A type of shellfish
Wāka	Boat
Whakapapa	Genealogy
Whakarongo	Listen
Whakawhānaungatanga	Process of establishing relationships, relating well to others
Whānau	Family
Whenua	Land

1.0 An Exploration of Food Sovereignty and Māori Economy

Food sovereignty, the right of people to define and control their own food and agriculture systems, has been established as an essential part of Indigenous self-determination (Cote, 2016; Daigle, 2019; Grey & Patel, 2015; Indigenous Food Systems Network, 2019; Kamal, Linklater, Thompson, Dipple & Committee, 2015; Kepkiewicz & Dale, 2018; Manson, 2015; Martens, 2015; Morrison, 2011; Whyte, 2016, 2017) and Māori food lives (Moeke-Pickering, Taima, Cote-Meek, Sheila & Heitia, 2015; Stein, 2016). The modern-day Māori economy is made up of diverse practices, institutions, and relations (Bargh, 2011, 2012). It is sometimes referred to as the *taniwha* economy due to its large, untapped potential (Pawson, 2018).

A new chapter of the *taniwha* economy is currently being written as Māori economies are moving beyond producing primary commodities and shifting towards more sophisticated forms of value-add (Pawson, 2018). Gibson-Graham's diverse economies framework (2008) offers an appropriate way to conceptualise both pre-colonial and contemporary Māori economies, as Māori economies are inherently diverse (Amoamo, Ruwhiu & Carter, 2018; Bargh, 2011, 2012; Bargh et al., 2014; Fitzherbert, 2015). There is a limited amount of research incorporating Māori food sovereignty and Māori economies.

Food sovereignty was a significant component of pre-colonial Māori economies, as Māori lived off the land and were guardians of their resources. However, after colonisation, food sovereignty was gradually removed from Māori economies. This thesis is concerned with the question of incorporating Māori food sovereignty back into Māori food economies, as this will enhance Māori self-determination and will ensure Māori are not re-colonised through capitalist ventures overrunning their food systems.

The question of restoring, elaborating and enlivening food sovereignty into Māori economies and social lives is currently unexplored in the Māori economy and Māori food sovereignty academic literature. One *iwi* that is grappling with this issue is Whakatōhea of Ōpōtiki. The Whakatōhea Māori Trust Board (WMTB) have invested in a mussel farm space in the Whakatōhea *rohe* and a mussel farm business called Whakatōhea Mussels Ōpōtiki Limited (WMOL) that operates on the farm. WMOL are currently shifting towards producing value-add mussel products for sale through capitalist markets, at a time when *hapū* and *whānau* are looking to *kaimoana* to restore food sovereignty through customary forms of economy. The mussel farm venture has brought ongoing tensions between WMTB and the *hapū* of Whakatōhea to the surface. As WMTB pursues their long-term *iwi* economic development goals through the mussel farm, *hapū* are concerned about how the mussel farm will affect their ongoing struggle for sovereignty and self-determination. This thesis will explore these tensions through one main research question and four underlying objectives, which are outlined below.

1.1 Research Question

How is the relationship between *iwi* commercial food ventures and *iwi* food sovereignty negotiated and developed by Whakatōhea?

1.2 Underlying Objectives

1. To map Whakatōhea's food economy over time.
2. To document Whakatōhea's loss of food sovereignty.
3. To investigate the relationship between the Whakatōhea mussel farm economy and Whakatōhea food sovereignty.
4. To explore food sovereign futures for Whakatōhea.

1.3 Significance of The Study

This thesis creates new knowledge about the intersection of Māori economies and Māori food sovereignty. It can guide Māori economic actors in pursuing Māori economic development without compromising Māori food sovereignty. This knowledge can be transferred to other Indigenous contexts where communities are grappling over economic development and food sovereignty.

Empirically, this thesis provides the first account of Whakatōhea's food economy and is one of a growing number of accounts of how Māori are bringing various ethical obligations together within Māori economies. It also adds to a growing body of methodological contributions that seek to validate Indigenous knowledge within Eurocentric academic institutions.

I make three important theoretical contributions concerning the Māori economy and food sovereignty. Firstly, I advance thinking around Māori economies using approaches that differ to other Māori economic scholars (Amoamo, Ruckstuhl & Ruwhiu, 2018; Amoamo, Ruwhiu & Carter, 2018; Bargh, 2011, 2012; Reid, Rout & Mika, 2019) by looking deeply at connections and relationships between Māori commercial food activity and Māori food sovereignty. Secondly, I discuss Māori food sovereignty in new ways within the broader context of colonisation, land loss, environmental depletion, health concerns, loss of cultural identity and Governance. Thirdly, I bring food sovereignty and Māori economy together in a unique way showing that Māori economies must consider food sovereignty to foster Māori self-determination. Lastly, I make an important political contribution by providing recommendations that can guide Māori economic practices towards fostering Māori food sovereignty and ensure they are not creating further dependence on global food systems.

1.4 Overview of Thesis

Chapter 2 provides background information on the case study *iwi*, Whakatōhea, and the area of Ōpōtiki, and describes Whakatōhea's experience of colonisation. Food sovereignty, diverse economies and Māori economy literature is reviewed in Chapter 3. This chapter argues that Gibson-Graham's (2008) diverse economies framework can help imagine and create food sovereign Māori economies. Chapter 4 discusses the methods and methodologies used throughout the thesis, ultimately arguing that Indigenous forms of knowledge should be recognised and validated within western academic institutions. Chapters 5 to 8 are the results chapters that address the four main objectives of the thesis. Four main conclusions are drawn from these chapters and, combined, they form an answer to the overall research question. Lastly, Chapter 9 completes the thesis by discussing the main conclusions, overall research question and thesis contributions, before arguing that all mainstream food economy actors can learn from Māori economy actors, ethics and practices.

2.0 Te Whakatōhea Ō Ōpotiki

Whakatōhea is an eastern Bay of Plenty *iwi* whose territory is encompassed by 35 km of coastline. Whakatōhea currently comprises 6 *hapū*: Ngai Tamahaua, Ngati Ruatakenga, Ngati Ngahere, Ngati Patumoana, Ngati Irapuia and Upokorehe. When Mātaatua, Whakatōhea's *wāka* first arrived at Whakatāne, led by Toroa, the men left the woman in the *wāka* while they explored the new land (Lyll, 1997). While the men were gone, the woman in the anchored *wāka* ran into trouble. Muriwai, Toroa's sister, took action to save the *wāka* even though it was culturally inappropriate for women to manage *wāka*. While saving the *wāka*, Muriwai exclaimed, "*Kia Whakatāne au i ahau*" (I must equip myself like a man). Muriwai is commemorated in the name of the town 'Whakatāne' and in a statue at the Whakatāne wharf (Lyll, 1997).

Over time Repenga, Muriwai's eldest son, eventually left for Ōpōtiki and was later followed by his sister Hineīkauia, who married Tutamure, a chief of Panenehu *iwi*. Hineīkauia and Tutāmure were the founders of Whakatōhea in Ōpōtiki (Lyll, 1997). Whakatōhea held governance over their lands in Ōpōtiki; they defended and shared their land and resources with neighbouring *iwi* and *hapū* (R. Walker, 2007). However, the arrival of Europeans in Aotearoa meant significant changes for Whakatōhea (R. Walker, 2007).

Whakatōhea's first European encounter was with James Cook in November 1769, when Whakatōhea went out to Cook's ship and traded with him. The trade did not go as Cook expected and he and his crew fired muskets at the Whakatōhea *wāka* (Lyll, 1997). Many of Whakatōhea's early European encounters following Cook were with missionaries; by 1840 several members of Whakatōhea practised Catholicism. A Whakatōhea Chief called Moka built a Raupo chapel and welcomed Roman Catholic Bishop Pompallier to Ōpōtiki in March 1840 (Lyll, 1997). It was at this time that the British officially established a colony in Aotearoa with The Treaty of Waitangi.

Whakatōhea chiefs signed the Treaty in 1840 (R. Walker, 2007). Whakatōhea then experienced relative peace as tribal boundaries became fixed, and fighting between Māori groups subsided (R. Walker, 2007). By the 1860s, these times of relative peace ended as more European settlers arrived in Aotearoa (R. Walker, 2007).

Whakatōhea often refer to the colonisation of their land as *raupatu* (R. Walker, 2007). The word *raupatu* derives from the phrase *Te Rau o Te Patu* which means "*the blade of a weapon*". Whakatōhea defended and lost land through these weapons for thousands of years before European arrival in Aotearoa (R. Walker, 2007). The word *raupatu* took on new meaning when the government invaded the Whakatōhea *rohe*, and confiscated thousands of hectares of land (R. Walker, 2007).

2.1 Raupatu – Initial Land Confiscations (1860 – 1866)

The 1860s mark a critical moment in the colonisation of Aotearoa by British settlers. Several critical processes led to the colonisation of Aotearoa, including: settler demand for Māori land, discriminatory policies to transfer Māori land to settlers, exclusion of Māori from national governance roles, social Darwinism positioning Māori as inferior, and the use of military force to assert the Crown's governance over Māori (R. Walker, 2007).

During the 1860s Whakatōhea became increasingly hostile towards the government due to several factors, the most significant being the large amount of Māori land being transferred to settlers (R. Walker, 2007). This tense situation was made worse by the arrival of Lutheran, Carl Sylvius Volkner, in August 1861 (Lyall, 1997). The construction of Saint Stephens, the Martyr church, in 1862 followed Volkner's arrival. Whakatōhea members attended this church and followed Volkner and his missionary teachings (Lyall, 1997). At the time, there was another religious group in the Whakatōhea *rohe* called the Hauhau. Te Ua founded the Hauhau, and the group worshiped Te Atua Pa Marire. The Hauhau were labelled as a cult and eventually sparked the Hauhau rebellion (R. Walker, 2007).

Kereopa was a leader of the Hauhau and, during his time in Ōpōtiki, British forces in Aotearoa killed his daughters. Following their death, Kereopa's influence over Whakatōhea increased, leading Kereopa to erect a *niu* pole at Pakowhai, marking his dominance over the area and rejecting British influence (R. Walker, 2007). Volkner, who was in Auckland during this time, was told by Kereopa's acquaintance Patara not to return to Ōpōtiki. Volkner did not listen to Patara and returned to Ōpōtiki (R. Walker, 2007), where he was arrested on arrival and later hanged under Kereopa's orders (Lyall, 1997).

Several Whakatōhea were witnesses to the hanging, and the *iwi* was eventually blamed by the government for Volkner's death (R. Walker, 2007). Because of the Hauhau's status as a rebel group, the Aotearoa government treated Volkner's murder as an act of war and decided to punish the whole of Whakatōhea for the offence (R. Walker, 2007).

Volkner's death came at a convenient time for the government, who were seeking land for military settlers and immigrants (R. Walker, 2007). In September 1865, Governor Grey sent troops to Ōpōtiki to arrest the people responsible for Volkner's death, threatening that if they did not give themselves up he would confiscate Whakatōhea's land. The governor told troops traveling to Ōpōtiki to assume that the whole of Whakatōhea was responsible for the murder of Volkner (R. Walker, 2007).

British forces invaded the Whakatōhea *rohe* on 8th September 1865 (Lyall, 1997) and skirmishes between the Hauhau and the troops followed (R. Walker, 2007). Whakatōhea showed little resistance to this invasion, fleeing to the hinterlands (R. Walker, 2007).

British troops occupied Ōpōtiki for several weeks and fed on Whakatōhea's abundant food resources (R. Walker, 2007). Whakatōhea's wealth was mentioned by the leader of the British forces, Major Charles Stapp:

"I should say they were wealthy... ploughs brand new all sorts of implements. I have a washstand, iron bedstead, table, chair and so have lots of others, and the force have got thousands worth of property belonging to them." (R. Walker, 2007, pp. 99-100)

Food in the area included vegetables, apples, peaches, beef, pork, poultry, and wheat (R. Walker, 2007). Whakatōhea also owned and operated several flour mills (R. Walker, 2007). British forces looted Whakatōhea horses, livestock, food crops and treasures and diminished Whakatōhea's economic wealth (R. Walker, 2007).

On 4th October 1865, British forces attacked Te Tarata Pā. The British troops then attacked Te Puia Pā on 5th October. Ngai Tamahaua and Ngati Irapuia occupants of the pā fled to the forest at Waioweka Gorge. By the end of October, Ngati Ruatakenga had surrendered to Major Stapp while the rest of the hapū stayed in the forest. Some Ngati Ruatakenga went to Ngai Tai territory and lived there for up to four years (Lyll, 1997). Until 1867 there was a continued struggle for power between the British forces and the Hauhau (R. Walker, 2007). By the time fighting between the Hauhau, and the British forces had subsided, 58 Whakatōhea members had died. This low number of casualties was likely due to Whakatōhea taking refuge in the surrounding forest, rather than fighting (R. Walker, 2007).

In 1863 the government created the New Zealand Settlements Act (later The Confiscated Lands Act 1867) so they could legally confiscate Māori land to house military and migrant settlers (R. Walker, 2007). After the British forces successfully occupied Ōpōtiki, they wasted no time in confiscating Whakatōhea land as punishment for the killing of Volkner (R. Walker, 2007). Four months after the invasion of Ōpōtiki, military settlers moved into the area (R. Walker, 2007). Settlers quickly built two hotels, a store, a post office, a hospital, and a school (R. Walker, 2007). Whakatōhea once had 198,700 ha of land, and after the confiscation they had 140,478 ha. Whakatōhea were labelled as rebels by the government, played no part in the making of the town, and were excluded from the new society the settlers created on Māori land (R. Walker, 2007).

2.2 Moving onto Reserves – 1866

The government allocated Whakatōhea hapū reserves which amounted to 40,000 ha (R. Walker, 2007). Upokorehe were allocated Hiwarau and Hokianga reserves at Ohiwa (R. Walker, 2007). Ngati Irapuia, Ngati Patumoana, Ngati Ngahere, and Ngai Tamahaua were placed on the Opape reserve (Figure 1 below), which was the traditional Whenua of Ngati Ruatakenga. Ngati Ngahere chose not to move onto the reserve, as it was Ngati Ruatakenga's land. This placing of four hapū on another

hapū's traditional land, caused tensions between *hapū*, especially when it came to cultivating food (R. Walker, 2007). In 1883, the reserve land was partitioned into five blocks so each *hapū* had defined land boundaries.



Figure 1 Part of the Opape reserve, Ōpōtiki. August 2019

The government confiscated the majority of Whakatōhea's arable land (R. Walker, 2007). Whakatōhea lost 29 of its 34 kms of coastline, including the Ohiwa Harbour, Waiotahi River, Waioweka River, Otara River and Hikuwai Beach at the Waiaua River (R. Walker, 2007). The reserve land allocated to Whakatōhea was mostly infertile, so *hapū* that wanted to grow food for subsistence relocated to confiscated unoccupied land (R. Walker, 2007).

2.3 Postcolonial Experience (1866 – Today)

By 1910, the impacts of colonisation were evident in Ōpōtiki. Settlers thrived in the small commercial centre while Whakatōhea were outsiders, struggling on their reservations with a lack of resources (R. Walker, 2007). This exclusion was apparent in local government; Whakatōhea did not feature in the Ōpōtiki District Council until 1922. Whakatōhea held many meetings about the *raupatu* and its cause of devastation for the *iwi*, and decided a petition should be written to parliament outlining Whakatōhea's grievances (R. Walker, 2007). In the coming years, Whakatōhea prepared several petitions to the government, outlining the immoral confiscation of their land, which included cultivation grounds, harbours for shipping, fishing grounds and food gathering grounds. They also argued that the reserve land was inadequate for providing enough food for subsistence and trade (R. Walker, 2007).

In 1920 the government admitted the confiscation of Whakatōhea's *rohe* was excessive "*but only to a small extent*" (R. Walker, 2007, p. 184). The government offered Whakatōhea a yearly sum of £300 compensation to be spent on education for Whakatōhea children (R. Walker, 2007).

In 1946 Whakatōhea received further compensation, a lump sum of £20,000. The government once again decided the conditions of the settlement: the money would only be paid to a Native Trustee account and was to be used to buy land for the betterment of the whole of Whakatōhea (R. Walker, 2007).

2.4 Formation of Whakatōhea Māori Trust Board (1952)

In 1947, at the same time that Whakatōhea held discussions over how they would spend the \$20,000 compensation money, the Whakatōhea Māori Trust Board (WMTB) inaugural members were elected. In the same year, another Whakatōhea group made a bid for the \$20,000. This group sent a letter to the Minister of Native Affairs arguing that WMTB lacked business skills and they were not working in the best interest of Whakatōhea. The group wished the government to retain the funds in their care and revert to weekly payments to Whakatōhea. R. Walker (2007) links this rivalry within Whakatōhea back to colonisation stating the formation of the splinter group was a result of a loss of tribal and chiefly *mana* derived from land loss.

Once Whakatōhea officially established WMTB in 1952, they faced the struggle of trying to keep their people at home. After World War II many Māori migrated to cities; in the end approximately 80% of Whakatōhea migrated to urban areas (R. Walker, 2007). Since its formation, the Whakatōhea Māori Trust Board has embarked on commercial ventures to recover the *iwi* economically, including several farm purchases. By 1996 WMTB owned 219 ha of land, and their farm assets were worth \$3,710,000 (R. Walker, 2007).

After Te Ohu Kai Moana (The Māori Fisheries Trust) won authority for *iwi* to have fishing quota, Whakatōhea, along with other tribes in the Bay of Plenty, formed the Mātaatua Fish Quota Company to aggregate their fishing quotas.

Today the Trust Board's visions are: "*To be the food bowl that feeds the world*" and "*Kia rangatira ai nga uri o te Whakatōhea - to grow and invest in the wellbeing of our people.*" Currently WMTB owned the Whakatōhea Dairy Farm (1,310 ha) (Whakatōhea Māori Trust Board, 2018), and are involved in several joint ventures including being a 1/3 shareholder in Waikeke Farms Ltd and a 1/3 shareholder in Te Waiti Lands Trust. WMTB is also involved in joint ventures in forestry, horticulture, and fisheries. As of 30th June 2018, WMTB's group accumulated funds were \$18,834 million (Rout et al., 2019). The following figure summarises WMTB fisheries investments:

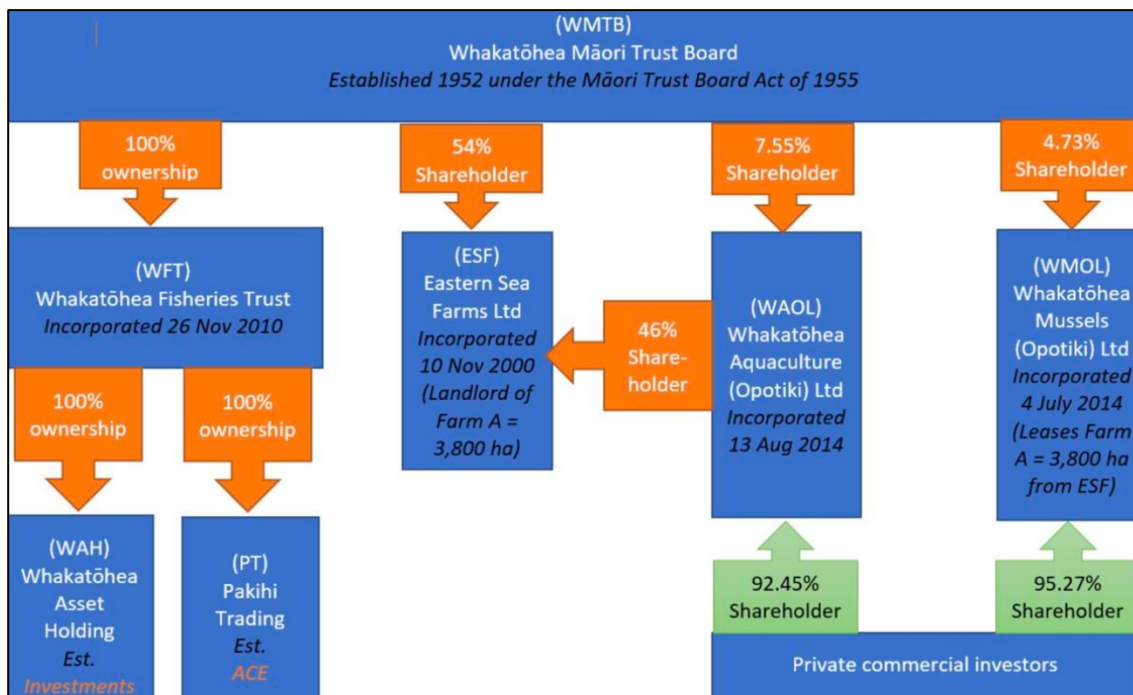


Figure 2 Whakatōhea Fisheries Investments (Rout et al., 2019)

As shown above, WMTB own Whakatōhea Fisheries Trust, which has two subsidiary companies: Whakatōhea Asset Holding and Pakihi Trading. The other panels show the ownership structure of the Whakatōhea mussel farm, which is discussed in Chapter 7.

2.5 Te Whakatōhea Today

Today, 12,174 members of Whakatōhea live in Aotearoa, (Stats NZ, 2013) of whom around 40% live in the Bay of Plenty (Rout et al., 2019). Whakatōhea has been in the process of settling their historical Treaty claims since 1996 (Rout et al., 2019). Currently, The Whakatōhea Pre-settlement Claims Trust has negotiated an agreement with the Crown and is in discussions with *hapū* to try and finalise this agreement, which has four main components (Whakatōhea Pre-settlement Claims Trust, 2020):

1. *Mana Whenua* - includes transfers of sites totalling over 6,692 ha.
2. *Moana* - includes up to 5,000 ha reserved for aquaculture development in the Ōpōtiki sea space.
3. *Mana Tangata* - includes several education funds and commitments from the tertiary education commission to work with Whakatōhea.
4. Monetary - totalling \$100 million made up of various funds.

The settlement will provide a platform for Whakatōhea to realise its aspirations and build a positive future for younger generations (The Whakatōhea Pre-settlement Claims Trust, 2020).

3.0 Literature Review

This chapter provides an overview of the literature relevant to this research. It introduces the notion of food sovereignty and positions it in relation to an emerging literature on Indigenous food sovereignty, the rise of interest in Māori economy within geography and cognate disciplines, and the diverse and community economies literatures in Geography. The final section of the chapter picks up the challenge of drawing these different literatures together to provide a theoretical framework for the difficult task of putting food sovereignty back into Māori economies in contemporary worlds.

3.1 Food Sovereignty

3.1.1 The Rise of Food Sovereignty

The concept of food sovereignty began to gain traction in academic literature in the 2000s (Edelman et al., 2014). Driven by a politics and ethics of social justice, this literature borrowed the idea of food sovereignty from the peasant movements where the concept originated (Burnett & Murphy, 2014). Food sovereignty is a diverse and evolving concept (Agarwal, 2014; Desmarais & Wittman, 2014; Edelman et al., 2014; Martinez-Torres & Rosset, 2014; McMichael, 2014; Van der Ploeg, 2014). At first, the definition focused on national self-sufficiency or the rights of nations, as seen in the 1996 La Via Campesina (LVC) 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.” (Agarwal, 2014, p. 1247).

In 2002 the definition shifted to focus on local self-sufficiency and the rights of people:

“The rights of peoples to define their own food and agriculture; to protect and regulate domestic agricultural production and trade to achieve sustainable development objectives; to determine the extent to which they want to be self-reliant.” (Patel as cited in Agarwal, 2014, p. 1247)

In 2007, at a global gathering of food sovereignty movements, the Nyéléni Conference, the definition expanded further to encompass more food economy actors:

“The right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems. It puts the aspirations and needs of those who produce, distribute, and consume food at the heart of food systems and policies. It defends the interests and inclusion of the next generations” (Patel as cited in Agarwal, 2014, p. 1248).

While food sovereignty is commonly understood and addressed at a local level, Van Der Ploeg (2014) attempts to summarise the importance of food sovereignty to global food systems. They argue food sovereignty helps to reduce the vulnerability of global food systems, caused by global commodity markets, by helping to connect urban consumers to farmers and by encouraging agricultural production methods to shift into agroecological production methods. Van Der Ploeg (2014) argues food sovereignty can strengthen social relationships, and create food democracy by encouraging local actors to have agency over their food systems.

3.1.2 Food Sovereignty: A Global Social Movement

Food sovereignty originated as a peasant movement of diverse peoples, all of whom are dependent on agricultural production (Burnett & Murphy, 2014). Van der Ploeg (2014) argues that the stronger peasant movements get, the more they will be able to increase food sovereignty, transform agriculture, and improve the wellbeing of people worldwide (Van der Ploeg, 2014). Significantly, as a grassroots movement grounded in a history of peasantry with lived experience of the failures of the current global food system, organisations such as LVC were as committed to finding solutions as they were to critique (Van der Ploeg, 2014). As Desmarais (cited in McMichael, 2004) states:

“We are people of the land we have a right to be here, and it is our job to look after the earth and our people - we must defend it.” (Desmarais as cited in McMichael, 2014, p. 942)

The food sovereignty movement started in peasant communities in America and Europe and then Asia, Africa, and the rest of the world (Burnett & Murphy, 2014). The movement has grown since 1996 and now represents people from 79 countries (Burnett & Murphy, 2014). It was driven by an organisation called La Via Campesina, who first introduced the concept to the political world in 1996 at the World Food Summit (Burnett & Murphy, 2014). La Via Campesina, which can translate to “a peasant way” (McMichael, 2014), is an “*International movement of peasants, small and medium-sized producers, landless, rural, women, Indigenous people, rural youth and agricultural workers*” (LVC as cited in Burnett & Murphy, 2014, p. 1066). LVC is a coming together of a diverse number of people to discuss, analyse, and strategize collective action (Burnett & Murphy, 2014). LVC's motive behind creating the food sovereignty concept and movement was to assert peasants' agency to control their own agriculture systems and create an alternative to the capitalist, global food systems, which were creating inequalities (Burnett & Murphy, 2014). LVC hosted The International Forum for Food Sovereignty in Mali, in 2007, where they promoted the concept of food sovereignty as a solution to inequality in global food systems (Martinez-Torres & Rosset, 2014). LVC created the seven principles of food sovereignty: 1. Food: A basic human right; 2. Agrarian Reform; 3. Protecting Natural Resources; 4. Reorganising Food Trade; 5. Ending the Globalisation of Hunger; 6. Social Peace and 7. Democratic Control (Knuth, 2009).

3.1.3 A New Food Studies Paradigm

There is general agreement in the literature that food sovereignty exists as both a countermovement and an alternative to the current corporate food regime (McMichael, 2014). Authors argue that the current food regime is crisis-laden, unsustainable, negatively impacts global food security, and has wider social and environmental implications (Agarwal, 2014; Bernstein, 2014; Burnett & Murphy, 2014; Edelman et al., 2014; Giunta, 2014; Martinez-Torres & Rosset, 2014; McMichael, 2014; Trauger, 2014; Van Der Ploeg, 2014).

Food sovereignty academics discuss various origins of this modern food regime in the literature. Bernstein (2014), for example, uses the Political Economy of the International Food Regime concept developed by Friedmann (1989) to theorise the origins of the current food regime. Bernstein (2014) argues that the rise of globalisation in the 1970s, and its links to neoliberalism and capitalism, played a role in forming the current global food regime. Bernstein (2014) argues globalisation displaced the second corporate food regime, which had initially driven the commodification of food (McMichael, 2014; Trauger, 2014). The commodification of food has shifted power dynamics within global food systems; this power is now concentrated in a small number of large firms (Trauger, 2014).

Burnett and Murphy (2014) discuss the food sovereignty movement's resistance to international trade as part of the current corporate food regime, and the role international trade has played in the unevenness of global food systems. They suggest however, that trade may still be important to the livelihood of peasant farmers. Trauger (2014) discusses the modernisation of agriculture and the part it plays in today's food regimes. The modernisation theory identifies the enclosure acts in Great Britain in the 1700s and 1800s, that changed British society from feudal and agrarian to urbanized and capitalist, as a defining moment in agricultural modernisation and, therefore, the current global food regime (Dawson as cited in Trauger, 2014). Trauger positions food sovereignty as oppositional to this modernisation project. McMichael (2014) summarises the argument presented in many of these articles by suggesting that the fight for food sovereignty comes down to a contest between visions of agriculture as a commodity versus visions of agriculture as a landscape of diverse people and sustainable practices (McMichael, 2014).

The critical food studies literature has positioned the concept of food sovereignty in opposition to food security; it provides a critique of food security as a measure of food lives created by and within a neoliberal corporate food regime (Agarwal, 2014; Bernstein, 2014; Burnett & Murphy, 2014; Edelman et al., 2014; Giunta, 2014; Martinez-Torres & Rosset, 2014; McMichael, 2014; Trauger, 2014; Van Der Ploeg, 2014). The main critique of food security found in food sovereignty literature is that it is a measure of food lives that has been co-opted by the state and intergovernmental organisations to serve neoliberal, capitalist ideals.

Many of the organisations and governments that use food security as a measure of food lives hold the view that productivity, efficiency, and free trade can enhance food security (Martinez-Torres & Rosset, 2014; McMichael, 2014). McMichael (2014) and Martinez-Torres and Rosset (2014) critique this view, arguing that economic concepts like productivity and efficiency cannot solve real-world problems and exclude a majority of the world. The state can use food security policies to serve its own political agenda, for example, by promoting certain agricultural practices over others (Trauger, 2014). This can contribute to a dependency on industrial agriculture, negatively affect peasant livelihoods and create food insecurity (Trauger, 2014).

Trauger (2014) associates food security with the welfare state. They argue that food security policies encourage the use of market mechanisms to distribute food aid to food poor people and that, in the long term, food aid creates dependency and perpetuates inequality (Trauger, 2014). Food security solutions often involve food charity, which has been described as a racist and elitist approach to food justice (Anderson & Cook, 1999; Guthman, 2008). Academics have also critiqued food security as narrowly focused on mundane measures like food quantity and nutritional content (Martinez-Torres & Rosset, 2014), which ignores human rights (Trauger, 2014; McMichael, 2014). This is in direct contrast to food sovereignty, which is a rights-based concept.

In the five years since the special issue on food sovereignty, which was published in the *Journal of Peasant Studies* and recognised what was emerging as something of a paradigm shift in critical food studies, the literature has taken diverse trajectories. Several scholars have focused attention on the gendered dimensions of food sovereignty (Brownhill & Turner, 2016; Grey & Patel, 2015; Jacobs, 2015; R. Kerr, Hickey, Lupafya, Dakishoni, 2019; Lewis, 2015; Masson et al., 2017; Navin, 2015; Mi, Park & White, 2015; Portman, 2018). They have pointed to concerns such as the lack of focus on gender in food sovereignty analysis (Mi et al., 2014), and the importance of feminist concepts such as intersectionality and participatory practice in mobilizing food sovereignty (R. Kerr et al., 2019).

Another body of scholars have focused attention on urban food sovereignty (Cidro, Peters & Martens, 2015; Clendenning, Dressler & Richards, 2016; Dehaene, Tornaghi, & Sage, 2016; Davila & Dyball, 2015; Figueroa, 2015; García-Sempere et al., 2018, Laidlaw & Magee, 2016; Leitgeb, Schneider & Vogl, 2016, Tornaghi, 2017). Here, critical scholars have considered themes such as the neoliberal context of cities limiting urban food sovereignty (Clendenning et al., 2016). There is a growing interest in policy among food sovereignty scholars, many of whom have asked how the grassroots concerns of food sovereignty can be accommodated into policy (Claeys & Duncan, 2019; Clark, 2016; Felicien, Schiavoni & Romero, 2018; Godek, 2015; Leventon, 2017; Pena, 2016; Schiavoni, 2018; Wittman & Blesh, 2017; Wittman, 2015). Others have asked whether the concept can withstand this stretch into realms beyond peasant studies and how useful it is in different settings (Bernstein, 2016; Heis, 2015; Jansen, 2015; Louis, 2015). One area where food sovereignty ideas have flourished is in the field of Indigenous food sovereignty.

3.2 Indigenous Food Sovereignty

The Indigenous food sovereignty (IFS) literature begins from the position that colonialism has stripped food sovereignty from Indigenous peoples (Morrison, 2011). The literature makes a conscious attempt not to define IFS; instead it recognises the diverse and mutually constitutive nature-culture relations that provided food provisioning systems for Indigenous people for thousands of years. As Morrison (2011) argues:

“Food sovereignty describes rather than defines the present-day strategies that enable and support the ability of Indigenous communities to sustain traditional hunting, fishing, gathering, farming and distribution practices the way we have done for thousands of years before contact with the first European settlers. We have rejected a formal definition of sovereignty in favour of one that respects the sovereignty rights and power of each distinct nation to identify the characteristics of our cultures and what it means to be Indigenous.” (Morrison, 2011, p. 97)

Morrison (2011) has left IFS as an open concept for Indigenous peoples to apply their own meanings. Rudolph (2012) adds that Indigenous people need to create their unique understandings of food sovereignty outside of non-Indigenous norms (Rudolph as cited in Martens, 2015). IFS has its own set of geographies and histories associated with local realities (Martens 2015).

There is some discussion in the literature about the appropriateness of the word ‘sovereignty’ when dealing with Indigenous peoples, as the word sovereign can sometimes infer control over nature, which does not align with Indigenous philosophies (Martens, 2015). Despite this contest over terminology, scholars have attempted to develop their own ideas around IFS. The Indigenous Food System Network, a grassroots network in Canada, has developed four principles that guide IFS: food is sacred, people have a responsibility to act as guardians of ecosystems, Indigenous food self-determination, and the alignment of policy with Indigenous values (Indigenous Food Systems Network, 2019).

Martens (2015) extends these principles to create an IFS circle (Figure 3). The framework positions food sovereignty as a relational construct of historical experience, connections to land, cultural identity, and political economy, with the inter-relationships shaped by power relations. Martens identifies power as the overarching element of food sovereignty. With the use of the word ‘power’ here, Martens is referring to the power of a person who is grounded in connections to land, culture, and people rather than western conceptions of power, which infer dominance over land. Indigenous peoples find power in being food sovereign; this power was taken away by colonialism (Martens, 2015).

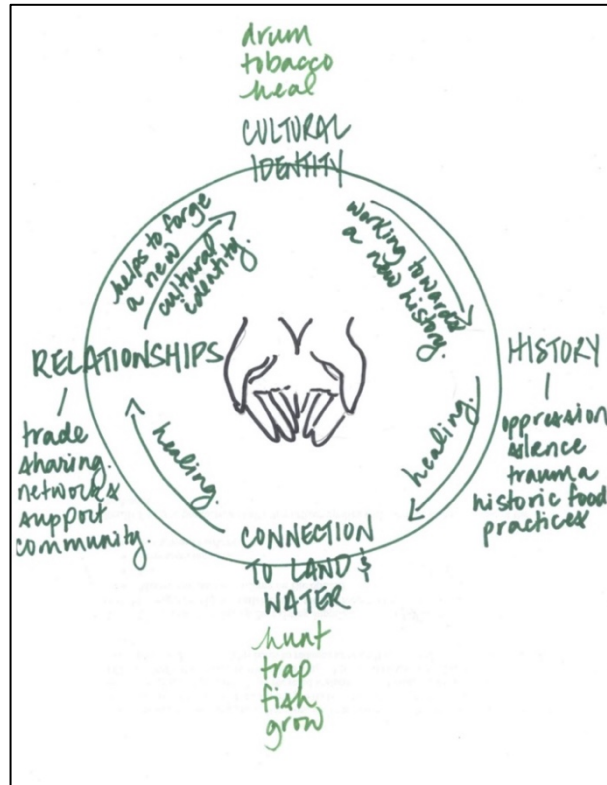


Figure 3 Indigenous Food Sovereignty Circle (Martens, 2015)

History, and the localised experience of colonialism, is a crucial factor for IFS. Food sovereignty is historical as well as future-shaping (Martens, 2015). Connection to the land is equally important; land represents the past, present, and future and is sacred (Martens, 2015). Colonial impacts on land have changed Indigenous people's food systems and caused a loss of food gathering skills (Martens, 2015).

Grey and Patel (2015) also recognise the importance of land in IFS, stating that IFS requires people to have control of their traditional lands. Kepkiewicz & Dale (2018) emphasise the importance of a reciprocal relationship between people and the land within food sovereignty. The relationship element in the IFS circle highlights the importance of humans in IFS; IFS is about caring for people as well as land (Martens, 2015). Morrison (2011) also recognises the importance of people within IFS, stating that people and land are linked and, therefore, IFS must consider both. Cultural identity is another important element of IFS as it shapes the way Indigenous people live their lives (Cote, 2016; Kamal et al., 2015; Martens, 2015).

IFS differs from food sovereignty in several ways, including the importance of land and self-determination within the IFS framework. However, the main difference between IFS and food sovereignty is that IFS is decolonial as it attempts to counteract the adverse effects that colonialism and settler colonialism have had on Indigenous food systems (Cote, 2016; Martens 2015; Whyte, 2017).

Whyte (2017) discusses the impact that settler societies have on Indigenous food systems while acknowledging that, without colonisation, Indigenous food systems would have changed over time. Settler societies interfere with Indigenous collective self-determination by changing Indigenous social and environmental relationships, causing food injustice and therefore reducing levels of IFS (Whyte, 2017). Cote (2016) discusses how colonisation has reduced IFS in North America through boarding schools, loss of homelands, forced migration, urbanization, and environmental contamination.

A key process of colonisation in North America was forcing a disconnect between Indigenous peoples and their homelands (Waziyatawin as cited in Cote 2016). This disconnection caused dependence on global food systems and decreased IFS (Cote, 2016). Colonisation has negatively affected the diets of Indigenous Canadians; it has marginalized traditional foods, leading to a loss of traditional food knowledge causing them to become less food sovereign (Turner & Turner as cited in Martens, 2015).

It is widely agreed in the literature that expressions of, and demands for, IFS are an act of decolonisation (Cote, 2016; Daigle, 2019; Grey & Patel, 2015; Kamal et al., 2015; Manson, 2015; Martens, 2015; Whyte, 2016). Decolonisation is part of the recent resistance and resurgence of Indigenous peoples (Grey & Patel, 2015), which seeks to change settler-Indigenous relationships (Manson, 2015). To decolonize is to turn Indigenous spaces that are marginalized, such as communities, cultures, and languages, into spaces of resistance and hope (Grey & Patel, 1999 as cited in Grey & Patel 2015). Whyte (2016) argues that, unlike food sovereignty, IFS for some Indigenous nations is not about seeking food self-sufficiency or cultural agency but is solely about strategic resistance to oppressive colonial food systems. Grey and Patel argue that IFS is decolonial and is part of the general anti-capitalist, anti-neoliberal resurgence that has emerged in recent times (Grey & Patel, 2015).

3.3 Diverse Economies

3.3.1 An Economic Framework for Food Sovereignty

The challenge in debates about food sovereignty is often to reconceptualise economy in such a way as to allow for food sovereignty to be enacted. But what kind of economy and conceptions of economy might make that possible? The diverse economies framework is one such concept, and one that has been used to imagine Māori economic futures (Bargh 2011; 2012).

Gibson-Graham and various colleagues have developed the concept of diverse and community economies to reframe mainstream representations of the economy from feminist, Global South and Indigenous perspectives (Gibson-Graham, 2006, 2008; Gibson-Graham, Cameron & Healy, 2013). Throughout their work, they have reoriented critical engagements with capitalism in four main ways. The first is to critique the representation of the economy as capitalist (Gibson-Graham, 2006). Gibson-Graham argue capitalist representations of the economy leave no room for alternative economies as

power is assumed to lie in capitalist economies. Another critique of the mainstream economy is that it is narrowly focused, Gibson-Graham state: the mainstream economy is only focused on “*commodity markets, wage labour, capitalist enterprise and an ethic of individualism*” (Gibson-Graham, 2003, p. 126). The third critique of the mainstream economy found in the diverse economies literature is that individuals are seen to have limited control over the economy (Gibson-Graham et al., 2013). Individuals are only thought to be able to affect the economy via consumption (Gibson-Graham et al., 2013). Gibson-Graham et al. (2013) argue mainstream views of the economy see it as only being shaped by a few major actors, including business entrepreneurs, investors, banks, and governments. Gibson-Graham’s (2013) also critique the mainstream view that the hegemonic economy is self-regulating, it needs to be left alone to operate correctly and non-capitalist economic interventions prevent it from running correctly.

Gibson-Graham (2008) argue that mainstream framings of the economy limit alternative economic imaginaries and further exacerbate the dominance of capitalism. The diverse economies framework offers an alternative to the mainstream economy. They use the concept of weak theory to develop their ideas around diverse economies, referring to diverse economy theory as a weak theory of the economy. Weak theory can be used to create something new rather than verify what we already know (Gibson-Graham, 2006). Weak theory widens the economy and includes practices that are marginalized by strong theories of capitalism (Gibson-Graham, 2006). Strong theory has created an ethic of powerlessness which predicts limited logics and structures (Gibson-Graham, 2008). For example, Gibson-Graham (2008) discuss strong theories of neoliberal globalization and how they deny legitimacy to existing diverse economies and discourage potential diverse economic futures.

Practising weak theory involves consciously “*refusing to know too much, allowing success to inspire and failure to educate, refusing to extend diagnosis too widely or deeply*” (Gibson-Graham, 2006, p. 8), and leaving room for counter-theories to develop (Gibson-Graham, 2006). Gibson-Graham (2008) use the practice of weak theory to think and theorize in a way that emphasises the possibility of new economic becomings rather than succumb to economic realities. Weak theory does not assume social experiments will fail or reinforce capitalism’s influence but can work to break apart homogenous understandings of power by exploring numerous forms of power (Gibson-Graham, 2006).

The diverse economies school of economic geography focuses attention on the breadth of economic organisation beyond capitalism (Gibson-Graham, 2006). They argue most people interact with diverse economies daily, and it is important to acknowledge a spectrum of economies rather than one hegemonic capitalist economy (Amoamo Ruckstuhl & Ruwhui, 2018). Figure 4 makes this point visually, by highlighting how much daily economic activity occurs outside of wage labour and capitalist corporate organisation.



Figure 4 Diverse Economies Iceberg (Community Economies Collective, 2020)

Diverse economy theorists reject the assumption that only capitalist production will create economic development, and the tendency of critics to reject capitalism without considering alternatives (Gibson-Graham, 2005; Samers, 2005). They have pointed not only to non-capitalist economic practices and transactions, but to community-centred economic agency, non-capitalist forms of labour and entrepreneurship as seen in Table 1 (Gibson-Graham, 2008).

Table 1 Example of a Diverse Economy (Gibson-Graham, 2008)

Transactions	Labor	Enterprise
MARKET	WAGE	CAPITALIST
ALTERNATIVE MARKET Sale of public goods Ethical 'fair-trade' markets Local trading systems Alternative currencies Underground market Co-op exchange Barter Informal market	ALTERNATIVE PAID Self-employed Cooperative Indentured Reciprocal labor In kind Work for welfare	ALTERNATIVE CAPITALIST State enterprise Green capitalist Socially responsible firm Non-profit
NON-MARKET Household flows Gift giving Indigenous exchange State allocations State appropriations Gleaning Hunting, fishing, gathering Theft, poaching	UNPAID Housework Family care Neighborhood work Volunteer Self-provisioning labor Slave labor	NON-CAPITALIST Communal Independent Feudal Slave

Again, the point made is that our daily economic life is dominated by non-market transactions, alternative paid and unpaid wages, and non-capitalist enterprise (Gibson-Graham, 2008). Gibson-Graham (2008) argue that treating diverse economies seriously goes beyond providing an alternative critique of capitalism to that delivered by Marxian political economy, to offer inspiration for different economic futures that rely on different ethical coordinates to self-interest, accumulation, and exploitation. They also argue this can be seen to be practical and have produced guidelines for remaking the economic world anew (Gibson-Graham et al., 2013). This involves a politics of experimentation and proliferating diverse economies.

Alongside the diverse economies literature there is a large body of literature by Gibson-Graham and others around the concept of community economies (Gibson & Cameron, 2005; Gibson-Graham et al., 2013; Gibson-Graham, 2005; Gibson-Graham, 2016; Graham & Healy, 2008; Lahiri-dutt, 2004; Lichtenstein & Lyons, 2001; Roelvink & Gibson-Graham, 2009, 2013). Community economies have the shared ethic of being-in-common rather than being as individuals (Gibson-Graham, 2006). Gibson-Graham argue that *“to come into the world is to be-in-common”* (Gibson-Graham, 2006, p. 81).

Within community economies, decisions are made with an ethic of care and a consciousness of being-in-common and economic actors work for the betterment of the community they are a part of, rather than for the betterment of themselves as individuals (Gibson-Graham, 2006; Gibson-Graham et al., 2013). The concept of being-in-common is relevant to Māori economies which have always acted under the ethic of being-in-common and favoured the collective over the individual in aligning with Te Ao Māori.

3.3.2 An Economic Framework for Māori Economies

Several academics suggest diverse economies offer an appropriate framework to conceptualise Māori economies (Amoamo, Ruwhiu & Carter, 2018; Bargh, 2011, 2012; Bargh et al., 2014; Fitzherbert, 2015). Traditional Māori economies are inherently diverse (Reid & Rout, 2016). Bargh (2011) discusses three reasons why the diverse economies framework is useful for conceptualising Māori economies. Firstly, the diverse economies framework reveals hidden activities in the Māori economy, which are often marginalised in mainstream economies (Bargh, 2011). Secondly, utilising weak theory with a diverse economies framework to examine Māori economies ensures they are not viewed under a capitalist/non-capitalist binary (Bargh 2011). Thirdly, the diverse economies framework encourages one to be place- and time-specific when theorising, which aligns with Te Ao Māori (Bargh, 2011). Amoamo, Ruwhiu & Carter (2008) argue that diverse economic frameworks are capable of responding to Māori organisations, as they hold a notion of the economy that allows for *“context-specific socio-historical culturally constituted frameworks”* (Amoamo, Ruwhiu & Carter, 2008, p. 67). Māori economies can be better understood through a diverse framework and reframing Māori economies brings them back to a place where collectivity enhances *“wellbeing, community, and*

environmental sustainability and Māori economic interdependence" (Amoamo, Ruwhiu & Carter, 2018, p. 68).

Reid and Rout (2016) and colleagues build bridges between the political value of recognising the size of the Māori capitalist economy, or at least highlighting the extent of Māori participation in the capitalist economy, as well as the wider conceptualisation of the difference that Māori bring to the practice of capitalism (Amoamo, Ruckstuhl & Ruwhiu, 2018; Amoamo, Ruwhiu & Carter, 2018; Bargh, 2011, 2012). A diverse economy framework shows that pre-colonial Māori economies celebrated productivity, innovation, and commercial exchange in various forms, as well as the significance of collective ownership, *kaitiakitanga* as a governance principle and practice, and collective social goals in trade (Reid & Rout, 2016).

The main critique of the diverse economies and community economies framework concerning Māori economies comes from Bargh and Otter (2009), who argue that Gibson-Graham do not acknowledge Indigenous understandings and relationships with land. Gibson-Graham (2006) state that community economies grounded in place are '*areas which are unmapped and unmoored*' (Gibson-Graham, 2006, p. 33). Bargh and Otter (2009) argue that this description implies that place, and therefore land, is neutral. This is in contradiction to Indigenous understandings and connections to land and place as important to identity (Bargh & Otter, 2009). Gibson-Graham (2006) also argue that people should focus on the '*now and here*' to create new economies. Bargh and Otter (2009) disapprove of the use of this phrase as it obscures the past and the future and ignores the importance of concepts such as *whakapapa* (Bargh & Otter, 2009). They are concerned that non-Māori following Gibson-Graham's (2006) instructions to focus on the here and now may ignore the *whakapapa* of the land where their economy is based. They may fail to acknowledge *tangata whenua* or other Indigenous groups as holding true sovereignty over that land and in turn perpetuate discourses of colonisation (Bargh & Otter, 2009).

Gibson-Graham (2006) describe their community economies research sites as '*relatively arbitrary*'. Bargh and Otter (2009) argue that this description implies that all land is a blank slate which makes Indigenous peoples historical and cultural connections to land invisible. Bargh and Otter (2009) argue that there should be acknowledgment of *tangata whenua* or people of the land when fostering diverse local economies.

3.4 Māori Economies in Transformation

Māori economies have specific technical, political, and moral dimensions and all aspects of Māori economies are situated within Māori worlds (Bargh 2011, 2012). Māori economies cannot be imagined within the framework of accounts of mainstream capitalist economies and measure value in diverse ways (Bargh, 2011, 2012). Māori economies seek to utilize Māori resources and improve Māori livelihoods (Fitzherbert, 2015). Mika and Reid (2018) conceptualise the Māori economy as a

network of economies with national and international links including, Māori enterprises, *whānau* business units within *hapū*, or *iwi* structures, tribal incorporations and pan-tribal entities.

3.4.1 Pre-colonial Māori Economies

There are four main aspects of pre-colonial Māori economies found in the literature. These are ownership structures, gift-giving, collectivity, and wealth accumulation (Firth 1972; Reid & Rout, 2016; Reid, 2011; Toft, 1984). In Te Ao Māori, land ownership does not exist; however, through genealogical links, status, and tribal roles, individuals, *whānau*, *hapū*, and *iwi* had rights to resources on land (Reid, 2011). These resources were managed in a way that most benefited the *iwi*, *hapū*, or *whānau* who had rights to them (Reid, 2011).

Gift-giving made up a large part of the Māori economy pre-European contact. Gift-giving systems were strict, and included reciprocation of gifts previously exchanged or exchange of skills or labour (Reid, 2011; Reid & Rout, 2016). Tribal leaders held much of the responsibility within this system (Toft, 1984). Another central theme of the pre-European Māori economy is collectivity. Māori were socially and morally obliged to contribute to their group's collective wellbeing and there was an absence of hierarchical labour divisions (Firth, 1972). The last central theme of pre-colonial Māori economies is wealth accumulation. Wealth was accumulated collectively in pre-colonial Māori economies (Firth 1972). Māori wealth was constantly passed within and between *hapū*, and *rangatira* were obliged to share wealth fairly amongst *hapū*, *whānau* and *iwi* (Firth, 1972).

3.4.2 Post-colonial Māori Economies

As Europeans arrived in Aotearoa in the 1800s, the Māori economy changed. Māori adopted European technologies from 1820 and began to produce more wheat, potatoes, and vegetables (Kingi, 2002; Petrie, 2002; Toft, 1984). Māori also owned boats and traded within and outside of Aotearoa (Petrie, 2002; Toft, 1984). Māori experienced economic prosperity due to their exceptional economic ability, including a well thought out economic strategy, efficient circulation of capital, accumulation of surplus, organised industry relations, entrepreneurship and quick adaptation to modern European farming and trade techniques (Toft, 1984).

Post-1840 Aotearoa was colonised by European settlers who grew to outnumber Māori and no longer relied on the Māori economy (Toft 1984). European settlers transferred Māori land into Crown ownership, disenfranchising Māori from their economic and cultural base (Petrie, 2002). The consequent loss of control over their economic worlds meant that Māori no longer prospered (Toft 1984). Post-1860, Māori still used culturally specific leadership and economic organisation strategies as well as natural resources to run their economies and maintained high standards of living (Toft 1984). The government undermined Māori control by imposing its ideas of economic development onto Māori, and Māori lost economic self-determination (Reid, 2011). Post-settlement and throughout

the early 1900s significant economic inequalities grew between European settlers and Māori as a result of colonisation (Reid, 2011).

3.4.3 Contemporary Māori Economies

During the 1980s Māori economies changed as Māori political leaders increasingly began to demand Māori self-determination (Bargh, 2011) and *iwi* began to settle their historical grievances with the Crown (Reid & Rout, 2016). The modern-day Māori economy is worth an estimated \$50 billion (Chapman Tripp as cited in Amoamo, Ruwhiu & Carter, 2018), and includes 40% of fishing quota and a third of the plantation forests in Aotearoa (Pawson, 2018). This economy includes investments in Seafood corporations, farming, geothermal power plants, and tourism initiatives (Fitzherbert, 2015). The modern Māori economy is made up of a diverse number of practices, institutions, and relations that seek to use Māori resources to enhance Māori livelihoods and self-determination (Bargh, 2011; Bargh et al., 2014, Fitzherbert, 2015; Scrimgeour & Iremonger, 2015).

The Māori economy encompasses bottom-up community and environmental focused activities as well as capitalist activities (Bargh 2011, 2014; Scrimgeour & Iremonger, 2015) and Māori actors that are seeking better livelihoods for their people through utilizing cultural, social, physical, and economic Māori resources (Fitzherbert, 2015). The modern-day Māori economy is continually changing (Bargh, 2011), and actors within the Māori economy are continually showing different ways of being economic (Bargh et al., 2014).

The modern Māori economy makes up a large portion of Aotearoa's economy, mostly due to Māori mobilising their resources gained through Treaty settlement claims. The claims process was established in 1975 but did not include claims of historical grievances (Pawson, 2018). In 1985, The Treaty of Waitangi Amendment Act was introduced, and necessary changes were made to include historical grievances (Reid, 2011); this meant significant increases in tribal claims (Pawson, 2018). Through the Treaty claims process, many *iwi* have gained large Treaty settlement packages made up of money, property rights, rights to purchase Crown Land, Crown apologies, the return of sites of cultural importance, and a range of co-governance arrangements (Reid & Rout, 2016). The process is now slowing down as many *iwi* have settled their grievances, however the claims have dramatically altered the Māori economy (Pawson, 2018).

Iwi historical grievances are administered by Māori Trust Boards. Several Māori Trusts were set up between 1922 and 1953 for the purpose of receiving and administering compensation awarded by the Crown for historic grievances (Te Puni Kōkiri, 2018). By 1955, the Māori Trust Board Act was set up to support existing and new Māori Trusts (Te Puni Kōkiri, 2018). Māori Trust Boards have a responsibility to act in the interests of their beneficiaries and are able to spend money on: health, social and economic welfare, education, vocational training and additional purposes (Te Puni Kōkiri, 2018). Trust Boards have several functions including the ability to invest in securities, buy and sell

land and carry out farming activities (Te Puni Kōkiri, 2018). Trust Boards are required to hold annual *hui* to report to their beneficiaries, they are also required to have their accounts audited annually and to prepare annual budgets (Te Puni Kōkiri, 2018).

3.4.4 The Taniwha Economy

In 2012 the then Minister of Māori Affairs, Pita Sharples, referred to the Māori Economy as the *taniwha* economy (Pawson, 2018). *Taniwha* are creatures that exist in Te Ao Māori who reside in bodies of water and caves; they are known to be protective but also harmful to wrongdoers (Fitzherbert, 2015). The Māori economy is compared to a *taniwha* because it is: 1. relatively mysterious and unknown, 2. it has the potential to be disruptive, and 3. it has emerged from the depths (Fitzherbert, 2015).

A new chapter of the story of the *taniwha* economy is now being written as Māori economies are moving beyond producing primary commodities and shifting towards more sophisticated forms of value-add (Pawson, 2018). Wakatū and Taupaki Trusts are leading the charge for a much more sophisticated form of capitalist economy focusing on investing in high value products for both domestic and international markets (Pawson, 2018). Wakatū corporation is currently worth over \$250 million and 30% of this is value-add assets in the food and beverage industry (Awatere et al., 2017).

Māori fisheries economies are also shifting towards more sophisticated forms of value-add as small and large Māori fisheries entities have accumulated high value quota and are building premium businesses around this quota (Reid, et al., 2019). Moana New Zealand is one of these fishery companies who are looking to create value-add on their premium products in existing and new markets (Rout et al., 2019). Ngai Tahu seafood also has a processing facility dedicated to producing high value products including *koura*, *tio* and blue cod (Rout et al., 2019).

The contemporary rise of the *taniwha* economy including recent value-add ventures has attracted criticism of its potential to (re)colonise Māori through capitalist understandings of the economy (Bargh 2007; Durie 1998, 2003; Mikaere, 2000; L. Smith 1999). Durie argues that Māori 'development' with economic growth but without increased Māori wellbeing has questionable value (Durie, 2003). There are two main lines of critique of the modern Māori economy in the literature. The first is an extension of Durie's concerns regarding the question of how Māori economic initiatives respond to the challenge of balancing well-being and other social goals with those of growth and economic prosperity. The other line of critique centres on understandings of economy and the relation between Māori economy and capitalism, and in particular the difference between capitalist and non-capitalist forms of economic entity.

Reid and Rout (2016) argue that colonisation has caused some Māori economies to be capital centric, as the colonial mindset is rooted in reactionary traditionalism. Reactionary traditionalism creates a

dangerous binary where Māori traditions and culture are not associated with Māori commercial activity, entrepreneurialism and innovation (Reid & Rout, 2016). It creates a divide between being Māori and being entrepreneurial, which is in direct contradiction to pre-colonial Māori economies that valued economic activity in diverse forms (Reid & Rout, 2016). The role of *iwi* Trust Boards is crucial within this debate as they hold the majority of *iwi* assets and are constantly negotiating a balance between pursuing capitalist economic development and pursuing *iwi* wellbeing.

There are three main critiques of the role that Māori Trust Boards play within Māori economies. S. Jones (2000) questions the concentration of control over tribal assets to the elite few involved in *iwi* Trust Boards, and argues that people of power within these institutions gain from tribal revenues at the expense of other *iwi* or *hapū* members (S. Jones 2000). Dodd (2002) argues that those who are disenfranchised from their *iwi* or *hapū* miss out on these institutional gains from Māori Trust Boards (Dodd as cited in Reid, 2011). Dodd (2002) also sees the concentration of tribal assets within Māori Trust Boards as problematic, stating that *iwi* who use international strategies to guide their corporate practices rather than ensuring their work is culturally cohesive between *iwi* Trust Boards and *iwi* and *hapū* cause problems within *iwi* (Dodd as cited in Reid, 2011). Dodd (2002) is concerned that this inequality will create similar problems as seen in other countries where Indigenous enterprises are separate from their tribal owners (Dodd as cited in Reid, 2011).

The second critique of Māori Trust Boards revolves around the exclusion of *hapū* from decision making within Māori asset management systems. A vast majority of *iwi* have adopted western corporate-beneficiary systems, where assets are held and managed by *iwi* Trust Boards (Barr & Reid as cited in Reid & Rout, 2016). Where tribal wealth was once centred around entrepreneurial individuals within *hapū*, it is now centred within capitalist *iwi*-owned corporations (Reid & Rout, 2016). R. Walker (2007) argues that the marginalisation of *hapū* and the rise of Trust Boards within contemporary Māori economies is due to colonialism and settler colonialism.

R. Walker states that Māori land loss and the subsequent loss of chiefs as tribal leaders created a Māori leadership gap (R. Walker, 2007). This gap in leadership allowed the government to force the creation of Trust Boards to extend its influence over tribal areas (R. Walker, 2007). Trust Boards are elected committees that have marginalised Elders and organic Māori leaders who would otherwise be *hapū* leaders in traditional Māori societies (R. Walker, 2007).

The third critique of Trust Boards is that they typically favour *iwi* long term economic development goals while side-lining *hapū* short term aspirations. This is controversial as traditionally *hapū* were the central socio-economic units of Māori groups. Ballara (as cited in Reid & Rout, 2016) discusses two reasons for the rise of *iwi* as dominant Māori groups: 1. A need for *hapū* to unify during colonisation, and 2. Government preference to deal with large *iwi* groups rather than multiple small *hapū* groups. The fall of *hapū* and the rise of *iwi* as governing groups is problematic for several reasons. Firstly, it creates an ethic of dependence where *hapū*, which were previously autonomous groups, are now

Trust Board dependents. Secondly, it means that the role individuals and *whānau* play within Māori economic development is left unrecognized (Reid and Rout, 2016). Thirdly, it means there is a lack of what Cornell and Kalt refer to as cultural match within Māori economies as *iwi* corporate systems do not match cultural systems (Cornell & Kalt as cited in Reid and Rout, 2016). Lastly, it means that *iwi* are more susceptible to co-option by the state (R. Walker, 2007). Critique of the role of Māori Trust Boards within Māori economies is multi-layered, and balancing economic growth with Māori self-determination will be increasingly challenging as Trust Boards seek investment to materialise value-add and diversification strategies.

3.5 Food Sovereignty in Māori Economy

There is a small body of literature dedicated to Māori food sovereignty (MFS). Much of the material lies in doctoral theses and the grey literature associated with active research programmes committed to decolonising agri-food relations. Nonetheless, key themes of MFS have emerged and this body of literature speaks to Māori understandings of food sovereignty. MFS is inherently decolonial (Stein, 2016); it looks to fight against colonial food systems imposed on Māori and revitalise traditional and thriving food systems (Stein, 2016).

Moeke-Pickering et al. (2015), found MFS involves control of land, food growing, food distribution, local community collaboration, and passing of knowledge. Stein (2016) explores what food sovereignty means to Māori women and suggests MFS revolves around seven key themes: 1. Community/*Iwi/Hapū*; 2. Traditions and *Tūpuna*; 3. *Whānau*; 4. Gardens, health and wellbeing; 5. Natural and agro-ecological food cultivation; 6. Circumstances impacting access to sustainable, culturally appropriate food; and 7. *Tino Rangatiratanga* of *māra kai*.

Constructs of MFS are deeply rooted in traditional Māori concepts. This is seen in the themes found in the work by both Stein (2016) and Moeke-Pickering et al. (2015). MFS is about re-integrating Māori *kai* back into Māori customs, culture, and land (Moeke-Pickering et al., 2015). MFS results from having access to traditional Māori food systems, including gardening, hunting, and gathering knowledge (Moeke-Pickering et al., 2015). It is inhibited by circumstances that prevent Māori from accessing traditional food systems, such as pollution, fishing quotas, and land loss (Moeke-Pickering et al., 2015). Shirley (2013) argues that colonisation and settler colonialism continue to have detrimental effects on MFS, through land loss, loss of traditional food systems and practices and environmental degradation.

Land management and land ownership are essential to true MFS (Moeke-Pickering et al., 2015; Stein, 2016). There is a strong focus on gardens as vehicles for food sovereignty in the MFS literature, showing the importance of land within MFS (Moeke-Pickering et al., 2015; Stein, 2016; Stein, Miroso & Carter, 2017).

Hua Parakore is an example of an MFS initiative. It is a verification and validation system for Māori organic food products created by Te Wāka Kai Ora (Māori Organics Aotearoa) and guided by Māori *tikanga* and *kaupapa* (Hutchings, 2016). Hua Parakore supports *kaitiakitanga*, wellbeing, and self-determination and contributes to IFS (Hutchings et al, 2016). Hua Parakore responds to and reflects LVC's seven principles of food sovereignty outlined above (Hutchings et al, 2016).

Mahinga kai is a practice that includes retrieving food from the environment and the practise of sustaining and protecting food gathering spaces for future generations (Orchard, 2016). *Mahinga kai* is integral to MFS. The term *mahinga kai* has several interpretations including: 1. *Mahi Nga kai* (work the food) (Orchard, 2016); 2. Sites denoting food (*kai*) work (*mahinga*) (Phillips, Jackson & Hakopa, 2016); and 3. 'drawing up the light to feed our bodies' as *ma* means 'white/light', *hi* means 'to draw up' and *nga kai* means 'the food' (Davis as cited in Phillips et al., 2016). *Mahinga kai* reflects Indigenous definitions and descriptions of food sovereignty from the literature.

Mahinga kai is rooted in Māori cultural identity and history. Māori have always practised *mahinga kai*; it is informed by ancient *tikanga* and *mātauranga* knowledge which has been passed down by ancestors over time (Phillips, 2015). *Mahinga kai* "was a livelihood, an identity and a part of people" (Phillips, 2015, p. 3). *Mahinga kai* allows Māori to act as *kaitiaki* and exemplifies the reciprocal relationship Māori have with the land (Phillips, 2015). *Whakawhānaungatanga* is an important aspect of *mahinga kai* as traditionally many food gathering ventures would happen in *whānau* or *hapū* collective groups (Phillips, 2015).

Ngai Tahu *Iwi* are currently using *mahinga kai* as a social movement to enhance *iwi* food sovereignty (Ngāi Tahu, 2015). *Mahinga kai* shows that food sovereignty is not only about growing your own food, but about controlling your own land and food resources. *Mahinga kai* requires much more than access to food resources it requires deep connections between the environment and people. For Māori, food sovereignty is *mahinga kai* and *mahinga kai* is food sovereignty; *mahinga kai* is the place where food sovereignty re-enters Māori economies.

3.6 Bringing Food Sovereignty Back into Māori Economy

Food sovereignty played a vital role in pre-colonial Māori economies. This is seen in the presence of *mahinga kai* as an integral part of traditional Māori societies and through the fact that, prior to European contact, Māori grew, gathered and traded all the food they needed to survive and were in control of their food systems. However, post-colonisation, both Māori economies and MFS changed. Māori no longer had control over their own economies as they did prior to colonisation. Although, as discussed above, Māori experienced economic prosperity during settlement time in the early 1800s through various economic ventures, this prosperity was short lived as by the 1840s the settler population in Aotearoa outnumbered Māori and therefore no longer relied on Māori for economic trade. At this point, European settlers transferred most Māori land into Crown ownership,

disenfranchising them from their economic and cultural base (Petrie, 2002). The government undermined Māori control by imposing its ideas of economic development onto Māori, and Māori lost economic self-determination (Reid, 2011). This changing Māori economy also meant that Māori were no longer in full control of their food systems. As is the story for many Indigenous peoples around the world, colonialism and settler colonialism have had many adverse effects on Indigenous people's levels of food sovereignty (Cote, 2016; Martens 2015; Whyte, 2017).

In modern times the Māori economy is arguably in the best position it has been in since the late 1820s (Bargh, 2018). The new Māori economy has a lot of potential, however, there are still colonial institutions holding it back. As Bargh (2018) states: *"the Crown persists with neoliberal politics that continue to restrict and marginalise Māori political and economic organisations, forms and rights"* (Bargh, 2018, p. 293). Bargh (2018) discusses these neoliberal policies, which include the stepping back of the state, lack of trade barriers, and the *"belief that the market is the best mechanism to regulate all forms of human behaviour as people are self-maximising and selfish individuals"* (Bargh, 2018, p. 294). Although the Māori economy is in a time of reprieve, food systems have changed in Aotearoa, and the growing and gathering *mahinga kai* economy that played such an important role in pre-colonial Māori economies, no longer plays the same role in modern Māori economies.

Allowing space for food sovereignty to re-enter into Māori economic spheres requires a unique framing of Māori economies. They cannot be framed in the same way that they were prior to colonisation, as current social circumstances do not allow for this. As Reid and Rout (2016) explain, concepts from pre-colonial Māori economies can be used to help support and guide contemporary modern economies, even though contemporary Māori economies must develop in contexts that are different from pre-colonial contexts. Reid and Rout (2016) argue that pre-colonial Māori economic concepts can serve the same purpose of providing a platform for food sovereignty in contemporary times as they did historically. It might just look different in practice in the presence of capitalist economies. *Mahinga kai* is one such platform for establishing places where food sovereignty re-enters Māori economies. Modern *mahinga kai* do not operate in the same way that they did prior to colonisation, but they continue to contribute to Māori wellbeing in diverse ways that are often not acknowledged by mainstream accounts of the economy.

Māori economies cannot foster food sovereignty if they operate like these capitalist Eurocentric economies. As Reid et al. (2019) argue, it is necessary for Indigenous economies to move beyond profit maximisation and towards maximising community well-being whilst not causing environmental harm. This is where Gibson-Graham's (2008) diverse economies framework becomes relevant to Māori economies and fostering food sovereignty. Using Gibson-Graham's diverse economies framework to explore Māori economies can demonstrate that Māori economies are not only capitalist or non-capitalist, but consist of various transactions, labour, resources and property ownership that contribute to Māori self-determination and wellbeing (Bargh, 2012). Bargh (2012) argues that the diverse economies framework is important for Indigenous economies, as voluntary activities that

occur within Indigenous communities are often ignored by Eurocentric economists. Importantly Amoamo, Ruwhiu and Carter (2018) argue that using diverse economy approaches to conceptualise Māori economies can show how food gathering and growing and food sovereignty contribute to well-being.

This means shifting away from profit maximisation as a main economic goal and towards community wellbeing. Gibson-Graham's (2008) diverse economies framework can help foster food sovereignty into Māori economies as it allows for diverse understandings of what constitutes an economy.

4.0 Methodology

In this chapter, I explain the research methods that I used to undertake this research and to write this thesis. Of particular relevance is the conceptualisation of Indigenous research paradigms that comprise ontology, epistemology, axiology, and methodology (Wilson, 2008). I explore each of these concepts below within an Indigenous framework as a way of contesting the Eurocentric foundations from which they originated. I also discuss my positionality and socio-cultural context, how I adopted *Kaupapa* Māori practices into my research, and data collection and analysis techniques. I conclude by discussing the legitimisation of participant voices as valid data within western academic institutions.

4.1 Indigenous Research Paradigms

Analysing western research paradigms within an Indigenous framework helps to demonstrate my positionality as an Indigenous academic undertaking Indigenous research. In discussing these research paradigms, I am particularly influenced by Chilisa (2012) and Wilson (2008). Marginalised peoples, who experienced the colonising effects of Eurocentric research paradigms, created Indigenous research paradigms as a countermovement (Chilisa, 2012). Indigenous research paradigms emphasise the importance of nurturing relationships during the research process (Chilisa, 2012). Therefore, Indigenous research paradigms consist of "*relationship ontologies, relational epistemologies, and relations axiology*" (Chilisa, 2012, p. 20). In discussing Indigenous research paradigms, Wilson introduced an Indigenous research paradigm circle (Figure 5).

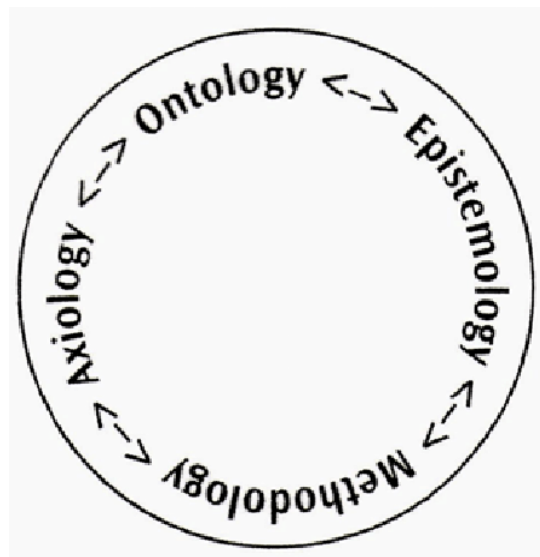


Figure 5 Indigenous Research Paradigms (Wilson, 2008)

Wilson demonstrates that Indigenous research paradigms, unlike western research paradigms, are inherently connected. The Indigenous research paradigm represented by the circle is premised on relationality, whereby all four parts are related and greater than their sum (Wilson, 2008). Wilson states "*The ontology and epistemology are based upon a process of relationships that form a mutual reality. The axiology and methodology are based upon maintaining accountability to these relationships*" (Wilson, 2008, pp. 70-71). An Indigenous ontology has multiple realities, however relationships hold profound importance within these realities (Wilson, 2008). Within Indigenous ontologies relationships to things are more important than the things themselves, therefore, "*reality is not an object but a process of relationships*" (Wilson, 2008, p. 73). This means an Indigenous ontology is the same as an Indigenous epistemology (Wilson, 2008). An Indigenous epistemology consists of entire knowledge systems built on these relationships (Wilson, 2008) and is, therefore, more than a way of knowing (Meyer, 2001). Indigenous epistemology is Indigenous "*cultures, worldviews, times, languages, histories, spiritualities and places in the cosmos*" (Wilson, 2008, p. 74).

Indigenous axiology emerges from Indigenous ontology and epistemology and is based on relational accountability (Wilson, 2008). Indigenous axiology is less about right or wrong value judgments and more about being accountable to your research relations (Wilson, 2008). Indigenous axiology shows that the researcher is linked to their research (J Wilson as cited in Wilson, 2008). Indigenous axiology ensures that the methodology employed by the researcher upholds and maintains relationships created within the research process and ensures that the methodology complies with relational accountability (Wilson, 2008). This commitment to a relational approach very much describes how I approached my research. I adapted this approach to reflect my research and personal socio-cultural context as a *pākehā* and Māori researcher with the help of Curtis's (2016) work on Māori research paradigms outlined below.

4.2 Māori Research Paradigms

Curtis (2016) discusses Indigenous research paradigms ontology, epistemology, and axiology within a Māori specific context. Māori societies have their unique **ontology** or understanding of reality, where all living and non-living things are interrelated (Curtis, 2016). Māori ontology or a Māori world view influences my positioning as a Māori researcher. From a Māori **epistemological** perspective, many diverse knowledges are legitimate and valid; for example, Curtis (2016) discusses storytelling as an important source of knowledge within Te Ao Māori. The diverse range of valued knowledges that exist within Māori epistemology have shaped my positionality as a Māori researcher.

For Curtis (2016), her experience as a Māori and a Māori researcher defines an **axiological** approach that is guided by her parents and Elders, who emphasise the importance of supporting the development of their *hapū* and *iwi*. Curtis (2016, p. 398) also argues that *kaupapa* Māori practices guide Māori axiology as they focus on "*rebalancing power, voice and mana to Indigenous people*". This Māori specific axiology focussed on uplifting Māori people, and giving back to *hapū* and *iwi* has

guided my axiological approach as a Māori researcher. My specific ontology, epistemology, and axiology are all influenced by my socio-cultural context and background and therefore underlie my research methodology.

4.3 A Pākehā Māori Woman

Discussing my positionality is paramount to the research process as my socio-cultural context and background have an impact on my research (Bourke, 2014; Davies & Dwyer, 2008). I am a *pākehā* Māori woman in the privileged position of being the researcher rather than the researched. I am socially assigned as *pākehā*, which means that, because of my white skin, people assume I am *pākehā* (Gillon, Cormack & Borrell, 2019). I experience all the privilege that comes from being a *pākehā* and none of the disadvantages that come from being socially assigned as Māori in Aotearoa.

My Māori *whakapapa* has inspired my Masters research journey. One person who has guided me throughout the research process is my cousin, Doctor Karen Brewer (nee McLellan). Karen and I share the same Māori ancestry but felt disconnected from our Māori *whakapapa* growing up (McLellan, 2013). Throughout both of our research journeys, Karen and I have learned that thinking we are not Māori enough is a result of "*living in a colonised society and coming through a colonising education system*" (McLellan, 2013, p. 2). Furthermore, we have learned that using blood quantum to measure ethnicity is an arbitrary colonial process that is not used by Māori to identify Māori people (Cormack, 2010; Liu, McCreanor, McIntosh & Spoonley, 2005; McLellan, 2013; L. Smith, 2012).

Gillon et al. (2019) argue that having a complex understanding of Māori identities can help to reject colonial settler understandings of Māori as a homogenized identity (Gillon et al., 2019). My socio-cultural background reinforces L. Smith's (2012) argument that there are multiple ways of being an insider or an outsider when it comes to research. My Māori *whakapapa* means that, in some ways, I am an insider when it comes to Māori research; however, my disconnection from my *iwi* and my lack of knowledge of Te Ao Māori mean I am also an outsider.

4.4 Adoption of Kaupapa Māori Practices

Kaupapa Māori (KM) is both a philosophical theory and a set of practices that affirm and legitimate Te Ao Māori, Māori knowledges and the right to be Māori while at the same time challenging hegemonic *pākehā* narratives (Eketone, 2008; Pihama, Cram, S. Walker, 2002). KM, in its most basic translation, means '*the Māori way*' (Pihama et al., 2002). G. Smith (1997) defines KM as the philosophy and practice of being Māori.

The literature points to various foundations of the KM concept. Taki argues that KM knowledge comes from the networking of various *iwi* knowledges and therefore encompasses an extensive range of diversities that existed and exist within ancient and modern Māori societies (Taki as cited in Pihama,

2001). L. Smith (2012) claims KM is founded on the coming together of three concepts: 1. *Kotahitanga*, the collective interdependence of humans; 2. *Wairuatanga*, sacred relations to the gods; and 3. *Kaitiakitanga*, an acknowledgment of humans as the guardians of the land.

Nepe (1991) argues that KM's foundation lies in Māori epistemologies, including Māori relationships and social structures, while Sharples (1988) argues that spiritualism and traditionalism are the foundations of KM (Sharples as cited in Pihama et al., 2002). There is a large body of KM literature that explores how Māori epistemology, ontology and philosophy intersect with research practices and process, and which has influenced Māori scholars (Bishop, 1996; Bishop, 1999; Brewer, Hardwood, McCann, Crengle & Worrall, 2014; Cram, McCreanor, L. Smith, Nairn & Johnstone, 2006; Garrick, 2012; Henry & Pene, 2001; Hoskins & Jones, 2017; International Research Institute for Māori and Indigenous Education (IRI) and Te Rōpū Rangahau Hauora a Eru Pōmare, 2000; B. Jones, Ingham, Davies & Cram, 2010; Kahotea, 2006; S. Kerr, Penney, Moewaka-Barnes & McCreanor, 2010; Lawton, Cram, Ngata, Robson, Brown, 2013; Mahuika, 2008; Moewaka-Barnes, 2000; Pihama, K. Smith, Taki & Lee, 2004; Ruwhiu & Wolfgramm, 2016). Two main KM concepts have emerged from this literature, *Kaupapa* Māori Research and *Kaupapa* Māori Theory (L. Smith, 2012). In developing these two concepts, there has been a range of contributions by Māori scholars. Both concepts were influential in how I undertook the research.

Kaupapa Māori Theory (KMT) is a widely applied transformative theory that is born out of a critique of western theory and uses ancient KM concepts (Penehira, Cram & Pipi, 2003). KMT was created by G. Smith (1997). G. Smith (as cited in Penehira et al., 2003) argues that KMT was first founded on three concepts: the legitimacy of Māori being taken for granted, the need for survival of Māori culture, and the need for Māori self-determination. Unlike western theories, KMT centres and legitimizes Te Ao Māori (Penehira et al., 2003). Penehira et al (2003) argue that to centre Te Ao Māori KMT requires the critiquing of western colonial constructions of Māori. G. Smith (1992) created six principles integral to KMT which have been built on by other authors as summarised in table 2 below.

Table 2 Six Principles of *Kaupapa* Māori Theory

<i>Tino Rangatiratanga</i> (Self-determination)	This principle emphasises the importance of having control over your wellbeing (Penehira, Cram & Pipi, 2003).
<i>Taonga Tuku Iho</i> (Cultural Aspiration)	This principle asserts the legitimacy and validity of Māori and Te Ao Māori (Penehira, Cram & Pipi, 2003).
<i>Ako</i> (Pedagogy)	This principle promotes culturally appropriate education practices (Penehira, Cram & Pipi, 2003).
<i>Kia pike ake i nga raruraru o te kainga</i> (Socio-economic)	This principle acknowledges that KMT has the potential to positively affect Māori wellbeing (Penehira, Cram & Pipi, 2003).
<i>Whānau</i> (Extended Family)	This principle emphasises the necessity of <i>whānau</i> customs and practices to achieve Māori self-determination (Penehira, Cram & Pipi, 2003).
<i>Kaupapa</i>	This principle emphasises the fact that KMT practices are part of one collective movement (Penehira, Cram & Pipi, 2003).

Kaupapa Māori Research (KMR) is recognised as a valid research approach (Bishop, 2005; Cram, 2001; Irwin, 1994; Pihama, 2011; L. Smith, 2005, 2011, 2012; S. Walker, Eketone & Gibbs, 2006). Smith (2011) summarises KMR:

“When I think about KMR, I see it simply: it’s a plan; it’s a programme; it’s an approach; it’s a way of being; it’s a way of knowing; it’s a way of seeing; it’s a way of making meaning; it’s a way of being Māori; it’s a way of thinking; it’s a thought process; it’s a practice; it’s a set of things you want to do. It is a kaupapa, and that’s why I think it’s bigger than a methodology.” (L. Smith, 2011, p. 10)

To help further explain KMR, L. Smith (1999) created a set of guidelines, which have been expanded on by other authors:

Table 3 Kaupapa Māori Research Guidelines

<i>Aroha Ki Te Tangata</i> (A respect for people)	The researcher should allow all participants to control and define the research space (Cram, 2001).
<i>Kanohi Kitea</i> (The seen face)	The research should cross the boundary between the researcher and the researched (Cram, 2001).
<i>Titiro, Whakarongo...Korero</i> (Look, listen...speak)	<i>Kaupapa</i> Māori researchers should look, listen and then speak (Cram, 2001).
<i>Manaaki ki te Tangata</i> (Share and host people, be generous)	<i>Kaupapa</i> Māori research is a joint approach where the researcher learns from the participant and where the researcher shares research findings with participants. (Smith, 2012).
<i>Kia tupato</i> (Be cautious)	<i>Kaupapa</i> Māori researchers need to be politically correct, culturally appropriate and aware of themselves as insiders and/or outsiders (Smith, 2005).
<i>Kaua e Takahia te mana o te Tangata</i> (Do not trample over the mana of people)	Researchers should be respectful and engaging with participants and the research community throughout the research process (Cram, 2001).
<i>Kia Mahaki</i> (Don't flaunt your knowledge)	This guideline urges <i>Kaupapa</i> Māori researches to be humble throughout the research process (Cram, 2001).

Methods used throughout my research project were sensitive to KMR approaches, however, there were several factors that prevented me from carrying out full KMR. Firstly, Nepe (1991) argues that KM is the conceptualisation of Māori knowledge transmitted through Te Reo Māori. This implies that one cannot practise KMR unless they are fluent in Te Reo, which I am not. Carrying out KMR also involves in-depth knowledge of Te Ao Māori, which I do not have as a *pākehā* Māori raised in a *pākehā* world. Finally, my primary supervisor is not Māori, neither of my supervisors have experience in completing KMR, and neither are fluent in Te Reo Māori.

Table 4 below shows how being sensitive to KM has shaped my research processes. The table outlines two scenarios: my actual research process as well as how I imagine the process would have been with no consideration of KMR.

Table 4 Kaupapa Māori vs non-kaupapa Māori research approaches

Process	Actual Research process sensitive to KM	Potential Research Process without KM
Finding a topic	Consulted with several members of Whakatōhea Showed face in Ōpōtiki, attended WMTB annual meeting Attempted to find out what <i>iwi</i> needed / wanted in terms of research Topic brings benefit to Whakatōhea	Topic not beneficial to Whakatōhea Emailed and/or called research stakeholders
Developing Research topic	Continued to consult with members of Whakatōhea via phone and email Two trips to Ōpōtiki to discuss my project and inform community	Emailed and called research stakeholders to continue developing topic
Writing Literature and Methodologies	Valued and prioritised indigenous literatures Spent a lot of time researching, learning and discussing indigenous methodologies Joined Te Wheke, an indigenous methodologies group for indigenous postgraduate students	Used any relevant literature that was available Used Eurocentric methodologies without questioning the effect on participants and research stakeholders
Carrying out interviews	Consulted with informed members of the community who knew about research as well as Whakatōhea protocols, prior to any interviews Learnt about Whakatōhea specific Kaupapa Māori protocols Had questions approved by involved member of Whakatōhea community Provided home cooked <i>kai</i> to research participants where possible and appropriate Completed <i>karakia</i> before interviews where appropriate or let participant do their own <i>karakia</i> Provided <i>koha</i> after interview as a sign of respect for their time in the form of a prezzie card rather than food or petrol voucher to allow participant to have more control Met participants in a space of their choosing Was conscious of KMR value <i>titiro, whakarongo... korero</i> (Look listen.... speak). Was aware of my complex position as both an insider and an outsider	Carried out some interviews via video call or phone without <i>karakia</i> Carried out some interviews face to face but did not provide home cooked <i>kai</i> or complete <i>karakia</i> May have not given participants the option of choosing their own interview space Not conscious of <i>titiro, whakarongo, korero</i> , may have interrupted interview participants or talked to much and not let them speak enough Not aware of the complexities of my insider / outsider status
Gathering Secondary Data	Valued indigenous Māori Whakatōhea voices over other voices	Used any relevant information that was available to me
Thematic Analysis	Let participants' voices create and frame themes Treated Te Ao Māori knowledge as legitimate and valid	Not conscious of valuing and privileging participant voices within themes May have not treated Te Ao Māori knowledge as valid and legitimate
Writing Analysis - Discussion	Privileged participant voice and treating it as valid data Treated Te Ao Māori knowledge as legitimate and valid	Not conscious of the importance of valuing participant voices
Post hand-in	Provide accessible open community report to Whakatōhea Present research to Whakatōhea	Not considering the needs / wants of research stakeholders after the thesis
Outside of thesis	Was a part of indigenous initiatives Te Wheke (Indigenous research methodologies programme), Tuakana (Mentoring programme) and Raranga Ki Te Ra (Student research seminar series) Attended Native American and Indigenous Studies Association conference to learn about indigenous research methodologies Obligation to decolonize The University of Auckland and wider spaces Attended various protests about social issues	Spent the whole year just focused on thesis rather than trying to decolonize spaces within the University and outside of the University

f

4.5 Data Collection and Analysis

My research project meets the ethical requirements of The University of Auckland. I received ethics approval from The University of Auckland Human Participants Ethics Committee on 31 July 2019 (Appendix A) and a letter of support for my research from WMTB on 9 July 2019 (B). I collected primary data from 9 informal interviews carried out between 19 and 28 August 2019 and collected a small amount of secondary data to supplement primary data, which is outlined in Table 5 below. The criteria for selecting participants required that they were knowledgeable about Whakatōhea *kaimoana* practices or involved in Whakatōhea *kaimoana* activities. I endeavoured to interview a diverse range of people in Whakatōhea within the scope of a Masters thesis. I interviewed three women and six men, including people from five out of the six Whakatōhea *hapū*. Because of my lack of established links within Whakatōhea, WMTB assisted me in making connections with interview participants and offered me a space to conduct interviews therefore WMTB had a level of influence over the selection of participants.

Table 5 Secondary Data

Article	The Importance of Connected Ocean Monitoring Knowledge Systems and Communities (Kaiser et al., 2019)
Book	Ōpōtiki Mai Tawhiti - Capital of Whakatōhea: The story of Whakatōhea's struggle during the Nineteenth and Twentieth Centuries (R. Walker, 2007)
Book	Whakatōhea of Ōpōtiki (Lyal, 1997)
Legislation	Fisheries (Kaimoana Customary Fishing) Regulations 1998
Legislation	Resource Management Act 1991
Legislation	The Fisheries Act 1996
Legislation	Treaty of Waitangi (Fisheries Claims) Settlement Act 1992
Legislation	Marine and Coastal Area (Takutai Moana) Act 2011
Meeting	Moana Project Launch.
Meeting	Whakatōhea Aquaculture Investment Hui (WMOL, 2019)
Report	Literature Review of Mussel Restoration and Sea Star Management in Ohiwa Harbour (Bay of Plenty Regional Council, 2016)
Report	Māori Marine-Based Enterprises And Kaitiaki-Centred Business Models - Tangaroa Research Programme: Whai rawa, whai mana, whai oranga: Creating a world-leading indigenous blue marine economy (Dr Matthew Rout, Dr Billie Lythberg, Dr Jason Mika, Dr Annemarie Gillies, Dr Hekia Bodwitch, Dr Dan Hikuroa, Dr Shaun Awatere, Ms Fiona Wiremu, Ms Mylene Rakena, Dr John Reid, 2019)
Survey	Whakatōhea Health and Wellbeing Survey (2012)
Website	About our District (Ōpōtiki District Council, 2017)

Interviews took place in Hamilton, Rotorua, and Ōpōtiki in locations chosen by the participants. I explained the objectives of the research with each participant before the interviews started. I also informed them that they could refuse to answer questions and stop the interviews at any time. I gave participants information sheets (C) to read, and consent forms (D) to sign and return to me before the interview started. I then asked participants a series of informal interview questions (E) that revolved around their past, present, and future *kai* practices and the Whakatōhea mussel farm. Questions enabled me to gather information to meet my research objectives and answer my overall research question.

The first interview was treated as a pilot interview with Participant 1, a senior member of Whakatōhea, who assessed the questions to see if they were appropriate to ask other members of Whakatōhea. This process was critical as it meant a senior member of WMTB approved my questions. Before conducting any interviews in Ōpōtiki, I asked Participant 5, a senior employee at WMTB, about the appropriate Whakatōhea conduct that I should follow when carrying out interviews. Participant 5 informed me that I should provide homemade *kai* to research participants. I therefore provided homemade *kai* to participants whenever possible. I also carried out *karakia* before starting interviews where appropriate and let participants do their own *karakia* if they wanted to.

During interviews, I was sensitive to KM approaches and made sure I practised *titiro*, *whakarongo*, *kōrero* and was aware of my complicated position as both an insider and an outsider. Interviews were informal, conversations stayed open and I did not coerce participants to discuss pre-set themes. Prezzie cards were provided as *koha* to participants at the end of the interview. After completing nine interviews, I transcribed them and sent them back to participants to allow them to add changes if necessary. Background information about participants is shown in Table 6. Participants who chose to be named are listed in F.

Once interviews were transcribed and approved by participants, I used my research objectives to apply thematic coding to the interviews with an overall goal of answering my research question "*What is the nature of the relationship between iwi commercial food ventures and iwi food sovereignty?*". I coded data to map Whakatōhea's food economy over time. I then compared the data to the theoretical concept of food sovereignty to explore how Whakatōhea's levels of food sovereignty have changed over time and the relationships between the Whakatōhea mussel farm and Whakatōhea food sovereignty. Finally, I explored Whakatōhea food sovereignty futures.

Table 6 Interview Participants

Participant 1 is involved in various organisations associated with Whakatōhea including Whakatōhea Māori Trust Board, Whakatōhea Fisheries Trust, Eastern Sea Farms, Whakatōhea Pre-Settlement Claims Trust, Pakahi Trading Company and Whakatōhea Fisheries Asset Holding Company.
Participant 2 is a Trustee for the Whakatōhea Pre-Settlement Claims Trust and a well-respected Elder. During their childhood they gathered food from Kokoki Ohiwa Tairoa Te Umanga o Tairongo, which they refer to as their food basket.
Participant 3 is involved in a number of Whakatōhea organisations including Whakatōhea Māori Trust Board, Whakatōhea Fisheries Trust, Whakatōhea Aquaculture Ōpōtiki Limited, Whakatōhea Mussels Ōpōtiki Limited and Whakatōhea Pre-Settlement Claims Trust.
Participant 4 has gathered food from the <i>moana</i> and the <i>whenua</i> their entire life and is extremely knowledgeable about food gathering practices. They also act as an advisor for the Whakatōhea Fisheries Trust.
Participant 5 has gathered food in the Whakatōhea <i>rohe</i> from a young age, is very involved with the Whakatōhea community in Ōpōtiki and works at the Whakatōhea Māori Trust Board.
Participant 6 has gathered <i>kaimoana</i> in the Whakatōhea <i>rohe</i> from a young age. They have been an avid fisher their whole life and are extremely knowledgeable about <i>kaimoana</i> .
Participant 7 grew up on their traditional <i>whenua</i> and was brought up to look after their rivers and land. They are a <i>kaitiaki</i> of the Whakatōhea <i>moana</i> and <i>whenua</i> , acting as a cultural assessor for rivers in the <i>rohe</i> .
Participant 8 has an intimate relationship with the <i>moana</i> . They are knowledgeable about many historical <i>moana</i> and <i>kaimoana</i> practices and are heavily involved with Whakatōhea at the <i>hapū</i> level.
Participant 9 learned how to gather food in the <i>rohe</i> at a young age. They are involved in various organisations associated with Whakatōhea, including Whakatōhea Fisheries Trust and Whakatōhea Māori Trust Board.

4.6 Indigenous Voices are Legitimate Voices

This research is inherently decolonial and, therefore, I have a decolonial ontological positioning and will not attempt to be critical of interview data as participants' collective memory. My ontological positioning to privilege participant voices aligns with L. Smith's (2012) discussion on 25 Indigenous research projects. L. Smith shows that Indigenous claims, testimony, storytelling, remembering, envisioning, and knowledges are forms of research data that do not need to be validated by western ideologies of legitimate data (L. Smith, 2012).

Indigenous **claims** are histories that can teach both Indigenous and non-Indigenous people important accounts of Indigenous collective histories (L. Smith, 2012). Indigenous **testimonies** are a way in which Indigenous people can talk about painful events; the structure of testimonies makes them suited to Indigenous participants (L. Smith, 2012). Testimonies are also used as "*a narrative of collective memory*" to better understand Indigenous histories, voices, and oppression (L. Smith, 2012, p. 241). **Storytelling** is important to all Indigenous research and "*contributes to a collective story in which every Indigenous person has a place*" (L. Smith, 2012, p. 242). Storytelling is a culturally appropriate research tool that gives control to the storyteller rather than the researcher (Bishop, 2005). **Remembering** involves the painful process of remembering colonisation and its effect on

cultural practices (L. Smith, 2012). For Indigenous people **envisioning** has elements of survival and involves imagining a future where they can set new directions (L. Smith, 2012). Gregory Cajete (as cited in L. Smith, 2012) argues that Indigenous envisioning is a methodology for knowledge-making. **Discovering the beauty of knowledge** is about discovering Indigenous knowledge systems, seeing their relevance, and using them to spur Indigenous development (L. Smith, 2012).

5.0 Transitioning Food Economies

In this chapter I show how Whakatōhea's food economy transitioned from one that was dependent on the environment towards one that is dependent on capitalist markets. Diverse economic frameworks are suitable for conceptualizing Māori economies (Amoamo, Ruwhiu, & Carter 2018; Bargh, 2011, 2012; Fitzherbert, 2015; Bargh et al., 2014), and can reveal a spectrum of capitalist and non-capitalist economies that affect material survival and wellbeing.

I use R. Walker's (2007) account of Whakatōhea's food economy blended with participant accounts to discuss Whakatōhea's pre-colonial food economy. I then discuss the post-*raupatu* economy, before providing a snapshot of Whakatōhea food lives today. To present these economies, I have organised them into four separate sections: historical knowledge systems, cultural rituals and responsibilities, connections to land and sea, and commercial relationships, drawing inspiration from Martens (2015) IFS circle (Figure 3), which consists of history, cultural identity, connections to land and relationships.

5.1 Pre-colonial: An Environment Dependent Food Economy

This section describes Whakatōhea's pre-colonial food economy prior to the *raupatu* of Whakatōhea, which has been described at length by R. Walker (2007). Regarding the diverse economy literature, what he describes is an economy consisting of a diverse range of interconnected technologies, practices, and ethical commitments, which together mobilised a rich resource base, *mātauranga*, and *kaitiakitanga*, where Whakatōhea are dependent on *kai* from the land and sea and trade relationships.

5.1.1 Historical Knowledge Systems

Knowledge of land, people, resources and ethics is at the core of all economy. This knowledge across these domains can be understood to be so entangled as to constitute a knowledge system. Much of the Indigenous economy literature points to the importance of the Indigenous knowledge systems within which economy is bound. Knowledge systems played a vital role in Whakatōhea's pre-colonial food economy. They shaped understandings of the resource base, and how to utilise and manage it sustainably, as well as how to live within it culturally. These knowledge systems were passed down through generations either orally or through practices like family food gathering. In pre-colonial times Whakatōhea used their knowledge systems as a guide for when and where to gather food. Elements of Whakatōhea's traditional knowledge system have survived the generations of dispossession and enrich today's economy. Since pre-colonial times Whakatōhea have continued to use navigational knowledge to map and access a number of traditional fishing grounds in the *rohe* (Participant 5). Participant 9 discusses how knowledge systems were used historically and how these knowledge systems inform food gatherers today:

"There were times to gather that particular food stock, and a time to preserve it, and those were the seasons when to do it. It's no different from harvesting food on the sea or harvesting food on land, they were seasonal. They were determined by seasons, they were determined by stars, they were determined by the bloom of certain flowers. So now with the kowhai, flying, mussels are quite fat. And kinas are fat too."

5.1.2 Cultural Rituals and Responsibilities

Traditional food rituals and responsibilities as *kaitiaki* were interwoven into production, distribution and consumption realms of pre-colonial food economy, and were bound up with traditional knowledge. R. Walker (2007) discusses a hunting ritual where, on the last night of the hunt, the men would cook Kererū in a *hāngī* and eat them. The hunters took the rest of the food back to the woman, children, and older men of the *hapū*.

Resource guardianship was an integral part of Whakatōhea's pre-colonial food economy. Full governance rights meant that Whakatōhea could use sustainable practices to preserve food resources for future generations. In pre-colonial times one of the main ways that Whakatōhea exerted governance over their resources was through *rāhui*. To *rāhui* is to restrict access or use of a certain area for a certain amount of time. In pre-colonial times, Whakatōhea *hapū* would mark a *rāhui* by standing up two large stones called Tahu and Ruamoko in the Waioweka River (R. Walker, 2007). Participant 8 explains several reasons why Whakatōhea continue to *rāhui*:

"We rāhui because there's death, we rāhui because of the conservation aspects of the moana as well, and we rāhui sometimes when there are political issues."

5.1.3 Connections to Land and Sea

Historical knowledges and cultural rituals and responsibilities became bound up in a set of practices that define the material basis of Whakatōhea's pre-colonial economy. Whakatōhea's physical environment provided a vast amount of food sources to sustain the people of Whakatōhea in pre-colonial times. The land in Whakatōhea's *rohe* was fertile; the rivers and sea held an abundance of *kaimoana*, and the forest surrounding the *rohe* provided animals to hunt and food to forage (R. Walker, 2007).

Historically the Whakatōhea *rohe* was contested because of its abundance of food resources, which, as Participant 9 explains, sometimes led to conflict:

"Our food resource was fought over fiercely, it was defended, and sought after by others. So many of them lost their lives defending our food stocks, and many lost their lives trying to take our food stocks."

For example, in pre-colonial times Whakatōhea defended the Ohiwa Harbour from other Māori groups as it was a highly sought after area. Whakatōhea once successfully battled Tūhoe over the harbour (R. Walker, 2007).

The Whakatōhea *rohe* has long provided the *iwi* food to hunt, gather and forage. Before 1840, Whakatōhea ancestors were prevalent bird hunters (R. Walker, 2007). Tarawa, Whakatōhea's earliest known ancestor, hunted birds in a traditional hunting area called Ruangarahō, where he caught *kereru* and *kākā* (R. Walker, 2007). There were several other historic birding areas, including Whitikau, where *kaka* and *huahua* were caught, Petipeti, which had *kākāpō*, Ngatapuāi Kiwi, where *kiwi* were prevalent and Taungakakariki where *kākāriki* were hunted (R. Walker, 2007). Ruamoko a Whakatōhea, ancestor who once led Ngati Ngahere, hunted *tītī* at a birding area called Hawea (R. Walker, 2007). General hunting practices were also a significant part of Whakatōhea's pre-colonial food economy. Whitikai and Waiaua were historic animal hunting grounds (R. Walker, 2007). Between 1840 and 1860, Whakatōhea's economy thrived through trade, and animal hunting practices decreased as food was sourced elsewhere (R. Walker, 2007).

The soil in the Whakatōhea *rohe* was nutrient-rich and contributed to Whakatōhea's pre-colonial food economy, providing plentiful food resources. The traditional name for one of Ngati Ngahere's food growing areas on the Otara River flood plain reflects the fertility of the land, Te Waiu o Paora (the breast milk of Paora). Ngati Ngahere held *mahinga kai* up the Waioweka River, where they grew *kūmara*, potatoes, maize, and *taro* (R. Walker, 2007). Historically, Waiaua and the coastal platform at Opape were also fertile areas where Whakatōhea grew *kūmara*, *taro* and gourd (R. Walker, 2007).

After the signing of the Treaty the *hapū* of Whakatōhea chose to reside at the Pakowhai village in Ōpōtiki because of its fertile soil where they could grow an abundance of potatoes, *kūmara*, corn, *taro* and wheat (R. Walker, 2007). *Hapū* still returned periodically to occupy Waiaua to cultivate crops in the summer (R. Walker, 2007). Whakatōhea's farming practices first became prominent when they resided at Pakowhai (R. Walker, 2007). Whakatōhea used crop rejects to feed the pigs that were farmed there (R. Walker, 2007). Pigs were a prized possession during this time and were used by Whakatōhea to eat, trade, and barter (R. Walker, 2007). Whakatōhea also grazed horses and cattle on the flood plain between the Otara River and the Waioweka River and farmed poultry (R. Walker, 2007).

Whakatōhea's pre-colonial fisheries resources were also fertile. Historically, the rocks between Opape and Te Rangi provided a large amount of seafood to Whakatōhea, including mussels, *kina*, crayfish, sea snails, *pāua*, *maomao* and snapper (R. Walker, 2007). The Waiaua River is another traditional fishing area in the *rohe* where Whakatōhea *hapū* caught flounder, mullet, herring, and whitebait (R. Walker, 2007). Historically, dragging practices took place on the beach between Waiaua and Tirohanga (pictured in Figure 6 below) to catch snapper, *kahawai*, stingray, and sharks (R. Walker, 2007). The Waioweka river provided flounder, mullet, herring, *kahawai*, whitebait, and kingfish, while

the Waiotahi River (Figure 7) was known for its *pipi* (R. Walker, 2007). The Ohiwa Harbour was once home to what Whakatōhea refer to as the daughters of Whakatōhea; cockles, mussels, and sea snails (R. Walker, 2007). Eels were caught in the Whitikau River while Tunamu, another Whakatōhea ancestor, had an eel fishery called *the fishbowl of Tunamu* near the junction of Petipeti and the Whitikau River.



Figure 6 Beach near Tirohanga, Ōpōtiki. August 2019



Figure 7 Waiotahi River, Ōpōtiki. August 2019

5.1.4 Commercial Relationships

Commerce in various forms was a vital part of Whakatōhea's pre-colonial food economy. Before European contact, trade between Māori groups was common practice. Whakatōhea coastal *hapū* traded with inland *hapū* (R. Walker, 2007). Māori were skilled traders and more than willing to set up trade relationships with Europeans when they arrived in Aotearoa (R. Walker, 2007). As noted above Whakatōhea's first European contact was with James Cook on Nov 1st, 1769, when Whakatōhea rowed out to Cook's ship and attempted to trade mussels and crayfish with him (Lyall, 1997).

In the early 1800s, many whaling and trading ships came to Aotearoa to barter with Māori (R. Walker, 2007). Whakatōhea exchanged their pigs, potatoes, maize and wheat for European goods like guns, gun powder, tobacco, clothes, flour, sugar, and tools. Whakatōhea were offered monetary payment for their goods but preferred to barter as goods were more useful than money (R. Walker, 2007). Post 1840, the potato was becoming a more popular crop than *kūmara* as more varieties were introduced to the area, and it was easier to grow than *kūmara* (R. Walker, 2007). Along with potatoes, European and American settlers and traders introduced other crops to Whakatōhea, including watermelon, cabbage, turnips, peaches, apples, and figs (R. Walker, 2007). These crops enabled Whakatōhea to trade and prosper through the 1840s and 50s (R. Walker, 2007). Post 1840, Whakatōhea trade activity increased as more Europeans visited and settled in Aotearoa (R. Walker, 2007). Whakatōhea were involved in cash cropping and trading pigs for ships between 1840 and 1860 (R. Walker, 2007).

In the 1840s, Ngati Rua used their pigs to purchase a Schooner ship, which they called Hokopoaka (purchased with pigs). In the early 1840s, Ngati Rua traded *huahua*, a bird regarded as a delicacy, with Ngati Rangatihi of Te Arawa for six *wāka* (R. Walker, 2007). Post 1850, monetary transactions played more of a role in Whakatōhea's food economy. In 1858 Hira Te Popo from Ngati Ira, who had a large wheat farm at Waioweka, built a flour mill to process his crop, which he sold in Auckland.

5.2 A Food Economy in Transition

The *raupatu* of Whakatōhea altered Whakatōhea's pre-colonial food economy. In 1865, British forces invaded the Whakatōhea *rohe* and, in the process, fed on the abundance of Whakatōhea's food resources and looted Whakatōhea horses, livestock, and food crops. The government then confiscated more than 40,000 ha of Whakatōhea's land including most of their arable land, which restricted their ability to grow and gather food. The Crown then moved Whakatōhea onto reserves with infertile land, which was not sufficient enough to cultivate the amount of food that Whakatōhea required. Post *raupatu*, Whakatōhea no longer held governance over a vast majority of their land and resources. However, Whakatōhea's food economy was still rich and diverse, and there was still a strong dependence on the environment for food. Table 7 below shows R. Walker's (2007) account of the post-*raupatu* food economy bundled up with participants' accounts of this economy, either through their own experiences of their food lives or through stories passed down through Elders.

Table 7 Post Raupatu Food Economy (R. Walker, 2007 & Participants)

Historical knowledge systems	• Beach fishing including net fishing off beach • Fishing grounds • Ground baiting 1 week before fishing • Guided by seasons, moon, stars, flowers • Catching whitebait with tea tree • Traditional eel fishing using flax fibre and wooden rod. • Handlines and homemade spinners for fishing
Cultural rituals and responsibilities	• <i>Kaitiakitanga</i> – sharing extra food with others, drying food, not wasting food, preserving food, storing food, using extra food as bait, fermenting food • Rituals/rules – never turn your back on the sea, never take more than you need, never sell <i>kaimoana</i>, be gentle with <i>kaimoana</i>, woman not permitted to dive, no preparing or eating <i>kaimoana</i> on the beach, no going on the rocks when menstruating, <i>karakia</i> before gathering, <i>karakia</i> before eating, giving <i>kai</i> two days rest on land before consuming, only woman allowed to eat the first <i>kererū</i> back from the hunt
Connections to land and sea	• Strong dependence on environment for food • Hunting: deer, goats, hare pigs, rabbit, • Birding: <i>kererū</i>, <i>kuaka</i>, <i>tītī</i> • <i>Kaimoana</i>: bottlefish, cockles, crabbing, crayfish, eels, flounder, frost fish, hermit crabs, <i>kahawai</i>, <i>kōura mara</i>, <i>kina</i>, kingfish, <i>kumukumu</i>, mullet, mussels, oyster, <i>pipi</i>, shark, snapper, <i>tītiko</i>, <i>toitoi</i>, <i>tuatua</i>, whales, whitebait. • Food gathering: <i>kawakawa</i>, beetles, blackberries, cabbage tree, <i>huhu</i> grubs, <i>manuka</i> leaves, mushrooms, nuts, <i>pūhā</i>, raspberries, watercress, • Collective food gathering and growing • <i>Māra kai</i>
Commercial Relationships	• Trade and Subsistence crops: corn, <i>kūmara</i>, maize, orchards, peas, potato, sugarcane, <i>taro</i>, wheat • Farm animals for cash and subsistence: ducks, goats, hens, pigs, sheep • Purchased small amount of food from shops in town • Standing orders of milk, cream, flour, bread & butter

As seen in the table above, Whakatōhea's post-*raupatu* food economy was still dominated by diverse practices, including historical knowledge systems, cultural rituals and responsibilities, connections to land and sea, and commercial relationships much like Whakatōhea's pre-colonial economy.

Whakatōhea continued to carry out food gathering and growing practices, including hunting, birding, gathering and fishing *kaimoana*, collective food gathering and *māra kai*. Whakatōhea were still dependent on the environment for food as seen in the quotes below:

"That was life. We were totally dependent on the food from the sea, the food from the river, the food from our forest." Participant 2

"There were no shops out there. None. There was a truck that used to come with bread. And if my mum didn't cook bread that's where we would get the bread." Participant 6

"I was always around the sea anyway, and it was part of the lifestyle that we had... as a child I don't remember that often going to the shops to buy food. There was a lot of food that was around us that we collected, so that's the relationship I think I have always had with the moana." Participant 5

Food gathering from the environment was an everyday activity for Whakatōhea during this time:

"The kouka tree that was food. We were like the Indigenous people overseas we survived on nuts, beetles... we had our surplus of hens and our surplus of wild ducks." Participant 2

"That's how they lived their life, they moved with the seasons and when the sea was sort of not so good then the bush, they would go to harvest meat and roots and ferns." Participant 8

"The moana, to me it's part of our lifestyle...and we harvested the mussels out here when they were fat; we left them alone when they were thin. Yeah, there were always other fish there to complete the diet rather than mussels alone. Snapper, kumu kumu, kahawai, kingfish, and there were also tuatua there at one time." Participant 3

"We had a family farm and orchard that supplied seasonal work but other than that the rest of the time or the majority of the time that we had spare was out doing things growing food, catching food. And yeah so and on the weekends we had sports and things. But the majority of the time we were out hunting, fishing, diving, food gathering." Participant 5

Participants also discussed how Whakatōhea utilised capitalist markets for food during this time, their families had standing orders of milk, cream, flour, bread and butter and occasionally purchased food from shops in Ōpōtiki.

5.3 A Market Dependent Food Economy

The rich, diverse food economies of pre-colonial and post-*raupatu* times discussed above slowly became less diverse as colonialism and settler colonialism dramatically altered Whakatōhea's food economy over time. Based on participant accounts of Whakatōhea's food economy in contemporary times, Table 8 outlines Whakatōhea's contemporary food lives and the more limited ways in which Whakatōhea now practise a diverse food economy.

Table 8 Whakatōhea's Contemporary Food Economy

Historical Knowledge systems	• Family knowledge sharing • Guided by flowers • Guided by seasons
Cultural rituals and responsibilities	• Fermenting foods • Sharing extra food • <i>Rāhui</i> • <i>Kaitiaki</i> under Fisheries (Kaimoana Customary Fishing) Regulations Act 1998 • <i>Karakia</i> before food gathering • Avoiding <i>tapu</i> actions
Connections to Land and sea	• Hunting practices: deer, goats, hare, pig, rabbits, • <i>Kaimoana</i>: cockles, crabs, crayfish, eels, flounder, <i>kahawai</i>, <i>kina</i>, kingfish, <i>kumukumu</i>, <i>maomao</i>, mullet, mussels, oysters, frost fish, <i>pāua</i>, <i>pipi</i>, sea snails, snapper, starfish, <i>tītiko</i>, <i>toitoi</i>, <i>travali</i>, <i>tuatua</i>, tuna, whitebait • Small group/<i>whānau</i> gathering activities.
Commercial Relationships	• Strong dependence on capitalist markets for food • WMTB commercial food ventures: farm purchases, horticulture, fisheries.

Whakatōhea still practise a range of food gathering activities that were part of their pre-colonial and post-*raupatu* food economies. Participants discussed their current-day food gathering practices and explained the kinds of food they continue to rely on:

"I would get mussels, I would get pipis, I would get cockles then I would get a whole lot of flounder...I would go to the Wainui stream; I would go further down and get a lot of mullet." Participant 6

"We ferment mussels, just put them in fresh water. But yeah I just ferment vegetables, like the cabbage tree and it's got mussels and mutton bird in it." Participant 9

Opape is still a key gathering ground for members of Whakatōhea today as it has been for hundreds of years. Participant 8 describes the food environment at Opape and how they try to ensure food availability and access for Whakatōhea:

"At Opape we have our own cycle of mussels. In the front we have got all the spat that are clung to the rocks. To the left and on the side of the channels we have the mussels in the next stage up from spat and we call them nianias. Those mussels are left there for kaumatua, for easy access. Then we have the bigger mussels further out and there's two types: greenshell mussels and I don't know what species, they are like a black shell mussel. So within Opape itself we have our own little nursery going on."

Despite the changes that have occurred, Whakatōhea still act as *kaitiaki* in the contemporary food economy as participant 7 discusses below:

“My relationship to the Moana would be just looking after the area and I would because it's part of us. It's who we are actually, that's how I was brought up was to look after our rivers, our whenua, the land.”

As participant 5 explains, WMTB work to enable members of Whakatōhea to act as *kaitiaki* within Whakatōhea's modern day food economy:

“I'm working with kaumatua around gathering history and stories in relation to the moana. I also ensure that the hapū are continuing to play a role as guardians and kaitiaki in relation to the environment.”

Cultural rituals and responsibilities also play a role in Whakatōhea's modern day food economy as discussed by participant 8 below:

“No going onto the rocks when you are on your menstrual cycle. When we are on the rocks we have been told not to scream or yell, because the waves could get big, especially when there are divers in the water. Conservation is a big thing so at the front of the rocks we were told from our nan never to go there because those rocks are for the elderly to teach their mokopuna how to forage, because they are the most accessible rocks. They were designated for kaimoana lessons specifically between kaumatua and mokopuna. When we are going out on the moana, we weren't allowed to have a shower. It was a conservation thing because if you wash your hair with shampoo and soap then put your body in the moana all the residue comes off. Not all whānau know this tikanga but we still practise it to this day.”

Whakatōhea's contemporary food economy is now fundamentally interspersed with accessing food through contemporary capitalist markets. All participants agreed that there is now a strong dependence on the chain supermarket in the *rohe*. As Participant 2 notes “[Chain Supermarket] is the survival kit now... it's the thing to use now unfortunately”. In contemporary times food gathering is a privileged side-line activity, as participant 9 explains in discussing a food gathering lifestyle:

“That lifestyle is a privileged lifestyle; I suppose if you have the time to do that or you take the time to do that...everything is so accessible now with supermarkets, that's taken away the importance of doing things like that.”

5.4 A Loss of Diversity

Conceptualising the economy over time using Gibson-Graham's (2008) diverse economies framework has revealed several significant practices which are both part of the formal mainstream economy and informal economies that contribute to Whakatōhea's material survival and wellbeing. This conceptualisation has also revealed that Whakatōhea's food economy has transitioned over time, from one that is diverse and dependent on the environment to one that is significantly less diverse and dependent on capitalist markets.

Whakatōhea's pre-colonial food economy was rich with resources and heavily reliant on the environment and trade relationships. This economy was systematically altered by the *raupatu*, which had damaging effects on the Whakatōhea food economy by disenfranchising them from their land, their governance rights and their food trade economy. Nevertheless, Whakatōhea still managed to carry out several practices that contributed to a diverse food economy post-*raupatu*. Many participants remember a time where Whakatōhea members gathered a large majority of their food from the environment and only relied on capitalist markets for a few staple items.

However, the *raupatu* of Whakatōhea and subsequent colonialism and settler-colonialism eventually played a role in dismantling Whakatōhea's food economy. The effects of the displacement of Whakatōhea's rich pre-colonial food economy by market relations have systematically peripheralised Whakatōhea. A diverse economy is still present, but in limited form. It looks dramatically different and less diverse in contemporary times where there is a very strong dependence on capitalist markets for food, and some regard food gathering and growing as a privileged side-line activity. What is evident in this conceptualization of Whakatōhea's transitioning food economy is that Whakatōhea has experienced a loss of food sovereignty.

6.0 A Loss of Food Sovereignty

Whakatōhea have been systematically stripped of their food sovereignty through the process of colonisation. Land has been taken or sold, seafood resources have been lost, and control and agency turned over to others. Colonisation has left Whakatōhea with far more limited access to healthy food and the resources to produce it. This access is only through capitalist labour, land and goods markets and is an access that is mediated by poverty, uneven education, health, and other capital. In this chapter, I explore this decline in food sovereignty by drawing on findings from interview participants, who attribute the loss to land loss, loss of governance, adoption of western lifestyles and attitudes, changing food environments and *kai* depletion. I will address each of these in turn.

6.1 Land Loss

By the 1840s, Whakatōhea *hapū* had secured well-defined land boundaries within which they could gather and grow food. Sovereignty over the *rohe* gave them access to seafood resources and a period of settled food sovereignty. In the 1860s, the government confiscated a large amount of Whakatōhea's land and moved *hapū* onto reserves (R. Walker, 2007). This *raupatu* reduced the area and qualities of land available to Whakatōhea for food gathering and growing to the area of the reservation – a smaller area that lacked the diversity of landforms and qualities necessary to maintain the *hapū*'s traditional food economy. Further, the food ground at Pakowhai no longer belonged to the *iwi* and *hapū* also lost exclusive control over, and access to their marine resources.

The losses changed people's lives and ways of living forever, and the process by which they were achieved was deeply damaging. For many Whakatōhea, the memories of what was lost, and how, remain painful and raw. The quote from participant 8 below illustrates the ways in which *raupatu* (and colonisation more generally) has affected Whakatōhea *iwi* in relation to *kai* and food economy and the material effects on people and the environment:

“When our whenua was raupatu'd, confiscated, that was a point of restricting our people to continue what they practised because it meant they couldn't go to the places where they harvested their kai. It's raupatu...And then you have got a sort of different type of raupatu which is succeeding or accessing Māori land and then turning it into reserves, with reserves come freedom campers, it is open to the public, and then you have got the desecration of the whenua, like with the rubbish, the pollution. And then, of course, it has been overfished, because people are restricted to certain areas to gather kaimoana, not all the areas are free for tangata whenua to go to because of the reserve type things.”

Below, participant 2, a well-respected Whakatōhea Elder, recalls the pain experienced from leaving their homeland at Ohiwa when they were a child. Their statement shows the detrimental effects that land loss can have on Māori lives:

“I maintained when we did have to leave there...we came to a house with power in Kutarere, and it broke my heart to a million pieces. And I remember I was only 11, I remember saying in my head and in my heart, I will be back, I will come back, and I will be there.”

These testimonies are both wrapped up in the colonial experience and attest to its permanent and ongoing effects on Whakatōhea's relationship with the land and access to food resources. They are expressions of the absence of food sovereignty.

6.2 Loss of Governance

Other participants focus as much attention on the loss of governance powers over the *rohe*, or control over what happens on the land, as they do to the alienation of land alone. For the colonised Whakatōhea, these two features of colonisation are tightly interwoven as indicated below by participant 9:

“Well, it is kind of different now because all the land was confiscated, and so your boundaries are not your boundaries anymore, yeah. Under the Opape reservation [partly pictured in Figure 8 below], each hapū have got small coastline from the eastern side of the mouth of the Waiaua River back to Opape. So, it is a small place, and so as a hapū, you are able to maintain that small area that's allocated to your hapū.”



Figure 8 Overlooking Opape reserve lands, Ōpōtiki. August 2019

Once again tied initially to *raupatu*, losses echo through memories as well as material realities of restricted sovereignty in the present. As Participant 8, a *hapū* researcher and secretary, argues, current governance over resources in the *rohe* has changed substantially and the ability for *iwi* to assert their authority has been diminished:

“At a hapū level yup we do have some governance, but in the same respect, there is also governance from the Council, regional and district councils there. If we think that fishing or shellfish gathering has been overdone, then we will close the gate, there is a gate down at the beach [at Opape]. The trustees have a certain level of governance, but not total authority, and from a hapū level to restore that mana motuhake and tino rangatiratanga of our people, then we need to have the ability to be able to govern and manage our own seas.”

Whakatōhea does have governance roles, but they are embedded in a wider externally controlled regime. *Hapū* have far from complete governance over their resources, which is wrapped up in the Resource Management Act (1991) (RMA), the Fisheries Act (1996), and the Treaty of Waitangi Fisheries Amendment Act (1992). This resource management legislation is administered by local and regional councils. In the marine space, these councils govern land and near-shore ocean use under the RMA, while the Ministry of Primary Industries (MPI) oversees and polices fishing practices via the quota management system (QMS) established by the Fisheries Act.

In the marine economy, for example, MPI sets daily catch limits under the quota management system. This sets annual allowable catches for quota holders and commercial fishers to prevent overfishing and ensure the sustainability of *kaimoana* resources in Aotearoa (refer to Tables 9 & 10 below, which set out daily take limits for recreational fishers in the Whakatōhea *rohe*) (Reid et al., 2019). The purpose of the QMS is to keep Aotearoa fisheries sustainable (Reid et al., 2019).

Table 9 Daily Kaimoana Catch Limits (Fish)

Fin Fish Species	Max Daily Limit Per Fisher	Min Fish Length (CM)	Min Set Net Mesh Size
Blue <i>Moki</i>	20	40	114
Blue Nose	5	-	160
Butterfish	20	35	108
Elephant Fish	20	-	150
Flat Fish	20	25	100
Garfish	No limit	-	25
Herrings	No limit	-	25
John Dory	20	-	100
<i>Kahawai</i>	20	-	100
Grey Mullet	20	-	100
<i>Parore</i>	20	-	100
Pilchard	No limit	-	25
<i>Pōrae</i>	20	-	100
Red Cod	20	25	100
Red Gurnard	20	20	100
Red <i>Moki</i>	20	40	115
Red Snapper	20	-	100
Rig	20	-	150
Sand Flounder	20	23	100
School Shark	20	-	150
Fresh Water Eels	6	-	12 (Fyke Net)
<i>Hāpuka</i>	Daily bag limit of 5	-	160
King Fish	Daily bag limit of 5	75	100
Snapper	10	27	100

Table 10 Daily Kaimoana Catch Limits (shellfish)

Shellfish Species	Max Daily Limited Per Fisher	Min Size (mm)
Cockles	150	None
<i>Kina</i>	50	None
Mussels	50	None
Oysters Dredge	50	58
Oysters Rock & Pacific	250	None
<i>Pāua</i> Ordinary	10	125
<i>Pāua</i> Yellow Foot	10	80
<i>Pipi</i>	150	None
Scallops	20	100
<i>Toheroa</i>	Prohibited	Prohibited
<i>Tuatua</i>	150	None
All others (Combined)	50	None

The accent on sustainability is welcomed by *iwi*, as is the QMS, which establishes strong property rights for *iwi* in the form of annual catches. *Iwi* are also involved in managing the mundane dimensions of licensing customary take, albeit again in relation to national sustainability goals and the QMS. However, quotas are problematic for many *tangata whenua* as they are rules set by a colonial government that restrict them from accessing their resources (McCormack, 2010). While sensitive to concerns with sustainability, several participants questioned why they cannot control how much fish is taken in their *rohe*, by whom, when, and why.

However, arguments in this regard are again framed in the experience and memories of colonisation. For example, a fisheries officer once stopped Participant 2 from collecting too many mussels in the Ohiwa Harbour, an area over which their *hapū* exercise *mana whenua*. Participant 7, a Whakatōhea *kaitiaki*, argues that recreational fishing quota restrictions are colonial control in relation to *tangata whenua* when they are fishing and gathering for family members, as they can only gather a certain amount per fisher when they may have a whole *whānau* at home to feed. In the Whakatōhea *rohe* government quotas also restrict *tangata whenua* from carrying out their duty as *kaitiaki* to remove toxic starfish, as they are only allowed to gather 50 starfish a day as per the QMS.

6.3 Adoption of Western Lifestyles and Attitudes

Adoption of western lifestyles is another factor that has decreased levels of food sovereignty for Whakatōhea. The expectation of Māori to have western lifestyles and work 40 hours a week has affected Whakatōhea's food gathering activities in two ways. Firstly, it is time-consuming, so it limits extra time for food gathering. Secondly, employment opportunities move people away from the *rohe*, affecting their ability to practise food gathering. Lack of time was identified by participants as a barrier to food gathering practices:

"In more recent times you know having my young family and you know work...takes a lot of my time, so I haven't been going fishing and diving as much as I would love to."

Participant 5

"That lifestyle it's a privileged lifestyle, I suppose if you have the time to do that or you take the time to do that... I think life has become so busy that you're lucky to sit down and eat with your family...And it's [food gathering] become a holiday thing in the summer, and that's only a few days before you have to get away." Participant 9

These quotes from participants highlight that, with the introduction of the 40-hour work week, it is a struggle to find time for food gathering activities. Several participants discussed how work has shifted them or their *whānau* off the *rohe* and decreased their access and ability to gather food. This point was raised by Participant 4:

“They haven't been taught. Kids have moved away. You know I've got moko's here that are learning, they are learning about gathering. I've got moko's in Australia too in the cities. They are losing it...everyone goes away, goes to look for work so all the people living at home they got to maintain that way of thinking, the way they were taught otherwise we're going to lose it.”

Participant 4's quote signifies the impact that moving away to work has on their *whānau's* ability to food gather, not only physically but mentally. As they explain, moving away from your *whenua* also means that food gathering knowledge is lost. Participant 8 discusses their *whānau's* experience of land loss:

“But then came this great idea that you shouldn't be doing this, you should be going out and making money, and he said that he wished he never adopted the idea that working away from your home was the best thing for you. Because when he moved away, regional Council's and district councils and that, move in because it's unoccupied and then you come home, and it's like woah, our whenua has been turned into a reserve. He wished that he never adopted the idea of working because it had him displaced off the whenua.”

The adoption of a western lifestyle has also meant a change in living arrangements for the people of Whakatōhea and this has affected levels of food sovereignty. Before colonisation, Māori societies were collective, but western ways of living are based on individualism, and this has influenced food gathering practices. Collective food gathering was previously practised by Whakatōhea *whānau*, as Participant 8 discusses:

“Mum has a family of 18, and she's from Opape and their family of 18 you know a certain amount of them would have the duties of doing the gardens and the housework, and the other ones would have the duties of going out hunting, and then you would have the next group to do the fishing and shellfish gathering and all of that, and so that's how they lived their life, they moved with the seasons and when the sea was sort of not so good then the bush, they would go to harvest meat and roots and ferns and that type of stuff.”

These gatherings were intergenerational and meant knowledge and skills could be passed down from Elders to younger people as discussed below:

“But it wasn't only that; it was also about the whakawhānaungatanga that we had in doing it, all that kind of stuff in the gardens. We would spend hours weeding the kūmara gardens going through. And whether we wanted to be there or not we were there we talked, and we sang songs and all that kind of stuff, got sunburnt. Yeah, and that would

happen too with fishing and other food gathering activities. We would do it as whānau."

Participant 5

"We used to go with large groups of people...it was like a family gathering where we went like at least 30-40 people...And it's something that would be passed down, I suppose, yeah, to learn to live off the land So yeah but we go gathering and the kids do the same thing now, but we don't go like how we used to go in big family groups."

Participant 9

As discussed above, collective gathering practices rarely occur any more in the *rohe*. Shifts in Māori societies from a primarily collective to largely individualistic has led to a significant decrease in traditional collective gathering practices for Whakatōhea, and has decreased levels of food sovereignty. New work rhythms and lifestyles are connected to changing attitudes towards food gathering, which by bringing universal western values to bear on lifestyles and food itself effectively strip sovereignty over food economy from local hands, local ideologies, and local practices. For example, participants discussed how younger people had developed increasingly negative attitudes to food gathering over multiple generations. This is, of course, bound up with new forms of media and technology that offer new leisure activities, inflate the value of leisure, bring global ideas and values into homes and keep people from food gathering. As Participant 7 observed, kids would rather play on the computer or PlayStation these days than practise food gathering.

Again, what is at stake is the way that colonisation has undermined the *mana* of *tangata whenua* and respect for Te Ao Māori, among Māori and in wider society. This includes respect for the environment and the art and science of food gathering, as well as the way of life that makes it a valuable activity.

As Participant 2 puts it:

"It's not so much the knowledge; it's the attitude I'm sad to say, it's the attitude, they have no passion to try and live that kind of life. ... If you go there now, you would never have known a 9-year-old, ten-year-old to go out there and do adults work. If I did that to my moko's now, they would have me up."

Participants link the decline in food gathering to changing attitudes and the erosion of Te Ao Māori. Participant 2, for example, claims that changing attitudes stem as much from failures to pass food gathering knowledge down through generations, as from the ideas associated with brave new hyper-modern worlds. Changing attitudes, loss of cultural knowledge, and the undervaluing of *mātauranga* Māori all reinforce the impact of a loss of sovereignty, as well as being one of its effects. *Mana*, practice and values are all bound together, and the erosion of one affects the others. As Participant 2 elaborates:

“And that attitude thing stems from instead of acknowledging the facts that they haven't been taught or live in that world, how can they know what to do next? They need a guide.”

For one participant, at least, the attitude dimension is perhaps more easily addressed than the institutional issues of ownership and governance. It is a great place to start reclaiming sovereignty. As Participant 5 argues in relation to the abandonment of food gathering among young people:

“I think it's a choice too; it's a definite choice. If we're able to switch the power off in houses for at least one day a week, it would make people come outside and do stuff as well.”

6.4 Shifting Knowledges

Several participants discussed an attrition of food gathering knowledge in the *rohe*. This has reduced food gathering practices, and in turn, has decreased Whakatōhea's level of food sovereignty. As Participant 4, a food gathering *tohunga*, observes:

“These days a lot of people don't have food sovereignty because they don't know how to, yeah there's a few things they haven't been taught they don't know where to go. They don't know who to go with...Kids have moved away. You know I've got moko's here that are learning, they are learning about gathering. I've got moko's in Australia too in the cities. They are losing it. That's a link lost; everyone goes away, goes to look for work, lost again that's another one, so all the people living at home they got to maintain that way of thinking, the way they were taught otherwise we're gonna lose it...One person goes there's that much more that they lose. People are not going to get taught, yeah.”

For local Whakatōhea, food gathering knowledge is decreasing as knowledge is not being passed down to younger generations. These changing knowledges mean that Whakatōhea's younger generation lack the skills they need to food gather, and therefore point to a compromised food sovereignty. As Participant 4 emphasises, the challenge of educating a generation about local Whakatōhea marine knowledge is a significant one:

“If you have a look at the Marae, there are not many people that are left that know much about marine life, mussels. There's only a few of us left at this Marae that dive...Before you know the generations have evolved, a lot of them have lost that art of fishing.”

6.5 Dependence on Global Food Systems

Dependence on global food systems has also reduced Whakatōhea levels of food sovereignty. The township of Ōpōtiki, where Whakatōhea is based, has one supermarket, and a small number of other food shops. Participants spoke about Whakatōhea's dependence on the supermarket as a food source, and discussed correlations between decreasing food gathering practices and the introduction of shops to the town as these shops offer a more convenient way to 'gather' food. The supermarket has increased levels of food security for the people of Whakatōhea. It is now easier to access a wider variety of food, but this does not necessarily equate to enhanced food sovereignty. Customers have no control over where their food comes from or how their food is produced. Participants discussed how the supermarket sells food, such as *kūmara* and cockles, which used to be grown and gathered in the *rohe* but are now sold for high prices. This throws a sharp light on the lack of control that many Māori have over their food worlds post colonisation and a dependence that points to a compromised food sovereignty.

6.6 Kai Depletion

Kai depletion is decreasing levels of food sovereignty in the *rohe*. According to participants, fish, mussels, cockle, and *pipi* stocks have all depleted. This *kaimoana* was once a prevalent part of Whakatōhea's diverse food economy. Participant 4 discusses mussel depletion in the Ohiwa Harbour, pictured in Figure 9.

"In 2002 or 2003, they had 240 million mussels in the Ohiwa Harbour. 2017 when we had that hui with NIWA (National Institute of Water and Atmospheric Research), there's only about 20 million; there used to be five beds of these mussels... every rock had about 80 million mussels, and now there's only one rock that's got 20 million mussels on it, and they are only getting to a small size."



Figure 9 Ohiwa Harbour, Ōpōtiki. August, 2019

Participants discussed three interrelated processes that create *kai* depletion in the *rohe*. Pollution is a significant problem causing *kai* depletion. One of the main areas in the *rohe* affected by pollution is the Ohiwa Harbour, where both mussels and cockles have depleted. Participants discussed how farming, forestry, boat numbers, human development and mangroves in the area have affected the harbour. **Error! Reference source not found.** shows farming near the harbour, while Participant 5 discusses the pollution of the Ohiwa Harbour:

“So, there's forestry, there's farming, and the silt build-up, the mangroves... I think it's a combination of a lot of things, but certainly, human development is probably the main instigator for the changes in the harbour.”



Figure 10 A farm in the Ohiwa Harbour area, Ōpōtiki. August 2019

Many of the same pollutants that Participant 5 discussed above are also affecting the Waiotahi *pipi* beds (pictured in Figure 11), which neighbour the Ohiwa Harbour. Participant 7, a Whakatōhea *kaitiaki* links the contamination of the beds to human development:

“Pollution because the one out at Waiotahi you will see the development out there, Waiotahi drifts all the homes there well there was no homes there for ages, and that's why our pipis were plentiful and not contaminated. It can impact a lot having homes around the beaches.”



Figure 11 Waiotahi Pipi Beds, Ōpōtiki. August 2019

Effluent runoff is also affecting the *pipi* beds; contamination of the beds has meant they have been closed on numerous occasions by the Ōpōtiki District Council as the *pipi* were unsafe to eat (see Figure 12). The Council's inaction around the *pipi* beds has frustrated Participant 4, who puts little faith in the local council to protect local resources in the Whakatōhea rohe:

“The Council they put signs at the pipi bed at Waiotahi, those pipi beds have been there for years. And all of a sudden, they have put a sign up, pollution do not take food. That's bull crap. What they should do is fix up the water. Why is it polluted they won't fix it? They put a sign there, easy way out.”



Figure 12 Sign warning against shellfish gathering at Waiotahi, Ōpōtiki. August 2019

For some participants the pollution of the rohe is not isolated and sits within a broader political context of capitalism and overconsumption of the worlds resources.

“You know pollution is another way that we haven't been able to use our sovereignty. I'm sorry to say pākehā have killed it off, greed, you know.” Participant 4

"You got the pesticides, the runoff from the farms, and it's all about production and capitalism, everything is a commodity yeah. And it's about taking as much out of them and making as much out of the environment and with little or no regard for the environment. And of course, giving nothing back regarding conservation. How can we maintain conservation practices when everything is being destroyed? So those are huge impacts on the tribe's food sovereignty." Participant 9

Climate change is one significant effect of the overexploitation of the world's resources. Participants suggested that climate change has affected *kaimoana* resources in the *rohe*. Storm activity from climate change, for example, is argued to be having a major impact on *kaimoana*:

"So the effect of storms through climate change, a bigger impact that it has I guess again it has a trickle-down effect into the rivers and streams and out to sea so if all of that changes then obviously it's going to be detrimental to our kaimoana in our area."
Participant 5

As Participant 5, an employee at WMTB, explains above, increasing storm activity through climate change means an increase in toxins entering fisheries areas. Increased storm activity in the *rohe* has already affected the Whakatōhea mussel farm. In 2018 storms that brought rough seas damaged 13 of the leased lines on the mussel farm (Rout et al., 2019). At the Moana Project launch in 2019, Brett Beamsley, the CEO of Met Ocean, discussed how climate change is affecting sea space in the Whakatōhea *rohe*. Brett stated that the water in the *rohe* is getting warmer, marine heatwaves are becoming more frequent and intense, and migration and extinction of species is occurring. These events have an unpredictable impact on fisheries (Moana Project Launch, 2019).

Another threat causing *kai* depletion in the *rohe* is a starfish species that many participants refer to as spiny starfish. According to several participants, the increasing number of starfish is one of the main reasons *kai* resources have depleted in the Ohiwa Harbour. The spiny starfish are also prevalent at the Opape rocks (see Figure 13). The starfish pose a threat to all *kaimoana* along the coastline in the Whakatōhea *rohe*. According to Participant 4, they are starting to cause problems at the Opape rocks, but have not significantly depleted the mussels yet. Local divers are attempting to remove them from the Opape area as Participant 5 discusses:

"So yeah, they did that exercise to try to remove starfish as much as possible and their native to the area anyway. But it seems like there's been a huge increase in the number of starfish and yeah it's one way that the hapū are trying to find a way to keep the balance in around those areas so that the mussels aren't annihilated."



Figure 13 The Opape Rocks, Ōpōtiki. August, 2019

The Bay of Plenty Regional Council investigated the starfish in the Ohiwa Harbour and produced a report in 2016 (Bay of Plenty Regional Council, 2016). The report states that starfish are greenshell mussel predators, and surveys of the harbour have found a correlation between decreases in mussel numbers and an increase in starfish numbers. The report finds starfish to be the main reason for the decline in mussels in the Ohiwa Harbour (Bay of Plenty Regional Council, 2016).

Kai depletion is a significant problem in the Whakatōhea *rohe*, inhibiting the ability of Whakatōhea to gather food and therefore decreasing levels of food sovereignty in the *rohe*.

6.7 A Loss of Food Sovereignty Through Colonisation

This section outlines a Whakatōhea food economy dominated by the on-going legacy of colonisation and settler colonialism. It is a story of a loss of food sovereignty that leaves *tangata whenua* estranged from the possibilities of a rich food sovereign life. The story is a familiar one in the literature (Cote, 2016; Martens, 2015; Whyte, 2017), and echoes poignantly through the testimonies of participants in my research. It is a story of widespread and orchestrated land alienation, of the imposition of colonial and post-colonial governance over land and fisheries systems, and a loss of *mana*, knowledge, drive, and aspiration in relation to food provisioning practices. These have been replaced by the trappings of western food systems, in which Whakatōhea (people and *rohe*) are positioned as marginal and impoverished. Purchasing food from capitalist markets and spending less time outside has become the new norm.

Significantly, however, this is far from the end of the story. Whakatōhea still holds land and quota, and *iwi* are reclaiming a degree of sovereignty in the form of governance rights and a rejuvenation of interest in *mātauranga* Māori, knowledge of the land, cultural practice, and food gathering attitudes. With land rights at the core of food sovereignty (Grey & Patel, 2015; Indigenous Food Systems Network, 2019; Kepkiewicz & Dale, 2018; Martens, 2015; Moeke-Pickering et al., 2015; Morrison, 2011; Stein, 2016), there is some distance to go to achieve a contemporary expression of pre-colonial times when Whakatōhea had control of their food systems, growing crops and gathering a large amount of food from rivers, forests and the ocean, and producing surpluses to trade with neighbouring Māori groups and European settlers. However, with gains in governance, increasing legislative and governmental recognition of rights, new commercial and gathering initiatives, and investments in *kaitiakitanga* and the *mātauranga* Māori to support it, it is possible to see glimpses of a diverse Māori economy (re)emerging.

Colonisation has disconnected Whakatōhea from their land physically and economically, through legal alienation, new systems of governance and out-migration, and culturally, through knowledge loss. These disconnections between Māori and their homelands created a dependence on global food systems and reduced levels of IFS, as they did for other Indigenous populations (Cote 2016). On the ground in Whakatōhea, many *iwi* members are dependent on the local supermarket for their food supply. They are far from food sovereign.

Settler colonialism has interfered with Indigenous collective self-determination in many complex ways that have, in turn, stripped Whakatōhea of food sovereignty and created various forms of food injustice. *Whānau* lost the ability, freedoms of time and desire, drive, and knowledge to gather food collectively. They lost the right to act as sole *kaitiaki* over their resources and have had to watch settler society pollute their environments and exploit and deplete their resources. Fortunately, they have often been able to practise a *kaitiakitanga* that has protected those resources from being entirely depleted or polluted by colonial and modern economies, and are still positioned to build new Māori economies.

Current day Whakatōhea is gripped in institutionalised and acculturated expectations to live a western lifestyle that does not allow time for vigorous food gathering practices or passing on food gathering and growing knowledge and culture to new generations. Reflecting on the food sovereignty literature, all of these circumstances have reduced Whakatōhea's ability to "*sustain traditional hunting, fishing, gathering, farming and distribution practices*" (Morrison, 2011, p. 97) and created a dependence on global food systems and therefore reduced Whakatōhea food sovereignty.

7.0 An Economy Emerging

In this chapter I will introduce the Whakatōhea mussel farm and discuss how it fits into wider Trust Board-*iwi* development tensions. I will then attempt to map the mussel farm using a diverse economic framework before commenting on relationships between the Whakatōhea mussel farm and Whakatōhea food sovereignty.

7.1 Whakatōhea Mussel Farm

The idea for the Whakatōhea mussel farm materialised in 2010 with Whakatōhea and members of the Ōpōtiki community; capital was raised for the venture between 2010 and 2014 (Rout et al., 2019). In 2014, the mussel farm company, Whakatōhea Mussels Ōpōtiki Limited (WMOL), was created with the intent to be commercially viable as well as socially and environmentally conscious (Rout et al., 2019). WMOL operates on farm A (black rectangle in Figure 14), a 3800 ha space that has the potential to be used for mussel and other shellfish farming. Eastern Sea Farms (ESF) are currently in the process of applying for resource consent for farm B (red rectangle in Figure 14) (Rout et al., 2019). WMTB also has an interest in another 5000 ha aquaculture space awaiting Treaty settlement (Kaiser et al., 2019).

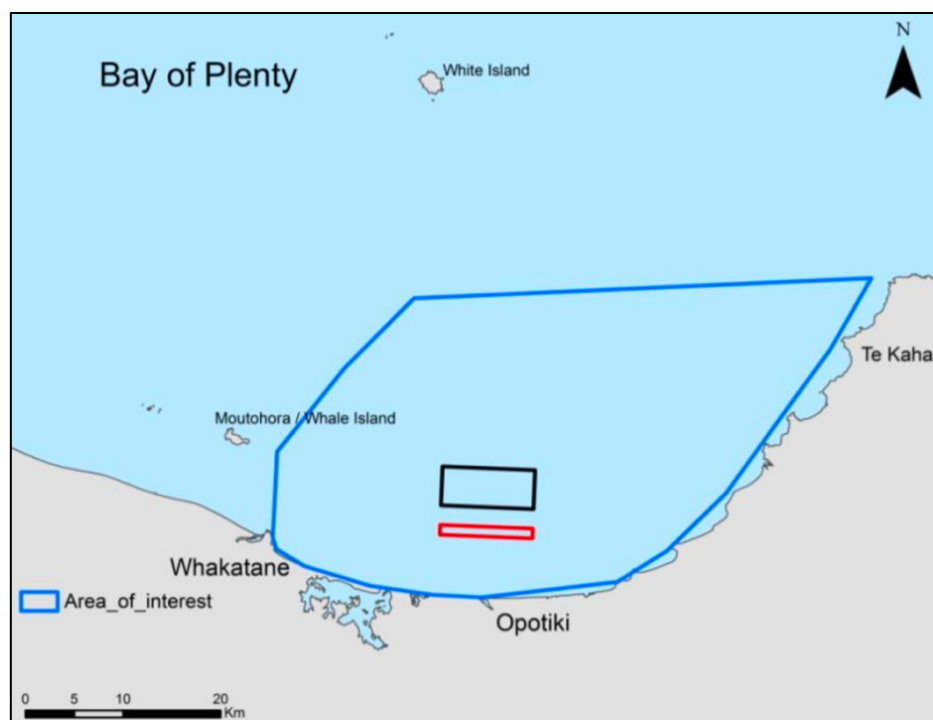


Figure 14 Map of Whakatōhea Mussel Farm (Rout et al., 2019)

Figure 15 below shows a portion of the mussel farm sea space from Ōmarumutu Marae just east of Ōpōtiki.



Figure 15 View of the Mussel Farm sea space from Ōmarumutu Marae, Ōpōtiki. August 2019

The complicated ownership and lessor structure of the Whakatōhea mussel farm is shown in Figure 16 below. Through WMTB's investment in ESF, Whakatōhea Aquaculture Ōpōtiki Limited (WAOL) and WMOL they own 57.5% and Lease 3.8% of mussel farm A.

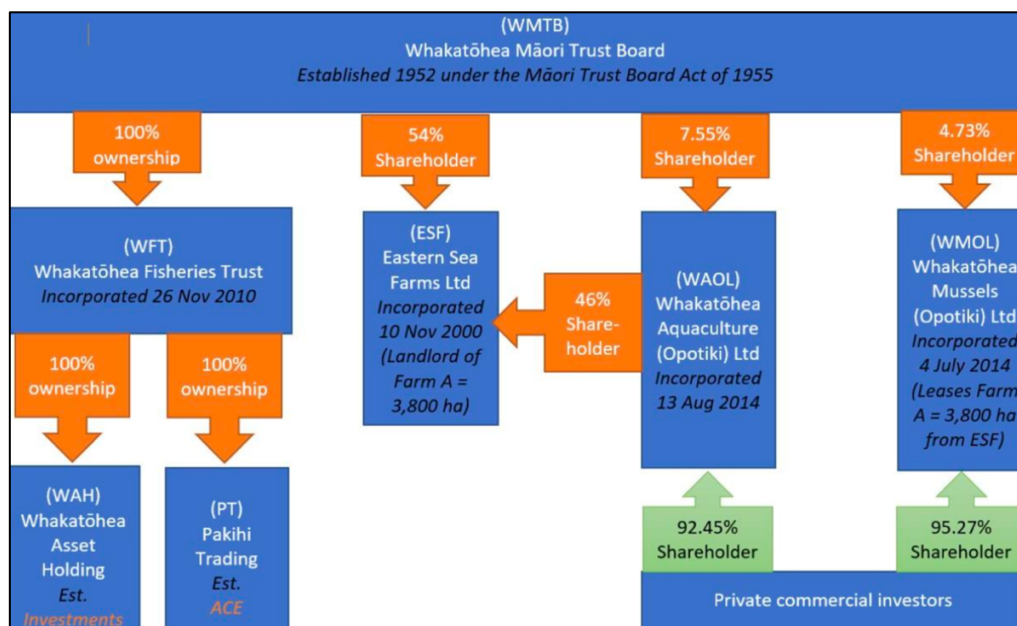


Figure 16 Whakatōhea's Commercial Investments (Rout et al., 2019)

WMOL is based in Whakatāne and employs 14 people, 11 of whom are from Whakatōhea (Reid et al., 2019). WMOL mussels are processed in Tauranga and are sold both domestically and internationally (Reid et al., 2019). WMOL completed its first international export in 2018 when they shipped mussels to Chicago. Mussels are sold under the brand '*Open Ocean*' and are called '*Whakatōhea mussels*' and '*Ōpōtiki mussels*'.

WMOL is a private farming company that does not claim to be a Māori company, although it intersects with the Māori economy in several ways. WMOL uses Māori names, for example '*Whakatōhea Mussels Ōpōtiki Limited*', it sells '*Whakatōhea mussels*' and one of its mussel farm boats is called *Kukutai*. The company also interacts with a number of Māori economic actors from Whakatōhea. A member of WMTB sits on the WMOL board, and WMOL employs several members of Whakatōhea. WMOL is partially owned by Māori organisation WMTB, and it operates on a mussel farm partially owned by WMTB. WMOL also operates within a sea space that Whakatōhea *hapū* associate with; there are several traditional Whakatōhea fishing grounds around the mussel farm. Although WMOL exports a large number of mussels, they also occasionally provide mussels for Whakatōhea events.

In December 2019, WMOL announced their plans to develop a mussel processing factory in Ōpōtiki. This project is dependent on the development of the Ōpōtiki harbour.¹ The mussel processing factory project is worth \$39 million. WMOL have sought funding from the Primary Growth Fund as well as shareholder funding from the people of Ōpōtiki and the Bank of New Zealand for the project (WMOL, 2019). In December 2019 WMOL called for investors, providing two separate investment pathways: one for wholesale investors who hold a certain amount of capital and another pathway for *hapū*, *whānau*, and individuals which required a \$10,000 minimum investment (WMOL, 2019). One condition of government funding for this development is that WMTB needs to be involved and on board with the project (WMOL, 2019). WMOL are working with Whakatōhea *hapū* to incorporate Māori *tikanga* into factory operations (WMOL, 2019).

WMOL hope to produce four types of mussel products in the factory; fresh greenshell mussels, frozen half mussels and, in a distinct move to value-add, the factory will also produce mussel powder and mussel oil (WMOL, 2019). WMOL has relationships with the United States, China and Korea, where mussels will be exported. WMOL hope to have the factory at full capacity by 2030 with ten boats on the farm and 380+ staff (WMOL, 2019). The Whakatōhea mussel farm development is caught up within wider Trust Board-*iwi* development tensions.

¹ A resource consent has been granted to develop the harbour, and The Ōpōtiki District Council is currently in the final stages of securing funding from the Government for the project (<https://www.odc.govt.nz/our-council/current-projects/harbour-development/about-project/Pages/default.aspx>).

7.2 Trust Board–Iwi Development Tensions

Māori Trust Boards' role in *iwi* development is complicated; some Māori Trust Boards pursue commercial development goals while others adopt diverse approaches to *iwi* development. There are several tensions around WMTB's role in *iwi* development, and some of these tensions emerged during participant interviews. WMTB employees grappled with the role WMTB plays in *iwi* development as Participant 5, a WMTB employee, discusses below:

"We're not there to grow food to feed our people, what we should be doing is growing our knowledge systems so that they know how to feed themselves. There is a balance the commercial side is kind of out here trying to grow business and employment, generate income. And hopefully, there will be benefits regarding passive income that goes back to the hapū, but we also have the balance of cultural knowledge systems that we are trying to also regenerate and grow. So that is about enhancing that side so that our people and our whānau again retain that knowledge about how to care for the environment so that in generations to come, our people will still be able to go out and collect food as our ancestors were many generations ago... it's a balancing act as a Trust Board. For me personally, we don't risk any cultural knowledge or environmental impacts at the mussel farm if we want to grow commercially... And that's a challenge I've had with many people. It's hard, and that's why we get a lot of protests people come in and ask where's our share?"

As seen in the quote above, Māori Trust Boards have the difficult task of trying to find a balance between their financial and environmental, social, and cultural responsibilities when trying to create *iwi* development. While some participants are comfortable with the role that the Whakatōhea Trust Board currently plays in *iwi* development, and confident in its ability to negotiate the balance between commercial ventures and non-commercial services for the *iwi*, tension and competing interests are always present. As *hapū* secretary and researcher Participant 8 observes:

"We have got all these elite that are overlooking our pressing issues that are in our community right now. But the focus as I see it with the Whakatōhea Trust Board is business, but we never seen any benefits because we've got investments in farming and into all these other businesses. But nothing has been productive for the people to pick them up and lead them into a different thing because the focus is more to make money."

As Participant 8 suggests, the interest in alternative areas of spending and investment extends to alternative and even non-commercial food initiatives. There is demand among some *iwi* members for WMTB to be more involved in diverse economic practices and, thus, a different form of *iwi* development that focuses on improving self-determination for the people of Whakatōhea rather than profit maximisation and *iwi* economic development. For example, Participant 7 expressed their

interest in WMTB becoming involved in waste clean-up initiatives. In a similar vein, Participant 4 discussed the potential for the Trust Board to be involved in initiatives that teach young Whakatōhea how to grow and gather food. These tensions around WMTB's role in *iwi* development are played out within the Whakatōhea mussel farm.

7.3 Tensions Emerging within The Mussel Farm

WMTB are grappling over the role that the Whakatōhea mussel farm can play in *iwi* development. Participants have differing opinions on whether WMTB should use the mussel farm to pursue purely commercial interests or whether they should adopt diverse economic practices within the mussel farm to pursue *iwi* development. Participant 1 discusses these tensions within the mussel farm:

"I think we are giving some thought to...the notion of food sovereignty. And in that sort of space what is then the responsibilities of the tribe to do that... like do we grow the food to then give to everyone or are we creating an environment where they can get their own food. I think there's always a little bit of balance between that. And I think that will be how we end up with a role both in terms of the development of the commercial fisheries but also supporting the recreational fishery."

Participant 3, a senior employee of WMTB, sets up a strong case for the mussel farm to have a 100% commercial intent:

"I think it is important... we are growing the mussels out there with a commercial intent you got to be commercial to be able to supply work for our people."

For Participant 3, deviating from commercial activity involves too much risk for the *iwi*. Participant 3's enthusiasm for commercial intent to bring jobs to the people of Whakatōhea is connected to a vision of future development centred on meaningful employment for a large number of Whakatōhea in the *rohe* itself, and Participant 3 sees the Trust Board and the mussel farm playing a crucial role in this. Participant 1, who is associated with many Whakatōhea organisations including WMTB, agrees with the commercial intent of the mussel farm, though also points out the potential problems of this commercial intent. In the quote below, participant 1 identifies alternative roles the mussel farm could play in enhancing food sovereignty:

"It would be not a great thing if we ended up with a good commercial mussel fishery, but the recreational ones keep diminishing... if the only way for them to be able to then get mussels in the future was by not being able to get it themselves, but only by buying it once we sell it, then it seems that there's something not quite right with that picture. And you know then you're also thinking about okay well because we know there's pressures, is there other ways that we can enhance the stock rates or something around that. And I

think those are things to be worked out in the future so anyone can come out to the mussel farms now and fish and they do."

Participant 1 reiterates that WMTB's financial *kaimoana* resources are separate from *iwi* recreational and customary resources. However, they question if there is something that the Trust Board can do in the recreational and customary fisheries space in the *rohe* as they see the irony in *iwi* recreational and customary fisheries resources being depleted while *iwi* commercial fisheries are thriving. Participants not affiliated with WMTB, have differing opinions on the role the mussel farm plays in *iwi* development. Participant 7 discusses the mussel farm venture and notes the difference in opinions:

"We have got all the kai resources here and yeah I think they are right, we can start doing our own business and money going back to, each and every hapū, which I know they will do that our Whakatōhea whānau. Some people don't see it like that, but I've looked at it on another scale that you got to try something out first before you can make it happen for the hapū. And that's what they were doing with their mussel farm."

As shown above, Participant 7 has faith in the mussel farm, and how it will bring development for the *iwi*. Participant 7 agrees with the commercial nature of the investment and sees the logic in the commercial route that WMTB is taking in trying to set up a solid financial base before investing heavily in *hapū*. However, Participant 7 also discusses how they have acquaintances within Whakatōhea who do not agree with the commercial way WMTB is pursuing *iwi* development through the Whakatōhea mussel farm.

7.4 A Diverse Economy?

Figure 17 attempts to map the economy of the Whakatōhea mussel farm. This diagram shows the vast number of organisations and actors associated with the Whakatōhea mussel farm. Ten main sets of relations comprise this interpretation, as seen in the branches: Mussel Farm A, Mussel Farm B and C, Other Species, Ōpōtiki Community, Ōpōtiki District Council, Whakatōhea, Ōpōtiki Harbour Development, WMTB, the environment and New Zealand.

coggle
made for free at coggle.it



Figure 17 can also be used to look at the way the mussel farm currently intersects with the people of Whakatōhea's food lives. One interaction is through supplying mussels publicly via market mechanisms at the chain supermarket in Ōpōtiki and Ocean Seafood Ōpōtiki (Rout et al., 2019). Anyone can purchase these mussels, however, one participant pointed out that the supply is sometimes limited. Mussels are also supplied on a casual basis by WMOL for Whakatōhea customary events such as *tangi*. The Ōpōtiki public can also occasionally access mussels from the mussel farm when storms cause mussels to break off their lines and wash up on the shore. Lastly, the mussel farm directly affects people's food lives by increasing fish stocks in the *rohe* and at the traditional fishing grounds, which are located on and around the mussel farm.

The mussel farm can indirectly affect Whakatōhea food lives by providing financial benefits to the people of Whakatōhea. One way it does this is through employment. Currently, the mussel farm employs 11 members of Whakatōhea, and this number is expected to increase. The mussel farm can also provide passive income for *hapū*: each *hapū* has been allocated a mussel line on the farm, and *hapū* received an initial payment from the first mussel farm harvest (Participant 8). There are also opportunities for *whānau*, *hapū*, and individual investment within the mussel farm. The mussel farm and the Ōpōtiki Harbour Development have the potential to spur economic development for Ōpōtiki. This will affect the financial lives of members of Whakatōhea by providing more jobs and other socio-economic benefits.

Despite these diverse interactions between the mussel farm and Whakatōhea food lives, it is difficult to say that there is a real diverse food economy in which the various practices discussed above are manipulated in any way by Whakatōhea *whānau* and *hapū*. Although WMTB hold a certain amount of power within this economy, it is still reflective of a capitalist economy. The only pathway for *hapū* and *whānau* to hold any power within this economy is through investment, even then they cannot compete with other investors who already hold a large amount of capital.

7.5 A Food Sovereign Economy?

The following section discusses the relationships between the Whakatōhea mussel farm and Whakatōhea food sovereignty. I discuss issues around who has control within the mussel farm space, who benefits from the mussel farm, economy-environment relations within the mussel farm, and a case for greater *hapū* involvement.

7.5.1 Who has Control?

Development tensions around the mussel farm are played out within decision making structures. The mussel farm operates as a commercial business and, therefore, decision making lies in the hands of the largest shareholders. Private investors own 42.5% of the mussel farm space, while WMTB owns

the other 57.5%. WMTB have a high amount of decision-making power within the mussel farm space, as discussed by Participant 3:

"We give the space to any company that we're happy with to do the experiments there in our waters, so we will give them the water space and then we might come in as a partnership. And then the risk is shared."

The point made above by participant 3, a senior employee of WMTB, is that WMTB can either impose conditions on the leases or exercise control through less formal agreements over practise or via a selection of lessees. WMTB has financial control over the mussel farm and leases space to whomever they find suitable. While WMTB has less of a say in how the aquaculture is carried out by businesses leasing space, they can exercise control through moral suasion and the selection of lessees, as noted by Participant 1:

"I think what we found because of the relationship that the Trust Board has with the venture, we have more say than might be warranted by our level of investment. And that's more about the relationship with the iwi, the sort of conversations we're having around what you would call, the provenance of the mussels as well, and the stories as they relate to that resource."

As Participant 1 suggests, WMTB can enhance its control over decision making in the mussel enterprise through its control over the space and the provenance values that derive from it. This means that Whakatōhea, the *iwi*, and its various *hapū* have a level of control over the farm and those who lease space. In fact, the initial planning of the mussel farm was carried out by *kaumatua* more than 30 years ago (Participant 5).

Participants discussed a number of conditions imposed on mussel farm lessees by WMTB. Firstly, WMOL are expected to hire people of Whakatōhea as labourers as well as for managerial and administerial positions (Moana Project Launch, 2019). WMOL are also expected to work with WMTB in giving the people of Whakatōhea opportunities to invest in the mussel farm, and has done this through their recent investment opportunity previously discussed. There is also an expectation within the Trust Board that companies operating on the mussel farm will look after the mussel lines provided by Pakahi Trading Company as passive income for *hapū* (Participant 5). It is expected that members of the public will be able to fish at the mussel farm. This is important to Whakatōhea as there are several traditional fishing grounds around the farm (Participant 1). WMTB impose environmental conditions on lessees of the mussel farm to ensure that the mussels and the Whakatōhea *rohe* are not contaminated (Participant 3).²

² I did not see any formal lease agreements legally imposing conditions on lessees.

The people of Whakatōhea lack control over the mussel farm because of their limited ability to invest in farming, processing, and distributing the mussels. WMTB has operated as a crucial intermediary, consolidating the interests of *hapū* and negotiating with outside investors in such a way as to retain influence on the value chain from farming through to marketing of the mussels, ensuring that *hapū* benefit financially and that certain environmental and cultural values are respected by outside capital. Participant 1 discusses the difficulties around WMTB trying to give *hapū* more agency in the mussel farm space while being limited financially themselves:

"So this is the balance of how you deal with the riskiness of the commercial situation and trying to do it in a way that gives whānau and hapū a little bit more opportunity to be active players in the kind of commercial aquaculture space rather than at the moment even with the Trust Board to a degree we are sort of a passive investor."

7.5.2 Who Benefits?

Questions about decision making are related to those to do with benefits from the mussel farm. The people and *hapū* of Whakatōhea stand to benefit from the mussel farm in several ways. Whakatōhea can benefit from the commercial success of the enterprise, which will yield returns for WMTB in the form of rents and profits. WMTB own 4.73% of WMOL. They also have shares in the mussel farm itself and benefit from leasing out the space to others. WMTB is in a position to provide dividends to its beneficiaries within the *iwi*, *hapū* each received a one-off \$10,000 payment from the first mussel farm harvest (Participant 8).

Significantly, the Trust Board is building commercial capability among members of the *iwi* as they develop the mussel operation (new skills, opportunities to come home from urban centres, familiarity with the commercial world, and so on). They are also reinvesting returns from the mussel operations in further commercial activities. Successful business development can take many years, and the Trust Board has asked *hapū* to be patient with respect to dividends from the operation. The people of Whakatōhea are stakeholders in the mussel farm and arguably should benefit from it as they hold provenance³ over the mussels and the farm space.

Whakatōhea benefit from the mussel farm through an allocation of mussel lines. The *hapū* of Whakatōhea have been granted a mussel line each as an investment opportunity; however, there have been issues to do with identifying the specific lines owned by specific *hapū*. After a significant storm, for example, when one mussel line broke, it was unclear which *hapū* owned the line and whether they would have to bear the loss themselves or collectively with other *hapū*. A better system has now been introduced whereby each *hapū* has an equal share in all six lines, and losses and costs

³ The mussel products themselves (Whakatōhea mussels) are named after Whakatōhea and this name adds value to the product. The mussel business (Whakatōhea Mussels Ōpōtiki Limited) is named after Whakatōhea. Further, the place where the mussels are grown covers several Whakatōhea traditional fishing grounds and is regarded as Whakatōhea sea space by several participants.

of repair will be shared. This system echoes the collectivity which occurred in Whakatōhea's pre-colonial food economy.

The people of Whakatōhea also benefit from the mussel farm through employment. While the mussel farm currently employs only 11 Whakatōhea members, WMOL aim to increase these numbers significantly over time and to train Whakatōhea members for managerial roles as the mussel farm development grows.

Hapū can also benefit from the mussel farm through an allocation of mussels for specific events as Participant 3 discusses:

"There will come a time when we will be catering for those sort of things, like for tangis not for every meeting yeah if they want a 21st then why don't you buy that. But if there is a big hui or something like that yeah otherwise well will go broke. You got to be balanced yes but definitely for tangihanga and that over time yeah, that will probably be a standard thing in time."

This initiative is in its early stages but demonstrates that WMTB is listening to the concerns of *hapū* for more apparent and more immediate returns from the mussel farm. It is a promising initiative in embracing diverse economic practices.

Iwi members, however, question the extent of each of these benefits to date. WMTB has a role as financial investor in the mussel farm, which it must perform as the financial representative of the people of Whakatōhea. They have a responsibility to pass on benefits of the mussel farm to the people of Whakatōhea. Some Whakatōhea members question whether the Trust Board is fulfilling this responsibility. They question whether the commercial returns have, to date, realised expectations and question the commercial model itself and the limited benefits it offers *hapū*. As Participant 8, *hapū* secretary and researcher, observes:

"Who's going to benefit from it? And for me with this whole mussel thing Whakatōhea Trust Board only own less than 5% of the shares... It's all private investors that own it, however, they are using the Whakatōhea name to sell the product... it's all centralised into this big corporate business, which isn't going to help our people out. Well, they won't be the major beneficiaries."

Participant 8 suggests that some *iwi* members benefit more than others and that privileged members of the *iwi* make decisions in their own interest:

"There's sort of an elite group that sit at the top that filter all the big kukus, filter all the big mussels and then let the little nianias (see Figure 18 below) drop to the commoners."



Figure 18 Nianias (little black mussels) on the Opape rocks, Ōpōtiki. August, 2019

This discourse challenges the legitimacy of the mussel farm venture and asks how much it will contribute to *iwi* development if *hapū* and *tangata whenua* are not the primary beneficiaries. Participant 8 also expressed scepticism over WMTB's promise of jobs for Whakatōhea, both the absolute number of jobs and what kinds of jobs these will be:

"The other thing is like with the directors of the mussel farm and all that; they promised 200 jobs for the locals, and that sort of reflects the mentality of the Trust Board for our people. They want them to be labourers. Because if we got like with the Trust Board and them expanding the mussel farm, and they're trying to bring in all these other overseas people in I see like were going to be taken over, our Moana is going to be taken over, and still sold under the demise of you got 200 jobs look we've got a beautiful wharf here now but there's no benefits going back to the people."

7.5.3 Economy-environment Relations?

Participant 3, a senior employee of WMTB, insists that the mussel farm is environmentally conscious. They argue that the mussel farm adopts environmental practices that go beyond the Ministry of Primary Industries (MPI) baseline recommended standards. The Trust Board adopt a *kaitiakitanga approach* at the mussel farm. For example, only new ropes are used at the mussel farm to prevent contamination. The Trust Board intends to use the mussel farm to improve Whakatōhea's marine space, as follows:

"We are looking at creating an environment out there that will complement itself. And what I mean by that we got mussels, maybe we need to grow seaweed there, maybe we need to grow other species there so that they complement each other. You know it's like a big environment that will live within its own like an ecosystem, without sort of extracting too much from this and causing problems over there. We have got to find that balance where the environmental impact is minimal." Participant 3

As discussed above, WMTB are considering several initiatives that have the potential to enhance the marine environment in the future. For instance, Participant 3 claimed that the mussel farm has enhanced fish stocks in the Whakatōhea sea space. Customary and recreational fishers are allowed to tie their boats up to the mussel farm buoys and fish (Reid et al., 2019). Several participants discussed how the mussel farm has increased fish numbers and the variety of fish, as Participant 1 explains:

"My brother-in-law can go out to the mussel farm and get fish and so it's effectively created an artificial reef that has attracted a lot of fish, and you can go out there and get your limit quickly. So, in that way, it has enhanced his ability to catch fish."

Mussel farm A has restored fish stocks in the *rohe* as it has attracted an abundance of sea life and created a new ecosystem (Reid et al., 2019).

Several participants questioned the mussel farm's environmental impacts. These centre on concerns about impacts on the immediate environment and wider impacts on food sources in local diverse economies. Several participants are concerned about future development plans for the mussel farm, which include dredging the Ōpōtiki harbour. The harbour is of both cultural and environmental significance to the people of Ōpōtiki; according to Participant 7 it has a lot of fish species, including flounder, snapper, eels and whitebait. Another environmental concern raised by Participant 8 is the potentially harmful chemicals used on the mussel farm and the effect these may have on creating algal blooms and harming the Whakatōhea sea space.

Several external environmental factors affect mussel stocks, including pollution, storms, warming waters, and starfish. Because the mussel farm is a commercial venture, there is financial motivation to protect it from these external environmental factors. In contrast, there are limited resources to protect natural mussel stocks in the same way, as identified by Participant 1:

"I think because of the nature of the (mussel farm) investment, there's probably a lot more sensitivity to how well the production system works and how that's affected either by temperature changes or you know frequency of storms. And given the place where it is it's a lot more exposed than the recreational kind of fishery, and we've got limited

ability to influence that. There's some things we could do, but we also need everyone else around the country, and around the world to be doing their bit."

Participants have differing views as to how the mussel farm is affecting the wider food environment in the *rohe*. The mussel farm has had a beneficial impact on fish stocks in the *rohe*. However, there are several concerns about potential negative impacts the mussel farm has on the environment. There is also an irony around the environmental protections put in place for mussel stocks at the mussel farm but not for natural mussel stocks in the *rohe*.

7.5.4 Case for Greater Hapū Involvement

Hapū have argued for more significant influence over the farm and future directions in the *rohe*'s marine economy. The Trust Board recognise the significance of these demands for more agency within the mussel farm space, but point to the commercial nature of the investment, the established channels of influence available to *hapū* through *iwi* governance and the *runānga*, and the low level of investment WMTB has in the mussel farm.

Participants have differing views over whether the people of Whakatōhea should have decision making power within the mussel farm. For example, Participant 6 argued it was better to leave the decision making to WMTB, while Participant 8 saw a role for the Whakatōhea people:

"From a hapū level to restore that mana motuhake and tino rangatiratanga of our people, then we need to have the ability to be able to govern and manage our own seas."

The limited decision-making power of Whakatōhea *tangata whenua* raises a set of deeper questions about sovereignty and economic development. Firstly, the mussels and WMOL derive their name from Whakatōhea and arguably, this should warrant the *iwi* decision-making power within the company. Participant 7 agreed that the people of Whakatōhea, as the namesake of the mussels, should be consulted. They question whether consultation about the development, necessary under the Resource Management Act (1991), was as wide and far-sighted as it should have been and whether *iwi* authorities consulted widely enough with *hapū*:

"Because they have used the name Whakatōhea, so it is good to consult with your hapū. But, this is where the RMA comes in where they can abide by all the rules for our people."

This point also highlights a major weakness of the environmental management regime organised around the Resource Management Act. Consultation takes place at the time of consenting, meaning that *hapū* have little opportunity to discuss, contest or influence the future direction of major aquaculture development in their *rohe*. Now that the farm is developed, *hapū* and *tangata whenua*

have little to no agency in the everyday operations of the mussel farm. For Participant 8, what adds to the frustration about the *hapū*'s lack of decision-making power in the mussel farm is that several high-profile scientists are informing mussel farm interests:

"But the community itself haven't been involved in those processes. We've got all these high profile scientists, and marine biologists, and when you bring that type of I don't know layer on, you know onto our moana it becomes like it's not about the mauri and the mana, and the history of that place it's about what can be done to make more money out of this place. If it was a hapū, an iwi approach, then I would be all for it, and we would have teams of people that work the land and work the moana to look after the environmental impacts."

Participant 8's views point to the absence of ground-level Whakatōhea decision making and the uncertainties and opposition this can generate. The debate also raises wider questions of jurisdiction and sovereignty when it comes to the sea in Aotearoa. The mussel farm space is 'out to sea', yet arguably impedes Whakatōhea sea space. On one hand, several participants suggest the mussel farm space is too far out to sea to be claimed by any one person, *whānau* or *hapū*. However, Participant 8 is concerned about how the mussel farm space will be used in the future.

"Because they claim to extend another 5000 ha mussel or sea space you see, planning that while as a hapū, we are still going through the MACA claims.⁴ So you know how is that possible because where they are going to extend their mussel farm is of interest to hapū."

Finally, participants have concerns about the extent to which capital gives outside actors significant control over economies and environments in the *rohe*. While WMTB can mediate and shape this control, it does not own enough of the various entities to fully control what is happening on and around the mussel farm. At the ground level, the six *hapū* of Whakatōhea were given the option to invest in the mussel farm but were unable to raise the capital given competing, well-being centred demands on their restricted finances:

"Even if we wanted to buy a line of our own for our hapū that's a challenge because our hapū are struggling as they are." Participant 8

⁴ Marine and Coastal Area Claims (MACA) are claims under the Marine and Coastal Area (Takutai) Act 2011 for recognition of protected customary rights and customary marine title. From <https://www.courtsofnz.govt.nz/the-courts/high-court/high-court-lists/marine-and-coastal-area-takutai-moana-act-2011-applications-for-recognition-orders>

7.6 A Compromised Economy

There are a number of diverse interactions between the Whakatōhea mussel farm and Whakatōhea food lives, however these interactions do not point to a real diverse economy in which Whakatōhea individuals, *whānau* and *hapū* can manipulate practices within the economy. This lack of power is also reflected in relationships between Whakatōhea mussel farm and Whakatōhea food sovereignty. WMTB have decision-making power within the Whakatōhea mussel farm, but the people of Whakatōhea, including the six *hapū*, have little decision-making power in this space. This lack of agency is problematic because *hapū* hold provenance over the mussels from the mussel farm. It points to a compromised food sovereignty.

The food sovereignty literature argues that food sovereignty involves the "*rights of people to define their food and agriculture systems*" (Patel as cited in Agarwal, 2014, p. 1247). Participation in food systems and food system independence are essential aspects of food sovereignty (Morrison, 2011; Patel, 2009; Indigenous Food Systems Network, 2019; Moeke-Pickering et al., 2015). Dependence on global or western food systems means a loss of sovereignty for Indigenous peoples (Cote, 2016). As Cote (2016) argues, Indigenous peoples need to be able to respond to their own food needs. In reflecting on the food sovereignty literature and the Whakatōhea mussel farm, it is clear that the mussel farm can both enhance and diminish Whakatōhea food sovereignty.

For the people of Whakatōhea, participation in their food systems is an integral part of food sovereignty. Whakatōhea have had the opportunity to participate in the Whakatōhea mussel farm through several avenues; Whakatōhea *kaumatua* developed the idea for the mussel farm, the mussel farm provides jobs for the people of Whakatōhea and WMTB and other members of Whakatōhea have had the opportunity to invest in WMOL. However, *hapū* and *tangata whenua* who are not in the Trust Board or working on the mussel farm, are largely excluded from participating in decisions around the mussel farm. The mussel farm, therefore, both enhances and diminishes Whakatōhea food sovereignty as it allows some Whakatōhea groups to participate but denies others.

There is a potential problematic ethic of dependence surrounding the Whakatōhea mussel farm. Firstly, WMTB is dependent on joint venture partnerships to participate in mussel farm activity as they lack the finances to set up their venture themselves. *Hapū* are dependent on both WMTB and the mussel farm business to receive benefits from the mussel farm as they are not financial investors in the aquaculture space or mussel farm activity. The people of Whakatōhea are dependent on the businesses involved in the mussel farm venture, including WMTB, to provide employment opportunities. In the future, the people of Whakatōhea may become dependent on the mussel farm for their mussel supply as natural mussel stocks in the *rohe* are decreasing, meaning the only way they will be able to acquire mussels is through capitalist markets. Fish stocks in the *rohe* are increasing around the mussel farm but decreasing in other areas, in the future Whakatōhea may also be

dependent on the mussel farm for fish supply. The development of the Ōpōtiki Wharf may exacerbate this dependence on the mussel farm as it will diminish *kaimoana* at the wharf.

There is a fundamental geography of power, economy, and environment here that runs counter to the grounded geography of people in their place that governs economy in a Māori world view. The capitalist development of the food economy creates a world where access is not about cultural connection to place or natural environmental rhythms, but about financial wealth. In the food sovereignty literature, this is dealt with by the concept of dependence. In the case of the Whakatōhea mussel farm, we can see it in sharper relief as questions of access, connection, and actual choice and influence. The more dependent Whakatōhea are on food systems outside of their control, the more restricted their access to food and their resources, the more distanced they become from their resource base and cultural-environment food relations and the less food sovereign they become.

8.0 Whakatōhea Food Sovereign Futures

Whakatōhea participants have identified a range of diverse initiatives that have the potential to foster food sovereignty into Whakatōhea's food economy. These include initiatives to enhance food gathering and growing, *iwi* environmental management, and Whakatōhea's agency within their food systems.

8.1 Food Gathering and Growing Initiatives

Whakatōhea's interest in food gathering and growing is increasing. As Participant 2 observes, there is an emerging interest and pride in food gathering, "*especially now that everybody is getting educated or coming into the area of wanting to know about it*". Participant 5, who is motivated to return to the land and to increase food gathering and growing practices, talks of urging their *whānau* to start their own *kūmara* gardens and encouraging the next generation to get involved. Participant 7 argues that food gathering and growing practices have positive external effects, as they encourage people to respect the environment as well as care more for others. Participant 7 and others point to education and knowledge sharing as ways to encourage Whakatōhea food gathering and growing practices, especially Ōpōtiki school-based initiatives:

"Even if we can start with the teachers, the families and the children going out maybe today it's that school maybe tomorrow Ōmarumutu School, and then the tohunga's can come alongside. We can do wonders instead of staying locked up inside." Participant 2

For Participant 2, sharing food knowledge in schools is a way to excite young Whakatōhea about Whakatōhea food systems. This initiative may require funding, and will require Whakatōhea *tohunga* to give up their time to teach others about Whakatōhea food systems. Participants discussed potential *hapū* and *iwi*-based education initiatives that could increase Whakatōhea food growing and gathering practices:

"Whakatōhea should be teaching all our Māori kids how to get out and fish, dive and hunt instead of looking for a job. It should be an iwi-based push though for every hapū to get at least 2-3 guys, and we can go out and teach them. It could be a hapū push. Take it to the hapū hui." Participant 4

Others suggest that WMTB has a role to play in promoting food gathering and food growing initiatives as part of its responsibility to maintain and spread cultural knowledge. WMTB might need to resource these initiatives, given that *hapū* and *whānau* have limited financial resources. While WMTB is primarily focused on growing *iwi* commercial development goals and working on the Treaty settlement, food sovereignty goals might be a simple and relatively inexpensive way to rejuvenate

Māori economy and improve health and cultural outcomes alongside these goals. As WMTB employee Participant 5 observes:

"We're not there to grow food to feed our people what we should be doing is growing our knowledge systems so that they know how to feed themselves...we also have the balance of cultural knowledge systems that we are also trying to regenerate and grow. That's about enhancing that side so that our people and our whānau retain that knowledge about how to care for the environment so that in generations to come, our people will still be able to go out and collect food as our ancestors were many generations ago."

Participants discussed how *tohunga* have a role to play in increasing Whakatōhea food gathering and growing practices. Utilising the skills of these experts will help Whakatōhea learn how to grow and gather food. Participant 4 is a *tohunga* who can contribute to Whakatōhea food practice education. Participant 5 discusses how Participant 4 can help teach others:

"There's things that I would like to try and reinstall with my whānau, utilising the skills of people like... [participant 4]... and other people that are still around to be able to share their knowledge."

Tohunga like Participant 4 are important resources for achieving food sovereignty. They are assets in which *hapū* and *iwi* must invest, as they do not always have the time or the means to teach others their skills. There is a role to play here for *iwi* authorities and potentially WMTB.

8.2 Environmental Management Initiatives

Participants discussed several environmental management initiatives that can enhance Whakatōhea food systems and foster food sovereignty. Participant 7, for example, is a champion for environmental clean-ups in the Whakatōhea *rohe*:

"Even at Opape we did a clean-up over there too as well. Tyres and batteries those were the main things we got out of there, well with the chemical spillage of the batteries and that. But there is still like 20 loads of rubbish."

Participant 7 discussed the negative effects of people dumping their rubbish, furniture and whiteware in the Whakatōhea *rohe*. They also promote the value of erecting signs to foster environmental awareness in the *rohe*, advocating for signs that say 'Protect Our Waterways' and warn people that rubbish dumpers will receive fines. Participant 7 also highlights the positive effects of a video made by their cousin to spread awareness about the pollution of the *pipi* beds at Waitotahi:

"So when he did do that video it was to save our pipi bed, it was to share it to that page, and it was to show how businesses like farming had an impact on our awa, our moana. The video is online."

Participant 7 argues that environmental clean-ups are educational and can teach people how to act as *kaitiakitanga*, but again their efforts currently rely on voluntary labour contributions. More support could help Participant 7 continue to combat the large amount of rubbish and pollution in the *rohe*.

Perhaps the most important food sovereignty initiatives, however, centre on efforts to regenerate Whakatōhea's food environment. Participant 5, for example, highlights the potential of putting areas of the *rohe* into reserves:

"What I would love to see are areas which are put into reserves to allow for kaimoana to regenerate. Perhaps we could put a rāhui on fishing for snapper around the Opape rocks. If there are more snapper that have a habitat there that could regenerate, then those snapper eat starfish, and they could keep the balance in there. Perhaps we could also put a rāhui on gathering kina around the Opape rocks to allow them to regenerate because there is not many. Regarding river management as well, for example, the whitebait habitats in the rivers. It will be good to see all those regenerated, and up and down the rivers so that you know you can increase the possibility of having more whitebait coming in, and there would be more fish coming in chasing the whitebait."

For Participant 5, Whakatōhea's food system and its potential for food sovereignty are bound up with the health of the environment. Environmental initiatives like *rāhui* and temporary fishing reserves can regenerate these food-producing ecosystems and food stocks. To achieve these gains, and improve Whakatōhea environmental management, the knowledge held by Participant 4 and other *tohunga* is crucial. Participant 4 has organised several starfish clean-ups at the Opape rocks to remove starfish that are eating shellfish. Reef bores have also been deployed at the Opape rocks by members of Whakatōhea to give mussels more space to grow and regenerate. Participant 5 discusses a regeneration initiative below:

"Upokorehe have been actively assisting and directing the Regional Council and DOC (Department of Conservation) around how they should look after the Ohiwa Harbour so they have had projects around pulling out mangroves in certain areas."

As individuals, *whānau* and *hapū* have limited resources to carry out initiatives to regenerate Whakatōhea food systems, WMTB could play a role helping Whakatōhea with these. The Whakatōhea mussel farm could play a significant role in these initiatives. As Participant 1 explains below:

"I think the aquaculture development is a big part of realising that vision of sustaining the people of Whakatōhea at home. And we are thinking about what is the responsibilities of the tribe to sustain people like do we grow the food to then give to everyone? Or are we creating an environment where they can get their own food? And I think we will end up with a role both regarding the development of the commercial fisheries but also supporting the recreational fishery."

Significantly, WMTB have been thinking about their role in supporting recreational and customary food systems as well as carrying out their commercial aquaculture activity. It sees the mussel farm's role as supporting the recreational fishery and regenerating the marine environment and participant 3 WMTB employee discusses:

"We are looking at creating an environment out there that will complement itself. We got mussels, maybe we need to grow seaweed there, maybe we need to grow other species there so that they complement each other. It is like a big environment that will live within its own like an ecosystem, without extracting too much from this and causing a problem over there. We have got to find that balance where the environmental impact is minimal."

WMTB sees that the mussel farm has positive external effects bound up in encouraging Whakatōhea's food systems. Participant 3 sees it as being pivotal to regenerating the Whakatōhea *hāpuka* and *moki* grounds. They point to the possibility of growing seaweed at the mussel farm to regenerate seaweed that has been depleted by large scale fishing boats in the *rohe*, and the potential to regenerate mussel stocks at the Opape rocks:

"We had already discussed this to maybe leave adult mussels there, maybe one line a mature line. There could be lines that could be left out there and they will probably spat over the winter and next time they will fatten up. And the next lot we will leave them there until they are two years old, rotate them like that. Then there is an ongoing supply of spat and what have you, sure we depend on the native mussel stocks, but we can give something back too."

WMTB sees itself as playing a role in environmental management and regenerating Whakatōhea's food systems in these kinds of ways; that is by promoting a *kaitiakitanga*-led food economy through its role in *iwi* development. While it is charged with meeting commercial goals, it claims that it will always pursue positive environmental outcomes, even if its limited finances keep it from explicit restoration projects that might regenerate Whakatōhea's food environment.

Participants have become increasingly concerned about the negative impacts of climate change on Whakatōhea's food environment, especially warming waters. As Participant 5 suggests:

"Where some seafood may not like certain temperatures, there are others that enjoy warmer waters so snapper, for example, enjoy warm water so we might lose kaimoana in certain areas we might be gaining others. There is only so much that we can do locally to try to protect it, but this is a global thing that is so out of control, there is barely anything that we can do to make a difference to climate change. So it is either we figure out ways to manage ourselves from today and onwards and try to assess what the impact is going to be with climate change, not regarding the rising waters but regarding the water temperature increases."

While warming water is a global issue and beyond the capacity of Whakatōhea to mitigate, it will need new environmental management systems to adapt to the loss of some species and gain of others. Whakatōhea, as an *iwi*, must come up with solutions to adapt to this change and it has yet to fully address this challenge that will have significant implications for food sovereignty.

8.3 Initiatives to Increase Hapū and Whānau Agency

Hapū and *whānau* have expressed frustration at the limited resources at their disposal to generate diverse economy initiatives and exercise food sovereignty. They are looking to WMTB for support. One option might be to enable *whānau* and *hapū* to fish Whakatōhea's fisheries quota as Participant 3 discusses:

"But in time we might withdraw our inshore fisheries quota and fish it ourselves... Because we're sure we can get the fish on our farm. And then we will have one or two of our own people doing that fishing for us. And that is business for whānau."

This aspiration is given further impetus by the success to date of the mussel farm, which is increasing the number of fish in the *rohe*. According to Participant 3, this ought to allow *whānau* and *hapū* to take more fish in a fuller appreciation of the right of Māori under the Treaty. This could create opportunities for *whānau* or *hapū* to play more active roles in Whakatōhea's diverse food economy. This perspective is shared by participant 8, who also claimed that WMTB should already be considering how to better include *hapū* and *whānau* in the Whakatōhea food economy, even if this might come at the expense of commercial goals:

"Nothing has been productive for the people to pick them up and lead them into a different thing because the focus is more to make money. And so, it's quite sad because if Whakatōhea Trust Board as a whole, tautoko'd those hapū, and worked with the hapū, then it could be a win-win situation. If you empower hapū, and got them to utilise their own unique environments around their marae and around their hapū, you would get some amazing business initiatives. But it's sort of all centralised into this big corporate

business, which isn't going to help our people out. Well, they won't be the major beneficiaries."

Participant 8 suggests that one easy win would be to offer courses where Whakatōhea could learn about food systems and environmental management. While such initiatives may not bring a financial return to WMTB, they would drive food sovereignty at *hapū* and *whānau* levels. They suggest this could be achieved within the mussel farm venture:

"If it was a hapū, an iwi approach, then I would be all for it, and we would have teams of people that work the land and work the moana to look after the environmental impacts. But the community itself hasn't been involved in those processes. We've got all these high profile scientists, and marine biologists, and when you bring that type of layer onto our moana it becomes like it's not about the mauri and the mana, and the history of that place it's about what can be done to make more money out of this place."

Participants are keen to see *whānau* and *hapū* play a greater role in the *iwi* commercial economy and to pursue food sovereignty goals through commercial ownership. One of the main ways the people of Whakatōhea can play an active role in the Whakatōhea mussel farm is through employment. Despite a stated intent to hire Whakatōhea to work on the mussel farm and eventually run the mussel farm business in the future, Whakatōhea employment numbers at the mussel farm are currently low. Financial involvement in the mussel farm venture is another opportunity that has yet to be developed. While *hapū* have each been allocated a mussel line, this is a limited involvement. Few *hapū*, *whānau*, or individuals currently have the financial means to invest. Conversations have begun to turn to different financial models that would allow them to be financially involved in the mussel farm venture:

"At the moment, there is largely a single company that's involved with developing the mussel farm. What we would like to see is more other groups out there and we are trying to work out what ways might families be able to do that, or hapū be able to do that now what that looks like is yet to be determined, still got to work that out." Participant 1

The opportunity to invest in the farm does not open up direct opportunities for food sovereignty, especially given the limited ownership stake that WMTB holds in the business. However, the farm is an asset and one that might be better tied to food sovereignty in the future.

8.4 Treaty Settlement Opportunities

The big opportunity, as it has been for many *iwi*, lies in settlement of Treaty claims. Participants hold out significant hopes for enhancing Whakatōhea food sovereignty through initiatives funded by settlement. Increased income for WMTB will allow *iwi*, *whānau* and *hapū* more agency within the

mussel farm business, and the opportunity to increase their level of investment in the Whakatōhea mussel farm:

"I think it potentially changes the nature of our involvement. With a settlement, you have a lot more resources, and you can then make decisions about the way they get played if we were to increase our level of investment into the aquaculture whether that's through existing companies or separate companies we would be in a position to do that."

Participant 1

In addition, Whakatōhea's Treaty settlement will mean a significant injection of income for WMTB, which means they will be able to invest more money and time into environmental management in the rohe:

"I think having the resources around also would allow us to do a little bit more around maybe the recreational fisheries. I think we would be thinking more about our ability to be involved with environmental issues on the land and in the sea, and that might end up being a part of dealing with the starfish. So things like that, being able to be more involved in activities like that, that support a cleaner environment, which then hopefully means that there is more kaimoana as well."

Participant 1

Participants discussed ways in which WMTB could use settlement money to uplift hapū:

"I thought wow, we are going to get \$100 million, let's see what ideas our people have, and it's all to do with protecting and preserving our whenua, not exploiting it, and desecrating it. You've got things like honeybees, and whānau have got some amazing ideas. But no one believes that they have the potential to be business owners."

Participant 8

The point is that settlement money could be used to invest in the people of Whakatōhea to be self-sustaining and to contribute to Whakatōhea's food economy by pursuing bottom-up rather than top-down development. This potential depends upon decisions made at *iwi* level about how to use the monies and who should control them. If *hapū* receive settlement money themselves, they will have agency and may pursue initiatives to become more involved in Whakatōhea's food economy. However, if *hapū* do not receive any settlement money themselves, they will be dependent on WMTB to use the settlement money to pursue initiatives that increase *hapū* agency within Whakatōhea's food economy.

8.5 Food Sovereign Futures

Participants pointed to diverse initiatives that have the potential to secure Whakatōhea's "*right to define their food systems ...[and secure access to]... healthy and culturally appropriate food produced through ecologically sound and sustainable methods*" (Patel as cited in Agarwal, 2014, p. 1248).

These initiatives are centred on diverse economy solutions that build strength from traditional food systems and the knowledge that underpins them (Morrison, 2011; Moeke-Pickering et al., 2015; Stein, 2016). The initiatives envisioned involve enhancing access to traditional land and sea resources, securing rights in this regard, revitalising traditional knowledge, education on traditional practices and contemporary environmental concerns, and a revaluing of *kaitiakitanga* as the basis for a powerful environmental management regime. The initiatives will, at the same time, decrease Whakatōhea's dependence on global and western food systems and allow Whakatōhea to participate in their food systems (Indigenous Food Systems Network, 2019; Morrison, 2011), act as *kaitiaki* (Indigenous Food Systems Network, 2019; Stein, 2016), and reconnect with the land (Martens, 2015; Grey & Patel, 2015; Stein, 2016; Kepkiewicz & Dale, 2018; Moeke-Pickering et al., 2015). Participants emphasise the need to enhance Whakatōhea food environments so that they provide more food resources and decrease dependence on global food systems on the one hand and increase Whakatōhea's agency within their food systems on the other. Treaty settlement is seen as an important moment at which the impetus for achieving these aims might be realised through material support such as access to land, financial resources, and confirmation of roles for *kaitiaki*.

9.0 Conclusion

This research has explored Whakatōhea's food economy and investigated current levels of Whakatōhea food sovereignty. It uncovered a food economy and food sovereignty dominated by capitalist food relations and an under-developed food provisioning system. However, the research also discovered a rich resource base for doing economy differently, a diverse economy which consists of elements from Whakatōhea's pre-colonial food economy bundled up with new economic futures within the Whakatōhea mussel farm, and other potential initiatives. This research found a willingness within various levels of Whakatōhea (individual, *whānau*, *hapū*, *iwi*) to build on this new food economy and create food sovereign futures. Much of this aspiration rests on Treaty settlements. Questions remain as to how settlement assets will be allocated, who will have control over these assets, and ultimately what material changes these assets will bring to Whakatōhea and at what levels.

9.1 Transitioning Food Economies

Conceptualising economies through a diverse economic framework focuses attention on activities that mobilise resources to make livelihoods and secure material survival and wellbeing for humans and non-humans alike (Gibson-Graham, 2008). The diverse economies framework provides a helpful tool for conceptualizing Māori economies (Bargh, 2011; Bargh, 2012; Fitzherbert, 2015; Amoamo, Ruwhiu, & Carter 2018, Bargh, Douglas & Te One, 2014). It reveals hidden economic activities, ensures Māori economies are not viewed under a capitalist/non-capitalist binary (Bargh, 2011), and acknowledges the importance of place and time-specific geographies, histories, and ethics (Bargh, 2011; Amoamo, Ruwhiu & Carter 2018).

Mapping Whakatōhea's food economy over time revealed a transformation from food provisioning activities centred on strong ethics of care and concern among people, and between people and their environments, to a dominance by capitalist relations of production. A diverse food economy built on Te Ao Māori and *kaitiakitanga* gave way to individual property rights, competition, maximising yields and global markets. The *raupatu* marked the start of the transition period for this economy; confiscation has subsequently given way to a gradual attrition of food sovereignty towards a dependence on capitalist markets like shops in town, including the chain supermarket in Ōpōtiki. This story is similar to those of other Indigenous groups as their economies were dismantled in numerous ways through colonisation and settler-colonialism.

Nonetheless, a diverse economy survives and continues to contribute to Whakatōhea's material survival and wellbeing. In Chapter 5, drawing inspiration from Marten's (2015) IFS circle, these practices were grouped into four categories: historical knowledge systems, cultural rituals and responsibilities, connections to land and sea, and commercial relationships. As Bargh (2011, 2012) suggests of other Māori economies in Aotearoa, mapping Whakatōhea's food economy within a diverse framework draws out a set of essential geographies, histories and ethics that are specific to

Whakatōhea's food economy. For example, Whakatōhea's food economy consists of a set of environmental rituals and responsibilities, deep connections to the environment, food gathering and growing practices and areas all impacted by a history of colonialism. Bargh et al. (2014) speak to another case that demonstrates the value of the diverse economies approach, particularly as it is translated through the lens of an Indigenous economy perspective, in discussing how Māori economies are adopting practices to combat climate change.

9.2 A Loss of Food Sovereignty

This changing economy arises from, and points to a loss of food sovereignty in the time since colonisation. The case confirms that colonisation has a negative effect on IFS (Cote, 2016; Martens, 2015; Whyte, 2017). The Whakatōhea experience is yet another example of how settler societies interfere with Indigenous collective self-determination and Indigenous social and environmental relationships, causing food injustice and eroding IFS (Whyte, 2017; Martens, 2015). As elsewhere in the colonised world, Whakatōhea had built a food economy around skills, knowledge and relationships with nature that provided healthy livelihoods and resourced a rich cultural life, yet self-sufficiency was displaced by colonial lifestyles, knowledge and food relations. Marten's (2015) food sovereignty framework neatly captures Whakatōhea's loss of food sovereignty.

Whakatōhea's colonial history and subsequent settler-colonialism have rewritten Whakatōhea's food **histories** and changed Whakatōhea food sovereignty. Before colonisation, Whakatōhea had high levels of food sovereignty. Whakatōhea were able to carry out their traditional food practices, including food gathering, food growing, passing of knowledge, *kaitiakitanga* practices and rituals. However, land loss, loss of governance, changing societal norms and attitudes, loss of knowledges, and *kai* depletion have all eroded this sovereignty.

Colonisation has changed the way that Whakatōhea **connects to the environment**. Land loss has physically reduced Whakatōhea's connection to the environment and decreased their access to many food gathering areas. Loss of governance has restricted Whakatōhea's ability to connect to the environment by acting as *kaitiaki*. At the same time, the depletion of many of Whakatōhea's *kai* resources due to overfishing, pollution, and development has disconnected people from their environments. So too has the dominance of western lifestyles among members of Whakatōhea, who no longer have the time or the passion for food practices and have lost food knowledge.

Colonialism has undermined Whakatōhea **relationships** to each other by eroding the social basis of food 'production' in gardens and food gathering sites. As pre-colonial economic life disappeared, Whakatōhea experienced a slow loss of collective gathering practices and related opportunities for *whakawhānaungatanga* and traditional food knowledge making and exchange. Pre-colonial trading relationships were simply wiped out as they lost their value to European settlers.

Colonisation also undermined Whakatōhea's wider **cultural identities** and their place in the food economy. For Māori, elements of cultural identity come from historical practices, rituals, knowledge systems and connections to the environment, and these have all been affected by colonisation as discussed above. Eurocentric ways of living became the norm for Māori post-colonisation, and this left little time for the food practices which were deeply intertwined with Whakatōhea's cultural identity prior to colonisation. Changes in social norms also meant many Whakatōhea shifted off their *whenua* into town centres or moved to other cities or countries for work, further disconnecting them from their cultural identity. Shifting cultural identities have also meant shifting attitudes towards food practices, a loss of food knowledge, and a major decline in food sovereignty.

In a deeper sense, food sovereignty is a reflection of the notion of sovereignty itself. Colonisation stripped Whakatōhea of its self-determination. It took away **power** from Whakatōhea; a people who once had the power to control their food resources and the ability to be food sovereign lost this power and, in turn, lost food sovereignty.

9.3 An Economy Emerging

What then of the possibility of reclaiming some of this lost sovereignty through diverse economy strategies? In this sense, Whakatōhea is better resourced than many Indigenous communities around the world. It is awaiting a significant Treaty settlement, one that will return land and sea-based resources and provide funds for investment or meeting immediate demands. Indeed, it has already benefited from a renegotiation of rights and interests that have resulted in the establishment of the mussel farm and related processing activities. Whakatōhea's commercial mussel venture has added new dimensions to the question of food sovereignty. Marten's IFS circle also helps to explore the relationship between the mussel farm and food sovereignty.

As it stands the mussel farm is less fully integrated into a Whakatōhea diverse economy than it might be, or arguably ought to be. The mussel farm economy intersects with the peoples of Whakatōhea in several ways, including through capitalist markets, employment, supply of mussels for cultural events, *hapū* mussel lines and *hapū* pay-outs. However, the only way for the people of Whakatōhea to hold any real power within this economy is through investment, which points to a less diverse food economy. This is potentially problematic as the people of Whakatōhea hold provenance over the mussels and the mussel farm.

There is potential for the mussel farm venture to contribute much more, yet each potential contribution also comes with risks. The mussel farm has the potential to rewrite Whakatōhea's food **history** from one of loss, caused by colonisation, to one of success. It has provided limited employment and financial opportunities to date but it promises more, including bringing economic prosperity to the *rohe* and *iwi*. However, interviewees also recognise a risk of re-colonisation through capitalism, given the limited level of agency afforded to *whānau* and *hapū* within the mussel farm venture and the extent of

outside capital involved. Whakatōhea members are restricted from participating in the mussel farm business unless they are financially involved or employed at the mussel farm.

The mussel farm has introduced troubling new relations of dependence on external capital. In a similar sense, there is potential for the mussel farm to enhance **connections to environment** through its positive externality effect on the marine environment, yet there is also potential for the mussel farm to compromise the marine environment through its role in the Ōpōtiki Harbour development which may deplete resources in the harbour. While the mussel farm is a symbol of success and positive development, it has compromised Whakatōhea's **cultural identity** by restricting their ability to act as *kaitiaki*. Finally, in a more general sense, the farm has the potential to empower Whakatōhea by providing economic development for both the Trust Board and *hapū*, but any increased dependence, re-colonising relations or compromises to cultural identity or environmental health will diminish effective **power** and undermine food sovereignty.

9.4 Food Sovereign Futures

The fourth driver of this thesis has been the idea of enactive research in a *kaupapa* Māori sense. That is, my work is designed explicitly to support Whakatōhea in their determination to achieve food sovereignty. In this sense, I have worked with Whakatōhea *whānau* and *hapū* to give voice and form to their diverse economy initiatives and efforts to take more control of their food systems. These initiatives include a revitalisation of customary gathering and traditional farming of foods, both Indigenous and introduced. Participants are engaged in, and have themselves launched measures to encourage, food gathering and growing practices, revitalise *mātauranga* Māori, enhance Whakatōhea environmental management and increase *hapū* and *whānau* agency within their food systems. These include efforts to break the reliance on capitalist markets, exchange foods among *whānau* in non-market ways, and take a more active role in the future of the Whakatōhea mussel farm.

Participants also discussed how the Treaty settlement could act as a catalyst for the materialisation of several initiatives. As with other *iwi*, the settlement of Treaty claims promises to unleash a watershed of frustrated activity and food initiatives. Participants do not lack ideas or visions of a diverse food sovereign future for Whakatōhea. Initiatives discussed by participants include food gathering and growing initiatives, environmental management initiatives, and initiatives to increase *whānau* and *hapū* agency within their food economy. They have the potential to change current Whakatōhea food systems and reduce the dependency that Whakatōhea has on capitalist food markets, enhancing Whakatōhea food sovereignty. These initiatives remain, as yet, unmaterialised. Treaty settlement will release capital and other resources that might allow for them to take form.

9.5 Addressing Objectives

The four key findings discussed above have allowed me to meet the four main objectives of this thesis:

Objective 1: To Map Whakatōhea's food economy overtime. Chapter 5 provides an overview of Whakatōhea's food economy over time that describes a transition from a pre-colonial economy, where people were dependent on the environment for food, to a less diverse contemporary food economy with a strong dependence on capitalist markets. Prior to colonisation Whakatōhea's food economy was rich with historical knowledge systems, cultural rituals and responsibilities, connections to environment and commercial relationships. Colonisation systematically stripped Whakatōhea of their diverse food economy, disenfranchising them from their land, governance rights and food trade economy.

Objective 2: To document Whakatōhea's loss of food sovereignty. The increasing dependence on capitalist markets runs in parallel with a significant loss of food sovereignty since colonisation. Through colonisation and settler-colonialism, Whakatōhea experienced land loss, loss of governance, loss of knowledges, loss of Māori lifestyles and *kai* depletion, and became dependent on global food systems which all contributed to a loss of food sovereignty for Whakatōhea.

Objective 3: To investigate the relationships between the Whakatōhea mussel farm economy and Whakatōhea food sovereignty. Meeting the first two objectives helped to set a context for exploring the third objective. I found that the mussel farm economy is not a real diverse economy through which individuals, *whānau* and *hapū* can manipulate practices within the economy. The nature of the relationship between the Whakatōhea mussel farm and Whakatōhea food sovereignty is complicated by tensions between the Trust Board's long-term economic goals and *hapū* short term aspirations. And there are questions over who has control within the mussel farm, who benefits from the mussel farm, and economy-environment relations which point to a compromised food sovereignty.

Objective 4: To explore food sovereign futures for Whakatōhea. To achieve this objective, I documented a number of initiatives that have the potential to enhance Whakatōhea food futures. Initiatives included those which sought to revitalise *mātauranga* Māori, to enhance Whakatōhea environmental management, and to increase *hapū* and *whānau* agency within their food systems.

I have explored how an *iwi* (Whakatōhea) negotiates a balance between pursuing commercial interests for Māori self-development and MFS. Currently WMTB are trying to grow *iwi* economic development through the mussel farm whilst in the process working to avoid compromising any culturally significant food gathering grounds or creating further dependence on global food systems. The research reveals this balance is difficult to negotiate and complicated by a number of circumstances that are outside of *iwi* control. For example, WMTB have a limited say in the mussel

farm venture themselves due to their limited ability to invest in the business as Whakatōhea have not yet settled their Treaty claims. The nature of the balance between commercial interests and MFS is also, unsurprisingly, understood differently by different members of *iwi*, *hapū* and *whānau*. However, all those to whom I spoke recognise that such a balance has to be negotiated and should (must) be negotiated in terms of Whakatōhea specific *tikanga* and *kaupapa*.

In meeting all four objectives, I have framed an answer to my research question: **How is the relationship between *iwi* commercial ventures and *iwi* food sovereignty negotiated and developed?** In short, the answer is that this relationship is negotiated and developed through a range of diverse perspectives on what constitutes *iwi* economy and *iwi* self-determination. This relationship is influenced by power imbalances, ultimately groups with the most financial capital have the most agency. However, Treaty settlements have the potential to change power dynamics within this relationship.

9.6 Contributions

This thesis has provided the first account of Whakatōhea's food economy, and has added to the repertoire of descriptions and interpretations of Māori diverse economies in the literature. I have offered another case study to the growing number of accounts of how Māori are dealing with bringing various ethical obligations together within Māori economy (Amoamo, Ruckstuhl & Ruwhiu, 2018; Bargh et al., 2014; Bargh, 2011, 2012; Fitzherbert, 2015). In keeping with the broad traditions of diverse and community economy scholarship, and the more focused accounts of Indigenous diverse economies, the Whakatōhea food economy encompasses a range of capitalist, customary and other non-capitalist practices, including accommodating both WMTB commercial food ventures such as the Whakatōhea mussel farm and *iwi* customary practices including food gathering and growing and *kaitiakitanga*.

I have also added to a growing body of methodological contributions that seek to validate Indigenous knowledge within Eurocentric academic institutions. I have dealt with the difficult challenge of deriving evidence about the past through narratives of people (my participants) in the present, considering these narratives may be politically coded. I have recognised that, for Māori, politics of knowledge and politics of sovereignty are inherently connected. This highly politicised way of knowing and presenting knowledge is not always recognised and validated within academic institutions where objective knowledge is prioritised, even if the particular claim to objectivity is a political move. It is increasingly recognised by social theorists that all knowing and all knowledge is situated and political. Objectivity is scientifically helpful but is rarely possible in the social world, and is part of the colonial project. I have drawn inspiration from L. Smith and other *kaupapa* Māori academics and argued that knowledge drawn from my participants is valid and should be accepted within academic institutions, even if it is important to identify, question and interpret contradictions and conflict.

I have made three important theoretical contributions concerning Māori economy and food sovereignty. Firstly, I have taken forward the idea of Māori economy and used it in a different way than other Māori economic scholars (Amoamo, Ruckstuhl & Ruwhiu, 2018; Amoamo, Ruwhiu & Carter, 2018; Bargh, 2011, 2012; Reid, Rout & Mika, 2019). I have aimed to examine in depth the connections and relationships between Māori commercial food activity and MFS, and the various ways in which these customary and capitalist food relations impact upon each other in Māori economies. Secondly, I have discussed MFS within a broader context of colonisation, land loss, environmental depletion, health concerns, loss of cultural identity and governance. This provides a helpful addition, indeed antidote, to preoccupations with the deficit dimensions of contemporary food practices among Māori. While deficit theorising in this regard is widely rejected, this thesis adds to the debate about food impoverishment some important positive notes to do with *kaitiakitanga*, customary practices, return of land and sea resources, and Treaty partnership futures. It also sounds notes of caution. I have shown how MFS has always been, and always will be, integral to Māori self-determination.

Indigenous food sovereignty is a beneficial concept for conceptualising Indigenous food lives as it leaves space for place-based, culturally specific understandings of food sovereignty. IFS as a concept can also widen perspectives on food systems, and shows that food lives are not just about access to growing and gathering food but are deeply rooted in connections to environment and cultural practices. It provides a crucial bridge across which to consider how food sovereignty and Māori economy literatures and insights can be brought together. I have shown that successful Māori economies must consider food sovereignty to foster Māori self-determination. Food sovereignty has been, and always will be, core to any Māori economy. Bringing food sovereignty back into modern Māori economies is a vital step towards Māori self-determination in Aotearoa so Māori can take back control of their food systems. A thriving Māori food economy that is poised for growth as more Māori economic organisations pursue value add strategies provides a powerful foundation for food sovereignty and sovereignty more widely (Rout et al, 2019).

Lastly, I have made important political contributions as I have helped develop thinking around Māori economic development and MFS. I offer four primary insights in the form of recommendations that might help to guide Māori economic practices to ensure they are not creating further dependence on global food systems but help foster food sovereignty back into Māori economy. Firstly, new food economies must consider the people of the place in which they are operating, their organisations, and the places they might be using to sell their products. For example, it is potentially problematic if an organisation is using an *iwi* or *hapū* name to sell their products if that *iwi* or *hapū* have no agency within the organisation. More generally, food connects people to place, and the food economy must recognise this relationship and steward both place and food. That is the message of *kaitiakitanga*. Secondly, Māori organisations need to consider their impacts on food environments and how they are affecting access to these environments. *Kaitiakitanga* imposes important obligations. Thirdly, Māori food organisations should consider their broader role in the global food system, and whether they are

perpetuating an ethic of dependence on global food systems for Māori. For example, these organisations may not be causing *kai* depletion, but they may eventually be the only way Māori can access certain foods and, in that way, become part of a narrative of dependence. Lastly, these Māori economic actors should consider ways they can help spur MFS, such as the initiatives discussed in Chapter 8.

9.7 Final Remarks

In these final remarks, it is important to bring this conversation into the context of mainstream economies. Global food systems have reached a crisis point regarding their impacts on both health and the environment (Carrington, 2018; Jones et al., 2019). Aotearoa is part of this problem: we waste approximately 160,000 tonnes of food a year (Love Food Hate Waste, 2018) and our food systems contribute significantly to climate change, with high per capita carbon emissions (Jones et al., 2019). This is also seen in Aotearoa's "*depleted fish stocks, soil degradation and loss of biodiversity*" (Jones et al., 2019 pp. 2). Further, one in every three adults in Aotearoa are considered obese (Ministry of Health, 2019). Obesity is linked to a wide number of diseases including diabetes, heart disease and cancer (Ministry of Health, 2004). Sustainable diets are a key solution to solving both the nutritional and environmental problems that come from our current global food systems (Burlingame & Dernini, 2011, 2012; Burlingame, 2019; Coninck & Revi, 2018; Fischer & Garnett, 2016; Lang, Barling & Caraher, 2009;). The Food and Agriculture Organisation of the United Nations (FAO) define sustainable diets as:

"Diets with low environmental impacts which contribute to food and nutrition security and to healthy life for present and future generations. Sustainable diets are protective and respectful of biodiversity and ecosystems, culturally acceptable, accessible, economically fair, and affordable; nutritionally adequate, safe and healthy while optimising natural and human resources" (FAO, 2010).

Food sovereignty is all about allowing people to take control of their food lives and thereby develop sustainable diets. It is not only important for Indigenous peoples, but it is important for everyone. All people should pursue food sovereignty and all social groups should put pressure on governmental authorities, their peers and economic actors in food systems to produce sustainable foods for sustainable diets. The responsibility should fall on everyone. If it is the case that Māori food sovereignty and sustainable diets rely to some degree on market actors, then Māori alone cannot be expected to pressure these actors into more sustainable practices. All food economy actors should be ethically aware of their impacts on the level of food sovereignty, both locally and globally, and should make efforts to foster food sovereignty back into food economies. Learning from Māori ethics, practices and actors, could be a good place to start.

Reference List

- Agarwal, B. (2014). Food sovereignty, food security and democratic choice: critical contradictions, difficult conciliations. *The Journal of Peasant Studies*, 0(0), 1–22.
- Amoamo, M., Ruckstuhl, K., & Ruwhiu, D. (2018). Balancing Indigenous Values Through Diverse Economies: A Case Study of Māori Ecotourism. 8316.
- Amoamo, M., Ruwhiu, D., & Carter, L. (2018). *The complex business of Māori business*.
- Anderson, M. D., & Cook, J. T. (1999). Community food security: Practice in need of theory? 141–150.
- Awatere, S., Mika, J., Hudson, M., Pauling, C., Lambert, S., & Reid, J. (2017). Whakatipu rawa ma ngā uri whakatipu: optimising the “Māori” in Māori economic development.
- Bargh, M. (2007). Resistance: an Indigenous response to neoliberalism. Wellington: Huia Publishing.
- Bargh, M. (2011). The Triumph of Māori Entrepreneurs or Diverse Economies?
- Bargh, M. (2012). Rethinking and re-shaping Māori Indigenous economies: Māori geothermal energy enterprises. 6(3), 271–283.
- Bargh, M. (2018). Māori political and economic recognition in a diverse economy. In *The Neoliberal State, Recognition and Indigenous Rights* (pp. 293–308). Canberra: ANU Press.
- Bargh, M., & Otter, J. (2009). Progressive spaces of neoliberalism in Aotearoa: 50(2), 154–165.
- Bargh, M., Douglas, S., & Te One, A. (2014). Fostering sustainable tribal economies in a time of climate change. 103–115.
- Bay of Plenty Regional Council (2016). Literature Review of Mussel Restoration and Sea Star Management in Ohiwa Harbour Title. 9372.
- Bernstein, H. (2014). Food sovereignty via the ‘peasant way’: a sceptical view. *The Journal of Peasant Studies*, 0(0), 1–33.
- Bernstein, H. (2016). Agrarian political economy and modern world capitalism: the contributions of food regime analysis contributions of food regime analysis. 6150(June).
- Bishop, R. (1996). Addressing Issues of Self-Determination and Legitimation in Kaupapa Māori Research. In He Paepe Kōrero: Research Perspectives in Māori Education. Wellington: New Zealand: New Zealand Council for Educational Research.
- Bishop, R. (1999). Kaupapa Māori Research: An Indigenous approach to creating knowledge In Robertson, N. (Ed). (1999) Māori and psychology: research and practice.
- Bishop, R. (2005). Freeing Ourselves from Neocolonial Domination in Research: A Kaupapa Māori Approach to Creating Knowledge. In N. Denzin & Y. Lincoln (Eds.). In *The Sage Handbook of Qualitative Research* (3rd ed.). Thousand Oaks: Sage Publications Inc.
- Bourke, B. (2014). Positionality: Reflecting on the research process. *The Qualitative Report*, 19(33), 1–9.
- Brewer, K. M., Harwood, M. L. N., Mccann, C. M., Crengle, S. M., & Worrall, L. E. (2014). *The Use of Interpretive Description Within Kaupapa Māori Research*.
- Brownhill, L. Turner, T. (2016). The Struggle for Land and Food Sovereignty Feminism in the Mau Mau Resurgence. In *Globalization and Third World Women - Exploitation, Coping and Resistance*.
- Burlingame, B. (2019). Towards a code of conduct for sustainable diets. *Dernini BBS, Editor. Sustainable Diets: Linking Nutrition and Food Systems*, 268.
- Burlingame, B., & Dernini, S. (2011). Sustainable diets: the Mediterranean diet as an example. *Public Health Nutrition*, 14(2274).
- Burlingame, B., & Dernini, S. (2012). Sustainable Diets and Biodiversity: Directions and Solutions for Policy, Research and Action. *Food and Agriculture Organization of the United Nations*. Rome.
- Burnett, K., & Murphy, S. (2014). What place for international trade in food sovereignty? *The Journal of Peasant Studies*, 0(0), 1–20.
- Carrington, D. (2018, August 28). Global food system is broken, say world’s science academies. *The Guardian*.
- Chilisa, B. (2012). *Indigenous Research Methodologies*. Sage Publishers.
- Cidro, J., Peters, E., & Martens, T. (2015). Beyond Food Security: Understanding Access to Cultural Food for Urban Indigenous People in Winnipeg as Indigenous Food Sovereignty Jaime Cidro Department of Anthropology. 24(1), 24–43.
- Claeys, P., & Duncan, J. (2019). Food sovereignty and convergence spaces. *Political Geography*, 75(June), 102045.
- Clark, P. (2016). Can the State Foster Food Sovereignty? Insights from the Case of Ecuador. 16(2), 183–205.
- Clendenning, J., Dressler, W. H., Richards, C. (2016). Food justice or food sovereignty? Understanding the rise of urban food movements in the USA United States Department of Agriculture. *Agriculture and Human Values*, 33(1), 165–177.
- Coninick, H., & Revi, A. (2018). Chapter 4: Strengthening and Implementing the Global Response Coordinating Lead Authors: (India). In *Global Warming of 1.5oC. An IPCC special report on the impacts of global warming of 1.5oC above pre-industrial levels and related GHGe, in the context of strengthening the global response to the threat of climate change, sustainable development, and effort*.
- Cormack, D. (2010). The practice and politics of counting: ethnicity data in official statistics in Aotearoa/New Zealand. *Wellington: Te Rōpū Rangahau Hauora a Eru Pōmare*.
- Coté, C. (2016). “Indigenizing” Food Sovereignty . Revitalizing Indigenous Food Practices and Ecological Knowledges in Canada and the United States. 1–14.
- Cram, F. (2001). Rangahau Māori: Tona tika, tona pono – The validity and integrity of Māori research. In M. Tolich (Ed.), *Research Ethics in Aotearoa New Zealand: Concepts, Practice, Critique*. Auckland: Pearson Education New Zealand.
- Cram, F. (2009). Maintaining Indigenous Voices. 308–322.
- Cram, F., McCreanor, T., Smith, L.T., Nairn, R., Johnstone, W. (2006). Kaupapa Māori Research and Pākehā Social Science: Epistemological Tensions in a Study of Māori Health. *Hūlili*, 3(1), 41–68.
- Curtis, E. (2016). Indigenous Positioning in Health Research. *Alternative*, 12(4), 396–407.
- Daigle, M. (2019). Tracing the terrain of Indigenous food sovereignties. 6150.
- Davies, G., & Dwyer, C. (2008). Qualitative Methods II: Minding the gap. *Progress in Human Geography*, 32(3), 399–406.
- Davila, F., & Dyball, R. (2015). Transforming Food Systems Through Food Sovereignty: An Australian Urban Context. *Australian Journal of Environmental Education*, 31(1), 34–45.

- Dehaene, M., Tornaghi, C., & Sage, C. (2016). Mending the metabolic rift: Placing the "urban" in urban agriculture. In *Urban Agriculture Europe*. Berlin: Jovis.
- Desmarais, A., & Wittman, H. (2014). Farmers, foodies and First Nations: getting to food sovereignty in Canada. *The Journal of Peasant Studies*, 0(0), 1–21.
- Durie, M. (1998). *Te mana, te kāwanatanga: The politics of Māori self-determination*. Auckland, New Zealand: Oxford University Press.
- Durie, M. (2003). Ngā Kāhui Pou Launching Māori Futures. Huia Publishers.
- Edelman, M., Weis, T., Baviskar, A., Jr, S. M. B., Holt, E., Kandiyoti, D., & Wolford, W. (2014). *Introduction: critical perspectives on food sovereignty*. 6150.
- Eketone, A. (2008). Theoretical underpinnings of Kaupapa Māori directed practice. *Mai Journal*, 1, 1–11.
- FAO. (2010). Final Document of the International Scientific Symposium. *Biodiversity and Sustainable Diets United Against Hunger*. Rome: FAO Headquarters.
- Felicien, A. N. A., Schiavoni, C. M., & Romero, L. (2018). *The Politics of Food in Venezuela*. 1–19.
- Figueroa, M. (2015). Food Sovereignty in Everyday Life: Toward a People-centered Approach to Food Systems. 12(4), 498–512.
- Firth, R. (1972). *The Economics of the New Zealand*. London: Routledge.
- Fischer, C., & Garnett, T. (2016). Plates, Pyramids, Planet. Developments in National Healthy and Sustainable Dietary Guidelines: A State of Play Assessment. Rome.
- Fitzherbert, S. (2015). Geographies of economy-making: the articulation and circulation of Taewa Māori across Aotearoa New Zealand. University of Auckland.
- Friedman, H. (1989). The rise and decline of national agricultures, 1870 to the present. XXIX.
- García-sempere, A., Hidalgo, M., Morales, H., Ferguson, B. G., Nazar-beutelspacher, A., Rosset, P., ... Ferguson, B. G. (2018). *Urban transition toward food sovereignty*. 7731.
- Garrick, C. (2012). Kaupapa Māori Research: Epistemic wilderness as freedom? *New Zealand Journal of Educational Studies*, 47(2), 64–73.
- Gibson-Graham, J. K. (2003). Enabling Ethical Economies: Cooperativism and Class. *Critical Sociology*, 29(2), 123–161.
- Gibson-Graham, J. K. (2005). Surplus Possibilities: Post-Development and Community Economies. *Singapore Journal of Tropical Geography Lecture Series*, 26(1), 4–26.
- Gibson-Graham, J. K. (2006). *A Postcapitalist Politics*. 4, 412–413.
- Gibson-Graham, J. K. (2008). Diverse economies: Performative practices for "other worlds." *Progress in Human Geography*, 32(5), 613–632.
- Gibson-Graham, J. K. (2016). Women and the Politics of Place. In *Livelihoods, Place, Community* (pp. 287–288).
- Gibson-Graham, J. K., Cameron, J., & Healy, S. (2013). Take Back the Economy – An Ethical Guide for Transforming Our Communities
- Gibson, K., & Cameron, J. (2005). Building Community Economies in Marginalised Areas.
- Gillon, A., Cormack, D., & Borell, B. (2019). Oh You Don't Look Māori - Socially assigned ethnicity. *Mai Journal*, 8(2), 126–141.
- Giunta, I. (2014). Food sovereignty in Ecuador: peasant struggles and the challenge of institutionalization. 6150.
- Godek, W. (2015). Challenges for food sovereignty policy making: the case of Nicaragua's Law 693. 36(3), 526–543.
- Graham, J., & Healy, S. (2008). Building Community Economies: A Post-Capitalist Project of Sustainable Development. *Economic Representations: Academic and Everyday*, 1–37.
- Grey, S., & Patel, R. (2015). Food sovereignty as decolonization: some contributions from Indigenous movements to food system and development politics. *Agriculture and Human Values*, 431–444.
- Guthman, J. (2008). Bringing good food to others: investigating the subjects of alternative food practice. 431–447.
- Heis, A. (2015). The Alternative Agriculture Network Isan and Its Struggle for Food Sovereignty – a Food Regime Perspective of Agricultural Relations of Production in Northeast Thailand.
- Henry, E., & Pene, H. (2001). Kaupapa Māori: Locating Indigenous Ontology, Epistemology and Methodology in the Academy. 8(2), 234–242.
- Hoskins, TK., & Jones, A. (2017). *Critical Conversations in Kaupapa Māori*. Wellington: New Zealand: Huia Publishing.
- Hutchings, J., Tipene, P., Carney, G., Greensill, A., & Baker, M. (n.d.). *of excellence for food and product production*.
- Indigenous Food Systems Network. (2019). *Indigenous Food Sovereignty*.
- International Research Institute for Māori and Indigenous Education (IRI) and Te Rōpū Rangahau Hauora a Eru Pōmare. (2000). *Māori research development: Kaupapa Māori principles and practices: A literature review*. Auckland, New Zealand.
- Irwin, K. (1994). Māori Research Methods and Processes: An Exploration. *Sites*, 28, 25–43.
- Jacobs, S. (2015). Gender, food sovereignty and agrarian reforms. In *Food Sovereignty in International Context - Discourse, politics and practice of place*.
- Jansen, K. (2015). The Debate on Food Sovereignty Theory: Agrarian Capitalism, Dispossession and Agroecology. 42(1), 1–26.
- Jones, B., Ingham, T., Davies, C., & Cram, F. (2010). Whānau Tuatahi: Māori community partnership research using a Kaupapa Māori methodology Whānau Tuatahi: Māori community partnership research using a Kaupapa Māori methodology. *Mai Review*, 3.
- Jones, R., Wham, C., Burlingame, B., & Allison, E. H. (2019). New Zealand's Food System Is Unsustainable: A Survey of the Divergent Attitudes of Agriculture, Environment, and Health Sector Professionals Towards Eating Guidelines. 6(July), 1–16.
- Jones, S. (2000). Development and Māori society: building from the centre to the edge. In *Culture and Sustainable Development in the Pacific*. Asia Pacific Press.
- Kahotea, D. T. (2006). The 'native informant' anthropologist as kaupapa Māori research. *Mai Review*, 1, 1–9.
- Kaiser, B. A., Hoeberechts, M., Maxwell, K. H., Eerkes-medrano, L., Hilmi, N., Safa, A., ... Kaiser, B. A. (2019). *The Importance of Connected Ocean Monitoring Knowledge Systems and Communities*. 6(June), 1–17.
- Kamal, A. G., Linklater, R., Thompson, S., Dipple, J., & Committee, I. M. (2015). A Recipe for Change: Reclamation of Indigenous Food Sovereignty in O-Pipon-Na-Piwin Cree Nation for Decolonization, Resource Sharing, and Cultural Restoration A Recipe for Change: Reclamation of Indigenous Food Sovereignty in O-Pipon-Na-Piwin Cree Nation for. *Globalizations*, 00(4), 1–17.
- Kennedy, V., Cram, F. (2010). Ethics of Researching with Whānau Collectives. *Mai Review*, 3, 1–8.

- Kepekiewicz, L., & Dale, B. (2018). Keeping 'our' land: property, agriculture and tensions between Indigenous and settler visions of food sovereignty in Canada. *The Journal of Peasant Studies*, 0(0), 1–20.
- Kerr, R. B., Hickey, C., Lupafya, E., & Dakishoni, L. (2019). Repairing rifts or reproducing inequalities? Agroecology, food sovereignty, and gender justice in Malawi. 6150.
- Kerr, S., Penney, L., Moewaka Barnes, H., McCreanor, T. (2010). Kaupapa Māori Action Research to improve heart disease services in Aotearoa, New Zealand. *New Zealand, Ethnicity & Health*, 15(1), 15–31.
- Kingi, T. (2002). Individualisation of Māori customary tenure and Māori agricultural development. *Transforming Land Conflict: FAO/USP/RICS Foundation South Pacific Land Tenure Conflict Symposium*. Fiji: University of the South Pacific.
- Knuth, L. (2009). The right to adequate food and Indigenous peoples - How can the right to food benefit Indigenous peoples? Rome.
- Lahiri-dutt, K. (2004). Informality in mineral resource management in Asia: Raising questions relating to community economies and sustainable development. 28, 123–132.
- Laidlaw, J. Magee, L. (2016). Towards urban food sovereignty: the trials and tribulations of community-based aquaponics enterprises in Milwaukee and Melbourne. 21(5), 573–590.
- Lang, T., Barling, D., & Caraher, M. (2009). Food Policy: Integrating Health, Environment and Society. *Oxford Scholarship Online*.
- Lawton, B., Cram, F., Ngata, T., Robson, B., & Brown, S. (2013). Developing a Kaupapa Māori Research Project to Help Reduce Health Disparities Experienced by Young Māori Women and Their Babies. *Alternative*, 9(3), 246–261.
- Leitgeb, F., Schneider, S., & Vogl, C. R. (2016). Increasing food sovereignty with urban agriculture in Cuba. *Agriculture and Human Values*, 33(2), 415–426.
- Leventon, J. (2017). Geoforum Local food sovereignty for global food security? Highlighting interplay challenges. 85(July), 23–26.
- Lewis, D. (2015). Gender, feminism and food studies Gender, feminism and food studies A critical review. 6029.
- Lichtenstein, G., & Lyons, T. (2001). The Entrepreneurial Development System: Transforming Business Talent and Community Economies. 15(1), 3–20.
- Liu, E. J. H., McCreanor, T., McIntosh, T., & Spoonley, P. (2005). New Zealand Identities: Departures and Destinations Edited by J.H. Liu, T. McCreanor, T. McIntosh and T. Teaiwa. *Victoria University Press*, (26), 211–213.
- Louis, E. (2015). "We Plant Only Cotton to Maximize Our Earnings": The Paradox of Food Sovereignty in Rural Telengana, India. 67(March 2014), 586–594.
- Love Food Hate Waste. (2018). What We Waste. Retrieved June 29, 2019, from Love Food Hate Waste Website: <https://lovefoodhatewaste.co.nz/food-waste/what-we-waste/>
- Lyll, A. (1997). *Whakatōhea of Ōpōtiki*. New Zealand: Reed NZ.
- Mahuika, M. (2008). Kaupapa Māori theory is critical and anti-colonial. *Mai Review*, 3, 1–16.
- Manson, J. (2015). Relational Nations: Trading and Sharing Ethos for Indigenous Food Sovereignty on Vancouver Island. The University of British Columbia.
- Martens, T. (2015). Good News in Food - Understanding the value and promise of Indigenous Food Sovereignty in Western Canada. University of Manitoba.
- Martínez-torres, M. E., & Rosset, P. M. (2014). Diálogo de saberes in La Vía Campesina: food sovereignty and agroecology. *The Journal of Peasant Studies*, 0(0), 1–19.
- Masson, D., Paulos, A., Bastien, E. B., Masson, D., Paulos, A., & Bastien, E. B. (2017). *Struggling for food sovereignty in the World March of Women*. 6150.
- Mccormack, F. (2010). Fish is My Daily Bread: Owning and Transacting in Māori Fisheries Fish is My Daily Bread : Owning and Transacting in Māori Fisheries. 4677.
- McLellan, K. (2013). The experiences of Māori with aphasia, their whānau members and speech - language therapists. University of Auckland.
- McMichael, P. (2014). Historicizing food sovereignty. *The Journal of Peasant Studies*, 0(0), 1–25.
- Meyer, M. (2001). Acultural Assumptions of Empiricism: A Native Hawaiian Critique. *Canadian Journal of Native Education*, 25(2), 188–198.
- Mi, C., Park, Y., & White, B. (2015). We are not all the same: taking gender seriously in food sovereignty discourse We are not all the same: taking gender seriously in food sovereignty discourse. *Third World Quarterly*, 36(3), 584–599.
- Mika, J., & Reid, J. (2018). Sustainable Seas - Research Proposal Template.
- Mikaere, A. (2000). *Māori and self-determination in Aotearoa/New Zealand*. Hamilton: University of Waikato.
- Ministry for Primary Industries. *Fisheries Act 1996*. (1996).
- Ministry for the Environment. *Resource Management Act 1991*. (1991).
- Ministry of Fisheries. Treaty of Waitangi (Fisheries Claims) Settlement Act. (1992).
- Ministry of Health, -. (2004). Tracking the Obesity Epidemic.
- Ministry of Health, -. (2019). Obesity Statistics.
- Moana Project, -. (2019). *Moana Project Launch*. Ōpōtiki.
- Moeke-Pickering, T., Cote-Meek, S., Heitua, S. (2015). Understanding Māori Food Security and Food Sovereignty Issues. *Mai Journal*, 4(1), 29–42.
- Moewaka-Barnes, H. M. (2000). *Kaupapa Māori: explaining the ordinary*. Auckland, New Zealand.
- Morrison, D. (2011). Indigenous Food Sovereignty: a model for social learning. In *Food sovereignty in Canada: creating just and sustainable food systems* (pp. 97–113). Halifax: Fernwood Publishing.
- Navin, M. (2015). Food Sovereignty and Gender Justice. In *Food Sovereignty and Gender Justice*.
- Nepe, T. (1991). Kaupapa Māori - An Educational Intervention System. University of Auckland.
- Ngāi Tahu. (2015). *Ngāi Tahu Mahinga Kai*. Retrieved June 29, 2019, from Ngai Tahu Website: <https://ngaitahu.iwi.nz/culture/mahinga-kai/>
- Ōpōtiki District Council. (2017). About Our District. Retrieved June 27, 2019, from Ōpōtiki District Council website: <https://www.odc.govt.nz/our-district/about-our-district/Pages/default.aspx>
- Orchard, S. (2016). Mahinga Kai Exemplar Baseline Survey 2015 Prepared by. (April).
- Raj Patel Guest Editor (2009) Food sovereignty, *The Journal of Peasant Studies*, 36:3, 663-706.
- Pawson, E. (2018). *The New Biological Economy*. Auckland.
- Peña, K. (2016). Social Movements, the State, and the Making of Food Sovereignty in Ecuador by. 43(206), 221–237.
- Penehira, M., Cram, F., Pipi, K. (2003). Kaupapa Māori Governance: Literature Review & Key Informant Interviews.

- Petrie, H. (2002). Colonisation and the involution of the Māori economy. *XII World Congress of Economic History*. Buenos Aires.
- Philips, C. (2015). Mahinga kai - He tāngata. Mahinga kaitiaki - He mauri. University of Otago.
- Phillips, C., Jackson, A.-M., & Hakopa, H. (2016). Creation Narratives of Mahinga Kai. *Mai Journal*, 5(1), 63–75.
- Pihama, L. (2001). Mana Wahine as a Kaupapa Māori Theoretical Framework. University of Auckland.
- Pihama, L. (2011). A conversation about kaupapa Māori theory and research. In J. Hutchings, H. Potter & K. Taupo (Eds.). *Kei Tua o Te Pae Hui Proceedings*, 49–55. Wellington: New Zealand: New Zealand Council for Educational Research.
- Pihama, L., Cram, F., Walker, S. (2002). Creating Methodological Space: A Literature Review of Kaupapa Māori Research. *Canadian Journal of Native Education*, 26(1), 30–43.
- Pihama, L., Smith, K., Taki, M., & Lee, J. (2004). A literature review on Kaupapa Māori and Māori education pedagogy. Wellington, New Zealand: *International Research Institute for Māori and Indigenous Education*.
- Portman, A. (2018). Food Sovereignty and Gender Justice. *Journal of Agricultural and Environmental Ethics*, 31(4), 455–466.
- Reid, J. (2011). Māori Land A Strategy for Overcoming Constraints on Development. Lincoln University.
- Reid, J., & Rout, M. (2016). Getting to know your food: the insights of Indigenous thinking in food provenance. *Agriculture and Human Values*, 33(2), 427–438.
- Reid, J., & Rout, M. (2016). Māori Tribal Economy: Rethinking the Original Economic Institutions.
- Reid, J., Rout, M., & Mika, J. (2019). *Mapping the Māori marine economy*.
- Roelvink, G., & Gibson-Graham, J. K. (2009). A Postcapitalist Politics of Dwelling: Ecological Humanities and Community Economies in Conversation. *Australian Humanities Review*, 145–158.
- Roelvink, G., & Gibson-Graham, J. K. (2013). Social innovation for community economies: how action research creates “other worlds.” In *The International Handbook on Social Innovation* (pp. 453–465).
- Rout, M., Lythberg, B., Mika, J., Gillies, A., Bodwitch, H., Hikuroa, D., ... Reid, J. (2019). *Māori Marine-Based Enterprises and Kaitiaki-Centred Business Models*.
- Rout, M., Lythberg, B., Mika, J., Gillies, A., Bodwitch, H., Hikuroa, D., ... Reid, J. (2019). *Kaitiaki-Centred Business Models: Case Studies of Māori Marine-Based Enterprises*.
- Ruwhiu, D., & Wolfgramm, R. (2016). Kaupapa Māori Research: a contribution to Critical Management Studies in New Zealand Kaupapa Māori Research: a contribution to Critical Management Studies in New Zealand.
- Samers, M. (2005). The Myopia of “Diverse Economies”, or a Critique of the “Informal Economy.”
- Schiavoni, C. M. (2018). The contested terrain of food sovereignty construction: toward a historical, relational and interactive approach. *The Journal of Peasant Studies*, 0(0), 1–32.
- Scrimgeour, F., & Iremonger, C. (2015). Māori Sustainable Economic Development in New Zealand: Indigenous Practices for the Quadruple Bottom Line Māori Sustainable Economic Development in New Zealand: Indigenous Practices for the Quadruple. (October 2011).
- Shirley, L. (2013). Is Māori food sovereignty affected by adherence, or lack thereof, to Te Tiriti O Waitangi? *Future of Food: Journal on Food and Society*, 1(2), 57–63.
- Smith, G. (1992). Research Issues Related to Māori Education. In *The Issue of Research and Māori*. Auckland: Research Unit for Māori Education.: University of Auckland.
- Smith, G. (1997). The Development of Kaupapa Māori: Theory and Praxis. University of Auckland.
- Smith, G., Hoskins, TK., & Jones, A. (2012). Interview: Kaupapa Māori: The dangers of domestication. *New Zealand Journal of Educational Studies*, 47(2), 10–20.
- Smith, L. (1999). Decolonizing Methodologies: Research and Indigenous Peoples. Dunedin: University of Otago Press.
- Smith, L. (2005). On Tricky Ground: Researching the Native in the Age of Uncertainty. In N. Denzin & Y. Lincoln (Eds.). In *The Sage Handbook of Qualitative Research* (3rd ed., pp. 85–107). Thousand Oaks: Sage Publications Inc.
- Smith, L. (2011). Story-ing the development of kaupapa Māori - a review of sorts. In J. Hutchings, H. Potter & K. Taupo (Eds.). *Kei Tua o Te Pae Hui Proceedings*, 10–15.
- Smith, L. (2012). *Decolonizing Methodologies* (2nd ed.).
- Stats NZ. (2013). Whakatōhea Iwi Profile.
- Stein, K. (2016). Māori Women Promoting Food Sovereignty in Aotearoa (New Zealand). University of Otago.
- Stein, K., Miroso, M., & Carter, L. (2017). It's not just about the destination, but also the journey: Reflections on research with Indigenous women food growers. 7(3).
- Te Maire, T. & Rout, M. (2018). *The Tribal Economy*. 27, 92-109
- Te Puni Kōkiri. (2018). The Māori Trust Boards Act 1995 - A Practical Guide for Members and Beneficiaries of Māori Trust Boards. Wellington: New Zealand.
- Toft, P. (1984). Modern Māori Enterprise: A Study of Economic Adaptation. University of Auckland.
- Tornaghi, C. (2017). Urban Agriculture in the Food-Disabling City: (Re)defining Urban Food Justice, Reimagining a Politics of Empowerment. 49(3), 781–801.
- Trauger, A. (2014). Toward a political geography of food sovereignty: transforming territory, exchange and power in the liberal sovereign state. *The Journal of Peasant Studies*, 6150, 1–22.
- University of Waikato. (2013). *Mussels are Filter Feeders*. Retrieved July 28, 2019, from <https://www.sciencelearn.org.nz/videos/366-mussels-are-filter-feeders>
- Van Der Ploeg, J. (2014). Peasant-driven agricultural growth and food sovereignty. *The Journal of Peasant Studies*, 0(0), 1–32.
- Walker, R. (2007). *Ōpōtiki-Mai-Tawhiti: Capital of Whakatōhea*. Auckland, New Zealand: Penguin Books.
- Walker, S., Eketone, A., & Gibbs, A. (2006). An exploration of kaupapa Māori research, its principles, processes and applications. *International Journal of Social Research Methodology*, 9(4), 331–344.
- Whakatōhea Māori Trust Board. (2018). *Whakatōhea Annual Report*. Ōpōtiki.
- Whakatōhea Mussels Ōpōtiki Limited. (2019). *Whakatōhea Aquaculture Investment Hui*. Ōpōtiki.
- Whakatōhea Pre-settlement Claims Trust. (2020). Our Settlement.
- Whyte, K. (2016). Indigenous Food Sovereignty, Renewal and U.S. Settler Colonialism.
- Whyte, K. (2017). Food Sovereignty, Justice and Indigenous Peoples: An Essay on Settler Colonialism and Collective Continuance. (January).
- Wilson, S. (2008). Research is Ceremony - Indigenous Research Methods. Fernwood Publishing.
- Wittman, H. (2015). From protest to policy: The challenges of institutionalizing food sovereignty. 2(2), 174–182.
- Wittman, H., & Blesh, J. (2015). Food Sovereignty and Fome Zero : Connecting Public Food Procurement Programmes to Sustainable Rural Development in Brazil. 1(1).

Appendix

A.Ethics Approval

Office of the Vice-Chancellor
Office of Research Strategy and Integrity (ORSI)



The University of Auckland
Private Bag 92019
Auckland, New Zealand
Level 11, 49 Symonds Street
Telephone: 64 9 373 7599
Extension: 83711
humanethics@auckland.ac.nz

UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE (UAHPEC)

31-Jul-2019

MEMORANDUM TO:

Assoc Prof Nicolas Lewis
Environment

Re: Application for Ethics Approval (Our Ref. 023313): Approved

The Committee considered the application for ethics approval for your study entitled **Whakatōhea Customary Seafood and Māori Food Sovereignty**.

We are pleased to inform you that ethics approval has been granted for a period of three years.

The expiry date for this approval is 31-Jul-2022.

Completion of the project: In order that up-to-date records are maintained, you must notify the Committee once your project is completed.

Amendments to the project: Should you need to make any changes to the project, please complete an Amendment Request form in InfoEd, giving full details along with revised documentation. If the project changes significantly, you are required to submit a new application to UAHPEC for approval.

Funded projects: If you received funding for this project, please provide this approval letter to your local Faculty Research Project Coordinator (RPC) or Research Project Manager (RPM) so that the approval can be notified via a Service Request to the Research Operations Centre (ROC) for activation of the grant.

The Chair and the members of UAHPEC would be happy to discuss general matters relating to ethics approvals. If you wish to do so, please contact the Ethics Administrators at humanethics@auckland.ac.nz in the first instance.

Additional information:

1. Do not forget to complete the 'approval wording' on the PISs, CFs and/or advertisements and emails, giving the dates of approval and the reference number. This needs to be completed before you use the documents or send them out to your participants.

Please quote Protocol number **023313** on all communication with the UAHPEC regarding this application.

B.Letter of Support



Whakatōhea
Māori Trust Board

122 St John Street,
PO Box 207
Ōpōtiki, 3162

Tel: 07 3156 150, Fax: 07 315 7968
wmtb.reception@whakatohea.co.nz

09 July 2019

To whom it may concern:

Tēnā koe

RE: Letter of support for Whakatōhea Customary Seafood and Māori Food Sovereignty research project

This is to confirm our support for the *Whakatōhea Customary Seafood and Māori Food Sovereignty* research project which utilises a Kaupapa Māori approach to explore Whakatōhea food sovereignty through a focus on customary seafood. We understand Georgia McLellan will conduct interviews with Whakatōhea iwi members and we understand that she will be our key contact person.

We have met with Georgia McLellan and exchanged emails and relevant research proposal documents. We are happy with the direction of the project and are pleased to be involved. We support Georgia McLellans ethics application and look forward to working together.

Nāku noa nā,
WHAKATŌHEA MĀORI TRUST BOARD

A handwritten signature in dark ink, appearing to read 'Dickie Farrar'.

Dickie Farrar
CHIEF EXECUTIVE

C.Participant Information Sheets

SCHOOL OF ENVIRONMENT
Faculty of Science



Date:

Participant Information Sheet Individual

Project Title: Whakatōhea and Māori Food Sovereignty
Name of Research: Georgia McLellan
Researcher Contact: gmcl740@aucklanduni.ac.nz

Ko Tarakeha te maunga
Ko Opepe te awa
Ko Mataatua te waka
Ko Whakatōhea tōku iwi
Ko Ngai Tamahaua tōku hapu
Ko Opape tōku marae
Ko Hopa Te Whero raua ko Huihana Hopa Te Arawaere ōku tipuna
No Tamaki-makau-rau ahau
Kei Mount Wellington taku kainga
Ko Kevin McLellan toku Papa
Ko Joann Bell toku Mama
Ko Georgia McLellan toku ingoa

This research is being conducted by myself, a member of Whakatōhea and a master's student at the university of Auckland. My Supervisors are Doctor Karen Fisher and Doctor Nick Lewis. Doctor Karen Fisher is Ngati Maniapoto and she has considerable experience in research on Māori environmental management. Doctor Lewis is an economic geographer who is working on the blue economy and has worked with Māori researchers in Te Rarawa. Both Doctor Lewis and Doctor Fisher are members of the Sustainable Seas national science challenge leadership team.

The Project

This research utilises a Kaupapa Māori approach to investigate Māori food sovereignty through a focus on Whakatōhea customary seafood practices in Opotiki. I am interested in exploring the different relationships and practices involved in the customary seafood practices and how these affect Whakatōhea food sovereignty.

Invitation to Participate

If you are Whakatōhea, live in our rohe and are familiar with Whakatōhea customary seafood practices I would like to carry out an informal interview with you about Whakatōhea food practices.

I would like to carry out an informal interview with you about various Whakatōhea food experiences, relationships and practices. The interview will take approximately 1 hour to complete and will be conducted at a location of your choosing between the 19th and 31st of August 2019.

Project Procedures

Participation in this research is voluntary. You have the right to withdraw from the research at any time, and the right to withdraw data traceable to you within two weeks of the interview. With your permission, the interview may be audio recorded to allow for transcription. This recording is optional, and you may choose to stop the audio recording at any time. I will transcribe the recordings. If you choose, you may edit transcripts to ensure accuracy. Transcripts must be returned within two weeks of receiving them. A summary of the research will be made available to participants on completion of the research upon request.

Confidentiality and Risk of Identification

I will not disclose information about who participates in this research and who does not. If you wish to be identified by name, you may choose to do this by giving your permission on the consent form. If you do not wish to be identified by name, I will use a pseudonym or generic descriptor to identify you such as “participant 1”. Even if you are not identified by name, you can become identifiable because of the information you provide. The researcher will undertake to keep the participants identity confidential.

Koha Payments

To thank you for your participation in this project you will be offered a \$30 prezzie card for prior to the interview.

Contact Details and Approval wording

The Participation Information Sheet provides you with the information that enables you to make an informed decision about whether or not you wish to participate in this research. We recommend you keep a copy of this document for future reference. If you have any questions or concerns. Please feel free to contact myself, Georgia McLellan, the Principle investigator for this research.

Student Researcher: Georgia McLellan, Masters Student, School of Environment, University of Auckland, gmc1740@aucklanduni.ac.nz .
Principal investigator: Nick Lewis, Associate Professor, School of Environment, University of Auckland. n.lewis@auckland.ac.nz
Co-investigator: Karen Fisher, Senior Lecturer, School of Environment, University of Auckland k.fisher@auckland.ac.nz
Head of Department: Doctor Julie Rowland, School of Environment, University of Auckland, j.rowland@auckland.ac.nz (09) 923 7412

For any concerns regarding ethical issues you may contact, the Chair, the University of Auckland Human Participants Ethics Committee, at the University of Auckland, Research Office, Private Bag 92019, Auckland 1142. Telephone 90 373-7599 ext. 83711. Email: ro-ethics@auckland.ac.nz

Approved by the University of Auckland Human Participants Ethics Committee on 31st July 2019 for three years, Reference Number 023313.

Date:

**Participant Information Sheet
Māori Organisation Manager**

Project Title: Whakatōhea and Māori Food Sovereignty
Name of Research: Georgia McLellan
Researcher Contact: gmcl740@aucklanduni.ac.nz

Ko Tarakeha te maunga
Ko Opepe te awa
Ko Mataatua te waka
Ko Whakatōhea tōku iwi
Ko Ngai Tamahaua tōku hapu
Ko Opape tōku marae
Ko Hopa Te Whero raua ko Huihana Hopa Te Arawaere ōku tipuna
No Tamaki-makau-rau ahau
Kei Mount Wellington taku kainga
Ko Kevin McLellan toku Papa
Ko Joann Bell toku Mama
Ko Georgia McLellan toku ingoa

This research is being conducted by myself, a member of Whakatōhea and a master's student at the university of Auckland. My Supervisors are Doctor Karen Fisher and Doctor Nick Lewis. Doctor Karen Fisher is Ngati Maniapoto and she has considerable experience in research on Māori environmental management. Doctor Lewis is an economic geographer who is working on the blue economy and has worked with Māori researchers in Te Rarawa. Both Doctor Lewis and Doctor Fisher are members of the Sustainable Seas national science challenge leadership team.

The Project

This research utilises a Kaupapa Māori approach to investigate Māori food sovereignty through a focus on Whakatōhea customary seafood practices in Opotiki. I am interested in exploring the different relationships and practices involved in customary seafood practices and how these affect Whakatōhea food sovereignty.

Invitation to Participate

If your staff are in Whakatōhea, live in our rohe and are familiar with Whakatōhea customary seafood practices I would like to carry out an informal interview with them about Whakatōhea food practices.

I seek your permission to interview your staff to ask them about Whakatōhea food security and food sovereignty. I seek your assurance in writing that the decision of your staff to participate or not will not have any effect on their relationship with you or their employment status. Your assurance can be given by signing the consent form.

Project Procedures

Participation in this research is voluntary. Participants will have the right to withdraw from the research at any time, and the right to withdraw data traceable to them within two weeks of the interview. With their permission, the interview may be audio recorded to allow for transcription. This recording is optional, and they may choose to stop the audio recording at any time. I will transcribe the recordings. If they choose, they may edit transcripts to ensure accuracy. Transcripts must be returned within two weeks of receiving them. A summary of the research will be made available to participants on completion of the research upon request.

Confidentiality and Risk of identification

I will not disclose information about who participates in this research and who does not. If your employee wishes to be identified by name, they may choose to do this by giving their permission on the consent form. If they do not wish to be identified by name, I will use a pseudonym or generic descriptor to identify them such as “participant 1”. Even if they are not identified by name, they become identifiable because of the information they provide. The researcher will undertake actions to keep the participants identity confidential.

Contact Details and Approval wording

The Participation Information Sheet provides you with the information that enables you to make an informed decision about whether or not you wish to participate in this research. We recommend you keep a copy of this document for future reference. If you have any questions or concerns. Please feel free to contact myself, Georgia McLellan, the Principle investigator for this research.

Student Researcher: Georgia McLellan, Masters Student, School of Environment, University of Auckland, gmcl740@aucklanduni.ac.nz .
Principal investigator: Nick Lewis, Associate Professor, School of Environment, University of Auckland. n.lewis@auckland.ac.nz
Co-investigator: Karen Fisher, Senior Lecturer, School of Environment, University of Auckland k.fisher@auckland.ac.nz
Head of Department: Doctor Julie Rowland, School of Environment, University of Auckland, j.rowland@auckland.ac.nz (09) 923 7412

For any concerns regarding ethical issues you may contact, the Chair, the University of Auckland Human Participants Ethics Committee, at the University of Auckland, Research Office, Private Bag 92019, Auckland 1142. Telephone 90 373-7599 ext. 83711. Email: ro-ethics@auckland.ac.nz

Approved by the University of Auckland Human Participants Ethics Committee on 31st July 2019 for three years, Reference Number 023313

Date:

**Participant Information Sheet
Māori Organisation Senior Position**

Project Title: Whakatōhea and Māori Food Sovereignty
Name of Research: Georgia McLellan
Researcher Contact: gmcl740@aucklanduni.ac.nz

This research is being conducted by myself, a member of Whakatōhea and a master's student at the university of Auckland. My Supervisors are Doctor Karen Fisher and Doctor Nick Lewis. Doctor Karen Fisher is Ngati Maniapoto and she has considerable experience in research on Māori environmental management. Doctor Lewis is an economic geographer who is working on the blue economy and has worked with Māori researchers in Te Rarawa. Both Doctor Lewis and Doctor Fisher are members of the Sustainable Seas national science challenge leadership team.

Ko Tarakeha te maunga
Ko Opepe te awa
Ko Mataatua te waka
Ko Whakatōhea tōku iwi
Ko Ngai Tamahaua tōku hapu
Ko Opape tōku marae
Ko Hopa Te Whero raua ko Huihana Hopa Te Arawaere ōku tipuna
No Tamaki-makau-rau ahau
Kei Mount Wellington taku kainga
Ko Kevin McLellan toku Papa
Ko Joann Bell toku Mama
Ko Georgia McLellan toku ingoa

The Project

This research utilises a Kaupapa Māori approach to investigate Māori food sovereignty through a focus on Whakatōhea customary seafood practices in Opotiki. I am interested in exploring the different relationships and practices involved in customary seafood practices and how these affect Whakatōhea food sovereignty.

Invitation to Participate

If you are Whakatōhea, live in our rohe and are familiar with Whakatōhea customary seafood practices I would like to carry out an informal interview with you about Whakatōhea food practices.

I would like to carry out an informal interview with you about various Whakatōhea food experiences, relationships and practices. The interview will take approximately 1 hour to complete and will be conducted at a location of your choosing between the 19th and 31st of August 2019. I have your manager/employers assurance in writing that the decision of staff members to participate or not in this project will not affect your relationship with your manager/employer or your employment status.

Project Procedures

Participation in this research is voluntary. You have the right to withdraw from the research at any time, and the right to withdraw data traceable to you within two weeks of the interview. With your permission, the interview may be audio recorded to allow for transcription. This recording is optional, and you may choose to stop the audio recording at any time. I will transcribe the recordings. If you choose, you may edit transcripts to ensure accuracy. Transcripts must be returned within two weeks of receiving them. A summary of the research will be made available to participants on completion of the research upon request.

Confidentiality and Risk of identification

I will not disclose information about who participates in this research and who does not. If you wish to be identified by name, you may choose to do this by giving your permission on the consent form. If you do not wish to be identified by name, I will use a pseudonym or generic descriptor to identify you such as “participant 1”. Even if you are not identified by name, you may become identifiable because of the information you provide. The researcher will undertake to keep the participants identity confidential.

Koha Payments

To thank you for your participation in this project you will be offered a \$30 prezzie card for prior to the interview.

Contact Details and Approval wording

The Participation Information Sheet provides you with the information that enables you to make an informed decision about whether or not you wish to participate in this research. We recommend you keep a copy of this document for future reference. If you have any questions or concerns. Please feel free to contact myself, Georgia McLellan, the Principle investigator for this research.

Student Researcher: Georgia McLellan, Masters Student, School of Environment, University of Auckland, gmc1740@aucklanduni.ac.nz .
Principal investigator: Nick Lewis, Associate Professor, School of Environment, University of Auckland. n.lewis@auckland.ac.nz
Co-investigator: Karen Fisher, Senior Lecturer, School of Environment, University of Auckland k.fisher@auckland.ac.nz
Head of Department: Doctor Julie Rowland, School of Environment, University of Auckland, j.rowland@auckland.ac.nz (09) 923 7412

For any concerns regarding ethical issues you may contact, the Chair, the University of Auckland Human Participants Ethics Committee, at the University of Auckland, Research Office, Private Bag 92019, Auckland 1142. Telephone 90 373-7599 ext. 83711. Email: ro-ethics@auckland.ac.nz

Approved by the University of Auckland Human Participants Ethics Committee on 31st July 2019 for three years, Reference Number 023313.

Date:

Participant Information Sheet Māori Organisation Employee

Project Title: Whakatōhea and Māori Food Sovereignty
Name of Research: Georgia McLellan
Researcher Contact: gmcl740@aucklanduni.ac.nz

This research is being conducted by myself, a member of Whakatōhea and a master's student at the university of Auckland. My Supervisors are Doctor Karen Fisher and Doctor Nick Lewis. Doctor Karen Fisher is Ngati Maniapoto and she has considerable experience in research on Māori environmental management. Doctor Lewis is an economic geographer who is working on the blue economy and has worked with Māori researchers in Te Rarawa. Both Doctor Lewis and Doctor Fisher are members of the Sustainable Seas national science challenge leadership team.

Ko Tarakeha te maunga
Ko Opepe te awa
Ko Mataatua te waka
Ko Whakatōhea tōku iwi
Ko Ngai Tamahaua tōku hapu
Ko Opape tōku marae
Ko Hopa Te Whero raua ko Huihana Hopa Te Arawaere ōku tipuna
No Tamaki-makau-rau ahau
Kei Mount Wellington taku kainga
Ko Kevin McLellan toku Papa
Ko Joann Bell toku Mama
Ko Georgia McLellan toku ingoa

The Project

This research utilises a Kaupapa Māori approach to investigate Māori food sovereignty through a focus on Whakatōhea customary seafood practices in Opotiki. I am interested in exploring the different relationships and practices involved in customary seafood practices and how these affect Whakatōhea food sovereignty.

Invitation to Participate

If you are Whakatōhea, live in our rohe and are familiar with Whakatōhea customary seafood practices I would like to carry out an informal interview with you about Whakatōhea food practices.

I would like to carry out an informal interview with you about various Whakatōhea food experiences, relationships and practices. The interview will take approximately 1 hour to complete and will be conducted at a location of your choosing between the 19th and 31st of August 2019. Your manager/employer has given their permission to discuss this project with you and to invite you to participate in the research. I have their assurance in writing that the decision of staff members to participate or not in this project will not affect your relationship with your manager/employer or your employment status.

Project Procedures

Participation in this research is voluntary. You have the right to withdraw from the research at any time, and the right to withdraw data traceable to you within two weeks of the interview. With your permission, the interview may be audio recorded to allow for transcription. This recording is optional, and you may choose to stop the audio recording at any time. I will transcribe the recordings. If you choose, you may edit transcripts to ensure accuracy. Transcripts must be returned within two weeks of receiving them. A summary of the research will be made available to participants on completion of the research upon request.

Confidentiality and Risk of Identification

I will not disclose information about who participates in this research and who does not. If you wish to be identified by name, you may choose to do this by giving your permission on the consent form. If you do not wish to be identified by name, I will use a pseudonym or generic descriptor to identify you such as "participant 1". Even if you are not identified by name, you may become identifiable because of the information you provide. The researcher will undertake to keep the participants identity confidential.

Koha Payments

To thank you for your participation in this project you will be offered a \$30 prezzie card for prior to the interview.

Contact Details and Approval wording

The Participation Information Sheet provides you with the information that enables you to make an informed decision about whether or not you wish to participate in this research. We recommend you keep a copy of this document for future reference. If you have any questions or concerns. Please feel free to contact myself, Georgia McLellan, the Principle investigator for this research.

Student Researcher: Georgia McLellan, Masters Student, School of Environment, University of Auckland, gmcl740@aucklanduni.ac.nz .
Principal investigator: Nick Lewis, Associate Professor, School of Environment, University of Auckland. n.lewis@auckland.ac.nz
Co-investigator: Karen Fisher, Senior Lecturer, School of Environment, University of Auckland k.fisher@auckland.ac.nz
Head of Department: Doctor Julie Rowland, School of Environment, University of Auckland, j.rowland@auckland.ac.nz (09) 923 7412

For any concerns regarding ethical issues you may contact, the Chair, the University of Auckland Human Participants Ethics Committee, at the University of Auckland, Research Office, Private Bag 92019, Auckland 1142. Telephone 90 373-7599 ext. 83711. Email: ro-ethics@auckland.ac.nz

Approved by the University of Auckland Human Participants Ethics Committee on 31st July 2019 for three years, Reference Number 023313.

D.Consent Forms

SCHOOL OF ENVIRONMENT
Faculty of Science



Science Centre,
Building 302, Level 6
23 Symonds, St
Auckland, New Zealand
Telephone +64 923 841

Date:

Consent Form Māori Organisation Representative THIS FORM WILL BE HELD FOR A PERIOD OF 6 YEARS

Project Title: Whakatōhea Customary Seafood Practices and Māori Food Sovereignty

Name of Researcher: Georgia McLellan

Researcher Contact: gmcl740@aucklanduni.ac.nz

I have read the participant Information Sheet. I understand the nature of the research and that my participation in this research is voluntary and that I can leave the interview at any time. I understand why I have been selected and I have had the opportunity to ask questions and have them answered to my satisfaction.

I agree to participate in this research
I understand that information will be securely stored for 6 years and then destroyed
I understand that the interview will take approximately one hour to complete
I agree / do not agree for the interview to be digitally recorded
I understand that I may choose to have the recorder turned off at anytime
I understand that my employer has given their assurance that my participation or non-participation in this research will not affect my relationship with my employer or my employment status
I understand that I have the right to withdraw from the research at any time without providing an explanation, and to withdraw data traceable to me until two weeks after my interview
I understand that I will be given the opportunity to edit my transcripts and must return it to the research within two weeks of receiving it with any alterations
I wish/do not wish to be identified by name
I understand that if a pseudonym or generic descriptor is used, I may become identification because of the information I provide
I understand that the researcher will undertake actions to keep my identity confidential (unless you choose to be named)
I wish to receive by email a copy of any summary findings yes/no

Signed:

Name: (Please print clearly)

Date:

Email: (for receiving copy of results)

Approved by the University of Auckland Human Participants Ethics Committee on 31st July 2019 for three years, Reference Number 023313

Date:

Consent Form
Māori Organisation Manager/Employer
THIS FORM WILL BE HELD FOR A PERIOD OF 6 YEARS

Project Title: Whakatōhea Customary Seafood Practices and Māori Food Sovereignty

Name of Researcher: Georgia McLellan

Researcher Contact: gmcl740@aucklanduni.ac.nz

Employee participation in an interview:

I have read the participant Information Sheet. I understand the nature of the research and that my staff's participation in this research is voluntary. I understand why they have been selected and I have had the opportunity to ask questions and have them answered to my satisfaction.

I give permission for the researcher to approach my staff to ask them to participate in this research

I permit my staff to take part in this study during work hours

I give my assurance that participation or non-participation in this research will not affect my relationship with my staff or their employment status

I understand that participation is voluntary, and that my staff may refuse to participate or to withdraw their participation at any stage without providing a reason

I understand that the interview will take approximately one hour to complete

I understand that information collected in the interview will be securely stored for 6 years and then destroyed

I understand that the researcher will undertake actions to keep my employee's identity confidential (unless they choose to be named)

I wish to receive by email a copy of any summary findings.....yes/no

You may withdraw your organisations involvement with this project at any time.

Signed:

Name: (Please print clearly)

Date:

Email: (for receiving copy of results)

Approved by the University of Auckland Human Participants Ethics Committee on 31st July 2019
for three years, Reference Number 023313

Date:

Consent Form Individual

THIS FORM WILL BE HELD FOR A PERIOD OF 6 YEARS

Project Title: Whakatōhea Customary Seafood Practices and Māori Food Sovereignty

Name of Researcher: Georgia McLellan

Researcher Contact: gmcl740@aucklanduni.ac.nz

I have read the participant Information Sheet. I understand the nature of the research and that my participation in this research is voluntary and that I can leave the interview at any time. I understand why I have been selected and I have had the opportunity to ask questions and have them answered to my satisfaction.

I agree to participate in this research

I understand that information will be securely stored for 6 years and then destroyed

I understand that the interview will take approximately one hour to complete

I agree / do not agree for the interview to be digitally recorded

I understand that I may choose to have the recorder turned off at anytime

I understand that I have the right to withdraw from the research at any time without providing an explanation, and to withdraw data traceable to me until two weeks after my interview

I understand that I will be given the opportunity to edit my transcripts and must return it to the research within two weeks of receiving it with any alterations

I wish/do not wish to be identified by name

I understand that if a pseudonym or generic descriptor is used, I may become identification because of the information I provide

I understand that the researcher will undertake actions to keep my identity confidential (unless you choose to be named)

I wish to receive by email a copy of any summary findings yes/no

Signed:

Name: (Please print clearly)

Date:

Email: (for receiving copy of results)

Approved by the University of Auckland Human Participants Ethics Committee on 31st July 2019 for three years, Reference Number 023313

E. Indicative Interview Questions

1. Where are you from?
2. What is your relationship with the Whakatōhea *moana*?
3. Can you tell me a bit about your *kaimoana* practices?
4. Do you know of any historic Whakatōhea *kaimoana* practices?
5. What about current day *kaimoana* practices?
6. How does the Whakatōhea mussel farm affect your ability to gather *kaimoana*?
7. To what extent do you have the ability to control and manage Whakatōhea *kaimoana* resources?
8. Whakatōhea Trust Boards vision is “*to be the food bowl that feeds the world*”. How do you think the trust board is carrying out this vision?
9. How do you see Whakatōhea *kaimoana* practices changing in the future?

F. Participant Names

List of interview participants, list order has been randomised for anonymity.

List of Participants
Daniel A Paruru
Te Kahautu Maxwell
Jacqui Biddle
Robert Edwards
Leelyn Ruwhiu
Daniel R Paruru
Maui Hudson
Ruka Hudson
Muriwai Kahaki