IMPACTS OF COMMUNITY FOOD PROGRAMS IN NORTHERN MANITOBA

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A thesis submitted to the Faculty of Graduate Studies of

The University of Manitoba

in partial fulfilment of the requirements for the degree of Master of Environment

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ABSTRACT

In response to a food crisis causing high rates of diet related diseases, Indigenous communities in northern Manitoba have recently started many food initiatives that are teaching food skills. There is limited solutions oriented research examining the impacts of these initiatives. Through a participatory action research methodology using participation, semi-structured interviews and case study methods, the impacts of five northern Manitoban food initiatives were investigated. Four themes were found: empowering food activities, improving health holistically, increasing cultural reclamation and *mino pimatesewin* (Cree for the good life). These themes occurred through multiple types of organizational structures, scales of impact and food skills. Elements of success included community, organization and network support; emphasizing cultural reclamation; and intentional inclusion of youth. The themes supported elements of Indigenous food sovereignty, emphasized the importance of community self-determination and showed the wide ranging impacts of food initiatives. They should be supported through networks, funding and research.

ACKNOWLEDGMENTS

Thank you to everyone that I met during my visits to northern Manitoba who welcomed me; shared meals with me; showed me glimpse of your lives, your homes, your schools, your food initiatives; shared your experiences with me and helped me to understand your communities more. Thank you especially to the many in Leaf Rapids that made me feel like a part of the community. Thank you to Chuck Stensgard for all the time you spent sharing your passion for food and people with me, and for always feeding and supporting me. Thank you to Don McCaskill for your personal support and the Frontier School Division support that you made possible.

Thank you to my advisor Dr. Stéphane McLachlan for guiding me through the research process, for giving me the freedom to shape my research topic and process while giving me insightful ideas for how to proceed. Thank you for all your encouragement, for helping me to find my voice and to see that I was capable of social science research when I doubted myself.

Thank you to my committee Dr. Annette Desmarais, Dr. Jamie Cidro and Julie Price for your patience, for your insights and the inspiration all of you have been through the work you do.

A special thank you to Julie for inviting me along on trips to northern Manitoba, making introductions to people and demonstrated the importance of building good relationships.

I want to thank the other graduate students and researchers that shared their advice and experiences with me and became my friends. Thank you to Asfia Gurkul Kamal and Jennifer Temmer for introducing me to the wonderful people that you know in the north, for sharing meals, laughter and stories with me. Thank you to Anny Chen for being a traveling companion, and a great person to discuss new ideas with. Thank you to Tabitha Martens for making time to

share your experiences with me when I was starting out and for being such as amazing strong example of someone living out Indigenous food sovereignty and Indigenous resurgence.

I am grateful for the financial support that I received from the Social Sciences and Humanities Research Council, the Northern Scientific Training Program, the University of Manitoba GETS and Faculty of Graduate Studies, and for the travel support from Northern Manitoba Food Culture and Community Collaborative, Frontier School Division and Wa Ni Ska Tan (Alliance of Hydro-impacted communities) that allowed me to visit communities in northern Manitoba, attend gatherings and attend conferences.

Thank you to my family and friends for your continued love, support and encouragement that made it possible for me to make it through. Thank you to my parents, Howard and Aletha Fawcett who have always encouraged my education and interest in the world around me. I especially what to thank my husband Victor Romero who has seen me through the best and the worst of this process. Your unconditional support and belief that I could do this have been invaluable to me.

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1. INTRODUCTION

Food is important culturally, physically and spiritually for people throughout the world. In every culture, the foods that are eaten, the places food comes from and the ways food is prepared have been influenced by the food knowledge that has been learnt and passed along throughout history (Rozin, 1996). Yet, food systems of Indigenous people around the world have been disrupted, interfered with and intentionally destroyed by colonization and the neoliberal commodification of food (Panelli & Tipa, 2009).

The destruction and disruptions of Indigenous food systems has also happened in the territory we now called Canada. Through actions pre-and post-creation of the colonial government, the social fabric, culture and sovereignty of Indigenous Nations have been attacked and diminished (Alfred & Corntassel, 2005). These influences have impacted food knowledge, food culture and ultimately Indigenous food systems since settler society started to dictate actions on Indigenous territories (Kepkiewicz & Rotz, 2018). Industrial development, government policies and regulations have all been identified as reasons that Indigenous communities are experiencing decreased control over their food systems, which can be seen as a declines in food sovereignty, and increased food insecurity (Skinner, Hanning, Desjardins, & Tsuji, 2013; Thompson et al., 2011).

Industrial development such as mining and hydropower has caused environmental degradation, forced relocation, decreased livelihoods and disrupted social connections in Indigenous communities (Hrenchuk, 1991; Kamal, Linklater, Thompson, & Dipple, 2015; Paci, Dickson, Nickels, Chan, & Furgal, 2004). Government policies have influenced all areas of life for Indigenous people. Residential schools, the pass system, and the banning of cultural activities are some of the policies that have had profound impacts on the ability to continue

passing along language, values, knowledge and culture, as well as causing integrational trauma (Clapperton, 2010; Frideres, 2011; Langevin, 2012). As a result of impacts from industrial development and detrimental government policies, the skills, knowledge and resources necessary for catching, gathering, growing and preparing traditional food have decreased or been lost in many if not most Indigenous communities (Batal, Gray-Donald, Kuhnlein, & Receveur, 2005; Johnson-Down et al., 2015; Sheehy, Kolahdooz, Roache, & Sharma, 2015).

These influences have all contributed to a widespread food crisis in Indigenous communities and a forced reliance on store-bought food as people are no longer able to access the foods that their ancestors ate for time immemorial and that contributed to their health (Batal et al., 2005; Morrison, 2011; Rudolph & McLachlan, 2013). The disruption of Indigenous culture and food systems has also adversely impacted health. The rate of food insecurity and the prevalence of diet related diseases are disproportionally higher for Indigenous than non-Indigenous people in Canada (Adelson, 2005; Tarasuk, Mitchell, & Dachner, 2016). In northern Canada, Manitoba included, many of these food system changes have happened more recently. Indeed, some people in northern Indigenous communities are still transitioning to consuming mainly store bought food (Wein, 2000).

Recently there has been an increase in the number of organizations and individuals in Manitoba who are concerned about the food crisis, decreased health, decreased food knowledge and are interested in enhancing the ability of Indigenous northern communities to access foods that are culturally important (ANA, 2012; NFPPSC, 2003; NMFCCC, 2014). Consequently, many community based food initiatives have started within the last fifteen years in northern Manitoba. Government organizations, nongovernment organizations, schools, and grassroots groups are now involved in programs that are teaching new food skills, re-introducing food skills

and getting people re-engaged with their food sources (NMFCCC, 2017). People involved in these organizations reflect a wide variety of backgrounds, geographic locations and motivations, but they have all started to work on programs that are related to food with the intent of helping community members access more healthy food and have more control over their food systems (ANA, 2012; Laychuk, 2018; NMFCCC, 2017; Northern Association of Community Councils, 2018).

The food initiatives that have sprouted up all over northern Manitoba in recent years are using many different approaches and are supported by different types of organizations.

Anecdotally, the programs have had varying levels of success but most have not been evaluated to determine the nature of any successes or challenges. Due to the large geographic area of northern Manitoba and remote location of many communities, there have been efforts to try to make projects more collaborative and to build bridges among initiatives by organizations that work with multiple projects, such as Northern Healthy Food Initiatives or Northern Manitoba Food Culture and Community Collaborative. There have been workshops to bring different food initiative leaders together and meetings that allow initiative leaders to network with each other (Indigenous and Northern Relations, n.d.; NMFCCC, 2014).

Although there are many food initiatives teaching food skills in northern Manitoba, there has not been very much research about them. A few studies looked at food initiatives in specific communities in northern Manitoba (Kamal et al., 2015; Okorosobo, 2017; Rudolph & McLachlan, 2013). Although there was a study of Indigenous food initiatives in western Canada (Martens, 2015), there has yet to be an overview of the impacts of the food initiatives and the organizations that support them that focuses on northern Manitoba. This type of cross community research is important because it allows for comparisons that can show common

characteristics of food initiatives, such as what makes them successful, that could be broadly applicable throughout the region (Martens, 2015). Additionally, understanding the impacts of many food initiatives can show the importance of these type of initiatives to the provincial government. There was also a desire expressed by people coordinating multiple food initiatives in northern Manitoba to understand more about the impact that food initiatives are having on the communities where they are operating, which indicates this could be valuable research for food initiative supporters (D. McCaskill, personal communication, April 27, 2015).

Based on the importance of this type of research and the desire expressed by people working with food initiatives, the overall goal of my thesis is to determine the impacts food initiatives teaching food skills are having in northern Manitoba. To determine the impact of these programs, the research will determine how successful the different food initiatives are based on their distinct goals; what elements make a program successful and what elements represent barriers to success; what ways can these food initiatives be best supported; and what influence they are having on food sovereignty.

There is an overabundance of negative stories and disparity focused research while there is a dearth of research that focuses on success stories and solutions in Indigenous communities (Adelson, 2005; Ford, 2009; Johnson-Down et al., 2015; Martens, 2015; Slater et al., 2013). As well, some scholars say that social science research should contribute to positive social change (Greenwood & Levin, 2011). Therefore, it is my intention that this project will celebrate and promote success stories, in order to encourage the positive work of five food initiatives in northern Manitoba and enable other programs to emulate the solutions highlighted in this research, where appropriate. I am also hoping this project will better enable different programs within similar geographic regions to support, communicate and network with each other, and in

so doing foster collaboration and create a sense of shared goals and solidarity among these food initiatives.

In order for this research to accomplish the goals of encouraging, supporting and enabling food initiatives the results, discussion and conclusions of this thesis need to be accessible to people beyond academia, in particular people involved in food initiatives and the organizations that support them. Knowledge translation is one concept used to understand attempts to share research results with the general population. Within this concept it is important that information is translated or 'stepped down' in a way that is appropriate for the desired audiences (Choi, 2005; Jacobson, Butterill, & Goering, 2003). Although it is my intention that the knowledge from this thesis can be used by participants, knowledge mobilization is a more applicable term because the research process, including the analysis and thesis writing, was iterative and included the research participants (Anderson & McLachlan, 2016). For the participants, as well as community members, supporting organizations and food practitioners to be able to use this research the end results need to presented in an accessible format. An entire thesis is a lengthy document that is less accessible for non-academics. Therefore, I chose to format the results into stand-alone chapters that can be read independently and are easier to utilize because they are shorter. Additionally, the chapters are in a format that can be readily edited into articles that can be published or shared at conferences which will spread the knowledge even further.

For the purpose of sharing the knowledge gathered through this research to participants, the wider community of food practitioners and organizations that support them, and the academic community, I chose to write a 'sandwich style' thesis. As required for this thesis style, the empirically focused chapters, chapters three and four in this thesis, are in the format of self-contained papers that include a literature review, methods, discussion and conclusions. There is

also an overall thesis literature review in the following chapter and an overall thesis discussion and conclusions in chapter five.

2. THESIS LITERATURE REVIEW

Food is important to people, families, communities and cultures around the world - for health, happiness and social connections (Rozin, 1996). However, around the globe there are threats to food systems, challenges with food production and barriers to people providing food for their families (FAO, 2006; Napoli, 2011). There are different academic disciplines that work on food related issues and many different concepts of how these challenges should be addressed, two of which are food security and food sovereignty. In Canada, Indigenous food systems in particular face many challenges (Kepkiewicz & Rotz, 2018). Decolonization, in particular daily acts of resurgence, and Indigenous food sovereignty are both working towards repairing and strengthening Indigenous food systems (Daigle, 2017; Morrison, 2011). In northern Manitoba, many food initiatives building food skills have been started in response to a country-wide food crisis (NFPPSC, 2003; NMFCCC, 2017). Research into the impacts of those food initiatives should be done with appropriate methodologies, such as an Indigenous methodology or a participatory action research methodology (Brydon-Miller, Greenwood, & Maguire, 2003; Kovach, 2009).

2.1 Food Security

Food security is a term that has been around since the 1970s. It is the predominant term that the UN Food and Agriculture Organization and other government organizations use when looking for solutions to hunger and food shortages around the world, which comprises food insecurity (Jarosz, 2008). The following definition of food security is most widely utilized and was established at the World Food Summit in 1996 states: "Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life" (Napoli,

2011). Food security is a term that has continued to evolve and is now considered to have four main pillars: availability, access, utilization and stability. As such, food must be available in an area, people must be able to access it, they need to have the ability to utilize the food and these pillars should all be stable (FAO, 2006). Efforts at increasing food security focus on policy, economic development, increasing agricultural production, environmental restoration or other dimensions of the problems that underlie inadequate access to food (Fieldhouse & Thompson, 2012).

2.1.2 Tensions with the concept of Food Security

The concept of food security is often critiqued because it views the solutions to food insecurity as more of the same neoliberal paradigm that is currently used in the industrial food system. Food security looks to more research, more production, and more technological innovations as the solutions but it does not question neo-colonialism or export orientated food production (Jarosz, 2008; Menezes, 2001). There is also a lack of food security work that attempts to challenge the problems of power and privilege that are creating food insecurity (Rudolph, 2012).

Food insecurity represents a large focus of the research on food in Indigenous communities in Canada (Bhawra, Cooke, Hanning, Wilk, & Gonneville, 2015; Erikson, 2008; Ford, 2009; Skinner et al., 2013). This focus on the negative aspects of food in a community is problematic. There is evidence that these approaches will hamper bringing solutions and new creative ideas to change situations. When there are structures and ways of thinking that are so ingrained in our lives that people do not believe they can ever change, nothing changes. However, by looking at the what could be possible rather than the existing challenges, new ideas and ways forward can emerge (Gibson-Graham, 2006; Williams, 2017). As well, many

Indigenous communities that have been implicated in research focusing on challenges and such negative aspects want to see the focus change. They know there are challenges in their communities and they are very familiar with what these are. Instead, they want research to look forward to sustainable ways of addressing such challenges, to use strengths-based approaches and they want to share stories of success (Martens, 2015; NMFCCC, 2017). It is so important to highlight good news stories because they "offer a pathway towards reconciling Indigenous and non-Indigenous worldviews around land use, sharing, and food culture" (Martens, 2015, p. 3).

2.2 Food Sovereignty

Food sovereignty is a concept that describes efforts to find solutions to food problems that are 'anti-neoliberal globalization' as well as one that works to address the larger political and societal structures that need to change in order to achieve equity, sustainability and food justice (Jarosz, 2008; Menezes, 2001). Some would say that it is an alternative to food security as an approach to solving food related problems (Jarosz, 2014). There are varying definitions of food sovereignty, which has allowed for the wide variety of cosmologies of the organizations that use the term (Grey & Patel, 2015). Some say that food sovereignty should not be limited to just one definition because the understanding of the term continues to grow (Jarosz, 2014). However, there are definitions that have emerged such as the one La Via Campesina, the founders of the term, put forth in 1996. They said 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. We have the right to produce our own food in our own territory" (La Via Campesina, 1996 as cited in Jarosz, 2014 p.173).

Since the term food sovereignty was introduced in 1996 it has been adopted by many different organizations around the world, and been used in diverse contexts, including urban

foodies, Indigenous hunters, and mid-sized farms in Canada (Desmarais & Wittman, 2014). As the application of the concept has changed, additional principles, pillars and visions of food sovereignty have been put forth that are not strictly definitions. For example, more recently La Via Campesina have said that their visions for food sovereignty "is the right of peoples to healthy and culturally appropriate food produced through sustainable methods and their right to define their own food and agriculture systems" (La Via Campesina, 2016). Part of what makes food sovereignty distinct from food security is the acknowledgement that food is about more than just the physical food and physical effects of what we eat. Food sovereignty acknowledges the importance of food for community and that social connections that can be built and strengthened through food (Desmarais & Wittman, 2014).

In Canada, many organizations have been working on alternative food systems and many provincial networks have started since the early 2000s (Levkoe, 2014). These organizations and others involved in the food movement in Canada came together to create the People's Food Policy Project to work together for food policy change which included discussions on food sovereignty (FSC, 2015). Beyond such provincial food networks, the process brought together diverse groups that were invested in the concept of food sovereignty and they agreed to adopt the six guiding principles of food sovereignty (FSC, 2015) that emerged from the 'Forum for Food Sovereignty' in Nyéléni, Mali (Schiavoni, 2009). The original six guiding principles or pillars were: a focus on food for people; valuing food providers; localizing food systems; giving control locally; building knowledge and skills; and working with nature (FSC, 2015). During People's Food Policy discussions in Canadian with Indigenous groups, a seventh pillar emerged that recognizes that food is sacred, which acknowledges the spiritual and important cultural role of

food as well as emphasizing that food cannot be just a commercial commodity (Desmarais & Wittman, 2014).

2.3 Indigenous Food Systems in Canada

2.3.2 Challenges

Since time immemorial, many Indigenous Nations have occupied what we now call Canada, including northern Manitoba. Pre-settlement, Indigenous people in Canada were self-sufficient, primarily through hunting, fishing, harvesting and growing all their foods on their traditional lands but also through trade with other communities (Boyd & Surette, 2010; Frideres, 2011, pp. 4–6; Schneider, 2002). Indigenous Nations had their own forms of government, social structures and represented many distinct cultures (Simpson, 2011, pp. 17–18).

Since before the formation of the colonial government and to this day, there have been policies that directly limit food activities and others that have hindered the ability of Indigenous people to pass along knowledge, skills, language and ceremony which indirectly influence food (Alfred & Corntassel, 2005; Carter, 1990; Clapperton, 2010). Food, culture and language are all connected, therefore even policies that are 'only cultural' still affect food, directly and indirectly (Martens 2015). For example, the banning on the potlatch ceremony along the Pacific drove this practice underground and made this important celebration, one that was connected to food, less accessible (Clapperton, 2010). The industrialization of Canada, forced resettlement, residential schools, collapse of local economies, unfulfilled treaty promises and environmental destruction of traditional lands have all played a role in diet transition and forced Indigenous people to replace a continually increasing proportion of their traditional diet with store-bought, processed foods (Dysart, 2015; Kuhnlein & Chan, 2000; Martin, 2011; Sheehy et al., 2015; Thompson et al., 2011; Wein, 1995).

Hydro-electric development is an example of industrial development that has had a huge impact on Indigenous communities in Manitoba (Neckoway, 2018), Quebec (Adelson, 2000) and around the world in countries such as Brazil, China and Malaysia (Aird, 2001; Choy, 2004; Fearnside, 2006). Direct impacts include forced relocation, flooding of traditional territory, ongoing erosion of shorelines, and environmental contamination. All these direct impacts have indirect effects on social connections, wildlife, livelihoods and other impacts that are still being realized (Neckoway, 2018). In locations where there has been hydro-electric development, even if communities still have people with strong land based skills and the recourses necessary for hunting, fishing and gathering, environmental disruptions and contamination have made it increasingly difficult for many Indigenous communities to continue to support themselves off the land (Dysart, 2015; Whiting & Mackenzie, 1998). For example, the community along South Indian Lake, O-Pipon-Na-Piwin Cree Nation (OPCN) had a strong, self-sufficient fishing economy before the construction of a dam and diversion of the Churchill River into the Nelson River for hydro development flooded the lake and changed the natural water rhythms. The fishery has now collapsed and there have been severe socio-economic and cultural impacts (Bodaly et al., 1984; Dysart, 2015; Hrenchuk, 1991; Kamal et al., 2015).

Residential schools have had negative impacts that continue to affect Indigenous communities. Many survivor experiences have caused personal trauma and intergenerational trauma in subsequent generations (Corntassel, Chaw-Win-Is, & T'lakwadzi, 2009; Frideres, 2011, pp. 80–95; TRC, 2015b). Residential schools were created to forcibly remove children from their communities and to place them in institutions that would try to assimilate them into settler culture as part of a larger policy meant to try to assimilate all Indigenous people (Alfred & Corntassel, 2005; Corntassel et al., 2009; Mendelson, 2008). Children were punished for

speaking their own Indigenous language or for carrying out cultural practices. Furthermore, physical, sexual and emotional abuse were all commonplace within residential schools (Furniss, 2000; Langevin, 2012; TRC, 2015b).

Such industrial development and the creation of residential schools have helped change the diets of Indigenous community members. The pace and level of this so called diet transition has varied among Indigenous communities (Whiting & Mackenzie, 1998) but connections have been established between these diet transitions and the increase of non-communicable diet-based diseases (Batal et al., 2005; Haman et al., 2010). The are many health problems that are more prevalent for Indigenous than non-Indigenous people that are associated with diet transition. For example, Indigenous people are 3-5 times more likely to have type 2 diabetes and are also more likely to be obese and have obesity-related diseases then the average non-Indigenous Canadian (Adelson, 2005; Haman et al., 2010; Triador, Farmer, Maximova, Willows, & Kootenay, 2015). Health impacts of the diet transition are exacerbated by the low quality, high prices and low availability of healthy store-bought foods in northern communities. Contributing factors to these characteristics of healthy food include the monopoly of only one grocery store in many First Nations communities, distance from urban centers and the costs of transportation (Thompson et al., 2011; Wendimu, Desmarais, & Martens, 2018).

2.3.2 Indigenous Food Sovereignty

The application of food sovereignty in the land in what we now call Canada in a generic way that assumes the needs of all populations are the same is problematic because it does not reflect Indigenous need or priorities (Rudolph & McLachlan, 2013). In some cases food sovereignty activities can cause tension between Indigenous and settler peoples (Kepkiewicz & Dale, 2018). For example, much of the land in what we now call Canada is contested or unceded

so when a mainly settler movement of people who are supposed to be working to create social inclusion, equality, food justice work to create local systems on someone else's homeland it can create tensions (Grey & Patel, 2015; Kepkiewicz & Dale, 2018). In Canada, the food sovereignty and food security movements are thus far mainly run by settlers and must be critical of the ways they are complicit in colonialism. Settlers should work to understand the connections between land ownership and colonization and work to be allies and to learn from Indigenous peoples (Matties, 2016). There are also criticisms of the term food sovereignty and questions about whether it should always be applied to the activities that Indigenous people on Turtle Island are undertaking to rebuild their food system. For instance, Sherri Kabatay, an Anishinaabe woman who in involved in Indigenous food practices said:

When I think of food and sovereignty, they are not connected. Because, you can't really say that you're sovereign over your own food. It's the plants and the animals that pity us. Our life depends on them. I can't say my sovereignty trumps that of the animal And, in order for me to live I have to ask for him or her [the animals and the plants] to help me live. (Daigle, 2016, p. 15)

The term Indigenous food sovereignty has developed to reflect the unique Indigenous understandings and applications of the concept of food sovereignty. There are unique aspects of food system that Indigenous food sovereignty identifies, which agriculture-based definitions do not capture. These include a necessity to view food as sacred' and the unique relationship of Indigenous people with their traditional land and food systems (Morrison, 2008, 2011). The term has become quite political and is associated with Indigenous Sovereignty (Grey & Patel, 2015). Since food is connected to culture, land and people it is not surprising that Indigenous food sovereignty encourages people to re-connect with all of these components of the food

Indigenous food sovereignty is diverse in its definition and application because Indigenous communities encompasses distinct Nations with distinct food practices. However, there are groups that are emerging, such as the Working Group on Indigenous food sovereignty (WGIFS) that are identifying principles that can be applied, as well as encouraging Indigenous food sovereignty in communities (Morrison, 2011). There are four main principles that have been identified as relevant to all expressions of Indigenous food sovereignty: sacredness of food; participation of people in Indigenous food sovereignty; self-determination in food and health systems; and policy reform to create a system that will allow Indigenous food sovereignty to flourish (Morrison, 2008).

The term Indigenous food sovereignty started and has mainly been used in North America and a growing number of researchers are exploring Indigenous food sovereignty (Daigle, 2017). They are exploring diverse issues such as, how Indigenous food sovereignty is lived out and undertaken in different communities (Cidro, Adekunle, Peters, & Martens, 2015; Kamal et al., 2015; Wendimu et al., 2018); the tensions between Indigenous food sovereignty and food sovereignty based in colonialism (Kepkiewicz & Dale, 2018; Kepkiewicz & Rotz, 2018; Matties, 2016); and how Indigenous food sovereignty can impact first foods of children (Cidro, Robin, Zahayko, & Lawrence, 2018). However, there is still a limited amount of research into Indigenous food sovereignty. Some areas that could be better explored are the roles Indigenous laws and governance of different nations play in the continuation of Indigenous food ways; how to make food sovereignty accountable to Indigenous law and political structures; and the connections between Indigenous food sovereignty, resurgence and self-determination from marginalized perspectives (Daigle, 2017).

2.4 Decolonization

The decolonization of Turtle Island has become a widely discussed topic in the academic literature in recent years (A. J. Barker, 2015; Lawrence & Dua, 2005; Mundel & Chapman, 2010; Wildcat, Mandee, Irlbacher-Fox, & Coulthard, 2014). There was even a new journal launched in 2012, entitled 'Decolonization: Indigeneity, Education & Society', this is devoted entirely to research about decolonization. Decolonization has many definitions because there are many different ways that people are involved in decolonizing activities. One definition that can encompass many of these differences is "decolonization is a process that involves fighting against the forces that have colonized Indigenous communities" (A. C. Wilson & Yellow Bird, 2005). Another way to define decolonization is to look at what colonization is. Taiaiake Alfred said, "...what is colonization if not separation from the land, the severance of the bonds of trust that held our people together so tightly in that not-so-distant past, and the abandonment of our spiritual connection to the natural world?" (Alfred, 2008, pp. 9–10). Therefore, decolonization involves building those connections again. These two definitions lead to two different parts of decolonization: the fight against the colonial political powers and cultural resurgence as ways of asserting control, and undertaking decolonized activities despite domination by colonial political powers.

2.4.1 Political aspects

Decolonization can be seen as a process that fights against colonial governments, policies and systemic oppression that have impacted Indigenous people, as is suggested in the first definition above. This process of resistance and political activity to contest colonial powers has been underway around the world since the 1500s, and in Canada has occurred for decades (Strang, 1991). In Canada, there has political activism to fight to get Aboriginal Rights

acknowledged by the Canadian government, for the right to self-governance, for land rights and the right for First Nations to give free and prior consent for industrial development on their traditional territories (McNeil, 1994). Worldwide, the political fight led to the UN Declaration of the Rights of Indigenous Peoples, which declares that all peoples have the right to self-determination (United Nations, 2007). Canada has now signed the UNDRPIP and verbally committed to Nation to Nation dialogue but these promises have yet to lead to significant changes (King & Pasternak, 2018).

Another step that some consider a step towards decolonization is the Truth and Reconciliation Commission (TRC) that was required by the settlement for Residential School survivors and which was established in 2008 (TRC, 2012, 2015b, p. 15). The vision of the TRC was "We will reveal the truth about residential schools, and establish a renewed sense of Canada that is inclusive and respectful, and that enables reconciliation." (TRC, 2012, p. 2). Truth and reconciliation commissions have been used in many countries around the world as a way to bring healing to victims and build relationships between victims and oppressors. However, the TRC in Canada is distinct from what happened in countries where there was a change in government, such as the TRC in South Africa after the end of the Apartheid government, because the same colonial government is still in power (Angel, 2012). Out of the TRC, there came 94 calls to action which called on the government of Canada to make changes in areas of education; child welfare; language and culture, health; and justice. It also put forth concert actions for reconciliation for various levels of government, organizations and churches (TRC, 2015a).

However, there have been criticisms of the TRC process. There are critiques as to whether the same colonial government that caused the oppression can hold itself to account for the cultural genocide that was committed (Angel, 2012; Corntassel et al., 2009). There are also

critiques as to whether there was enough truth actually heard by settler society to make an impact and questions about whether the reconciliation can happen without truth (James, 2012).

Additionally, others criticize the term reconciliation, as it was used by the TRC, and suggest that is only "reinforces colonial relationships" which do not lead to decolonization (Corntassel et al., 2009).

Taiaiake Alfred started a discussions amongst Indigenous scholars about the paradigm of Indigenous Resurgence as a way to shift the discussions from reconciliation to decolonization (Wildcat et al., 2014). Corntassel explores these ideas further and talks about how decolonization needs to mover from just being a theory to being acted out (Corntassel, 2012).

2.4.2 Indigenous Resurgence

"Our culture is beautiful and loving, and it nurtures our hearts and mind in a way that enables us to not just cope, but to live" (Simpson, 2011, p. 13). This quote shows the importance of culture which includes the ability to undertake traditional cultural activities and live by cultural values, both of which have been hindered by colonization. Although decolonization can happen through large political and systematic changes, it can also come about through acts of daily resurgence (Corntassel, 2012; Daigle, 2017; Simpson, 2014; Wildcat et al., 2014). In fact, some argue that such daily acts are more important to both decolonization and resurgence because they do not depend on the colonial government to grant human rights but instead on Indigenous people taking action and responsibility based on their own beliefs and knowledge of what is right (Corntassel, 2012; Simpson, 2011, pp. 16–20).

There is a close relationship between Indigenous food sovereignty and decolonization and some scholars consider Indigenous food sovereignty an important type of decolonizing work (Grey & Patel, 2015). Indigenous food systems have been hindered directly and indirectly by

colonial policies (Kepkiewicz & Dale, 2018). Therefore, working to reclaim Indigenous food sovereignty in a way that is participatory, one that empowers the self-determination of communities and works towards policy reform is a way of "fighting against the forces that have colonized Indigenous communities" (A. C. Wilson & Yellow Bird, 2005). As well, land is important to Indigenous cultures, to their personal and community health (Radu, Larry, House, & Pashagumskum, 2014). Indigenous food sovereignty works to rebuild connections with land, and to increase access, control of traditional territories (Morrison, 2011). Therefore Indigenous food sovereignty is a way of overcoming the 'separation from the land' that Alfred (2008, p. 9) talked about and working towards decolonization.

This connection can be seen in daily acts of resurgence that Indigenous people are undertaking to reclaim their food systems and the foods that their ancestors ate. Indigenous people are re-learning to hunt, fish, gather and tend to the foods that their people ate since time immemorial. At the White Earth community, *manoomin* (wild rice) continues to be harvested using techniques that are similar to those that were traditionally used. They are also harvesting maple syrup and growing their traditional flint corn, and recently, they have begun working on building a sustainable economy based on such food products (Grey & Patel, 2015). Another example is the 'pre-contact diet' that several Indigenous artists in Winnipeg, MB chose to undertake. They researched what was available to their ancestors before contact with settlers and ate only those foods for a month. This diet was started due to health concerns (CBC, 2015), but the act can also be seen as a daily act of resurgence which leads to decolonization.

2.4.3 Decolonization and Education

Education is another area where there has recently been lots of research and discourse over decolonization (Meyer, 2014; Simpson, 2014; Wildcat et al., 2014). Educational systems have

been used as "an instrument of oppression in our not-so-distant history" (Mendelson, 2008, p. 3). Therefore, it is unsurprising that many Indigenous people are skeptical of institutional educations and unwilling to be involved (Mendelson, 2008). Due to this history and many other intersectional factors¹, the current models for education systems in Canada are failing to meet the needs of many Indigenous people and Indigenous communities (Lamb, 2014). This failure is demonstrated in the statistics that show that there are lower levels of high school graduation in First Nations reserves as well as for Indigenous people living off-reserve and that the percentage of Indigenous people with university degrees is substantially lower than for non-Indigenous Canadians (Assembly of First Nations, 2012; Davison & Hawe, 2012; Gilmore, 2010; Mendelson, 2008; Statistics Canada, 2015).

In response to the TRC calls to action on education, including the calls to develop "culturally appropriate curricula" (TRC, 2015a, p. 2) and to "integrate Indigenous knowledge and teaching methods into classrooms" (TRC, 2015a, p. 7), some school divisions are making changes to try to incorporate cultural teachings and involve more knowledge holders and Elders from the local communities in order to increase the quality of education for Indigenous students (FSD, 2009). Despite the negative ways that education has been used in Indigenous communities, it is being reclaimed as an important way to teach land-based skills with the support of administrators that give space for new programs and different ways of teaching. There are also many land based education programs that are happening from elementary school all the way up to post-secondary institutes (Opaskwayak Education Authority, 2012; University of Saskatchewan, 2019).

¹ I.e. Intergenerational trauma from residential schools (Langevin, 2012), underfunding of education on reserves (TRC, 2015a), the outdated *Indian Act* provides no support for a First Nations education system and there is no other legislation to replace it (Mendelson, 2008).

There are also other initiatives that teach gardening skills within primary and secondary school in Indigenous communities but this can be controversial, in light of decolonization work, when they end up promoting the type of gardening that was introduced by settlers. In northern Manitoba it is especially controversial because European based plants that were grown in cultivated gardens became more widely eaten than the country greens that were tended and harvested pre-contact because of their introduction by the Hudson Bay Company (Soloway, 2015). Some Indigenous people in the prairies did start growing crops and vegetables in the ways introduced by settlers but some government policies discouraged growing while others controlled the selling of harvests and the amount of profits Indigenous farmers could make (Carter, 1990). Gardening is also controversial because there is a history of Indigenous children being forced to learn to garden in residential schools (Iwama, 2000). However, there is evidence, both archeological and through oral history, that Indigenous people in the Manitoba were involved in horticultural activities pre-contact (Boyd & Surette, 2010; Flynn & Syms, 1996; Schneider, 2002; Soloway, 2015).

For some, these changes within the current education paradigm are not radical enough and decolonization discourse is providing alternatives for how education can be transformed to teach "in order to nurture a generation of Indigenous peoples that have the skills, knowledge and values to rebuild our nation according to the word views and values of Nishnaabeg culture", instead of state-led education systems that produce citizens that perpetuate colonialism (Simpson, 2014). Simpson and others are calling for a land-based education that uses the land as pedagogy. This allows learning to be a choice, a reciprocal act where knowledge is gained from lived experience, and which is gained through being on the land (Simpson, 2014; Wildcat et al., 2014). Such approaches to education are starting to happen outside of educational institutions in

Manitoba through initiatives, programs and individuals undertaking the work themselves. Examples of such approaches include the two gatherings *Wassasihk*, and *Kiwikapawetan* in OPCN that teach youth about culture, language and food through taking them out on the land (Kamal et al., 2015).

2.5 Food in Northern Manitoba

High food prices in northern Manitoba and their implications for health and wellbeing have been a concern to northern citizens and southern allies for many years. In 1998, there was an attempt to create a top-down solution to the issue of food availability by the Manitoba, Canadian and First Nations governments by providing additional money to people on social assistance to help offset the high costs of food in northern Manitoba (NFPPSC, 2003). Shortly after, the high prices of milk and the effect that had on children was the 'trigger point' for the Northern Food Prices Report (NFPR), commissioned by the government of Manitoba to investigate the reasons for high food prices in northern Manitoba (NFPPSC, 2003). This top-down response and the NFPR focused on problems of food insecurity rather than looking directly at food skills in communities. However, seven strategic priorities came out of the NFPR ², four of which were focused on increasing food production and harvesting in the north, so the discussion shifted towards developing food skills.

Yet, since the NFRP, high prices of food and concerns about food security in northern Manitoba remain unaddressed (Thompson et al., 2011). In the same time period, there has also been a growing alternatives food movement that has increased interest in learning food skills in

² The seven strategic priorities were: northern food self-sufficiency initiative, milk price review in northern communities, northern food business development, northern community foods program, northern greenhouse pilot project, northern gardens initiatives, and northern food price survey program (NFPPSC, 2003)

order to self-produce food (Rudolph, 2012). As well, there have been an increase in decolonization and resurgence movements, notably 'Idle no More', which have generated interest in learning about Indigenous cultures and traditional activities (A. J. Barker, 2015). All these factors have contributed to a growth of food initiatives and organizations that support them throughout Manitoba, especially the North.

The food production and harvesting priorities of the NFPR led the Manitoba provincial government to the create in 2004 the Northern Healthy Foods Initiative (NHFI) that supports food initiatives throughout northern Manitoba by providing funding, infrastructure and administrative support for community-led projects (ANA, 2012). The nature of these projects has evolved throughout the lifetime of the program. There was an initial focus on gardens but now NHFI supports other projects such as poultry programs and bee keeping but they are still all related to food self-sufficiency in northern Manitoba. (Indigenous and Northern Relations, n.d.; Northern Association of Community Councils, 2018). The NHFI works with government and non-government organizations to fund and support the community-based projects. They primarily work through the Bayline Regional Roundtable, Northern Association of Community Councils, Four Arrows Regional Health Authority, Food Matters Manitoba and Frontier School Division (Indigenous and Northern Relations, n.d.). An additional funder and supporter that has become important in northern Manitoba since it formed is the Northern Manitoba Food Culture and Community Collaborative (NMFCCC).

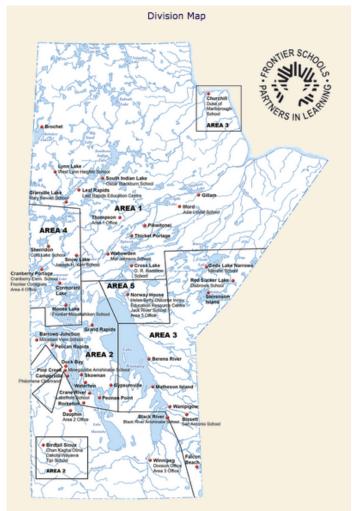
The NMFCCC emerged in 2013 and it works with any community in northern Manitoba that is undertaking projects that strengthen the community through food, culture and community programs. There is an emphasis on community-led initiatives and they work to help communities determine what is important to them and define their own success. The NMFCCC

brings together many philanthropic organizations that are interested in doing similar work in northern Manitoba. It administers the funds, works on the relationships and allows both funders and the community projects they support to learn from the challenges and successes of other projects (NMFCCC, n.d.).

Food Matters Manitoba (FMM) is a non-profit organization that started in 2006 (Levkoe, 2014) to supports food programs throughout Manitoba. FMM works with both schools and communities to set up and support existing programs that will increase food awareness and self-sufficiency (FMM, 2018). They supported programs in northern and Indigenous communities since they began but more recently, there has been an emphasis on encouraging and teaching the ceremonial and cultural significance of food for Indigenous people (T. Stevenson, personal communication, May 15, 2016). For example, they developed a resource to inform people where they could access traditional foods in Winnipeg (FMM, 2015).

The Frontier School Division (FSD) has actively promoted gardening in Area 1 (fig. 1) since 2006 when they implemented their 'Veggie Adventures' science curriculum (Manitoba Chamber of Commerce, 2010; NMFCCC, 2018). FSD covers a vast geographic range, the largest of any school division in Manitoba. For ease of administrating such a large school division it is divided into five different areas (fig. 1) each with its own superintendent (FSD, n.d.). The emphasis on gardening was strengthened in 2008 when the superintendent, Don McCaskill, hired a regional gardening coordinator to support schools interested in gardening throughout the FSD (Kamal, personal communication, April 15, 2016). They also developed an online curriculum, called Our Learning Garden, that expanded the ideas originally put forth in the 'Veggie Adventures' to encourage the use of gardening to teach science outcomes in kindergarten through to grade 12 (Our Learning Garden, 2013).

Figure 1: Frontier School Division areas



The Bayline Regional Roundtable is an organization that supports six communities along the Bayline rail line, primarily focusing on increasing food security in a way that builds on community strengths and knowledge (Rural Development Institute, 2008). The Northern Association of Community Councils is an organization that supports northern communities with a focus on economic, social and community development. As part of this purpose they support food initiatives through a partnership with NHFI (Northern Association of Community Councils, 2018).

The Four Arrows Regional Health Authority (RHA) was established in 2000 in order to better support the four Island Lake First Nations through working together for the health of the

whole region (Four Arrows Regional Helath Authority, 2011). Four Arrows RHA has also been involved in supporting food initiatives throughout Manitoba and other provinces, most notably through their 'Indigenous Food Sovereignty Summit', which was first held in 2016 and then in 2018. The 'Indigenous Food Sovereignty Summit' brings together community practitioners of Indigenous food sovereignty, organizations that support this work and academics. It has been an important place for community practitioners to learn more about concepts related to Indigenous food sovereignty, to share their own experiences and create connections with other community practitioners (Four Arrows RHA, 2018).

2.6 Methodologies

2.6.1 Indigenous research methodologies

Many Indigenous communities have wary relationships with research, as was stated in Smith's comment, "The word itself, 'research' is probably one of the dirtiest words in the indigenous world's vocabulary" (Smith, 1999, p. 1). There are many who have criticized the impact of dominant research methods in Indigenous communities and shown how they can perpetuate neo-colonialism and disempower communities (Castleden, Sylvestre, Martin, & McNally, 2015; Smith, 1999; A. C. Wilson & Yellow Bird, 2005). As a response, there have been many Indigenous scholars who have undertaken to understand and build Indigenous methodologies as a counter-point to those conventional approaches. Since there are strong connections between colonization and dominant research methods, many consider creating Indigenous methodologies is considered decolonizing work (Hart, 2002; Kovach, 2009; Smith, 1999; S. Wilson, 2008).

Many Indigenous methodologies reflect the differences in epistemologies of different nations and ways that Indigenous people are conducting research (Kovach, 2009). Instead of

dictating that certain aspects are necessary to comprise an Indigenous methodology, there are indicators of Indigenous inquiry, which include: using an epistemological base; self-location; "conducting research in a good way"; and conducting research in a decolonizing, resistant way (Kovach, 2009; S. Wilson, 2001). How the research is conducted is a very important part of Indigenous methodologies; it needs to be conducted in ways that are considered good by the epistemology on which the research is based. An element that is common to many Indigenous epistemologies is that research needs to be conducted relationally, with reciprocity and respect. The relationships between the community and the researcher should be reciprocal and respectful. Researchers are also expected to be accountable to the people they are in relationship with, these extending to their own family and community (Martens, 2015; S. Wilson, 2001). A way of explaining and grounding these relationships is self-location. It is important for understanding who the research is, where they came from, their connections, and their purpose for conducting research (Kovach, 2009). This way of acknowledging relationships and people's backgrounds is also reflected in other resistance research methodologies, such as feminist methodologies (V. Taylor, 1998). However, a unique aspect in Indigenous methodologies is that the background is not viewed in a negative way as 'bias' but is rather a way of providing grounding and connections to other people, to relationality (S. Wilson, 2008). Lastly, Indigenous research does not work to prove people right or wrong but it does work towards decolonization. It does not exist just for the sake of adding to academia, instead by virtue of being relational, it is accountable to produce something good for the community of people it has been working with and to be part of decolonization (Kovach, 2009; S. Wilson, 2008).

2.6.2 Participatory Action Research methodology

Participatory Action Research (PAR) is a methodology that researchers and communities use in an attempt "to move people and their daily lived experiences of struggle and survival from the margins of epistemology to the centre" of research (Hall, 1992, pp. 15–16). PAR is based within the broader methodology of Action Research (AR), which is a type of social science research that works towards positive social change by working with the communities of interest rather than on or even for them. Some see it as the way that all social scientists should conduct research (Greenwood & Levin, 2011). Importantly, AR privileges contextualized knowledge rather than assuming that only objective knowledge is important for research (Stapleton, 2018).

PAR is a methodology that specifically focuses on working with marginalized groups and challenging power structures (Greenwood & Levin, 2011). It emphasizes conducting action research while participating in a way that produces positive change for the community and transforms the researcher through this interaction (Stapleton, 2018). It acknowledges that research affects researchers too and people do not approach research without their own biases. It also acknowledges the importance of real life experience and respects the experience and knowledge that people have of their own circumstances. PAR attempts to change systems for the better through praxis and reflection (Brydon-Miller et al., 2003; Genat, 2009).

2.7 My perspective as a settler Canadian

Since I began my Masters research I have been learning about Indigenous culture, governance, and values through university courses, academic literature, attending an Indigenous Food Sovereignty Summit, multiple Wa Ni Ska Tan (Alliance of Hydro-Impacted Communities) gatherings, and most importantly, through visiting and building relationships with Indigenous people in northern Manitoba. Through these activities, I have learnt about Indigenous

methodologies, especially the importance or relationships, reciprocity and respect through my interactions with Indigenous people. Although I have worked to apply some aspects of Indigenous inquiry, such as conducting research in a good way, in my research process I do not claim that I used an Indigenous research methodology. Basing research methods on an Indigenous epistemology is an important aspect of Indigenous research methodology. As a settler person who is just beginning to learn about the Indigenous people of Manitoba, I do not have anywhere near a full enough understanding of Cree (Ithinewuk³) epistemology to employ an Indigenous research methodology. Instead, I used a PAR methodology in which I took opportunities, as they presented themselves, to apply what I was learned from the settlers who worked in good relationship with Indigenous people, as those are who I first met, and the Indigenous people who I met and from whom I learned. Even though I am not using all the aspects of Indigenous inquiry, I have worked to incorporate respect, reciprocity and relationality in my research approach and to use self-location in my interactions. I have attempted to give the people with whom I have done research enough context to understand me and I will attempt to do the same here as well.

I am a settler Canadian from the small farming based city in the prairies, Brandon,
Manitoba. My ancestors were all European, Ukraine, U.K., Germany and Mennonite, and were
part of the early colonization of Manitoba and northwester Ontario. I grew up in a happy,
Christian household with parents, siblings, and a grandparent. I had an interest in the
environment, food justice and other cultures that brought me, eventually, to this research. My
interests first brought me to spend three years in southern Africa. While I was there, through

³ Ithinewuk, also written Ithinew, means 'the people' and is the Cree word used to refer to Cree people (Neckoway, 2018; Tait, 2017)

spending time at a farming initiative in the Maphutseng valley in Lesotho, living and working with Basotho people, getting to know them, their language, their culture I realized how little I knew about the Indigenous people in the land I grew up in that we now call Canada. Through spending time working and living in the city of Pietermaritzburg, in the deeply racialized country of South Africa, my friendships with people from many ethnic groups, Zulu, Afrikaans, English, "Colored4", led me to see deep unconscious racism and made me reflexive of my unconscious assumptions about the Indigenous people in Manitoba where I grew up.

Those experiences led me back to Manitoba, back to a place of wanting more understanding, wanting to truly get to know the people who were in Manitoba long before my ancestors arrived. My passion for food justice, my growing skills in horticulture and a newfound interest in food sovereignty gave me the desire to understand food in the northern region of Manitoba and made me want to participate in research that would bring positive social change. All which led me to first be introduced to a garden in Leaf Rapids, from which all my other connections in northern Manitoba have been made.

⁴ This is a distinct cultural group in South Africa and this is how they identify themselves (Kamwangamalu, 2004).

3. GOALS OF FIVE FOOD INITIATIVES IN NORTHERN MANTIOBA

Abstract

Many skill building food initiatives have recently started in northern Manitoba in response to the ongoing food crisis and related health problems. Regional approaches that research the positive impacts of food initiatives are rare in academic literature. This research uses solution-oriented participatory action research to examine the purposes, goals and impacts of five food initiatives in five Cree (Ithinewuk) and Métis communities in northern Manitoba, O-Pipon-Na-Piwin Cree Nation, Leaf Rapids, Nisichawayasihk Cree Nation, Opaskwayak Cree Nation, and Misipawistik Cree Nation and Grand Rapids (counted as one community). The results are based on semistructured interviews, with funders and individuals working with the food initiatives, and researcher participation and actions. The food initiatives were found to have diverse activities and structures but similar goals. All initiatives had multiple goals that extended beyond food and physical health and affected multiple portions of society from the individual to the regional level. Goals were grouped into four themes: empowering food activities; improving health holistically; encouraging cultural reclamation; and mino pimatesewin (a Cree term for 'the good life'). These themes were reflected in diverse ways but all the initiatives empowered food activities, improved access to healthy foods and increased the ability of current and future generations to achieve mino pimatesewin. Currently, the attention of academics, funders and supporting organizations focuses primarily on the food production and health impacts of food initiatives but there should be attention to, and support for, all four themes identified in this research.

Keywords: cross-scale impacts, cultural reclamation, food initiatives, health and wellbeing, Indigenous food sovereignty

3.1 Introduction

Food is important for our bodies, our culture, and our communities and when our food systems are damaged, it can affect us at all these levels. In Northern Manitoba, there is a long-standing food crisis that is reflected in high food prices, the ubiquity of food-related diseases and the inability for people to access traditional foods they desire and foods that are culturally important (Haman et al., 2010; NFPPSC, 2003; Robidoux et al., 2012). An important report was commissioned by the Manitoba provincial government in 2003 on the causes and possible solutions to the food crisis, prompted by the high cost of food. The study was conducted by a group of government and non-government organizations (NFPPSC, 2003). The main provincial response to this report was to create a provincial initiative called Northern Healthy Foods Initiative (NHFI), which provides funding and support to many community-based food programs through partnerships with organizations throughout northern Manitoba (ANA, 2012).

The mainstream approach to address the food crisis in Manitoba and equivalent crises around the world has been to focus on food security. Food security is an attempt to make sure individuals in communities have access to food in order to address hunger (Schanbacher, 2010). As the concept has developed over time is has expanded to include additional elements, such as the important requirement for the food being provided be culturally appropriate and accessible in ways that communities desire (Napoli, 2011). Another related concept that has emerged more recently, and which also addresses such food crises, is Food Sovereignty. The term food sovereignty was first used by Via Campesina, an organization that began with peasant farmers in Brazil but which now has global membership (Grey & Patel, 2015). In contrast to food security, this approach works to address the underlying political and structural problems that limit food access and control over food systems and to promote food systems that are controlled by local

communities and that are ecologically sustainable (La Via Campesina, 2016). Food sovereignty does not have a standardized definition; however, the core principals are generally agreed upon, including the right for local determination of food systems, the importance of food for consumption over export and building ecologically sustainable systems (FSC, 2015; Grey & Patel, 2015; La Via Campesina, 2003). Indeed, part of the strength of the food sovereignty is that it does not have a standardized definition, which emphasises the importance of determination by local communities. This allows any definition to be based on local interpretations and for it to be applied in different ways by communities all over the world (Grey & Patel, 2015; Martens, 2015).

Indigenous Nations were self-sufficient and enjoyed sovereignty at all levels, including food sovereignty, prior to contact with European settlers. Through the colonization of Turtle Island, part of which we now call Canada, sovereignty was limited by actions such as supressing culture and language, drastically reducing food sources and forcing children to attend residential schools (Carter, 1990; M. S. Taylor, 2011; TRC, 2015b). Part of colonization also involved industrial resource extraction and intensive resource use in northern Canada, which had impacts such as forced relocation, degradation of the environment and destruction of the flora and fauna in the region (Aitchison, McKay, Norrie, & Van Eek, 2001; Waldram, 1993). Industrial development and resource extraction continue to occur in northern Manitoba, such as recent construction of the Wuskwatim and the ongoing construction of the Keeyask hydroelectric dams. Although the government now works, in theory at least, to get free and prior consent from Indigenous communities for these type of activities there continues to be impact on the natural environment and the communities themselves (Neckoway, 2018).

Language, culture, food, and way of life are all closely connected. Therefore, the colonial actions that destroyed culture, language and livelihood unsurprisingly also decimated Indigenous food systems. At times, food sources were a direct target of colonial activities, such as wiping out the buffalo across the prairies, and at times they were indirectly affected, such as the loss of language which impeded the passing on of knowledge including knowledge directly related to food procurement (Carter, 1990; M. S. Taylor, 2011; TRC, 2015b). There are neo-colonial influences that continue to undermine Indigenous food systems to this day, such the restriction of land management and harvesting in areas that have become designated parks or protected areas (N. J. Turner & Turner, 2008). The results of these influences on Indigenous communities represents a transition from a nutrient dense, culturally connected, active food system to a reliance on nutrient-poor food that is obtained through commercial interactions in stores that have low quality and high cost products. These foods, along with an increase in sedentary lifestyles, have caused devastating increases in obesity and obesity related diseases, including type 2 diabetes and heart conditions in Indigenous communities (Haman et al., 2010; Kuhnlein & Chan, 2000; Martin, 2011).

Food sovereignty works to address underlying political and structural barriers to communities controlling their own sustainable food system; however, there are many unique aspects in Indigenous communities that were not captured in the original conceptual approaches, so the term Indigenous food sovereignty has since emerged (Desmarais & Wittman, 2014). This term acknowledges the unique perspective and context Indigenous communities have in addressing food sovereignty. There is no standardize definition of Indigenous food sovereignty because it is meant to reflect the sovereignty of the different Indigenous Nations, which are diverse in nature, and therefore their expression of Indigenous food sovereignty will also be

diverse (Morrison, 2011). Although the term is new, many of the underlying concepts have existed for millennia, and are rooted in the practices and food culture of Indigenous Nations which date back to time immemorial (Morrison, 2011). There are four main components that Working Group Indigenous food sovereignty identified as essential: participation in food systems; self-determination of food and health; legislation and policy reforms; and the sacred or divine nature of food which makes the right to food sacred (Morrison, 2011).

These principals of Indigenous food sovereignty cannot be achieved without connection to the land and sovereignty over territories where food activities take place or changes to policies and legislation around these issues, which ultimately makes Indigenous food sovereignty a highly politicized concept that is strongly related to decolonization and the resurgence of traditional cultures (Grey and Patel, 2015; Simpson, Leanne in Martens, 2010, p. 63). However, the decolonization activities are not limited to traditional political activities of lobbying, protests and boycotts, the decolonizing aspect of Indigenous food sovereignty can LAO be seen in daily acts of resurgence (Corntassel, 2012; Daigle, 2017). Such daily acts choose to act the Indigenous responsibilities that are passed on from past generations rather than on human rights granted by colonial governments (Corntassel, 2012). These are actions that are reconnecting people to the land and culture, reclaiming the ways Indigenous people want their communities to be and throwing off the colonial influences that have brought their communities to unhealthy places. Acts such as growing the same type of corn that was traditionally grown in a homeland; harvesting the kwetlal (camas) plants, which eaten by past generations and cooking them in traditional ways; or learning to cultivate traditional kalo (taro) fields which have been unmanaged for over a century (Corntassel, 2012).

The majority of research about health and food in northern Manitoba, in Indigenous communities and even more broadly in northern Canada, has focused on the negative aspects and disparities between Indigenous and non-Indigenous communities, such as the prevalence of food insecurity, the negative health impacts of food, high food prices, etc. (Bhawra et al., 2015; Fieldhouse & Thompson, 2012; Slater et al., 2013). The main narratives that are told by the mainstream media about Indigenous communities across Canada also focus on such negative stories (Martens, 2015). This focus on challenges and disparities is highly problematic because it reduces an entire population to a single narrative that emphasises aspects that leads to racist responses, and in this way arguably perpetuates challenges rather than working to find solutions or address the root cause (Martens, 2015).

Recently, some researchers, especially from the Indigenous food sovereignty perspective, have started to focus on positive stories, solutions and on successes, however there is still relatively little research from this perspective. Some of the important research happening in the Prairies and in northern Manitoba highlights the stories of resilience and resurgence of food skills, cultural connections and food sovereignty (Kamal et al., 2015; Martens, 2015; Rudolph & McLachlan, 2013). This has been accompanied by an increasing number of Indigenous movements and awareness by settlers of the reality of life for Indigenous people in Canada (A. J. Barker, 2015; TRC, 2012).

In recent years, there has been a growing number of community food initiatives in northern Manitoba. These initiatives are teaching skills and giving people in many communities throughout the North opportunities to participate in gardening, gathering, hunting, fishing, trapping, raising animals, bee keeping, and food preparation (ANA, 2012; FMM, 2018; NMFCCC, 2017). They have been supported by a variety of different organizations, both non-

government and government including, Bayline Regional Roundtable, Food Matters Manitoba, Four Arrows Regional Health Authority, Frontier School Division (FSD), Northern Association of Community Councils and Northern Manitoba Food Culture and Community Collaborative (ANA, 2012; NMFCCC, 2017). These organizations have provided different types of funding, workshops and skill building opportunities in northern Manitoba. There have also been concerted efforts to work together with other organizations that have similar goals in similar locations, to create networks and to pool resources for offering workshops (NMFCCC, 2017).

Although there are numerous food initiatives there has been little regional research into their impacts. Anecdotally, the impacts are wide ranging and high in impact, and the programs are considered successful by the participants and leadership alike, but little is known about the positive impacts outside of the communities where they exist (NMFCCC, 2017). Initially the focus of this research was the impact that the food initiatives are having on food sovereignty in northern Manitoba. However, through an iterative research and analysis process that included visits, building relationships with people involved in the food initiatives, interviews and discussing the results with the people involved in the food initiatives, it was found that although there are impacts related to food sovereignty that was not the main focus of any of the food initiatives. They are all broadly focused on food security and food sovereignty but they also address other societal issues.

To get a better understanding of why these food initiatives exist, this chapter will broadly look at the multiple purposes of the food initiatives through examining their shared goals. The goals will be placed in four broad underlying themes that cover the type of impacts food initiatives want to have: empowering food activities; encouraging health holistically; increasing cultural reclamation; and the improving *mino pimatesewin*, which is Cree for the good life.

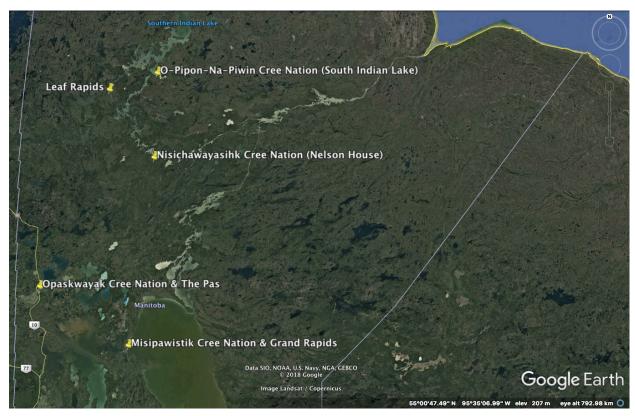
Following in the pathway of telling positive success stories, this research represents an opportunity to identify good news stories and share them in order to encourage the food initiatives from communities involved in this research and other food initiatives elsewhere in Canada. This chapter will look at each of the themes of goal in depth to determine examine the goals that contribute to each theme and why they are considered important by the food initiatives.

3.2 Methods

Research was primarily conducted using a participatory action research (PAR) methodology (Genat, 2009). PAR is a methodology used for social science research that is characterized by conducting research with participants, rather than on subjects; valuing the knowledge held by those participants; and the researcher taking an active role in working towards for positive social change (Genat, 2009). The methodology used in this research was also influenced by elements of Indigenous inquiry, which elements that are common to many of the diverse Indigenous research methodologies (Kovach, 2009). The main elements of Indigenous inquiry used during this research were self-location, and conducting research in a relational way with respect and reciprocity (Kovach, 2009; S. Wilson, 2008).

Qualitative methods were used to conduct research, including participation, actions and semi-structured interviews (Adler & Adler, 1998; Fontana & Frey, 1998; Genat, 2009). This research was conducted in northern Manitoba focusing on five food initiatives in five different communities (from north to south): O-Pipon-Na-Piwin Cree Nation (OPCN), Leaf Rapids, Nisichawayasihk Cree Nation (NCN), Opaskwayak Cree Nation (OCN), and the side by side communities of Misipawistik Cree Nation (MNC) and Grand Rapids that were treated as one community for the purposes of this research (fig. 2).

Figure 2: Location of participant communities



The food initiatives were selected utilizing a snowball sampling method, which is a way of selecting potential research participants through "natural and organic social networks" (Noy, 2008). With this method the connections and knowledge of participants are used to locate and access other potential participants (Noy, 2008). Sampling started with participants in Leaf Rapids that I connected with while participating in a gardening food initiative located in that community. The number of potential participants expanded as I was introduced to people running similar types of food initiatives in the region. From these connections five food initiatives were selected based on the interest of people in leadership and the relevance of the food initiative to the research. Where possible, I visited either the town administration office or the band council office to introduce myself and my research. When requested, I sent an outline of my research project to the band council or town council members by e-mail.

Once the semi-structured interviews were completed I used an emergent iterative data analysis (Srivastava & Hopwood, 2009) to analyze the data. This is a common method used to analyze qualitative data that allows themes and patterns to emerge through a reflexive, iterative process. Viewing the analysis as a reflexive process acknowledges that themes and patterns do not emerge on their own but through the perspective of the researcher and the ontology and epistemology they utilize (Srivastava & Hopwood, 2009). This research used the transcripts of the semi-structured interviews, researcher personal observations, and the reflections of the research participants to develop themes. I used the Dedoose software to assist with the initial analysis of the semi-structured interviews. When the initial analysis was completed and potential themes were identified research participants had opportunities to provide feed-back through in person visits, phone calls and e-mails.

3.2.1 Study area

This research was conducted in the five communities in northern Manitoba (fig. 2). All the communities are situated north of the 53rd parallel and accessible by all-weather roads and, where there is open water, a continuously operating ferry. There were four First Nations communities, OPCN, NCN, OCN and MCN, that are governed by a Chief and Council. Grand Rapids is a Métis community and Leaf Rapids was originally established to support a mine, both are governed by a mayor and council. All the First Nations communities involved in this research are Cree or Ithinewuk (also written as Ithinew). Ithinewuk means 'the people' and is the Cree word used to refer to Cree people (Neckoway, 2018; Tait, 2017). However, the term Cree will be used throughout this chapter as it was the word participants used most commonly during my visits and in interviews.

In each community, one food initiative was the focus of the research; however, some communities had multiple food initiatives running simultaneously. The food initiatives chosen were: Community Gardens in OCN (which is less commonly known as the Mino Pimatciwin Program which is a Cree term for 'good living'), the Grand Rapids school based gardening and food education in Grand Rapids and MCN, Grow North Boreal Gardening Project in Leaf Rapids, Ithinto Mechisowin (Cree for food from the land) Program in OPCN, and the Otetiskiwin Kiskinwahtowekamik School based gardening and food education in NCN (table 1). The commonality that connected all these food initiatives was a focus on teaching food skills and providing opportunities for individuals to engage in food activities and to use those skills to obtain food.

Community Gardens: This food initiative in OCN stated from one garden but grew to five gardens spread throughout the community. This was a grassroots initiative that was started by community members to address health concerns, such as diabetes. There was an emphasis on getting people physically active and participating in the gardens. They encouraged whole families to work in the gardens together and taught everyone gardening and cooking skills.

Grand Rapids school based initiative: This initiative was run out of the local school, which is part of the FSD and was attended by students from MCN and Grand Rapids. They grew plants indoors, in plots outside their school and they were working on starting a greenhouse on the school grounds. Some of the school staff involved in the food initiative taught cooking and preserving skills, with produce from the gardens, to students and their families in non-school hours. They also provided gardening boxes for students to use home with their families during the summer. In addition to the horticulture activities Grand Rapids school also ran regular culture camps which included opportunities for learning about and participating in medicine

Table 1: Food initiatives, supporting organizations, and their characteristics

Food Initiative	Location	Year started	Main purposes	Food activities
Community Gardens (Mino Pimatciwin Program)	Opaskwayak Cree Nation (OCN)	2013	Address health concerns including diabetes, community healing, technical training	Multiple gardens, cooking workshops
Grand Rapids school based initiative	Misipawistik Cree Nation & Grand Rapids	2009	Improving the health of students, cultural teaching, increasing access to healthy food	School and home gardens, indoor growing, cooking workshops, medicine picking
Grow North Boreal Gardening Project	Leaf Rapids	2008	Training leaders, developing northern crops, advanced technical training	Garden, greenhouses, indoor growing facilities, horticultural workshops
Ithinto Mechisowin (Cree for food from the land) Program	O-Pipon-Na- Piwin Cree Nation	2012	Reconnecting people with the land, culture, providing country foods to community members in need, and increasing Indigenous food sovereignty	Fishing, trapping, berry & medicine harvesting, hunting, gardening, cooking workshops
Otetiskiwin Kiskinwahtowekamik School based initiative	Nisichawayasihk Cree Nation	2015	Improving the health of students, cultural teaching, increasing access to healthy food	School and home gardens, medicine picking
Supporting Organization				
Frontier School Division horticulture programs (Area 1)	Thompson office	2006	Support using horticulture to enhance learning opportunities in their schools	Gardens, indoor growing, greenhouses
Northern Healthy Foods Initiative	Thompson office	2004	Support food initiatives through funding and networking	Gardening, bee keeping, poultry
Northern Manitoba Food Culture and Community Collaborative	Winnipeg office	2013	Supports initiatives that strengthen the community through food, culture and community programs	Fishing, trapping, berry & medicine harvesting, hunting, gardening, greenhouses, poultry, cooking workshops

picking.

Grow North Boreal Gardening Project: This initiative was a regional program, housed within the Frontier School Division (FSD), that researched the best growing techniques for the Boreal region and shared the knowledge with people leading food initiatives through workshops and visits. The original focus was to assist food initiatives based in the FSD schools but they expanded their scope to support any horticultural food initiative in the region that asked for assistance. They ran a large outdoor garden and two greenhouses for research and demonstration purposes. They also had indoor growing areas that were used for teaching and demonstration.

Ithinto Mechisowin Program: The focus of this initiative was revitalizing country foods in their community. They gave students from the local school, Oscar Blackburn which is part of the FSD, the opportunity to participate in country food activities such as, fishing, trapping, hunting, berry and medicine harvesting and the preparation of these food. They also taught gardening skills and grew a small garden. Another part of their program was to provide country foods for Elders, single mothers and other people in their community with limited abilities to obtain these foods for themselves and their families.

Otetiskiwin Kiskinwamahtowekamik School based initiative: In NCN this food initiative was based in Otetiskiwin Kiskinwamahtowekamik, the local First Nations run elementary school. There was education in classes about nutrition and healthy foods as well as opportunities for students to learn practical horticulture skills. They started plants indoors, had an outdoor growing area in the school courtyard and some students had home gardens. They worked closely with Elder Fred Hart who assisted with the school garden, students home gardens and made his home gardens available to demonstrate his gardening techniques. He also taught about natural medicines and took students medicine picking.

There were interviews with individuals from three organizations that support food initiatives in northern Manitoba: Northern Healthy Foods Initiative (NHFI), the Northern Manitoba Food Culture and Community Collaborative (NMFCCC) and the Frontier School Division (FSD) (table 1).

Frontier School Division (FSD): They actively promoted gardening in Area 1, one of five sections of FSD, starting in 2006 when they introduced curriculum that used horticulture to enhance learning (FSD, n.d.; Manitoba Chamber of Commerce, 2010; NMFCCC, 2018). In order to encourage the use of horticulture in the classroom and support existing programs a regional gardening coordinator was hired in 2008. The regional coordinator and local students started the Grow North Boreal Gardening Project in Leaf Rapids (A. Kamal, personal communication, April 15, 2016), which is one of the food initiatives involved in the research (table 1).

Northern Healthy Foods Initiative (NHFI): This organization was created by the Manitoba provincial government in 2004 to support community-led projects throughout northern Manitoba that were increasing the capacity of people to be self-sufficient in their food needs (ANA, 2012). There was an initial focus on gardening projects but now NHFI supports a variety of food activities including, greenhouses, poultry programs and bee keeping (Indigenous and Northern Relations, n.d.; Northern Association of Community Councils, 2018). NHFI provided financial and networking support through partnerships with government and non-government organizations, including Frontier School Division (Indigenous and Northern Relations, n.d.).

Northern Manitoba Food Cultures and Community Collaborative (NMFCCC): This organization formed in 2013 to support community based projects throughout northern Manitoba that were working to strengthen their community through food, cultural activities. They funded

projects with money that came from a group of philanthropic organizations that combined their efforts to better support community work in northern Manitoba. They worked in a ways that allowed communities to define their own success and to learn from the challenges and successes of other projects (NMFCCC, n.d.).

3.2.1 Participation and Actions

The results are supported by observation, participation and actions that I undertook throughout the research process. I had the opportunity to observe food initiatives and build relationships while I volunteered in Leaf Rapids, visited the communities involved in this research, and co-planned and co-facilitated horticultural workshops in Leaf Rapids in 2016 and 2017. I also had informal conversations, attended planning meetings and put on events with people from many of the organizations involved in food work in northern Manitoba, including, FSD, NHFI, Food Matters Manitoba, NMFCCC, Bayline Regional Roundtable, and Four Arrows Regional Health Authority.

I volunteered with the Grown North Boreal Gardening Project in Leaf Rapids for two weeks in 2014 before I even started my research in order to determine if this type of research would be a good fit for me. I then volunteered with the same project for two months in 2015. In addition, I was involved in hands-on action projects in Leaf Rapids over the course of the research in the form of virtual and in-person workshops. The virtual workshops were available through the FSD website to any interested schools. The in-person workshops were planned around the growing season and invited leaders from horticultural initiatives throughout the northern part of the FSD and from the five participating food initiatives.

I visited all the communities where the food initiatives that participated in the research were located at least twice while building relationships, conducting interviews and getting

feedback on my initial analysis of the results. I took an initial trip to visit communities with food initiatives that could potentially participate in the research, several trips to do in community interviews and another trip to visit and get feedback on my initial analysis of the interviews.

3.2.2 Semi-Structured Interviews

In addition to participation and actions, the results are also based on semi-structured interviews that were conducted with 18 individuals, 15 individuals from the five communities where the food initiatives were located and three individuals that oversaw multiple food initiatives or that provided funding (table 2). Interviews with as many individuals as possible, were conducted in person (15 out of 18) and in each individual's home community (10 out of 18). Phone interviews were only used with three individuals that oversaw multiple initiatives or individuals that I already had extensive relationships with (table 2). All the interviews were one-on-one, except co-interviewing Peggy and Elder Stan Wilson, as well as Kimberly Izzard and Annie Ballantyne. In both cases these were done with two individuals because they were traveling together outside of their home communities, had a short window when they were both available for the interview, and they worked together closely in their respective food initiatives.

The semi-structured interviews included questions about successes, challenges, barriers, and changes over time in the participants community or the communities they worked with and in their food initiative or organization. The questions about success allowed participants to define what they thought success meant in their own context. The word success can be problematic because definitions of success are often imposed by funders or government bodies that ask for that numerically quantifiable proof of success (ANA, 2012). However, because success is a term that is commonly used with imposed definitions it was utilized during the semi-

Table 2: Food initiatives, list of participants and method of interview

Food Initiative	Participant	Role in Community/Initiative	Method of interview
Community Gardens	Mable Bignell	Elder, community garden participant	In person in OCN
	Noreen Singh	Finance manager of Cree Nation Tribal Health Centre and community garden leader	In person in OCN
	Peggy Wilson	Retired teacher, founder and leader of community garden	In person in Winnipeg
	Stan Wilson	Elder & retired university professor, founder and leader of community garden	In person in Winnipeg
	Teresa de Hoop	Educator in The Pas School and community garden participant	In person in OCN
Grand Rapids school based initiative	Annie Ballantyne	Principal of Grand Rapids School, Community Food Champion	In person in Leaf Rapids
	Kimberly Izzard	Guidance Counsellor at Grand Rapids School, Community Food Champion	In person in Leaf Rapids
Grow North Boreal	Chuck Stensgard	Regional Gardening Coordinator	By telephone
Gardening Project	Susan Horodecki	Community Food Champion	In person in Leaf Rapids
	Brian Trewin	Assistant Leader in Grow North Boreal	In person in Leaf Rapids
		Horticultural Program	
	Chris Brayley	Assistant Leader in Grow North Boreal Horticultural Program	In person in Leaf Rapids
Ithinto Mechisowin (Cree for food from the land) Program	Rene Linklater	Director of Tommy Thomas Health Centre and Ithinto Mechisowin committee member	In person in OPCN
	Shirley Ducharme	Vice Principal of Oscar Blackburn School, IMP committee member and band councillor	In person in OPCN
Otetiskiwin	Fred Hart	Elder, Gardening advisor	In person in NCN
Kiskinwahtowekamik	Nadine Yetman	Educator and School Administrator and School	In person in NCN
School based initiative		gardening leader	
Supporting Organization		Role in Organization	
FSD	Don McCaskill	Superintendent of Area 1 FSD	By telephone
NHFI	Jennell Majeran	Manager of NHFI	By telephone
NMFCCC	Julie Price	Coordinator of NMFCCC	In person in vehicle

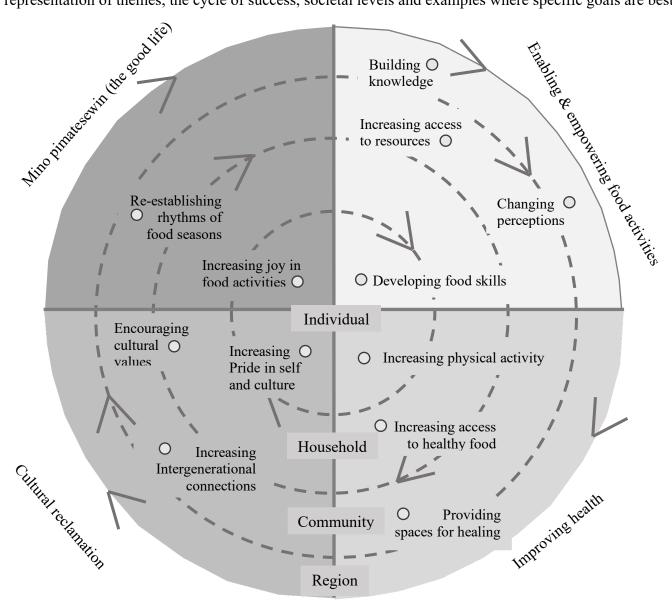
structured interviews in order to give participants an opportunity to re-define what success meant for themselves and to allow aspects of the food initiatives that were important to participants to emerge.

All the interviews were transcribed and the transcript were sent to the participants to verify accuracy and give the opportunity to remove any comments they did not want included in the research. I transcribed six interviews myself and had the rest transcribed professionally.

3.3 Results

When visiting communities and learning about their different food initiatives, it emerged that the initiatives had many different functions and not all of them were directly related to food production or food harvesting. These multiple functions were also articulated during the interviews and it became clear that many of these functions were intended outcomes and therefore could be appropriately viewed as goals. Although there were numerous goals for every food initiative, it was possible to group them into four main themes: food activities, health, cultural reclamation and the concept of *mino pimatesewin*, which is Cree for the good life. These themes operated simultaneously at different societal levels, in individuals, households, the wider community and even the region. Each theme was not independent, rather they were all connected such that the success of any one theme in turn contributed to the success of the next theme. One way to conceptualize the relationship among the different goals and themes of the food initiatives is presented in figure 3. All the themes of goals are placed in a circle and each theme leads to the next and the last theme leads back to the first so that it becomes a circle without a beginning or an end. All the themes operate at multiple societal levels, which are represented by the inner circles. The societal levels are separated into different circles but they all occur within larger one circle because they are not independent elements. Each component is

Figure 3: Visual representation of themes, the cycle of success, societal levels and examples where specific goals are best represented



part of the whole and connected to the other parts, for example individuals are not independent of their community instead communities and individuals influence each other. For example, the strengths and challenges of the community influence the barriers and opportunities for each individual. There are examples of specific goals placed in the circle according to which theme and societal level they fit best. All these goals will be discussed in the following sections which are based on the themes, starting with food activities and continuing in a clockwise manner.

3.3.1 Food Activities

The food activities theme encompasses the goals that are directly related to empowering and enabling food activities. This includes the goals that are related to the knowledge and skills necessary for food activities and the goals related to gaining access to the spaces and equipment necessary for food activities. There was great variety in the activities that were undertaken to achieve these goals, such as starting a community garden, researching new crop varieties, or teaching hunting skills to youth. These goals were easily identified by most initiatives because they were the kinds of pragmatic activities that most funders were interested in supporting and indeed were generally the original reason the programs started. Even as programs evolved and additional goals were added, the initial goals often continued to be central to the initiatives, in part because they were of key interest to outside funders. Some of the food activity goals included in this theme are developing practical food skills, building knowledge, increasing access to the resources necessary for food activities and changing perceptions (fig. 3).

Every initiative worked with groups of people that never had or that had lost their food skills. Therefore, transferring knowledge and building skills were important goals. As Brian Trewin, from Leaf Rapids, said, "From my perspective...the gardening program helps to raise awareness of gardening or horticulture and just help[s] to give different generations some kind

of skills in developing their own gardens or having at least some idea of it." Similarly, all the other initiatives also focused on building skills and increasing knowledge related to the food activities that were part of their programs.

Importantly, each initiative defined for itself which foods they considered to be important for their community and therefore which types of food activities they wanted to focus on. The main types of foods that initiatives focused on were vegetables, fruits and foods from the land, also known as country foods. The vegetables and fruits were grown in gardens or greenhouses, and included carrots, tomatoes, strawberries and rhubarb. The foods from the land were hunted, trapped, gathered or fished, and included moose, rabbits, berries and whitefish. Although each program decided which type of food to focus on both gardens and foods from the land were considered to be important. Therefore, most initiatives began with a focus on gardening or foods from the land but they had already expanded into the other or were planning on doing so.

One of the things that I really like and I'm still trying to promote is the gardening. When we had a committee meeting ... we were talking about our program and what's our strengths. We identified our traditional hunting and that is really strong still, but gardening is one of the things that I told our committee, is still weak. ... So that's one of the things that I'd like to see grow because I know going back when we were living across [the lake] my grandfather had gardens, and my goodness, I just remember going and trying to steal some strawberries from his garden, everything was so rich, just good growth. (Shirley Ducharme, OPCN)

All the knowledge about food activities was taught through the hands-on teaching of practical skills. It was important for the food initiatives that the knowledge and skills taught

were not just theoretical. Skills were gained through a combination of teaching and practicing. As Chris Brayley explained, when he started to learn about gardening through the Grow North initiative he learnt by getting involved, "At the beginning a small handful of us helping out...it helped me kind of develop the garden in my own way and learn gardening in a hands-on way." In order to teach in this way, the initiatives needed the resources and spaces necessary for food production, harvest and preparation. However, in most communities these were not readily available, so increasing access to resources became another important goal. A few examples of how this happened included developing spaces for community gardens, lending out tillers for people to create their own gardens, and providing money for the gas that was needed to go out hunting.

Another aspect of enabling and empowering food activities that was important to many food initiatives was perceptions about what type of activities were actually possible in the region. Perceptions were important because the belief that food activities were not possible in a certain area or community could stop people from starting or joining a food initiative. One way of changing such perceptions included demonstrating what food activities were possible.

[W]hen you live up here in the north where it's cold, we've got sometimes seven, eight months of winter - cold weather anyway, ... for a lot of people even to see that you can grow anything is a success. (Susan Horodecki, Leaf Rapids)

For some food initiatives, changing perceptions and inspiring new programs became an outcome but for others this was an important underlying goal from the beginning.

People interested in food initiatives found that simply knowing about or observing other relevant initiatives in northern or Indigenous communities, even if the initiatives did not face the same obstacles and challenges, was often inspiring. This kind of excitement was experienced by

the principal of Grand Rapids School, Annie Ballantyne, when Chuck Stensgard, the Regional Gardening Coordinator for Frontier School Division, visited her community.

It started when Chuck came to our community, would of been 2009, and he fed all of our students' vegetables and fruit. And then he showed them how they could grow their own vegetables and fruit. And that got a lot of kids interested, got teachers interested and they started doing more, like they were making the grow boxes and putting them in the hallway or putting them in the classroom. (Annie Ballantyne, Grand Rapids and MCN)

The act of sharing the knowledge that had been learnt through a food initiative with people from other communities also became inspiring for some. This happened with the Ithinto Mechisowin Program when they began to share their story with Indigenous people across Manitoba, the Yukon, and elsewhere around the world, such as New Zealand.

I think one of the things they're starting to understand about their program is actually how inspirational they are to other communities. In June, we did the Country foods program learning exchange in South Indian [Lake]. It was eight communities that gathered there for four days, talking all about country foods. And following up with them [Ithinto Mechisowin Program] afterwards, it was really neat to hear how a group of visitors coming to learn about their program ... it helped the community themselves understand how awesome what they're doing actually is. (Julie Price, NMFCCC)

3.3.2 Health

This theme includes goals related to physical health of individuals, which is one of the most common associations between health and food initiative from a settler perspective, and it

also includes goals related to other types of health, such as mental and spiritual wellbeing at different societal levels including the health of families and communities. Each food initiative reflected goals in this theme, often multiple ones depending on which aspects of health they focused on. This subsection will highlight three goals that were common to many of the initiatives: increased access to healthy food, increased physical activity, and providing spaces for healing. One goal that was only seen in two food initiatives, creating economic opportunities, will also be examined because it shows a unique view of health.

The most obvious connection between food initiatives and physical health is the goal of making healthy food more accessible to community members. When the goals in the previous theme, empowering and enabling food activities, were successful they made it possible to increase the availability of healthy food in the community (fig 3). The goal of making food available was so central to the purpose of the initiatives that some participants saw it as self-evident. For example, when talking to Elder Mabel Bignell, as we were sitting in the community garden at OCN, I naïvely asked "What parts would you consider the successes of the garden?" And Elder Mable responded while laughing, "What do you mean which part? It looks like a success all over." She was referring to the garden that was still full of plants and where everyone had participated in a large harvest of vegetables the previous weekend. For her, growing vegetables in the garden, "it's really good when you eat from the garden, there's nothing bad", was the obvious success of the program.

Another aspect of increasing physical health that was important for many food initiatives was increasing levels of exercise by becoming involved in food activities; this was viewed as complementary to increasing access to healthy food. Peggy Wilson, from OCN, emphasized the connection when she said "... Yeah, it's a cyclical thing too because if you don't eat properly you

don't have the energy to do those kind of things and it becomes a self-fulfilling prophecy." In their community gardening initiative at OCN, they freely shared the produce with anyone who participated in the gardening rather than giving it away, in part because it encouraged people to come out and be physically activity in the gardens.

Increasing physical health was also a central part of many food initiatives because there was concern over the high rate of diabetes and its impacts on people. Although other general health concerns were raised, diabetes was the only one specifically mentioned by name that could be improved by the food initiatives because of increased physical activity and healthier eating.

The trick is to get people to understand the connection between what they eat and the physical activity, that...they create their own disease. And they don't seem to understand that because it's all for convenience. Because other people have said 'Why are you doing all this work? just go to the store and pick up whatever you want.' We tried to explain to them, you don't know when you're buying the produce from the store the condition that they were grown in. (Elder Stan Wilson, OCN)

Being out on the land and working with plants was considered by many participants to be places where healing could take place. For some initiatives, providing spaces where healing could occur was worked into the structure of how they operated because it was seen as essential for the health and wellbeing of the individuals they were working with.

Kim: They [students and plants] need water, they need sun, they need love.

Annie: And for our kids who aren't getting that they could benefit from the experience of looking after [plants]. I was just telling [Kim] when I phoned

home today there was a little boy who was sent to the office at 9:30 in the morning. And I said, you know what, he would benefit from looking after plants in the morning. And having that time. Because things are happening at home right and he needs to find a place to look after himself. (Kim Izzard and Annie Ballantyne, Grand Rapids and MCN)

The food initiatives also had the potential to become a healing place for households, families and even entire communities through people coming together to participate in food-related activities, to share knowledge and to build relationships. When participants from the food initiative in OCN were asked to describe how they would know they were successful during a conversation with Julie Price they said they would know they were successful,

if they have whole families coming to the garden because what they are doing is so much, it's about cultural reclamation, but it's about family healing. And they see that raising this very high quality healthy, ...produce... it's about rebuilding their families as much as it's about getting healthy foods.

Increased economic opportunities were not regularly considered part of increasing the health of individuals, however there was a connection to community health for some initiatives. Economic opportunities can strengthen communities by affects such as increasing a household's ability to care for itself and for others. In many of the researched communities, there were strong local economies and societal connections in the past, ones that had since been undermined by colonization. This has materialized in unemployment numbers for northern communities that are almost 5 times those of the rest of Manitoba (Statistics Canada, 2018). For all these reasons, some food initiative leaders viewed providing economic opportunities as an important part of their programs. Some of the different ways initiatives had created economic opportunities

included hiring program coordinators, hiring temporary workers during busy months and using programs as an opportunity to teach skills that were transferable to employment in other fields. For example, in Grand Rapids, they received a grant to expand their program by building a greenhouse and attempted to use the expansion to also provide such economic opportunities,

Kim: Well I'm just pretty psyched about this greenhouse and it's almost kind of scary cause you want it to really be successful and you want to do it right...look at employment and training and see if we can actually create...

Annie: some jobs

Kim: you know two half time position, either that or something else (Kim Izzard and Annie Ballantyne, Grand Rapids and MCN)

Although it was not occurring in any of the initiatives, there were also ideas to use the skills and produced food to create small business opportunities. The profit would then go towards sustaining the initiatives or be used by individuals to support themselves,

I'm hoping that they see that maybe they can create a niche market with the strawberries they grow. You get two or three people growing together maybe you don't sell the strawberries bulk in Thompson; maybe you make jam and sell the jams. You can sell them locally or otherwise. (Chuck Stensgard, Leaf Rapids)

The themes are all closely related and, in many ways, intertwined, especially the goals of enabling food activities and improving health. The connection between the goals can be seen in reflections on what were important goals for the Community Gardens,

the education component...that's really valuable, what you can learn from Peggy and Stan, other gardeners that have more experience. And then you can also notice that, people are trying to eat healthier because they're in the garden now, they're participating in there, so they, they're thinking about vegetables and stuff like that for their meals... it would be good for diabetes prevention, so that's what we have tried to do with the gardening is to do that, the diabetes prevention, because we have high diabetes in the North. So, I think just trying to advocate that this is a good way because it's moderate activity, you know, you get [a] good harvest out of it and you're learning, so it gets a lot of components for you going, so I think that's been the biggest success for it, is that people are learning, starting to get interested and meaning that, it's really helping. (Noreen Singh, OCN)

Noreen's comments demonstrate that although each category can be seen as distinct they can also be seen as connected in a cycle, that by increasing food activities there is an increase of health at all the societal levels.

While some participants saw learning as the most central goal, others emphasized increasing physical health or availability of food. All the components were important for all the initiatives; however, the area of most importance was often connected to the role the participant had in the initiative or in the community. For example,

Some of the positive things that I've seen are, people are coming out to socialize, people are exchanging ideas and ways of harvesting, people are sharing various land based areas where they can harvest food. People are losing weight, people are becoming generally healthy, people are coming together at various gatherings and basically showcasing what they've grown... Generally, people are coming together socializing, talking about what they've harvested.

And the overall benefit I think is people are becoming more conscious of their health. (Rene Linklater, OPCN)

Rene was the Director of the Health Complex in OPCN and his comments emphasised health, perhaps because of his career.

3.3.3 Cultural reclamation

The food initiatives involved in this research reflected many goals that revolved around social connections and culture because these concepts were closely connected to food and were of key importance to these communities. These are grouped into a cultural reclamation theme because they all supported various aspects of cultural resurgence and cultural reclamation. Food is an important part of culture and it is especially important in Indigenous communities because food is considered sacred (Morrison, 2011). Consequently, the colonial impacts of making foods that are part of Indigenous food systems inaccessible have, and continue to, negatively affect culture and, in turn, colonial impacts that undermine cultural practices negatively affect food systems, thus creating a negative feedback loop where a decrease in control over food creates a decrease in cultural practices and then food. Since these are all interconnected, control over food activities needs to increase in order for cultural reclamation to happen.

A lot of the communities we work with ... talk about healing and reclamation, reclamation of self and culture as being some of the most important reasons why they do the work that they're doing, that most of us would look at as food work or CED [Community Economic Development] work, and they're talking about healing and cultural reclamation. (Julie Price, NMFCCC)

The connection between food activities and cultural practices can be seen in this description of hunting and gardening practices,

Well, whenever somebody kills something like ducks, geese, moose, caribou, they share it. That's always been that way. And the people that grow gardens they share it. Fortunately, we're getting more and more gardeners every year putting in a garden, because I really like this. They always mention that at one time everybody had a garden. Absolutely everybody. You couldn't have a house without a garden. (Elder Fred Hart, NCN)

Obtaining food through hunting or gardening was not an individualized activity in the past, instead foods were shared with people in the household and within the rest of the community. This type of sharing is an important cultural practice. Elder Fred was excited that the number of gardens were expanding in the community because this was an important way that people in NCN sustained themselves in the past and saw that through growing and sharing food cultural principals could be practiced.

Another way that most initiatives were working to promote cultural reclamation was by creating spaces for intergenerational connections between Elders and youth. "I think there's a lot of this craving for intergenerational knowledge transfer and I think that's happening in lots of different places..." (Julie Price, NMFCCC). The knowledge that Elders had was wide ranging and applicable to all aspects of life, including food. These connections were a way for Elders to transfer knowledge about food activities but they were also about sharing language, protocols and ceremonies around food and in this way connections between Elders and youth were important for rebuilding and reclaiming culture.

The Elders have always had a prominent place in the community but I think that since they've become more active, they've had more of a voice...They're contributing to the community. They're seen as keepers of knowledge. So, we

go to them for protocols and we also ensure that they're recognized for their contributions to the community. (Rene Linklater, OPCN)

Another important aspect of this intergenerational connection was the youth in the community. The focus was on transferring knowledge to the youth, and not the middle generations,

The fact that people are recognizing the knowledge that Elders have... it's become part of the programming now... Partners are seeking out the Elders in the communities that have the skill to share and this knowledge that they want to share and especially with the youth...And these Elders that have this experience from the way they came into the world and the way they lived, those folks are starting to pass away and so it's important that they continue to share their knowledge. (Jennell Majeran, NHFI)

Another goal of the food initiatives, as reflected by cultural reclamation, was encouraging participants to have pride in their culture and to have confidence in one's self. This was happening through all the initiatives in different ways, and in some initiatives, it had even become an important part of how the initiative operated.

So, I've seen the development too, of a lot of people wanting to go out and hunt and bring in the wild meat to the program. Because the ones that have the outfits, like the snowmobile and boats and motors, they're more than willing because they know that, they want to help in providing for the Elders and for the people that are unable to do the hunt for themselves. So, it's an honor to do that, I guess, and I've seen that change, especially those ones that really enjoy doing that - there's a lot of pride. So, I see a lot of pride for those people

that are able to hunt and bring in the meat to the program. (Shirley Ducharme, OPCN)

Having activities that allowed people to feel pride in what they were doing was also important for the initiatives because it could influence whether the community wanted to support or be involved in an initiative. In OPCN, there are negative associations with food banks and people were originally hesitant to access the Ithinto Mechisowin program because they thought it was the same as a foodbank. However, by showing the community the value in the program and the way that is could encourage pride in their culture and themselves, the community became widely supportive of the initiative.

It was not only foods from the land initiatives that were developing pride in people and encouraging important cultural values, gardening-based initiatives also encouraged cultural reclamation, even if growing food in this way was not a part of the culture prior to contact.

Gardening, which can also be called cultivation, was seen as an activity that could affect participants minds and spirits.

What you practice will influence the way that you are. If you are practicing land-based cultivation then it will influence the person you are at that moment. It definitely cultivates a different mind – your thinking mind, your heart mind, your body mind, your spirit mind. The practices that you do will influence each of those minds. (Brian Trewin, Leaf Rapids)

In the school based food initiative in Grand Rapids, where the focus was mainly on gardening and food preparation, they were also seeing self-confidence and cultural values increase,

Really, it's when you see people who are so happy and excited that they've done something, that they made something, it's just, they get a glow to them. And a lot of them were really intimidated by this whole canning and preserving, they thought it was this big process. And it was like 'wow! I didn't know, I'm going to show my sister or my auntie how to do this' ... people were so proud that they didn't just hang onto it and say, 'this is for me'. They were giving it away for gifts, they were Christmas presents, they were Birthday presents and to me that says a lot. That's one thing that's really been lost, that generosity. (Kim Izzard, Grand Rapids and MCN)

This activity, which was at first glance teaching people how to preserve the food that was being grown in the gardens, was also encouraging community connections and the important cultural values of sharing and generosity. Encouraging cultural values was another goal found in many of the initiatives.

Sharing knowledge about medicinal plants, including ways to harvest and use medicines respectfully, was another goal that facilitated cultural reclamation. Medicines were not a focus of any of the original interview questions. However, leaders from several different initiatives, all Indigenous women, expressed the importance of bringing medicine into their food initiatives.

Well just more about our traditional medicines, how we can go harvest, you know go pick them, stuff like that. I think if we can get elders to show our youth more ways to get our traditional medicines... just learning more about our medicine, our natural medicines is something else I'm very interested in. And that's kind of a step I want to go towards. Because we're covering a lot of food sovereignty but now I want to go further and do the medicine so that's why I'm

putting that medicine wheel in our courtyard, to show the four sacred medicines of our culture. And you know we need to learn how to pick them, how to respect them and use them, how to use them respectfully. So that's my next step. (Nadine Yetman, NCN)

Nadine's comment demonstrates the close connection between food and medicine as reflected by a holistic worldview. As I came to learn through observations and interviews, food and medicine are not always seen as two separate entities.

3.3.4 Mino pimatesewin

All the initiatives had goals that viewed people as holistic and their needs as extending far beyond food. Their physical, emotional, spiritual health and overall wellbeing were all things that were considered by different aspects of the initiatives. These goals and themes were connected to each other, such that the success of the goals in one theme increased the success of the goals in the next theme in a cyclical way. The final theme that all of these initiatives gave rise to was not food skills or even food sovereignty but rather a better life for individuals and communities, in the present and into the future. In Cree the term *mino pimatesewin* means 'a good way of life', and this is what all the initiatives were trying to accomplish in their own way. As Elder Mable Bignell said, "I really like to see them develop themselves into being good, they call it good mino pimatesewin, a good way of life. That's what we what we like to stress to our young people in our community."

There were different ways the food initiatives were accomplishing this theme, but they all wanted to improve the lives of people in their community, especially for their youth and for future generations.

So, I guess I could say, a really common thread to all of them, is that they feel they're being successful if they feel they are making the world, or their community, or their life, a better place for children and future children coming into it. That would be the common thing that people would talk about as a way of knowing if they're successful, is like the impact that they feel like they're having on current youth populations and future generations. (Julie Price, NMFCCC)

One example of a goal in this theme is the increased excitement and joy that arises from participating in the food system (fig. 3). Increasing pride in culture and self-confidence, could lead to a growth in excitement and joy in food and is an example of how cultural reclamation could lead to *mino pimatesewin* for individuals, families and communities. Increasing excitement and joy could be viewed as an outcome instead of a goal, however some participants expressed that increasing participation in the initiatives was a goal in and of itself,

We define success in terms of participation. So, are our programs actually up and running or do they kind of fall to the wayside? So, if a program is running and students, in our case students and teachers are delivering and participating, then I would say they're successful. If they're celebrating their successes through things like harvests and that kind of stuff, then I would say they're successful. (Don McCaskill, FSD)

For most initiatives, the joy and excitement that came from producing one's own food and getting involved with one's food system was a demonstration of how becoming involved with food activities could increase overall wellbeing and increase *mino pimatesewin*, not just physical health.

In the town of The Pas, where I teach, I had a little environmental group called the "Bee Team" and we did a lot of gardening ... I love doing that because the kids don't know much [about gardening] and most kids find it so rewarding when they see that little seed, we plant start growing. They are so excited to take it home. One student, who just moved to Canada from India, was absolutely shaking because as he was so excited and had never done anything like that before. (Teresa de Hoop, OCN)

Increased excitement and joy in participating in food activities was encouraged by all the initiatives and led to further interest and continuation of food activities. This shows how each theme of goals leads to the next and in particular the theme of *mino pimatesewin* in turn gave rise back to the initial theme of empowering and enabling food activities, at once completing the circle and starting the cycle again.

Reconnecting people with the rhythm of seasonal food activities (fig. 3) and helping them to experience the rhythm personally is something that some food initiative leaders talked about and it was an implicit goal of some of the initiatives.

When you think of spring you're already thinking 'oh the first goose is so tasty' [Laughter] and stuff like that. And then the jams too, for each season you're craving and looking forward to having the fresh berries and everything. So I don't know if I'd call that a growth because it's instilled in you, like what you were brought up with, the kinds of food, and if you don't have it you're missing something and then when it season its time, 'oh I just can't wait to have those blueberries and stuff like that. (Shirley Ducharme, OPCN)

For Shirley these activities were a natural part of the rhythm of her life. The desire for other people to experience these rhythms as well fits within the theme of *mino pimatesewin* because they are part of the good life for Food Champions in OPCN and many other communities involved in this research.

3.4 Discussion

The term success can be problematic because it has been used by researchers, funders and government organizations in ways that have been negative for Indigenous communities. Such as, using the definitions of success to highlight disparities between Indigenous and settler communities or to emphasize that Indigenous individuals do not meet the measures of success put forth by government institutions (Herbert, 2003, p. 257-260). Strength based approaches are one way that many health researchers are working with communities to allow the people to describe what is working well for their community, or what are the strength of their community, without imposing definitions of success (Paraschak & Thompson, 2014) Some non-government organizations are also moving away from using the term 'success' with community led projects because it is so value laden and instead asking people 'why and how is your project important?' (J. Price, personal communication, March 12, 2019). In this research the term success has been used throughout the semi-structured interviews, the analysis and this written thesis. However, I attempted to use it in a way that attempted to acknowledge that success is a value laden term and to allow participant to re-define what they considered success.

During the interviews both the term success and the phrase 'what are positive things that happening in your community/the communities you work with' were used in the questions. Some of the participants asked questions such as, 'What does success mean?' to which I encouraged them to define what it meant to them. These questions show that participants were used to

having others define what is meant by success. Additionally, all of the participants were encouraged to describe what they consider successful about their program regardless of what other people or organizations considered successful. Allowing participants to define what made their initiative successful and what outcomes their food initiatives were accomplishing allowed multiple goals to emerge for each initiative and eventually the four different themes.

All the food initiatives that were examined through this research had multiple goals, some related to food and others related to health, culture and creating a better life for people.

Similarly, many gardening food initiatives throughout North America and Europe were found to have multiple goals or multiple functions some of which were directly related to food and health with others related to social functions (Corrigan, 2011; Drake & Lawson, 2015; Hazzard, Moreno, Beall, & Zidenberg-Cherr, 2011). A study of people participating in community gardens in Paris and Montreal found that some of the goals were directly related to food, such as increasing the quality, quantity and diversity of their foods. However, other goals related to personal and community goals, such as increasing social connections, escaping the urban area and creating positive impacts on city landscapes (Pourias, Aubry, & Duchemin, 2016).

Due to the similarities in the goals of all the initiatives, it was possible to group them into themes which demonstrated the underlying purposes for all food initiatives. All the themes that came out through this research have been seen in recent literature on food initiatives, decolonization, cultural resurgence and Indigenous food sovereignty that have focused on potential solutions and celebrating successes (Cidro et al., 2015; Kamal, 2018; Martens, 2015; Rudolph & McLachlan, 2013). However, is the previous research the themes were not explicitly linked together and there was very little discussion of how one theme can enable another theme.

Each of the themes, enabling and empowering food activities, improving health holistically, cultural reclamation and *mino pimatewsin*, can be seen individually in different areas of recent research. Enabling and empowering food activities allowed people to participate in their food systems which is one of the principals of Indigenous food sovereignty (Morrison, 2011). Improving health in a holistic way has been an important concept for finding ways to improve health programs for Indigenous people in Canada (Mundel & Chapman, 2010). Cultural reclamation can lead to cultural reclamation is an important part of decolonization (Corntassel, 2012; Wildcat et al., 2014). Lastly, the good life, mino-pimatesewin in Cree, minobimaadiziwn in Anishinaabe, is a concept that has been used in looking at ways to improve Indigenous-focused social work (Hart, 2002), a part of an Indigenous research methodology (Debassige, 2010), and a concept that can improve First Nations health systems (McIvor-Girouard, 2006). Since all the themes that emerged from this research are part of recent academic literature it can be seen that they are important in many contexts. The diagram representing the various themes (fig. 3) shows one way the connections between these themes and their impacts on multiple parts of society can be conceptualized.

The theme of enabling and empowering food activities was an important purpose and a large part of the activities of all the food initiatives in this research. This is the theme that often gets the most attention from people outside the community, especially funders (ANA, 2012; Just Food, n.d.; Whole Kids Foundation, n.d.) likely because the outcomes of the goals in this theme are the most tangible and easily measured. This theme has an obvious connection to food security because the physical outcome of enabling and empowering food activities is producing and procuring food which fits with the food security goal of people having access to healthy food (Napoli, 2011). Although it is positive to have support for this theme, too much emphasis could

be detrimental to the success of the other themes. All the themes are important so if food initiatives are forced to overemphasize the theme of empowering food activities because of outside interests, it could take support away from the other themes.

One of the goals within the theme of food activities was to increase the resources available because the lack of resources was a barrier for people to partake in food activities. This lack of resources and funding is something that is experienced by many food initiatives, including many community gardens across Canada and the U.S. (Drake & Lawson, 2015). However, in northern Canada the propensity for underfunding community food initiatives is exacerbated by industrial development and hydroelectric development (Kuhnlein & Chan, 2000; Neckoway, 2018; Wheatley & Paradis, 1995) that have caused environmental contamination and forced the relocation of many Indigenous communities in northern Canada, including Manitoba. These affects have severely impacted the livelihoods of many Indigenous communities and contributed to high unemployment in this region (Hrenchuk, 1991; Statistics Canada, 2018; Wa Ni Ska Tan, n.d.). A lack of resources has also been a barrier for other food initiatives in northern Canada that focus on country foods (Chan et al., 2006; Organ, Castleden, Furgal, Sheldon, & Hart, 2014). Researchers found that having access to equipment through different types of community or government programs increased the ability of people to go out on the land and water to attain country foods (Organ et al., 2014). Therefore, funding and in-kind support should be made available for the resources and facilities that are needed in order for food initiatives to be able to be successful in enabling and empowering food activities.

In this research, the perceptions on the community were an important factor in whether people got involved or supported food initiatives and demonstrating to other communities how food initiatives could be successful in their context had an inspirational effect. There is literature

that looks at the importance of having individuals from minorities as educators and role models in other contexts to encourage youth from the same ethnic group and to help them realize they can succeed (Davison & Hawe, 2012; Lamb, 2014; Pope, 2015). However, there is very little research about the ability of community initiatives to be models that encourage other communities to establish their own community initiatives. Especially considering the prevalence of negative stories and comparisons of deficiencies in Indigenous communities (Martens, 2015) the success stories of food initiatives should be promoted and the effect sharing success stories have on other Indigenous communities should be documented.

The leaders of the food initiatives chose what type of food activities and skills they thought would make their community healthier. There were factors, such as the environment and available funding that may have influenced these choices but it is important that communities are able to choose for themselves what is healthy. Although there are many scientific studies, lots of most document what is healthy based on biomedical markers in nutrition (He et al., 2009; Mead, Gittelsohn, De Roose, & Sharma, 2010; Moffatt, 1995; Slater et al., 2013). However, there are scholars who are exploring the social construction of health and the importance of culture in determining wellbeing (Adelson, 2000). Since Adelson (2000) critically examined health theory through research with Cree communities near James Bay, Quebec, other researchers have explored the ways that Indigenous cultures around the world determine what is healthy, which is different than how it is measured by western science (Izquierdo, 2005; Panelli & Tipa, 2009). The importance of communities being able to freely choose what type of food activities and food skills they want and initiatives to teach based on their ideas of what is healthy should be acknowledged as part of community self-determination.

Improving health holistically is the third theme food initiatives and common in for food initiatives around the world, but for many initiatives with a settler worldviews physical health is the main focus (Drake & Lawson, 2015; Hazzard et al., 2011; Pourias et al., 2016). The connections between eating healthy foods and decreased food-related disease is well documented (Bird, Wiles, Okalik, Kilabuk, & Egeland, 2008; Haman et al., 2010; Johnson-Down et al., 2015). As well, the health benefit of increased physical activity from all types of food activities has been shown to occur through food initiatives throughout the world that focus on increasing food skills and activities (Drake & Lawson, 2015; Martin, 2011; Milburn, 2004). However, health was not viewed as just a physical trait by many of the participants in this research. Instead, it was seen as holistic and consisting of physical, emotional, mental and spiritual components of a person, a family and a community. Health, as a holistic concept that incorporates all aspects of a person and their connections within a community is common in Indigenous worldviews, including in Cree concepts of health (Marsden, 2005; Willows, 2005). Holistic health and looking at people holistically as part of a community means focusing on all parts of life. This worldview probably contributes to these food initiatives having so many different types of impacts. This is a positive aspect of food initiatives that needs to be given space to flourish in Indigenous food initiatives because it is culturally important and is something that non-Indigenous food initiatives could learn from as well.

One of the goals of the health theme was to provide spaces for healing. This happened through the food activities that the food initiatives enabled. Activities related to horticulture and country foods have both been found to promote healing and health. Horticulture therapy and horticulture related activities, have been proven to reduce stress, improve quality of life for adults and help maladjusted students cope better with school (Gigliotti & Jarrott, 2005; Lee, Oh,

Jang, & Lee, 2018; Lin, Lin, & Li, 2014; Yao & Chen, 2017). The effects that plants can have on people was recognized by some of the participants and it something that should continue to be utilized as healing.

Being on the land is a food activity that some food initiatives enabled and empowered because it promoted health, cultural reclamation and *mino pimatesewin*. It has been seen in other food initiatives in Canada that harvesting, eating foods from the land and being connected with the land is good for emotional and psychological health (Organ et al., 2014; Willows, 2005). There is also an acknowledged healing effect from engaging in land-based actives and some health initiatives have promoted land-based activities specifically for this purpose (Coyhis & Simonelli, 2008; Radu et al., 2014).

Another way that some food initiatives promoted healing was by encouraging people to come together as a community. Community connections are an important source of healing and initiatives that are done at a community level can be more effective when there has been collective trauma and intergenerational connections (Schultz et al., 2016), as there have been in many Indigenous communities (Frideres, 2011). Therefore, activities that bring communities together that have become more individualized, in turn, create spaces for healing to take place.

Cultural reclamation is an important theme because culture and food are integrally connected (Cidro et al., 2015; Morrison, 2011) so by strengthening cultural connection food systems can also be strengthened. Although some food initiatives did not have any goals or activities that purposefully connected to this theme, the leadership of all the initiatives realized the importance and strength that comes from cultural reclamation and wanted to see it increase in their communities. It could also be argued that goals such as increasing self-esteem can lead to cultural reclamation even if that is not an explicit goal of a food initiative. Or, it could also be

argued that connecting to the land even through gardening food initiatives could be a part of cultural reclamation because it has been seen that connections to the land, soil and water can happen through gardening experiences, through bodies engaging with the environment around them (B. Turner, 2011).

An important goal of the theme of cultural reclamation was increasing intergenerational connections. Such connections are critical because Elders are vital to the social fabric of communities; they hold knowledge important to all aspects of life. Respect for Elders is important in Indigenous cultures and is an aspect that is necessary for building healthier communities. Intergenerational knowledge transfer is an important way that teachings about all areas of life are passed on (Radu et al., 2014). Cultural reclamation can also encourage or improve other goals. For example, the goal of encouraging of cultural values, and goals within other themes, such as building knowledge about food activities can all be increased through intergenerational connections. In this way cultural reclamation is both a theme of goals and a factor that has made food initiatives more successful, which will be discussed further in the next chapter.

The term, *mino pimatesewin* was only used during one interview. However, it was appropriate to use it as a theme of goals for several reasons. The term itself is a broad and overarching concept that connected to many of the ideas that other participants expressed in their interviews. Creating a better life for the future generations, creating a better community for everyone and increasing the quality of life for the community all examples of ideas that were shared in interviews that can be connected to *mino pimatesewin*. Another reason I use this term in the context of this research, is that it is commonly used in other initiatives in Indigenous communities in Manitoba that work to improve many aspects of life, including healing, health,

and education (Deer, Falkenberg, Mcmillan, & Sims, 2014; Indspire, 2015; Pimickikamak, 2017). The term has also been used in other research done by and with Indigenous people in Manitoba (Hart, 2002; Kamal, 2018, p. 220). The last, and possibly most important reason, is that participants in the research were given opportunities to look at the initial results, including the cycle of goals and they said the findings resonated with what happened in their initiatives.

The cycle of goals could begin at any point within the circle. In the presentation of the results and the following discussion the cycle started with empowering and enabling food activities. This was chosen as the starting point because creating more food through food activities was the most obvious goal in my mind. This is a common way of thinking from a settler point of view. However, the starting point of the cycle can depend on your worldview. For Elder Mable Bignell from OCN, the most logical place to start the cycle was with *mino pimatesewin*. For her, everything follows, (i.e. food activities, improved health, cultural reclamation), once people are able to start living a good life, *mino pimatesewin*. Either place is a logical choice it just depends on your worldview.

Although the themes are separated into different segments of the circle, for the sake of conceptualizing the ideas, there is a connection between all the themes and this can be seen in how goals cross over multiple themes. For example, increasing pride in culture was in the cultural reclamation theme but it was also seen to have healing effects. It has been found that increased cultural pride leads to increased self-esteem for many populations and this can contribute to healing and healthy lifestyles (Lavallee & Poole, 2010). These connections are why none of the goals can exists completely in isolations and therefore all the themes should be encouraged in food initiatives even if one theme is the focus of a supporter or funder.

3.5 Conclusions and implications

Allowing participants to define what success looked like for their communities and the food initiatives they were involved in was important because it allowed many different goals to emerge and the four different themes that came from those goals. There were many goals that are not regularly considered part of food initiatives, such as increasing the economic health of a community, that emerged. Allowing participants to define success for themselves was also important because it gave an opportunity to re-define a value laden term that has been used in problematic ways but continues to be used in many contexts (Castleden et al., 2015; Herbert, 2003). Therefore, if the definitions of success that settler supporters and funders use are expanded by the goals put forth by the participants this could assist food initiatives to accomplish the goals and themes they desire.

Food initiatives in northern Manitoba have a broad range of themes each with many goals and multiple societal levels that they operate on. Therefore, the actions of these initiatives have wide ranging impacts into many areas of society and aspects of life. However, the majority of research that has looked at the importance of food initiatives has been on narrowly defined health impacts and increased food produced through activities (Corrigan, 2011; Olstad, Raine, & McCargar, 2012). Given the importance of each of the themes the wide ranging results that can come from food initiatives should be acknowledged. The fact that these food initiatives supported much more than just food goals shows the way many communities were trying to operate in a holistic and integrated way. This type of holistic view should be more widely supported through research, funding, government programs and other supports. Furthermore, given that most research in Indigenous communities has focused on the negative aspects and deficiencies (Martens, 2015) and it is only more recently that some research has become

explicitly solutions oriented and hopeful in nature, any additional research should be done in a solutions-based way that works with communities.

The theme of cultural reclamation in food initiatives should be supported and perhaps researched further. Although most settler worldviews do not connect food programs with cultural reclamation it was important to the communities and contributed to the food initiatives success. Food initiatives that purposefully included cultural reclamation in their activities and structures experienced the success of cultural reclamation goals increasing the success of goals in other themes. In fact, it appeared that all the food initiatives were contributing to cultural reclamation in some way even if it was not an active part of their initiative. Settler academics and funders who want to support community driven food initiatives should especially consider this theme because it is not a natural part of our worldview. Additionally, all food initiatives working with Indigenous communities should consider ways to increase cultural reclamation because of the strong connection between food and culture and cultural resurgence.

Although elements of food security and Indigenous food sovereignty can be seen in the themes and goals of the food initiatives identified through this research none of the participants explicitly mentioned the term food sovereignty unless they were directly questioned about it. Instead the initiatives were working to provide a good way of life for the present and future generations, which can be summed up in the concept *mino pimatesewin*. It could be said that food was the best means for achieving the end theme of increasing a good life, rather than as an end in and of itself. Instead of creating food initiatives that just addressed one challenge in their community, people worked to create solutions that addressed many of the interconnected societal problems which shows that these food initiatives are important.

4. MULTIPLE CASE STUDY OF THREE FOOD INITIATIVES IN NORTHERN MANTIOBA Abstract

Numerous food initiatives have recently started in northern Manitoba in response to the ongoing food crisis and within the context of revived Indigenous resurgence. Conducting research with multiple initiatives is important to better understand regional similarities and differences. Participatory action research was used to conduct a multiple case study of three food initiatives in three Cree (Ithinewuk) and Métis communities in northern Manitoba, using semi-structured interviews, researcher observation and document review. The initiatives were: Community Gardens in Opaskwayak Cree Nation, Grow North Boreal Gardening Project in Leaf Rapids and Ithinto Mechisowin (a Cree term for 'food from the land) Program in O-Pipon-Na-Piwin Cree Nation. These initiatives were chosen from a larger research project with five initiatives. The results demonstrated how three common dimensions, organizational structure, scale of impact and the type of food skills taught, differed among these three initiatives. Common challenges included a lack of exposure to food activities, stigma around a lack of knowledge and underfunding. Challenges were overcome through youth involvement, group learning, and community support. Important elements of success were: emphasizing cultural reclamation, support from multiple organizations, passionate food champions and community involvement. The results suggest that overtime initiatives found balances within the extremes of each of the common dimensions in order to best meet the needs of their community. To better support these food initiatives there should be an increase in: funding that allows for community determination, cultural reclamation and country foods activities; support from multiple organizations; and networking with similar initiatives. Key words: Indigenous, food skills, organizational structure, scale of impact, success, barrier,

community food initiatives

4.1 Introduction

Indigenous sovereignty on Turtle Island, including the territory we now call Canada, has been weakened since contact with Europeans and continues to be under attack to this day (Alfred & Corntassel, 2005). There have been recent attempts by the Canadian government to repair relationships and give some sovereignty back to Indigenous nations, including the Truth and Reconciliation Commission, promises to increase the amount of Nation-to-Nation dialogue and the new 'Rights Framework' (King & Pasternak, 2018; Shepherd & McCurry, 2018). However, many scholars and Indigenous leaders say that these recent attempts have not made any significant changes, and that the 'Rights Framework' fails to address questions about land and resources, which are a fundamental aspect of sovereignty (King & Pasternak, 2018). Other scholars argue that Indigenous sovereignty was never taken away and instead it just needs to be acted on, despite the policies of colonial governments (Alfred & Corntassel, 2005).

Whichever way people view the recent attempts of the Canadian government it is obvious that there is still much work to be done to increase Indigenous sovereignty (Shepherd & McCurry, 2018). Indigenous food sovereignty is related to overall Indigenous sovereignty because of the close connections between land, food and sovereignty. As well, one of the pillars of Indigenous food sovereignty is policy reform, including reforms related to land, which makes Indigenous food sovereignty political in and of itself (Martens, 2015; Morrison, 2011).

Communities in northern Manitoba, the majority of which are Indigenous, have identified a need for healthy food and to have the skills and resources to be able to produce and attain the food they desire on their own (ANA, 2012; NMFCCC, 2017; Rudolph & McLachlan, 2013). This can be seen both as a reaction to the ongoing food crisis and a desire to re-establish Indigenous food systems (Kamal et al., 2015; Thompson, Kamal, Alam, & Wiebe, 2012).

However, there are numerous barriers to northern communities achieving this, many of which can be traced back to colonization (Thompson et al., 2011). Such barriers include environmental change and degradation due to hydroelectric development, deforestation and intensive mining (Dysart, 2015; Neckoway, 2018); forced relocation by government and corporations (Dysart, 2015); climate change (Ford, 2009; Furgal & Seguin, 2006); the loss of knowledge, skills and cultural connections through residential schools (TRC, 2015b); intergenerational trauma from residential schools and the sixties scoop (Frideres, 2011); and gendered violence (Adelson, 2005; N. J. Turner & Turner, 2008).

Despite all these barriers there are a growing number of food initiatives in Indigenous communities in Canada that are teaching food skills and working to re-establish Indigenous food systems (Daigle, 2017; Martens, 2015; NMFCCC, 2017). However, there is very little literature about these type of food initiatives and about what contributes to their success. The food research in Indigenous communities in Canada has focused mainly on food insecurity (Ford, 2009; Skinner et al., 2013), health challenges and disparities between Indigenous and Settler communities (Bhawra et al., 2015; Haman et al., 2010; Mead et al., 2010; Slater et al., 2013) and the link between environmental degradation and food contamination (Martin, 2011; Wheatley & Paradis, 1995).

Similarly, other researchers who are working from an Indigenous food sovereignty perspective have found that there is a lack of academic literature and even popular literature celebrating the good news stories related to food and wellbeing in Indigenous communities (Kamal et al., 2015; Martens, 2015; Rudolph & McLachlan, 2013). The prominence of "bad news" is problematic for many reasons. It hinders the transmission of potential solutions between communities that could benefit from the ideas, it perpetrates the stereotype that only

negative things happen in Indigenous communities, and many people in Indigenous want research in their communities to focus on solutions (Gibson-Graham, 2006; Martens, 2015; NMFCCC, 2017; Williams, 2017).

In contrast to the negatively focused research that has been conducted in and on Indigenous communities, much research about alternative food systems in settler communities, has been solutions-centred, especially as the food movement in Canada and around the world has grown in scale and impact (Levkoe, 2014). In Canada and the U.S. much research has focused on initiatives such as community and school gardens (Corrigan, 2011; Drake & Lawson, 2015; Hazzard et al., 2011; Pourias et al., 2016), alternative food networks (Fourney, Gregson, Sugerman, & Bellow, 2011) and school based nutrition and healthy eating programs (He et al., 2012; Huys et al., 2017; Powell & Wittman, 2018). However, settler-centred research, which is mainly conducted in the south, is rarely transferable to Indigenous communities. Therefore, there is a great need for research on the positive aspects of food in Indigenous communities.

Recently, there has been a growing literature on positive aspects of food activities and the resiliency of Indigenous communities, especially from an Indigenous food sovereignty perspective. For example, one recent study examined the good news stories of food initiatives in Indigenous communities across western Canada (Martens, 2015), another study highlighted positive impacts of food initiatives and the resiliency of the community of O-Pipon-Na-Piwin Cree Nation (Kamal et al., 2015) and there was research about a possible north south exchange between Misipawistik Cree Nation and a farm in southern Manitoba (Rudolph & McLachlan, 2012). However, such solutions-centred approaches remain the exception.

Case studies represent one way to look at any phenomenon in depth and learn more about its characteristics (Creswell, 2018) and they have been applied to gain greater understanding of

food initiatives. Recently, case studies have examined food initiatives in Indigenous communities in Canada, South Africa, Australia and amongst other countries around the world (Chan et al., 2006; Murray et al., 2014; Organ et al., 2014). These case studies have investigated the successes and challenges of the initiatives but there continues to be very few case studies focusing on the defining characteristics of the initiative and investigating what contributes to success. It is only by examining the components, challenges, barriers and elements of success of food initiatives that there can be better understanding of how to best support and facilitate these initiatives (Olstad et al., 2012). However, as each community and each food initiative is unique, a case study approach that examines multiple initiatives, instead of just one, is better suited to give broader insights about food initiatives throughout a region, as was done in the cross community research into food initiatives throughout western Canada (Martens, 2015). A larger diversity of examples allows wider conclusions to be drawn that can potentially apply to other food initiatives in Indigenous communities.

This chapter will use a multiple case study to examine three notable food initiatives in northern Manitoba in order to better understand how they functioned, what they achieved, and how they overcame any challenges. All these food initiatives focused on teaching skills and giving people opportunities to participate in food activities in order to increase access to healthy foods. I will examine how the food initiatives differ and how they are similar based on three main dimensions that explore the purposes of the initiatives; the type of food skills that were taught; and the type of organizational and governance structures that the initiatives utilized. Furthermore, I will examine some of the ways food initiatives overcame challenges and barriers

and some elements of success.⁵ By examining three initiatives that differ from one another, it will be possible to gain a broader understanding of food initiatives that could be applicable to a large range of other food initiatives across the continent.

4.2 Methods and Study Area

Research was primarily conducted using a participatory action research (PAR) methodology (Genat, 2009). PAR is a methodology used for social science research that is characterized by conducting research with participants, rather than on subjects; valuing the knowledge held by those participants; and the researcher taking an active role in working towards for positive social change (Genat, 2009). The methodology used in this research was also influenced by elements of Indigenous inquiry, which elements that are common to many of the diverse Indigenous research methodologies (Kovach, 2009). The main elements of Indigenous inquiry used during this research were self-location, and conducting research in a relational way with respect and reciprocity (Kovach, 2009; S. Wilson, 2008).

Qualitative methods were used to conduct research, including participation, actions, semi-structured interviews and a grey literature review (Adler & Adler, 1998; Fontana & Frey, 1998; Genat, 2009). Research was conducted in northern Manitoba focusing on five food initiatives in five different communities (from north to south): O-Pipon-Na-Piwin Cree Nation (OPCN), Leaf Rapids, Nisichawayasihk Cree Nation (NCN), Opaskwayak Cree Nation (OCN), and the side by side communities of Misipawistik Cree Nation (MNC) and Grand Rapids that were treated as one community for the purposes of this research (fig. 2). All the communities are situated north of the 53rd parallel and accessible by all-weather roads and, where there is open

⁵ In this research elements of success were considered anything that allowed, encouraged or

facilitated the achievement of what the people who participated in, or led, the food initiatives wanted their initiative to accomplish.

water, a continuously operating ferry. There were four First Nations communities, OPCN, NCN, OCN and MCN, that are governed by a Chief and Council. Grand Rapids is a Métis community and Leaf Rapids was originally established to support a mine, both are governed by a mayor and council. All the First Nations communities that participated in this research are Cree or Ithinewuk (also known as Ithinew). Ithinewuk means 'the people' and is the Cree word used to refer to Cree people (Neckoway, 2018; Tait, 2017). However, throughout this chapter the term Cree will be used because it was the term most commonly used by participants.

This case study will examine three different food initiatives in three different communities across northern Manitoba, representing a subset of the five communities that were chosen for the overall research. These three initiatives were chosen because they demonstrated a variety of types of food activities, a diverse of organizational structures, and they differed in the scale they were working to impact. The three initiatives in this case study, from north to south, are the Ithinto Mechisowin Program in O-Pipon-Na-Piwin Cree Nation, the Grow North Boreal Horticulture Program in Leaf Rapids, and the *Mino Pimatciwin* (a Cree term for 'good living') Program in Opaskwayak Cree Nation, (fig. 4). The food initiatives were selected utilizing a snowball sampling method, which is a way of selecting potential research participants through "natural and organic social networks" (Noy, 2008). With this method the connections and knowledge of participants are used to locate and access other potential participants (Noy, 2008). Sampling started with participants in Leaf Rapids that I connected with while participating in a gardening food initiative located in that community. The number of potential participants expanded as I was introduced to people running similar types of food initiatives in the region. From these connections five food initiatives were selected based on the interest of people in leadership and the relevance of the food initiative to the research. Where possible, I visited

Figure 4: Location of case study communities



either the town adminisration office or the band council office to introduce myself and my research. When requested, I sent an outline of my research project to the band council or town council members by e-mail.

Once the semi-structured interviews were completed I used an emergent iterative data analysis (Srivastava & Hopwood, 2009) to analyze the data. This is a common method used to analyze qualitative data that allows themes and patterns to emerge through a reflexive, iterative process. Viewing the analysis as a reflexive process acknowledges that themes and patterns do not emerge on their own but through the perspective of the researcher and the ontology and epistemology they utilize (Srivastava & Hopwood, 2009). This research used the transcripts of the semi-structured interviews, researcher personal observations, and the reflections of the research participants to develop themes. I used the Dedoose software to assist with the initial

analysis of the semi-structured interviews. When the initial analysis was completed and potential themes were identified research participants had opportunities to provide feed-back through in person visits, phone calls and e-mails.

4.2.1 Participation and Actions

The results are supported by observation, participation and actions that I undertook throughout the research process. I had the opportunity to observe food initiatives and build relationships while I volunteered in Leaf Rapids, visited the communities involved in this research, and co-planned and co-facilitated horticultural workshops in Leaf Rapids in 2016 and 2017. I also had informal conversations, attended planning meetings and put on events with people from many of the organizations involved in food work in northern Manitoba, including, FSD, NHFI, Food Matters Manitoba, NMFCCC, Bayline Regional Roundtable, and Four Arrows Regional Health Authority.

I volunteered with the Grown North Boreal Gardening Project in Leaf Rapids for two weeks in 2014 before I even started my research in order to determine if this type of research would be a good fit for me. I then volunteered with the same project for two months in 2015. In addition, I was involved in hands-on action projects in Leaf Rapids over the course of the research in the form of virtual and in-person workshops. The virtual workshops were available through the FSD website to any interested schools. The in-person workshops were planned around the growing season and invited leaders from horticultural initiatives throughout the northern part of the FSD and from the five participating food initiatives.

I visited all the communities where the food initiatives that participated in the research were located at least twice while building relationships, conducting interviews and getting feedback on my initial analysis of the results. I took an initial trip to visit communities with food

initiatives that could potentially participate in the research, several trips to do in community interviews and another trip to visit and get feedback on my initial analysis of the interviews.

4.2.2 Semi-Structured Interviews

In addition to participation and actions, the case study results are based on semistructured interviews that were conducted with 11 individuals from the three communities where
the food initiatives were located and three interviews conducted with people that oversee
multiple food initiatives or provided funding (table 3). As many interviews as possible were
conducting in person (11 out of 14) and in each individual's home community (8 out of 14).

Phone interviews were only used with three people that oversaw multiple initiatives or
individuals that I already had extensive relationships with. All the interviews were one-on-one,
except my co-interviewing Peggy and Elder Stan Wilson. This was done with two individuals
because they were traveling together outside of their home communities, had a short window
when they were both available for the interview, and they worked together closely in their food
initiative.

The semi-structured interviews included questions about successes, challenges, barriers, and changes over time in the participants community or the communities they worked with and in their food initiative or organization. The questions about success allowed participants define what they thought success meant in their own context. The word success can be problematic because definitions of success are often imposed by funders or government bodies that assume that success has to be numerically quantifiable (ANA, 2012). However, because success is a term that is commonly used with imposed definitions it was utilized during the semi-structured interviews in order to give participants an opportunity to re-define what success meant for themselves and to allow aspects of the food initiatives that were important to participants to

Table 3: Case study food initiatives, list of participants and method of interview

Food Initiative	Participant	Role in Community/Initiative	Method of interview
Community Gardens (Mino Pimatciwin Program)	Mable Bignell	Elder, community garden participant	In person in OCN
	Noreen Singh	Finance manager of Cree Nation Tribal Health Centre and community garden leader	In person in OCN
	Peggy Wilson	Retired teacher, founder and leader of community garden	In person in Winnipeg
	Stan Wilson	Elder & retired university professor, founder and leader of community garden	In person in Winnipeg
	Teresa de Hoop	Educator in The Pas School and community garden participant	In person in OCN
Grow North Boreal	Chuck Stensgard	Regional Gardening Coordinator	By telephone
Gardening Project	Susan Horodecki	Community Food Champion	In person in Leaf Rapids
	Brian Trewin	Assistant Leader in Grow North Boreal Horticultural Program	In person in Leaf Rapids
	Chris Brayley	Assistant Leader in Grow North Boreal Horticultural Program	In person in Leaf Rapids
Ithinto Mechisowin (Cree for food	Rene Linklater	Director of Tommy Thomas Health Centre and Ithinto Mechisowin committee member	In person in OPCN
from the land) Program	Shirley Ducharme	Vice Principal of Oscar Blackburn School, IMP committee member and band councillor	In person in OPCN
Supporting Organization		Role in Organization	
FSD	Don McCaskill	Superintendent of Area 1 FSD	By telephone
NHFI	Jennell Majeran	Manager of NHFI	By telephone
NMFCCC	Julie Price	Coordinator of NMFCCC	In person in vehicle

emerge.

All the interviews were transcribed and the transcript were sent to the participants to verify accuracy and give the opportunity to remove any comments they did not want included in the research. I transcribed six interviews myself and had the rest transcribed professionally.

4.2.3 Study Area

The first case study is situated in O-Pipon-Na-Piwin Cree Nation (OPCN), which is located on and commonly referred to as, South Indian Lake. It was originally an area used as winter fishing grounds for people from Nisichawayasihk Cree Nation as well as Métis and settlers because of the rich fishing and hunting in the area. It eventually became a permanent settlement and then an independent First Nation in 2005, in part as a strategic response by the Manitoba government and the Manitoba Hydro crown corporation to undermine community resistance to the proposed Wuskwatim hydro generating station (Baker and Thomas, 2005; L. Dysart, personal communication March 15, 2016). There was a rich fishing economy and a vibrant community in area with 400,000 lbs of White Fish being commercially sold in 1972 (FFMC, 2014). However, the Churchill River runs through South Indian Lake and in the 1970's the Churchill River Diversion (CRD) was built by Manitoba Hydro for a hydroelectric dam. The construction had a profound impact on the community's socioeconomic situation and continues to have impacts on the environment (Bodaly et al., 1984; NMFCCC, 2014). People were forced to relocate to a new community, traplines were flooded and commercial fishing had a huge decline (Government of Manitoba, 1975; Hrenchuk, 1991). The community has worked to continue to fish and harvest foods from the land, which are also called country foods, despite all these obstacles. There is now a population of 1100 people with an additional 600 members of OPCN living in other communities (Indigenous and Northern Affairs Canada, 2019a). In addition to the Ithinto Mechisowin Program there are other food initiatives in the community run through the Health Centre, as well Wassasihk, and Kiwikapawetan, annual gatherings run by community members that celebrate and share skills related healing, food and medicine from the land (Kamal et al., 2015).

The second case study is situated in Leaf Rapids which is located on the Churchill River, and as such it is also affected by the CRD. However, since it was a town built to provide services for the people working at the Ruttan mine, the CRD did not have similar impacts on the economy. Leaf Rapids was originally built in the 1970s as a 'model community' and was meant to provide all the necessary services in a way that best served the population and increased community connections (Lewis, 2018). At the height of mining the population was about 2,000 people, and while the mine was in operation the majority of the population was non-Indigenous (Statistics Canada, 2001). After the mine closure in 2002 (J. Barker & Durnan, 2012), the population decreased rapidly and there are now around 500 residents (NMFCCC, 2015). There was some migration into Leaf Rapids from surrounding communities after the mine closure. A notable addition to the population was from the nearby community of Granville Lake when they were forced to evacuate due to unsanitary sewage conditions, which continues to the date of writing (CBC, 2003, 2018). Due to the decrease in population the services available have decreased but it continues to be run as a municipality. Another change, as of 2018, was the majority of residents were Indigenous (Statistics Canada, 2016).

The third case study is situated in Opaskwayak Cree Nation (OCN), located on the north side of the Saskatchewan River where it meets the Pasquia River. The town of The Pas is on the south side of the river, on territory that OCN was forced to give up because it was more fertile and settlers wanted to farm it (NMFCCC, 2014). There are 3,200 people living in the community and an additional 2,800 people that belong to the band but live in other communities (Indigenous and Northern Affairs Canada, 2019b). Just like OPCN the community of OCN was once a healthy self-sustaining Nation. They used to rely on hunting, fishing and small gardens. However, due to many factors including the relocation, environmental disruption from the Grand

Rapids generating station dam built by Manitoba Hydro in the 1960s and the impacts of residential schools, the community now relies mainly on store-bought food and has many health concerns (Kusch, 2010; NMFCCC, 2014). In 2014, there were only 20 members of the band over 68 years old, despite there being a population of 5,700 (NMFCCC, 2014). In response, several different food initiatives have started operating in the community, besides the Community Gardens program which will be focus of this case study. The other initiatives include an indoor hydroponic garden that produces leafy greens for families in the community (Laychuk, 2018), a land based outdoor education program run through the high school, Oscar Lathlin Collegiate, (Opaskwayak Education Authority, 2012) and OCN remains the site of biannual visits from the University of Saskatchewan Land-Based Indigenous Focus Education Masters course (University of Saskatchewan, 2019).

4.3 Case Study Results

Although there are multiple food initiatives in two out of the three case studies communities this study will focus on just one initiative in each community in order to get an indepth understanding of three initiatives. The results presented reflect the characteristics of the food initiatives up to and including May 2018 when the formal interviews were completed. However, I talked with many participants after May 2018 both in person during my trip to discuss my initial analysis of the results and over the phone. During those interactions I heard updates about changes in the food initiatives and some of these changes are mentioned in the discussion. The results will be presented by looking at each dimension for each initiative, cycling through them from south to north.

The first case study is the Mino Pimatciwin Program, which means "good giving" in Cree. It is was commonly and hereafter referred to as the Community Gardens Program. It was

started in OCN in 2013 by retired educators Peggy and Elder Stan Wilson. After retirement, they moved back to the community and noticed the high rates of obesity and diabetes and wanted to do something to introduce healthier food. Peggy said,

So, we found a space, kind of an old abandoned area and we started our first [garden]. The band was really good because they donated, they gave us the use of their heavy equipment. So, they cleared the soil and I had got a grant from Tides Canada⁶ for top soil. So that's how we started.

They had to start by constructing a site where gardening was possible because the community had been removed from their traditional territory where there was good top soil for gardening and relocated to nearby marginal land. In the first community garden, all the topsoil was bought and trucked in, much of it from farmers that were located in OCN traditional territories (NMFCCC, 2016).

The second case study is the Grow North Boreal Horticulture Program, which was commonly and hereafter referred to as the Grow North Program, located in Leaf Rapids. It officially began in in 2008 as a Frontier School Division (FSD) education project but it grew out of existing infrastructure, and food activities in the community (NMFCCC, 2014). There were three main dimensions of the program: two greenhouses; a large garden, which they referred to as the nursery; and an indoor growing and teaching facilities. Each of these dimensions started in a different way. The first greenhouse was built in the 1980s by teachers from the school. The nursery started in 2007 when youth from the local school, who were students of a teacher named

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⁶ The official name of the funder is Northern Manitoba Food Culture and Community Collaborative (NMFCCC) but some community members refer to it as Tides Canada, the more intuitive name of the first philanthropic partner in the collaborative.

Chuck Stensgard, were interested in starting an outdoor garden in their community. Chuck shared how the nursery started,

the trailer park that was down below my house grew empty... and ... I knew where there was some black soil for grass and where somebody had a garden – but the problem was they burnt five trailers there so the ground was covered with toxic materials. So, basically the group of young people that were working with me, ...suggested that we could ground garden down there and I said well, yeah ... but I tried to explain the politics of Leaf Rapids town properties, paying taxes on the trailer park, it was still in their control and I would make a call. I made a call and I was told I couldn't work down there because they were concerned the toxic materials would be dangerous to the children but that the town would clean it up soon and we just had to wait a couple of years and then it would be okay to do it.

However, the students did not wait until it was cleaned up, they went ahead and started cleaning up the place so they could start gardening. Chris Brayley, who was involved as one of those first students and later became a leader in the initiative, explained "[A] bunch of kids go down there and start a garden, the government's not going to say no, so that's how it all started". Out of the nursery, the original greenhouse and the interest of local students the Grow North program started. Chuck was hired on as the full time regional coordinator by the Frontier School Division to develop ways for gardening to be incorporated into the education system. The second greenhouse along with the indoor growing and teaching facilities developed to meet the needs of the program.

The third case study is the Ithinto Mechisowin Program (IMP), which means "food from the land" in Cree, it is located in OPCN. It started in 2012 as an idea from several food champions from the community, including Hilda Dysart and Shirley Ducharme, as a way to support food activities year-round that could revive the "lost traditional food economy" (Kamal, 2018, p. 204). They brought together people that represented many different organizations and groups in the community to form a committee and determine what shape the program should take (Kamal et al., 2015). The process was supported by University of Manitoba researchers including then PhD candidate Asfia Gurkul Kamal.

Two of the major community partners that joined IMP in the beginning, and continued to be involved, were the Tommy Thomas Memorial Health Complex and the Oscar Blackburn School. Rene Linklater, the Director of Health Services for OPCN shared how he was invited into the program right from the start,

I was approached by Shirley Ducharme, Hilda Dysart and Asfia ... and they basically said 'we would like to start a foods program, ... and asked if we could be affiliated with the health department in any program area that deals with food. And I was like, great! It was really interesting and it was a really good way for us, for this department to get involved with the program they were introducing and it just spawned after that.

Hilda Dysart and Shirley Ducharme worked at Oscar Blackburn School, so they formed the connection with the school. The other organizations that came together to make IMP possible were the Chief and Council, the Trappers Association and the Fishers Association.

There were also other food champions from the community that supported the idea, notably Elder Vivian Moose and Elder Annie Spence.

4.3.1 Desired Scale of Impact

The first dimension of the three case studies that will be examined is the intended scale of influence. The scale here refers both to the geographical area the program attempted to impact as well as the population. By looking at the main purposes of each of the programs, why they were started, and the level of school involvement, the intended scale will be visible. Table 4 summarizes how aspects of the three dimensions examined in this case were exhibited in each of the programs. The aspects for each dimension are on the left and the properties that the programs displayed in the corresponding columns. For desired scale of impact, the aspects are purpose, school involvement and scale of impact.

The purpose of the Community Gardens program in OCN was to "[t]o support food sovereignty and healthy living. To increase the number of healthy, active families in OCN by providing garden spaces and opportunities for people to learn and grow food together."

(NMFCCC, 2015, p. 19). Health, in a holistic sense, was central to the purpose of the initiative. It was emphasized that in the past they were a healthy Nation and they "want to return to our roots of strength, physical prowess and harmony with the earth" (NMFCCC, 2016, p. 28). The program started at a local scale that aimed to benefit the local community and it continued to operate in that way. They worked to make the main garden a welcoming place for everyone in the community to visit and spend time in by making improvements such as landscaping, adding seating and creating an outdoor kitchen.

In the Community Garden program, there was a focus on education and providing opportunities for hands-on learning for people with all levels of knowledge. There was an intergenerational focus that encouraged whole families to participate with a particular emphasis on youth. They made sure there were always tasks for every ability level and they planned some

Table 4: Summary of important dimension of case study food initiatives

	Community Gardens	Grow North	Ithinto Mechisowin		
Desired Impact					
Purposes	Address health concerns, community healing, technical training, food sovereignty	Training leaders, developing northern crops, advanced technical training	Reconnecting people with the land, culture and increasing Indigenous food sovereignty		
School involvement	Peripheral	Majority	One of the partners		
Scale of impact	Primarily local	Regional (North)	Primarily local, regional and international sharing		
Food skills and activities					
Food activities	Multiple gardens, cooking workshops	Garden, greenhouses, indoor growing facilities, horticultural workshops	Fishing, trapping, berry & medicine harvesting, hunting, gardening, cooking workshops		
Use of food	Participant consumption	Research, staff consumption & Instruction*	Community and participant consumption		
Type of food and skills	Mostly what people eat, some demonstration	Mostly new varieties, some of what of people want, always research focus	Re-vitalizing traditional foods		
Organizational Structures					
Leadership	Community	Individual	Community/Individual		
People in Leadership	4-5 Volunteer leaders-one for each garden, plus Wilsons	1 full time paid, 2-3 contract paid	1 paid program coordinator, Volunteer community board		
Staffing	Participants	Leadership staff and 2-8 summer youth, volunteer 'interns'	Volunteer harvesters, hunters, elders, students		
Participants/ Beneficiaries	38+ families, approximately 175 people (volunteers)	4-6 core communities in any year. 30 communities impacted throughout the years	300 students and community members participate a year, 350-400 people per month receive food		
Funding	NMFCCC, Band Council, NHFI	FSD, NHFI, NMFCCC,	NMFCCC, Manitoba Hydro, University of Manitoba		
Year started	2013	2008	2012		

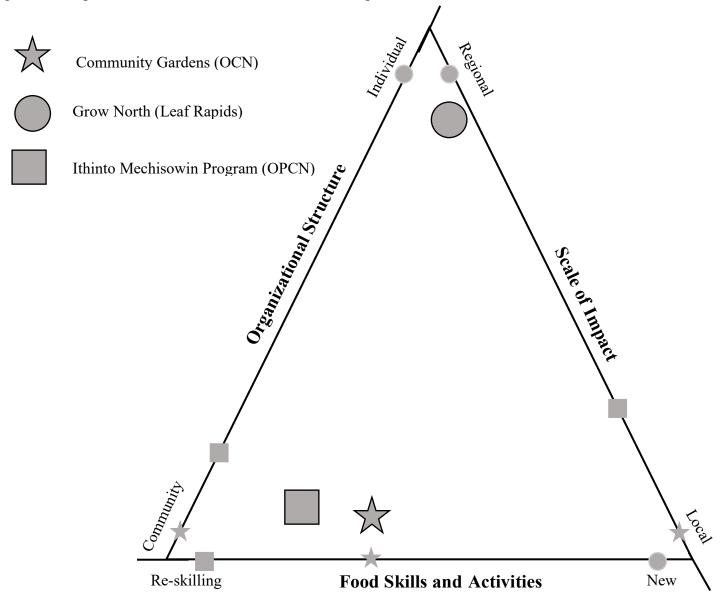
^{*}Peripherally supported events at O-Pipon-Na-Piwin Cree Nation.

activities, such as an annual birdhouse building competition, specifically because they were attractive for young people. There was some participation from groups of students from the local schools, but it was all based on specific teachers choosing to get involved and bringing students to the garden. There were not any formal structures built into the program to interact with the local educational institutions. However, the Community Gardens were an exciting opportunity for educators that knew about it so there were teachers from The Pas that brought students and a professor from the University of Saskatchewan that brought students from her land-based education program bi-annually (NMFCCC, 2017).

A visual representation of the three dimensions examined in this case study can be seen in figure 5. One aspect of each dimension is on each of the side of the triangle. The aspects from table 4 that I considered the most comparable between the three food initiatives were chosen. Each side acts as a continuum of the extremes of that aspect. There are shapes that represent each of the food initiatives showing where they fall on each continuum. There is also a representation of each initiative inside the triangle to show where they fall, overall, compared to each other. For this subsection, the desired scale of impact is represented by the line on the right-hand side of the triangle, as a continuum that shows whether each initiative was more regionally or locally focused. For the first food initiative, the Community Gardens, the focus was exclusively on impacting people from the local area, with the emphasis on the community of OCN, so it falls on the local end of the scale of impact continuum (fig 5).

The next initiative we will examine is Grow North. The purpose of this program was "[t]o empower youth and adults to live well and increase food security through gardening and to be a hub of sharing and learning on gardening and greenhouse techniques for northern boreal communities" (NMFCCC, 2016). The main way that they learnt new techniques was

Figure 5: Comparison of food initiatives based on three important dimensions



through trials of new methods and crops, which made research a large part of their overall purpose. Chris Brayley explained that an important part of what he did was,

finding out what can actually grow up here, which is very interesting. And there's some things, like tomatillos, which you wouldn't think we [could] grow up here that grew wonderfully; peppers surprisingly [grow well] if you use the proper cover system.

The purpose of this research was to use the new techniques to teach and equip other communities in the boreal forest to grow their own vegetables and to run their own gardening initiatives. Therefore, the geographical scale of impact was regional and thus the program falls at the regional end of the scale of impact continuum in figure 5. The targeted population was anyone in the boreal forest region but the skills were primarily shared through leaders of horticultural or gardening programs. There was an emphasis on programs run through schools, both because of an original focus on youth and the connection with the FSD. School programs were the primary connecting point between the Regional Coordinator and other communities. However, Grow North did not restrict the knowledge sharing to school-based initiatives or communities that had FSD schools. They were open to anyone who was interested in learning from their techniques, especially those in the boreal region in Manitoba. Chuck shared how one of the First Nations he worked with through the regional program started growing their own food,

Norway House, ever since I went in and did a workshop about eight years ago.

They've been constantly maintaining the school garden that I helped them build and there's been more and more people in the community that are

gardening ... I really think that Norway House will... be a major production community for themselves.

The last food initiative to look at for this dimension is IMP. They wanted to "achieve food sovereignty by strengthening and expanding the country foods service to community members in need and 're-skilling' community members." (NMFCCC, 2014, p. 15). This program aimed to work with people in the community that were disconnected from the land and people that struggled with food insecurity. The geographical scale of impact was local when the program started. However, as the program developed and began to accomplish their goal of "revitalizing their traditional food economy" (Kamal, 2018, p. 204) there were opportunities to share their learnings with others with similar food programs in Manitoba and throughout Canada. There were even a few opportunities when individuals shared about IMP internationally. In this way, even though the focus of day to day activities continued to be local their scale of impact also became regional and therefore it falls close to local on the scale of impact continuum (fig. 5) but not at the extreme end.

In terms of the scale of people impacted, the activities of the IMP brought country foods into the program that could be stored in their community freezers. This food was distributed every week to Elders, single parents and other individuals with health problems. The program worked to share teachings and skills with anyone in the community that was interested, but with a particular focus on Elders and youth. As Rene Linklater said, "[t]he main priority of all the programs is transferring traditional knowledge to the youth and children. That's the main goal."

The students at the school were the main target when they talked about the youth or young people, as Shirley Ducharme who worked in the school said,

Yeah, usually we take from the school, we identify kids that really need a lot of encouragement and motivational type of activities, so it's a life skills program.

So, the ones that really need an extra boost and to do different learning outside of the classroom.

However, it was not only the students in the life skills program that benefited from participating in IMP. All the students from all the grades were included at different times of year in different activities. For example, the youngest grades went to the program office to watch and help with preparing ducks and geese, while the older grade 9 and 10 students were part of the moose hunt.

4.3.2 Food activities, skills and use

The next dimension that will be examined is the food skills that were taught through the food activities the initiatives regularly undertook, along with what type of food was produced through these activities and how it was used, table 4 gives a summary for each of the food initiatives. In the triangle diagram (fig. 5) the food skills continuum, the bottom line, shows whether the food skills and activities that were promoted by the initiatives were focused on new foods or on re-skilling so people could access foods that were traditionally eaten in the community.⁷

To start with, the main food skills the Community Gardens in OCN were teaching were gardening skills. In the past, there were many people in the community that knew how to garden but the current residents had lost or never learnt gardening skills. Elder Mable Bignell reflected on the difference between the exposure she had to gardening compared to the youth she knew,

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⁷ Comparing new skills versus re-skilling it is not a comparison of country foods or medicines with horticulture. All the Indigenous communities in this case study saw gardening as a skill that their parents or grandparents had but was lost.

I think the younger people weren't exposed to that gardening that we were exposed because we were exposed to gardening. My dad used to have a big garden outside our house; there he grew potatoes, corn, you name it we had it there. And we learnt from there how to tend to a garden but nowadays a lot of young people are being steered away from that concepts now and not too many of them are interested in doing that because of course it's work [Laughter].

The gardening skills were taught through people participating in the day-to-day activities of gardening. Everyone involved in the Community Gardens was encouraged to participate in the gardens together to learn and put their skills into practice.

There were also occasion cooking workshops facilitated by Community Garden leaders to show people how to use some of the new vegetables and to teach skills for preserving produce. Some foods that were new to participants were grown in the Community Gardens but in general they grew the type of food people in the community usually ate, which is reflected in their program being left of centre on the food skills and activities continuum in figure 5.

In the Community Garden Program "food from the garden is shared with everyone who helps out" (NMFCCC, 2016, p. 28). This included both people who regularly volunteered at the garden and those that visited. Allowing people to participate in the harvest was also a way they encouraged people to come to the garden and see the value in it, which was reflected in Noreen Singh's comments,

So, my neighbor, she brought her granddaughter out this year to join the garden but last year I brought them with me to harvest and her granddaughter really likes it, so she was great in there planting with us in the beginning of the year. So, it helps with people to grow interest in it, ... a lot of them once they

start to harvest and have the foods, that usually converts them because they can taste the difference. That's what she said, she said 'I can really taste the difference between the store-bought stuff and the harvest', she said 'we like the harvest better', so she's hooked.

In turn, with the Grow North program the food skills that were taught were also horticultural but they extended beyond outdoor gardening to include greenhouses and indoor growing. Interestingly, the regular horticultural activities that occurred were carried out for the purpose of research, not teaching food skills. However, the research was eventually used to teach new food skills primarily through hands-on workshops conducted in the Grow North facilities in Leaf Rapids. These workshops were carried out with both leaders and participants from other food initiatives, mainly ones within the region. The workshops with participants of food initiatives were most commonly conducted with schools within a couple hours driving distance so they could send classes for day long workshops. Most years Grow North also hosted a workshop for food initiative leaders, from both school and community initiatives throughout the boreal forest region. In addition, the information was shared through online platforms, including videos and a website, as well as through curriculum that was shared with all Frontier School Division educators. However, these latter forms of sharing did not appear to have as much uptake as the workshops.

The main purpose of the day-to-day activities was to learn about new skills, techniques or foods that grow well in order to share them with people throughout the region, therefore all the types foods that Grow North grew were chosen for a research or demonstration purposes. Many types of food that were unfamiliar to staff and participants were grown, such as brassicas that grow well in cold climates, tomatillos, stevia and haskap berries. There was also

experimentation with foods that participants were more familiar with but were not often grown in gardens in the north, such as tomatoes, and peppers and with familiar foods that are recommended for northern gardens, such as potatoes and carrots. Any of these more familiar vegetables were grown to test new varieties or techniques or to show that it is possible to grow them in the northern boreal forest. Therefore, it can be said that the emphasis of food activities was on teaching new skills which is why the Grow North program on the far right side of the food skills and activities continuum in figure 5.

Some of plants grown by the Grow North staff were carefully chosen for seed saving and most of the remaining produce was utilized for personal consumption by staff or volunteers or for Grow North events. For staff, the extra produce contributed to their food security during the growing season (NMFCCC, 2017). Some produce was sent to OPCN to share with Elders or for community feasts because of the close connections between the two communities. The produce was not freely available to the community because it is not a community garden.

Lastly, with IMP the food skills taught were mainly focused on obtaining and using food from the land. The program was used both as an opportunity to teach young people food skills and to provide food for people in the community who were less able to obtain country food for themselves. Besides the food that was shared weekly with Elders and others in need, food was also shared with the Oscar Blackburn School for teaching purposes and with the general community for feasting, a culturally important practice. The food that was shared came from the teaching activities or was brought into the program by volunteer harvesters from the community.

The food activities gave young people opportunities to learn from the Elders and other skilled hunters, trappers, fishers and harvesters. There were many different food activities for the youth that occurred in seasonal patterns throughout the year. They learnt skills related to

harvesting, trapping, hunting, fishing and food preparation. Shirley Ducharme shared how these seasonal activities occurred,

[W]e have seasonal hunts that the volunteers will take some of our students hunting and then whatever they bring we bring ... into the school [it is used] in the home-ec program, like wild meat, moose meat, caribou meat, then we do the recipes in the home ec program ... and show them the wild meat that's available here and ... cook it so they know they we can use the wild meats in the recipes. And also with fishing too ... we allocated some funds to the fisherman here and then they would bring in fish and then in the fall when they were preparing, the kids would go to the program office and see to preparation of the fish. And then they prepared it in different ways so they ... smoke the fish ...and just different ways that they can make meals.

There were also some gardening skills that were taught during certain years but this was not a main food skill. All of the food skills were taught in the context of cultural connections and with the intention of cultural reclamation. Language teaching and sharing the Cree words related to the food activities was also an important part of the IMP activities. This emphasis on food activities that re-skilled community members and shared food from the land places IMP on the far left side of the food skills and activities continuum in figure 5.

4.3.3 Organizational Structure

There are many different aspects of organizational structure dimension of the food initiatives that will be explored in this subsection, all of which are summarized in table 4. However, the factor of whether leadership was influenced more by the community or a few individuals was the organizational structure aspect that was most comparable between the cases

and influenced the other aspects of this dimension the most. Therefore, the type of leadership is the aspect represented on the continuum, on the left side of the triangle in figure 5.

4.3.3.1 Leadership

The organizational structure for the Community Gardens was purposefully chosen so that it could be community-led, one of the ways they did this was by making the program primarily volunteer run, including leadership. Noreen, who is a volunteer leader, noted, "we don't have a lot of staff from organizations like the health or education or anything. It's all on our own evenings, it's all on our own weekends, it's all on our own here, so it's more community-led." The program received support from the Chief and Council and other groups in the community, but it was never run by an institution.

The leadership for the Community Gardens was shared by a group of individuals from the community but they always consulted with the wider group and the community in general to determine what was desire. For example, Teresa de Hoop, a participant, shared how, there is a "group of people who come together at the beginning of the year, we plan it out and Peggy maps everything out." Another example can be seen in Peggy Wilson's comments,

I was thinking about this year just trying to see what [participants] want to grow, maybe they don't want to grow a bunch of potatoes because they're diabetic, or they don't want to grow certain types of foods, so I was thinking maybe trying to survey people and ask them what they'd like to grow, maybe that would peak interest.

All the decisions were made as a group and anyone from the community who wanted to could join, which is why the Community Gardens Program was placed at the bottom of the organizational structure continuum in figure 5, to indicate that it is community led.

The people in leadership were working to get more people involved in order to spread out the responsibility and work. The first year they started with one central community garden but because of interest from many people in the community they expanded and as of 2017 they had five community gardens spread across the community. One way they did that is recruiting an individual from each area where they wanted to put a smaller garden to provide leadership for that specific garden.

Although the Community Gardens were organized through community decisions and leaderships from many different individuals there were strong food champions that continued to bring encouragement to the program, the most commonly mentioned were Peggy and Elder Stan Wilson. Peggy and Elder Stan, the original founders, continued to be highly involved in leadership of the initiative. When Teresa de Hoop was asked how there is such a community spirit that brings people together she said "I'm going to have to say Stan and Peggy Wilson. I think that they are amazing, I don't even know of a good enough word to explain them but they're so good." This was echoed by Elder Mabel Bignell, who has participated for several years, "Peggy is so instrumental and doing all these things and it gets people involved." It was well known to all the people involved in the program that Peggy and Elder Stan were the originators, as was show in the comments of Teresa de Hoop,

I can't remember what it [the area] looked like there without the community garden because it's so amazing now to see it. I just think how much work they've [Peggy and Elder Stan] done and how much struggles they've gone to.

In contrast to the community leadership of the first case, the leadership for Grow North came primarily from a few individuals that worked for institutions. It was started as a regional program to primarily serve schools that were part of the FSD. Although it was run out of a

specific community, Leaf Rapids, the needs of that community were not intended to influence the organization structure of the initiative any more than the needs of the other communizes. However, there was not an organization structure set up to collect the desires of all the communities the program was designed to serve, instead, it was structured to be run by a few individuals that determined the horticultural needs of the region. The strong influence of a few individuals is why Grow North is place at the top of the organizational structure continuum in figure 5.

In Grow North there was always at least one person who was a paid leader of the program and at times there were assistant leaders that were also paid. There were also some individuals who assisted with leadership in a voluntary capacity but these were mainly people from outside the community. Many of these were individuals were from various academic institutions and who went to Leaf Rapids for a short period to learn from being part of the initiative. Others were individuals who moved to Leaf Rapids for work and later became involved in a volunteer capacity in leadership. Chuck Stensgard, the regional coordinator, wanted to see this type of volunteer leadership continue and to recruit even more individuals from outside the community, he said,

I could use about five to ten good southern semi-retired farmers that would enjoy working with different communities ... who would still like to come up and help ... for a summer, you know they have gardening skills.

However, there has also been a desire within Grow North to increase local leadership skills.

Throughout the history of the initiative some of the supporting leadership roles were filled by people from the community, including more recently young adults who used to work with Chuck when they were students.

The main person who gave leadership to Grow North was Chuck Stensgard. He was a passionate, strong leader who had years of experience with horticulture before leading the regional initiative. He grew vegetables for himself in the boreal forest for 40 years and ran horticultural projects at the Leaf Rapids school. He continued to be dedicated to the project even with opposition and skepticism from some people in the community. Chris Brayley talked about how some community members viewed Chuck's involvement in Grow North,

They think Chuck and the projects get money from Frontier and the government and [they] spend as little as they can on the project and pocket the rest. But little did they know that Chuck gets [a] minimal amount, average salary for what he's doing nothing too major, nothing too little, and his workers get average pay and that's about it.

The organizational structure of IMP was more similar to the Community Gardens, in that it was created to encourage community input and involvement in the program. From the inception the program was led by a committee of community members. As Shirley Ducharme, who was a committee member from the beginning said,

When we started we tried to incorporate ... the school and then they looked [to] the Chief and Council to be a representative there and then with the Elders ... and youth ... and we did incorporate the trapper's fisherman's association members.

There was also a representation from the local Health complex on the committee.

Although there was involvement from the University of Manitoba the decisions were made by community members while the people who were not from the community provided support. All the committee positions were volunteer but some people worked for organizations

that allowed them to do some work with the committee as part of their paid position. For example, Rene Linklater was asked to join the program because of his role as the Director of Health Services. He said, "I am the chair, I oversee the overall budget, the program, the coordinators, also various community members that are involved." The committee had people representing the different community organizations that supported IMP as well as people that represented different parts of the population, such as Elders, but did not work for a specific organization. Since the committee was made up of community members and there was no strong influence from a single institution or individual the IMP is near the bottom of the organizational structure continuum in figure 5 to indicate that it is mainly community led.

Similarly, to the Community Gardens, even though it was community-led there were strong food champions that were involved with the creation of the program that continued to provide leadership, supporting, encouraging and at times were the face of the program.

4.3.3.2 Staffing and Participation

The majority of the garden labour in the Community Gardens program was done by the participants on a volunteer basis, so for many years there was no additional paid staff. As mentioned before they purposefully structured the program to reduce the need for paid labour and encourage community involvement. When the Community Gardens started, they decided as a group that there should be two conditions, each family had to do an hour of work in the garden each week and pay a \$5 membership fee. They encouraged whole families to come out, grandchildren, parents, grandparents; there was no limitation on what was considered a 'family' for the purposes of the conditions. The participation was encouraged by Peggy "because if someone else does all the work it takes away the physical component." However, no one monitored who came to the garden or how many hours each family participates, instead it was up

to families to monitor themselves. Also, anyone from the community was welcome to stop by and participate in the garden even if they were not an official member.

In later years they had a few students that were hired in the summer to work in the main garden but it was uncertain whether this practice would continue. As Peggy Wilson said,

We got summer student funding to hire summer students this year, that's a good thing and a bad thing. Because when the everyday gardeners are getting paid they [volunteer members] kind of back off because, oh the students will just do it. So, we'll see how that goes.

There was lots of interest from the community from the beginning, there were 38 families that signed up the first year. They wanted anyone in the community who was interested to have a chance to participate so they created additional gardens to make it more accessible to people without vehicles because the community is spread out geographically. They met once a week to work all together in the main garden and once a week at the smaller garden locations. Noreen Singh shared how all the gardens work together,

Yeah, we coincide with the other garden committees, so we say okay well Mondays is our night and then everybody kind of picks a night right, so you can go to any one of the gardens and help out. Let's say for example you went Monday and then a lot of us have to go and help on the main garden because it's so big so they need extra help so they try and encourage everybody to help the main garden as well, so it could be up to two times a week that we go.

At the garden nights, they worked on whatever tasks needed to be done at that point in the season. However, they always gave instructions for those who were learning and tried to include everyone, no matter, their age, skill or physical ability.

The program was purposefully structured in a way that brought everyone together once a week for various reasons, including the fact that "socializing is just as important as anything else. People go there and visit as they work" (NMFCCC 2016). Bringing everyone together also helped with the purpose of increasing the health of families by strengthening connections between people and allowed them to keep paid labour at a minimum and community engagement at a maximum.

The program was open for anyone in OCN or even the neighbouring community of The Pas to participate. They wanted the program to benefit as many people as possible so they encouraged people to visit the gardens and allowed anyone who visited to harvest. They did this to help people see the value in gardening and try to stimulate interest. They encouraged visiting by placing the main garden in a place frequented by foot traffic, beautifying the grounds and letting everyone know they were welcome. Their strategies worked and there were many people from the community that visited the big garden. Peggy Wilson said,

A lot of people that we never see during our regular meeting days... drop by.

In fact, I had a man say to me the other day 'I went to the garden to get potatoes

but when I went there the potatoes were gone.' But I've never seen him at the

garden.

In contrast, Grow North relied primarily on paid staff to plant, care for and perform the maintenance tasks necessary to maintain the nursery and greenhouses. Some of the work was performed by the people in leadership who were on staff year-round. During the growing season, they also hired young adults, mainly students, to assist with the increased labour and gave honorarium to younger students who completed specific jobs in the nursery. However, the

purpose was not to just provide the necessary labour but also to teach skills to the youth. The jobs acted like a mentoring program. Chuck Stensgard said,

[M]y idea is to keep getting the information out there and keep channeling it towards the younger, from young adults and down, so as they have a chance to make some decisions they actually have some skill sets so they can understand the plant or grow a plant or whatever. So, yeah I think that the educational component is important.

During the growing season, there were also some people involved on a voluntary capacity. Mostly, these were individuals from outside the community from academic institutions, as was mentioned on the leadership subsection. Occasionally, there were adult community members that were involved as volunteers in the day to day labour for short periods of time. However, there was limited involvement of community members in the Grown North facilities because the initiative was not primarily intended to impact the local community.

Lastly, the staffing for IMP was mainly volunteer with the exception of one year-round paid coordinator; everyone else who was involved in harvesting and teaching was a volunteer. There were some small honorariums offered to offset costs to people going out on the land, such as for to cover gas the cost of gas, but all the teaching that was done by the Elders, skilled harvesters or fishers was all voluntary and led by individuals from the community. Rene Linklater said,

We have approximately ... 10 maybe 13 regular harvesters, ranging from various areas in the community, the far end, Lucy bay, uptown. These are people that are generally older and know various ways of how to harvest and they also have various places where they harvest foods and different trap lines.

In more recent years there have been youth hired to work with the program during the summer but the purpose of hiring youth was to increase their involvement and leadership skills more than to complete the food activities. Rene Linklater said,

In fact, this summer we'll be hiring two summer students, a male and a female, to kind of oversee the food program, where the coordinator will kind of stand back and kind of just give direction, nothing major though (laughter). So, what they're going to be doing is they're going to be planning activities for youth in different age categories.

4.3.4 Challenges, barriers and solutions

All the cases experienced challenges during the formation and operation of their programs but this section will focus on the ways that challenges were overcome, rather than on the challenges themselves. The participants in all the communities involved in the research (table 1), not just the participants from the case study, were aware of challenges in their food initiatives and their communities but they did not want to dwell on them, instead they wanted to focus on the solutions. This was illustrated in this interaction with Kim Izzard and Annie Ballantyne of Grand Rapids and MCN when they were asked "Have you found challenges along the way in your food journey?",

Kim: I'm sure there is but they're not things I tend to hold onto...I try

Annie: Cause you try to problem solve

Kim: Yeah, so they're not things, although there definitely was, they're not things that I hold onto or try to remember. We're always trying to improve and to break down those barriers.

4.3.4.1 Exposure and Knowledge

In all these communities, a lack of knowledge about food skills and food activities was a main reason that these food initiatives were started. However, not only knowledge and skills what the programs were designed to provide but the lack of knowledge along with a lack of exposure was also a challenge and sometimes a barrier to people participating. As Elder Mable Bignell explained,

It's very hard to get these community people to believe in something that they haven't been really exposed to. But I think that the main challenge is to get them involved, to get them started, to get them interested, to get them to realize it's important to go this route, it's for the benefit of our young people more so than our older ones. I always find that it's a very challenging job to get young people involved in something that they haven't been exposed to, haven't been told about.

Although Elder Mable was specifically involved in the Community Gardens, people in Leaf Rapids and OPCN also had a lack of knowledge and exposure to food skills and activities. In table 5 the common challenges and barriers are listed on the left hand side and the ways they were overcome in each of the cases are listed under each of the initiative names. As can be seen in table 5, the common way a lack of exposure and knowledge was overcome was to provide opportunities for people, especially youth, to be exposed to and participate in food activities.

Getting young people involved in the food initiatives was part of the way a lack of knowledge and exposure was overcome because in many of the programs they saw that if people got involved as younger youth they continued to be involved as they got older. There was lots of enthusiasm from all ages of children to learn and be involved. When Elder Mable was asked

Table 5: Challenges and corresponding solutions used in case study food initiatives

	Community Gardens	Grow North	IMP
Lack of exposure	Provide exposure,	Provide exposure,	Provide exposure,
and knowledge	including youth, open	focus on youth	focus on youth,
	participation in		Intergenerational
	harvesting		connections
Stigma over not	Group learning	Workshops for adult	Group learning
knowing/learning		leaders	
as an adult			
Vandalism	Show people the value	Show people the value	Show people the value
within food	for themselves and the	for themselves and the	for themselves and the
activity spaces	community so they	community, fences,	community, fences,
(i.e. gardens)	become invested and	guarding	alternative locations
	continue to work		close to monitoring
	through the challenges		
Funding	Finding organizations	Finding organizations	Finding organizations
	that match food	that match food	that match food
	initiative values, in-	initiative values, in-	initiative values, in-
	kind community	kind community	kind community
	support	support	support
Physical	Improvement to the	Experimenting with	Sending out
environment	physical area to make	new growing	experienced people,
	it more resilient	techniques, using	scheduling according to
		locally available	the season and weather
		resources to improve	
		the soil	

how she got they got youth involved in activities they had never been exposed to she said,

Well literally bringing them over and putting them to work and telling them this is what tools you use, and this is how you use them, and this is how you plant ... It's just literally involving them, even the ones that weren't interested in it, they got pushed into it as well because their peers are doing it, 'well why not me?' type of thing.

As the youth got older some communities found that some of them were less interested in participating but the programs still worked to keep them involved. For example, the IMP had this problem and worked to overcome it. Shirley Ducharme said,

Sometimes there's a lack of participation with mainly the youth, I guess maybe the grade nines and tens I find, but we worked around it. Summer employment, ... we tapped into that because they're getting paid so why not take them down the road and go pick raspberries and they participated [Laughter]. There's ways of finding how to get them motivated.

In all the cases, the involvement of young people was considered important by the food programs and also by the general community. Improving life for future generations was a motivating factor for doing any sort of activity in all these communities. As Julie Price shared,

If you ask any of the communities why they are doing what they're doing, they immediately talk about Wabung, future generations. It's about tomorrow, it's about opportunity for our children, it's about opportunity for our youth, it's about bringing pride back to our community. So, I guess I could say, a really common thread to all of them, is that they feel they're being successful if they feel they are making the world, or their community, or their life, a better place for children and future children coming into it.

The communities saw that by getting the next generation interested in the activities promoted by the food programs the cycle could continue in the future with the following generation being taught by the ones that were youth at that time. Due to the importance of youth to the general community, when programs specifically included youth this often increased the acceptance and support from the local community. This support from the local communities was one of the factors that made food initiatives successful, as will be discussed more in the next subsection, elements of success.

Another way that a lack of exposure was overcome in the Community Gardens was encouraging everyone in the community to visit and allowing anyone who came to work in the garden to harvest produce. As was discussed in subsection 4.3.2, when talking about the uses of the food in the Community Gardens, this method of inclusion brought many people from the community to see the gardening space and experience for themselves the benefits and value of gardening.

One of the notable ways that the lack of knowledge in youth was overcome was through intergenerational connections with the Elders who held the knowledge the program wanted the youth to learn. As Shirley Ducharme shared,

We have one of the Elders in our school that will actually take our kids just into the forest here and go gather spruce gum and roots that she knows, medicines, herbs that are available. We do have quite a few members that do that and they'll come to school to and bring whatever herbs they have and do that type of teaching to our students

Intergenerational involvement was purposefully integrated to both the IMP and the Community Gardens programs. It was important for many reasons, including the transfer of knowledge, the way it helped initiatives achieve their goals and because Intergenerational connection is a culturally important concept.

4.3.4.2 Stigma around lack of adult knowledge

Another challenge was the stigma around learning skills as an adult. People were reluctant to appear like they did not know how to do something or did not have the skills for activities that they felt like they should already know. This fear of showing a lack of knowledge

could have stopped people from participating, especially because these were close-knit communities where people knew each other. As Julie price shared,

A lot of communities have told me about a fear in the community members in looking like they don't know what's going on. Let's talk about Opaskwayak again. This fear of not knowing how to garden, 'when my grandparents and my great grandparents knew how to garden' and looking foolish is a really serious thing in this community. One of the ways they've addressed it is ... nobody has their own plot, so nobody's can look better than anyone else's and that's intentional because that's culturally what would have happened traditionally. ... In addition to that, ... where everybody comes together, generally they get the same kind of information. So, there's some community members that are pretty good gardeners and they sort of lead these sessions and everybody is learning together. So, you can have a 5 year old and a 60 year old grandma who are learning the same skills together and that is intentional to try and reduce peoples fear of not looking like they don't know what they're doing.

By having everyone working side by side on the same garden and by learning all the skills all together the stigma was overcome.

IMP also utilized group learning to overcome the stigma of not knowing, or not having a specific skill. With the IMP, they required people to have many different certifications, such as food handlers, CPR, boat safety, hunter safety and firearms training. At first people were resistant to take the training to get these certifications. Rene Linklater said, when he first asked people to get their food handlers certification,

They're like "I know how to dress a fish, I've been doing it for 20 years." ... So that was really a struggle to convince them to get their certification in those areas, food handlers, CPR, first-aid, criminal record check, child abuse registry ... because some people, they're worked with these kids, they've taken them out on the land on their own and all of a sudden this food program comes along and says 'well we have these guidelines and you don't meet them, you can't really work with us.' So that was a struggle, yeah. But the way to get around that we basically started offering courses for free. And right now, I'm actually proud to say we actually have maybe 75% of the community trained in food handlers, CPR/first aid, fire arms, boat safety, the majority of them now have their criminal record check and child abuse registry. So, we just said well let's just offer these programs for free. Let's educate the community and get them certified.

By offering the training in the community, for free, in large groups to they were able to overcome stigma and reluctance to get certified.

With the Grow North Program, they overcame the stigma around lack of knowledge by holding workshops where adult leaders, who were mostly working with students, came together and learnt horticultural techniques. This was less of a challenge with Grow North because the majority of the adults being trained worked in the education system and were accustomed to learning new skills and acquiring new knowledge as a regular part of their job.

4.3.4.3 Vandalism

Another challenge that all the food programs faced was vandalism within the spaces where they carried out their food activities, such as the gardens and greenhouses. One method

that was used to partially overcome this challenge was to show people the value of the program to themselves so community members would become more supportive, less likely to cause vandalism themselves, and the participants would be willing to continue being part of the program despite the vandalism. When people began to see the value there was continued involvement from participants and often other community members who were willing to volunteer their time and resources. The involvement of community members who were not regular participants helped to overcome the challenges of vandalism and contributed to success. For example, when Elder Mable was asked what made the Community Gardens successful she said,

It's the way it's been handled by the organizers, by our community people and by our departments, like the beautification team that comes in and waters the plants and all that. And even had the water hose put in and all that. It's coming, before we never have that and then they put the fence around our garden, it's the willingness of the people to make it happen, I think that's what really got it started.

The other technique some of the programs undertook, or considered, was to use preventative methods such as installing fencing or having people monitor the area in order to stop people who wanted to vandalize the space. Shirley Ducharme said,

And we did initiate a greenhouse too in our school but it got vandalized so it wasn't successful. We're still trying to find a location where we could have a greenhouse, and then it will be continually monitored. But we haven't got to that stage, so we're trying to find ways that we could have an early start and find some way to enrich our soil to get make more good growth.

4.3.4.4 Funding

The main challenges related to funding were not enough resources and the expectations from funders. There were always more resources needed than funding available so all the programs had to continue to look for different sources of funding to support their work (NMFCCC, 2015). In addition, some of the funders had restrictions on what could be funded or unrealistic expectations about reporting impacts.

As can be seen in table 5, all the programs overcame the challenge of needing funding, in part, with in-kind-support from the local government or other local organizations. The in-kind-support included the use of land, donations of physical resources and the labour of employees to complete tasks. For example, Grow North was granted permission to use land owned by the corporation that runs Leaf Rapids for the Nursery without paying taxes or water bills; at the main garden in OCN the landscaping and grounds maintenance was done by people who worked for the community of OCN; and in the IMP the entire program started without funding by the community bringing the different skills and resources they had (Kamal, 2018). This type of support allowed the programs to function with limited funding and to accomplish even more with the funding they had.

The main way that the expectations of funders was overcome was by finding at least one funder that allowed the funds to be spent on any aspects of the program that was desired. Peggy Wilson shared how the funding they got from NMFCCC allowed them to move the Community Gardens program forward in the ways they wanted to go,

You know, and they haven't cut it off, that's the nice part. Usually with grants you get a grant and that's kind of the end of it, but they follow through and make sure that there's enough money, because it takes money to make those

projects work ... So, they've been excellent and also, I like their way of evaluating whether it's working. they're certainly not saying 'we need blood sugar counts' ... because you don't change people in 10 years or 5 years or whatever ... this grant that we've got it for 3 years now it allows us to expand into other areas. That's great.

The leadership from all the programs found at least one funder that allowed them to expand in the ways they wanted their program to go rather than limiting what type of activities or results were allowed. Some of the programs had additional funding that was more restricted but by having at least one funder that gave greater autonomy they were able to accomplish tasks they wanted.

4.3.4.5 Physical environment

All the cases faced challenges that were both natural to their physical environment and ones that were anthropogenic. There were challenges rising from the weather, climate change, soil quality and deterioration of the natural habitat of plants and animals. Depending on the type of food activities the challenges and potential solutions related to the physical environment differed. Table 5 shows that each of the programs used different methods to overcome the challenge of the physical environment.

For the horticultural activities, the weather was a challenge that needed to be accounted for in the timing of planting and sheltering of plants but the soil quality was the main physical challenge that the programs worked to overcome because they could have more control over it. As was discussed in the history of the programs, the Community Gardens created their first garden with purchased top soil in order to start gardening immediately without having to spend years amending the soil. Once it was established they began to work on creating compost in

order to increase the biological life and nutrition in the soil without using chemical fertilizers.

Grow North never purchased top soil but instead experimented with different locally available inputs to amend the soil. They tried different inputs such as peat moss from local bogs, fish entrails from a nearby processing plant, and tree matter. They continued to try different methods and eventually saw improvement in their soil quality but it took a lot of work, as Brian Trewin shared,

Well, for gardening the soil development is almost nonexistent and even if you are trying to improve the tilth of the land it takes a lot of effort and -- probably, because I haven't been doing it for a decade, I'm going to say probably even longer than a decade, even if you are active every year, I assume that it would take a long time to get the fertility up, yeah.

The main way that Grow North worked to overcome the physical challenge of the soil and the weather was by using locally available materials because they wanted to find methods that other communities could also use even if they did not have much funding.

With IMP the food activities were mainly hunting, gathering, fishing, and acquiring food from the natural environment. Therefore, the biggest challenges were the weather, including increased unpredictability because of climate change, and the contamination of the natural habitats by heavy metals associated with hydro-related flooding. The best solution for the variable weather was to be flexible with the timing of activities, according to what weather occurred. However, some years the weather was too harsh or unpredictable and they were unable to complete the activities they wanted to. Shirley Ducharme explained how the weather affected IMP,

Especially this year, the weather was so unpredictable and that was a big challenge for hunting and planning because you don't know, there was so much snow, traveling was hard. But we still did go later, before we got a lot of snow there was still people, still hunting caribou, they were able to get it. And also, in spring too after, there was just a couple of weeks it was nice traveling and a lot of people went out to go do the hunting. So that's the only thing is, if it's late freeze up or a very cold and windy fall then usually we're not successful with moose hunting and that. So that's the biggest thing, weather is a big challenge.

In order to overcome the challenge of the contaminated parts of their environment they had to go to locations further away from the community that were not contaminated, such as going fishing in smaller 'inland' lakes instead of in South Indian Lake where the community is located.

4.3.5 Elements of Success

Each of the food programs examined in this case study had certain elements that contributed to their success, these were any elements that contributed to food initiatives accomplishing the goals the participants wanted their food initiatives to undertake. The elements that will be examined are: support from multiple organizations, passionate food champions, and investment in the program by the local community.

4.3.5.1 Support from multiple organizations and funders

Receiving support from multiple organization and multiple funders was a common element of success for all the programs. There was support from organizations such as schools, local governments, universities, and local associations of food practitioners. There was funding from philanthropic, educational and government funders. In addition to providing monetary

funding and in-kind support this network of organizations and funders provided ideas, solidarity, practical knowledge and at times some of the local organizations endorsing the value of the program increased the opinion of the program with the individuals in the community.

The IMP, in particular, showed the way support from multiple organizations contributed to success. When talking about what showed the success of IMP Shirley Ducharme said,

And also ... the partnerships that are happening, like the lodge and the fisherman and that's an improvement, the growth of this program, when they pull in these partnerships.

IMP had different organizations involved and people from multiple organizations providing leadership to the program right from the start. This helped to create a program that fit the desires of multiple parts of the community and led to increased community support and investment. An interesting element of the partnerships between IMP and the rest of the organizations in the community is that they were reciprocal. For example, the Oscar Blackburn School provided community support and connections to local youth, while IMP provided wild meats for the school to use in their home economics classes and heritage days. These reciprocal relationships reinforced the value and benefits these programs brought to the community. In addition, reciprocity is a cultural value, so operating in a culturally appropriate way was important for the program and elevated the program in the opinion of the community.

Another reason that support from multiple organization from the local community was important was that it contributed to a broader base of support. When there were many people, spread throughout different segments of the population, involved there were more people to

realize the value to the community, spread the word about what was happening and potentially support the program by volunteering or providing in-kind support.

As was discussed in the challenges subsection, programs were always looking for more funding so having multiple funders provided stability if one funder was unable to provide grants, for a season or permanently. Multiple funders also had different types of support and opportunities for learning from the networks established by those funders. In-kind support was also an important factor that became even stronger when there were multiple organizations that could offer it.

4.3.5.2 Passionate Food Champions

As was seen in the subsection on leadership, all the food initiatives had passionate food champions that gave leadership and encouragement to the programs, even if they had community leadership. There were many challenges in all the programs so it was important to have people who were very passionate and really cared about what they were doing. The comments made about Peggy and Elder Stan Wilson in the leadership subsection, 4.3.3.1, showed how influential it was to the program to have the support of dedicated food champions. The dedication they had to the program was also evident in their own reflections. For example, Peggy Wilson said,

As someone who helped start the gardens, you have to have infinite patience.

There's lots of times when I'm sitting there saying 'god, why can't they get it?

I've said it ...' But I think ... you just have to keep going.

This kind of dedication was shown in all the cases with the participants and fellow leaders recognizing the programs would not have been possible or would not be the same without the dedication of community food champions.

4.3.5.3 Community support and ownership

Community support and 'ownership' of a program was considered an important element of success for all the food initiatives. This community 'ownership' was figurative and included both community leadership and support from individual members the local community, which was referred to by some research participants as community 'buy-in'. This was expressed explicitly by the participants who oversaw and funded multiple programs and mentioned through examples by the people directly involved in the initiatives. This is not to say that there were not challenges associated with community leadership or with trying to gain support from community members. However, once those challenges were addressed and the community saw the value in the programs there was increased involvement and success. As Don McCaskill, the superintendent of FSD Area 1 said, "So, in communities where we've had to build – try to build a strong relationship with the community and the students then they've tended to be more, more successful." The challenge of gaining community ownership or 'buy-in' was mostly overcome by showing people the value and benefit in the programs. Once this was overcome support was seen in actions such as in-kind support and involvement in the program. This element of success led to many of the other elements of success being possible.

4.4 Discussion

The diagram in figure 5 synthesizes how all three food initiatives in this case study functioned as well as highlighting differences and similarities among them. The three dimensions of food skills, scale, and organizational structure bring to light, respectively, what food initiatives do, who the food initiatives are working to impact, and how they operate. By placing each food initiative along a continuum for each of the dimensions it is easy to visually see how they differ in their dimensions and overall. Other studies have looked at organizations

dimensions and scale but within the context of a single type of food skills, specifically gardening (Drake & Lawson, 2015; Hazzard et al., 2011).

4.4.1 Food skills

All the food initiatives in this case study shared a desire to increase the amount of healthy food and cultural resurgence (chapter 3) which was accomplished in part through teaching food skills and empowering food activities. This dimension can be seen in the bottom section of the triangle diagram (fig. 5). Each initiative chose to enable and teach the type of food skills that they believed would best achieve their goals in their context. The choice of whether to teach new skills or re-skill, as well as the choice of whether to focus on country foods or gardening had tensions that the food initiatives had to manage, whether they realized it or not.

When initiatives choose to focus on re-skilling they met the communities desire for encouraging cultural recurrence but there are large challenges with attaining healthy food through re-skilled activities, especially in sufficient quantities to address the current food crisis in the North (Rudolph & McLachlan, 2013). The impacts of industrialization, primarily hydro development, relocation and climate change have all affected areas that were previously used for harvesting, hunting and fishing (Dysart, 2015; Erikson, 2008; Ford, 2009; Hrenchuk, 1991). This is true for the First Nations communities in this case study (OPCN and OCN) as well as many Indigenous communities throughout Canada (Ford, 2009; Trainor, Stuart Chapin, Huntington, Natcher, & Kofinas, 2007). The food initiatives in this case study that are building country foods skills have responded by finding alternative sites for activities, being flexible to different weather patterns and taking extra safety precautions because of the changes in water patterns due to hydro development. However, people in other communities in northern Manitoba

have expressed concerns over whether country foods are still plentiful enough to provide enough food for their community (Rudolph & McLachlan, 2013).

There are also tensions when food initiatives choose to focus on new skills. In this case study the new skills were mainly new gardening techniques designed to overcomes some of the environmental barriers, namely poor soil quality and the short growing season. Therefore, the new skills helped to increase access to healthy food but they did not necessarily increase cultural resurgence. New skills can also require people from outside the community to provide the knowledge and support the activities. Although community members can develop skills themselves and teach them to others in the community, a focus on new skills can potentially lead to dependency on outsiders to continue the food initiative. This was highlighted in the context of school programs where school staff ran gardening initiatives within the FSD. Often, the programs were discontinued once the staff that were most passionate moved away. In contrast, the IMP program continued to operate, despite the fact that the program coordinator changed several times. This was in part because the initiative was re-skilling and there were a variety of people in the community that had the knowledge needed to run the program. There is very little research on the impact of introducing new skills that require outside support to communities. This may be important to investigate because it could influence the type of food initiatives organization support.

There are also tensions within food initiatives in northern Manitoba specifically related to gardening. Firstly, even with adaptations gardening also has environmental limitations and there are questions about whether northern Manitoba gardens can actually provide enough food for a community (Rudolph & McLachlan, 2013). However, a more controversial issue is whether gardening is an appropriate food activity in Indigenous communities, especially in northern

Canada, because of its close connection to colonization. Gardening in Manitoba was introduced in the north by the Hudson Bay Company, economically controlled by the government and taught in residential schools (Carter, 1990; Iwama, 2000; Soloway, 2015). Therefore, it is understandable that people in some Indigenous communities are skeptical about gardening. However, there people who say that there is a history of gardening in northern Manitoba (NMFCCC, 2014, 2017) and there are people, like Audrey Logan, teaching Indigenous gardening methods in Winnipeg (Parker, 2018). There are community lead gardening initiatives taking place in Indigenous communities throughout Manitoba and the rest of Canada (Mundel & Chapman, 2010; NMFCCC, 2014, 2017). Therefore, no matter what skills food initiatives choose to teach the important factor is that communities choose what is best for their context.

4.4.2 Organizational Structure

The organizational structure dimension had many factors that contributed to it (table 4) but the most distinctive aspect was the whether the leadership came from the community or an individual. This factor was closely related to whether food initiatives worked to impact a regional or local scale. The two food initiatives that focused their activities on a more local scale were also more community-led in their organizational structure. There are other factors, such as the similarities between OPCN and OCN compared to Leaf Rapids, that might contribute to the connection between these dimensions. However, it is easier to have a community-run structure when there is a local scale of impact because it requires less resources to gather people in order to get input into decisions.

The Community Gardens was the most community-led initiative and it was the most grassroots and the least structured of all the initiatives. Grassroots organizational structures are best poised to meet the needs of the local community but there is a tension because they have

challenges as well. There are limitations in terms of how much they can accomplish with their activities because they only have the support of individuals. However, this was overcome in this case study with the more grassroots initiatives gaining support from many other organizations in their community and external networks. Having multiple organizations support food initiatives can be important for many reasons. The different organization can help add connections that show the diversities in different parts of the population in the community. This diversity of community voices was found to be an important factor for the success of a community freezer program in Nain, Nunatsiavut (Organ et al., 2014). Also, connections between organizations that serve people in a community can make all the organizations that serve people stronger through a stronger network of understanding (Murray et al., 2014).

4.4.3 Scale of Impact

All the food initiatives in this case study wanted to make life better for people from every societal level in the area where they were working, from the individual up to whole community or region (chapter 3). The main difference in scale came from where, geographically, they focused the majority of their efforts, as is seen on the right side of the triangle diagram (fig.5). When food initiatives choose to focus their efforts on a regional scale there is often less community support because it is difficult to be connected to all the communities and to know what they need. Similarly, it was found that there can be challenges with provincial environmental conservation programs understanding local needs (Weyerhaeuser, Wilkes, & Kahrl, 2005) and that local environmental conservation collaboratives have different structures than regional collaboratives so it is difficult to transition from local to regional (Prager, 2010). There is very little literature about regional, community-based food initiatives because of the emphasis on local community control in the alternative food literature (Levkoe, 2014).

However, in this study the positive aspect of a food initiative having a regional focus was that they were able to make more connections with other initiatives and to find networks of external support.

The food initiatives that focused their activities on a local scale had the tension of only being able to impact the immediate community, despite the fact that other communities in the region are confronted by a similar food crisis. However, the strongest reason for having a local scale of impact was that it allowed the leadership and decisions of the food initiative to be very connected to community desires.

There were changes over time to initiatives at both ends of the scale of impact continuum (fig. 5) which helped to overcome some of these tensions. The IMP started out with only a local scale of impact but as it became more established they began to share about their initiative throughout the region and even internationally. This was possible, at least in part, because of connections that existed with the University of Manitoba and that were built overtime with NMFCCC, which is a regional organization. At the opposite end, Grow North is now looking to become more local in scale of impact. Since the interviews Chuck Stensgard has stepped down as the regional coordinator and two youth who have worked with him, Chris Brayley and Brian Trewin, have become co-leaders of the program. They have plans to try to make more of an impact on the local community.

Many of the tensions illustrated in the triangle diagram (fig. 5) were overcome by leaders and participants letting the dimensions of their food initiatives evolve and working to find the best balance for their initiatives. So far these changes have shifted the food initiatives more towards the center of each continuum and towards the middle of the overall diagram.

Interestingly, although there have been changes in all the initiatives they have all continued to

keep one of the three dimensions consistent throughout their history. As mentioned above, the Grow North initiative is working to impact the local community more and the change in leadership is also making the organizational structure more community-led. However, they remain committed to research and teaching new food skills. The Community Gardens are working to have more activities that are re-skilling, as well as looking towards having wider of a scale of impact to increase healthy foods in communities around them but they are continuing to use a community led organizational structure. Finally, IMP has become more regional over time, as discussed above. They have also gained more institutional support overtime and are poised to gain even more as Shirley Ducharme, one of the founders, was elected Chief of OPCN in 2018. The one dimension that has remained constant is their focus on re-skilling. All the food initiatives continue to be active and are expected to continue to evolve and change, probably towards a central place in the triangle.

4.4.4 Challenges and Elements of Success

Resources and funding was a barrier that affected all three dimensions of every food initiative in this case study and it affects many other food initiatives as well (Drake & Lawson, 2015; Hazzard et al., 2011). The desire for funding can cause tensions in food initiatives. One tension comes from the types of activities that can easily receive funding. For example, funding often favours gardening over country foods activities. The main provincial funding for food initiatives in Manitoba, NHFI will provide funding for gardening activities and tools but "supports and reimbursement towards hunting, fishing or trapping equipment, gas for hunting, fishing or trapping trips are still not considered as eligible categories for in-kind or cash funding" (A. Sharma, personal communication April 9, 2014 as cited in Kamal, 2018, p. 258-259). This type of bias can influence the type of skills food initiative focus on, especially since funding

from non-Indigenous sources often does not allow activities involving wild meats (Kamal, 2018). Other studies have shown that organizations that are dependent on funding sometimes changes their programing to align with the desires of the funders (Krawczyk, 2018; Regan & Oster, 2002).

This tension over funding can also influence organizational structures. Food initiatives that rely on paid leadership and labour are more reliant on funding and therefore more likely to try to accommodate the stated or perceived desire of the funders. Boards of non-profits in New York were found to be more likely to give into the pressure of funders when the organization was highly dependent on funding (Chao, 2007). On the other hand, food initiatives that rely entirely on volunteer leadership and labour are more limited in what activities they can carry out unless there are individuals in a community with other means of supporting themselves and their families. However, relying on volunteer labour increased community participation and often community support. It can also allow more autonomy for cultural resurgence and other decolonizing activities. This reliance on community support instead of outside funders is encourage by some Indigenous scholars, such as Leanne Simpson who said it is important to confront the "funding mentality" in order to have programs that are truly decolonizing because "colonizing governments and private corporate foundations are not going to fund our decolonization, because the colonial relationship serves their interests" (2008, p. 77). An alternative organizational structure, between the extremes of completely paid and completely volunteer was demonstrated by IMP. They had a paid manager and support from people who had jobs from which they could use part of their paid time to support the initiative. However, in all their activities and in their leadership they were very volunteer dependent.

Another challenge that impacted all the dimensions of all the initiatives was the influences of colonial policies and hydro-electric development across the region, but all the communities have demonstrated resiliency and are working to overcome these continual challenges. Hydro-electric development has had impacts on the entire landscape, which disproportionally impacts Indigenous communities as they rely on the land. The changes include contamination of the environment by mercury (Grondin, Lucotte, Mucci, & Fortin, 1995), decreases in fish populations (Bodaly et al., 1984), changes in hunting and harvesting areas and unsafe water conditions due to hydro developments and relocation of entire communities (Dysart, 2015). These environmental changes have affected the food activities dimension the most. However, there have also been impacts on social components that can create contribute to challenges in organizational structures and scale (Dysart, 2015; Hrenchuk, 1991).

Another aspect of this challenge that effects the scale dimension is that communities are more isolated because of decades of colonial governments, industry, and other bodies using divide and concur techniques to weaken kinship ties (Corntassel et al., 2009). As well, residential schools took children away from their families and purposefully broke connections to culture and Indigenous societal structures (Langevin, 2012). A technique that many food initiatives, and other organizations working with Indigenous communities are using, are networks that are helping re-connecting people and communities. Networks where communities can share strengths, as well as networks where people can share stories, experiences and build ideas together (NMFCCC, 2017; Wa Ni Ska Tan, n.d.).

Another challenge that is a result of colonial policies is a lack of knowledge and skills in younger generations because of disconnections between generations as well as intergenerational trauma (Frideres, 2011; Langevin, 2012). Food initiatives overcame this challenge in part

through intergenerational connections, which represent a way to pass on knowledge, rituals and other culturally important concepts. Therefore, intergenerational connections are beneficial for the youth, for the Elders and the whole community (Viscogliosi et al., 2017). They are also beneficial for the food initiatives because they are a source of knowledge. In many Cree communities, these connections are seen as a way for transmitting "traditional food knowledge and values" (Islam & Berkes, 2016). In urban food initiatives in Winnipeg, Manitoba, that included Indigenous people from different Nations the involvement of families, including multiple generations was also seen as important and a factor that strengthened food systems (Cidro et al., 2015).

This case study explored elements of success but success is a term that can have many definitions even when the term is being applied to just one program. The definition of success often depends on the perspective or role of the stakeholder defining success. This can be problematic and cause tension amongst stakeholders, especially when the funders have a different definition of success than the people participating in a food initiative. Pressure from outside organizations to show that an initiative is successful is another aspect that is problematic and can force programs to either lie about outcomes or shift their focus to activities that have immediate and obvious results that meet the definitions of success put forth by the stakeholder evaluating the program (Chino & Debruyn, 2006). Due to the problematic way the term success has been used and its value laden nature some organizations have moved away entirely from using the term (J. Price, personal communication, Mar. 12, 2019). This research did use the term success and this case study examined what factors contributed to the success of food initiatives but the term success was not based on a pre-conceived definition. Instead success was defined by what the research participants involved food initiatives thought was important and what they

wanted to see their food initiatives accomplish. For this reasons elements of success were characteristics, interactions or activities that assisted and empowered food initiatives to achieve the goals they set for themselves (chapter 3).

4.5 Conclusions

There were tensions within all the dimensions of the triangle diagram (fig. 5) and these contributed to a better understanding of how the food initiatives in this study functioned, which can potentially be used to understand other food initiatives. As importantly, there were common elements of success that helped to understand the food initiatives and can give suggestions for how, communities, funders and governments can better support these food initiatives and possibly other community based food initiatives in Indigenous communities as well.

In this research participants defined what they considered successful and those definitions of success were used to explore what factors contributed to that type of success. Since success is a value laden term that is often defined by funders asking participants to define success was important. Funders and supporting organizations should consider collaborating with participating organization to define what is considered successful. Additionally, they could consider supporting the elements of success that emerged from this research because it could better help food initiatives accomplish what the goals participants consider successful, even if there are still differing definitions of success. Another factor of success that supporters should consider it looking towards long term success instead of just evaluating the short term effects (Chino & Debruyn, 2006).

Community support and involvement was the most important element of success and it is closely connected to self-determination. Self-determination is important because communities are the ones that best understand the challenges and complexities of their own social dynamics.

Community involvement and control, a form of self-determination, has also been identified as important in other research into responses to the food crisis in northern Manitoba, "Rather than any one solution being strongly favoured, participants generally indicated that any food-related initiative that was locally designed and controlled, and which facilitated these outcomes, would be useful and well received" (Rudolph & McLachlan, 2013). The concept of self-determination is part of the foundation of food sovereignty as well as one of the pillars of Indigenous food sovereignty (Desmarais & Wittman, 2014; Morrison, 2011). Perhaps more importantly self-determination is a right of Indigenous people in Canada. It is a right that is recognized as inherent by many Indigenous scholars (Alfred & Corntassel, 2005), by the Canadian government (Imai 2009, p.8) and internationally as described in the UN Declaration of the Rights of Indigenous Peoples (2008).

Support from other internal and external organizations as well as community members is another important element of success for the food initiatives in this study. All the initiatives started, in some iteration, without much funding and some without the support of their local governments. Instead the communities came together with support that came from other organizations and networks. Communities should be empowered through good news stories, visiting other initiatives and supportive networks to come up with ideas that will fit their context and have support to start them. Communities with similar food initiatives in similar contexts supporting each can be very powerful.

There are some networks that already exist that support these kinds of connections and learning between Indigenous communities. NMFCCC is a funder of food initiatives but it also works to build connections between communities through visits and workshops around specific topics (NMFCCC, n.d.). The Indigenous Food Sovereignty Summit is a gathering in Manitoba

that brings together practitioners, academics, and government officials all interested in increasing Indigenous food sovereignty (Four Arrows RHA, 2018). Wa Ni Ska Tan, a Cree word that means 'rise up' or wake up, is an alliance of hydro affected communities that brings Indigenous people and allies together to better understand the impacts of hydro and find ways for research to support healing and positive change (Wa Ni Ska Tan, n.d.). These type of networks where communities can learn from and support each other should be fostered rather than bringing in outside experts.

Funding structures need to be developed that allow community determination, cultural reclamation, re-skilling in country foods and other values that are important to Indigenous communities. In Manitoba there is non-government funding, through NMFCCC that brings together many philanthropic organizations which gives a central place for communities to apply, helps teach philanthropist the how to be in good relationship with Indigenous communities and allows the communities to determine the scale, food activities and organizational structure they want (NMFCCC, n.d.). Likewise, Wa Ni Ska Tan provides funding for community projects. However, all forms of funding should work to find ways to allow community self-determination of what dimensions work best for their communities without being pressured by the type of funding available or by needing to have easily numerically quantifiable results. Especially given the colonial history of gardening it is important that food initiatives in Indigenous communities are able to choose the food activities they want and are not forced to garden because the settler worldview sees it as the best way to increase healthy food. Every community and every food initiative need to be able to determine what is best for themselves.

5. THESIS DISCUSSION AND CONCLUSIONS

5.1 Discussion

This research attempted to determine the impacts of food initiatives in northern Manitoba by looking at the larger region generally and five communities specifically. This was done through determining how successful the programs were based on their goals; what elements were barriers and what elements contributed to their success; and the best way to support these type of food initiatives now and into the future. This chapter will look at how these objectives were addresses by this research and what implications the conclusions might have.

Since the aim of this research was to get a better understanding of a region it was important to focus on multiple initiatives. Every community is unique and therefore community based initiatives that are formed on the needs, strengths and desired foods of the community population are also each unique. When just one initiative is the focus of research the implications cannot necessarily be applied to other initiatives (Kamal et al., 2015). By conducting research that looked at multiple initiatives in northern Manitoba, the conclusions are more likely to be applicable to other initiatives that are based in communities in the same region or in similar types of communities in a different region. However, my results are still limited in application because only five food initiatives were explored in depth out of the dozens of food initiatives that exist throughout the region.

5.1.1 Connections Between Empirical Chapters

The similarities in the goals of food initiatives in northern Manitoba was shown in chapter three along with the resulting four themes: empowering food activities, improving health holistically, increasing cultural reclamation and encouraging *mino pimatesewin*. This helped to answer the objective of determining how successful the food initiatives were based on their

distinct goals. The results showed that food initiatives saw themselves as successful however this research did not employ any tools to verify success because individual food initiatives did not desire this type of evaluation. Rather, many individuals who gave leadership to food initiatives saw the requirements to prove to funders that they were successful as a nuisance. Therefore, in order to conduct research that was useful for the participants involved the focus was placed on analyzing elements that food initiatives identified as making themselves successful. This way of valuing the contextual knowledge and lived experience of the research participants is supported by the PAR methodology that this research employed (Brydon-Miller et al., 2003).

Chapter four looked in detail at three initiatives as part of a multiple case study. The ways the food initiatives operated were examined using three important dimensions: food activities taught, organizational structures, and scale of impact, as well as ways challenges were overcome and elements of success. This addressed the objective of determining what elements make a program successful and what elements are barriers to success. It was found that food initiatives overcame many tensions by finding balance in their important dimensions and overcame challenges through the support of individuals and organizations in the community, incorporating cultural reclamation including intergenerational methods that simultaneously valued Elders and youth, and through supportive networks.

One interesting aspect of elements of success was that success was defined differently by the different stakeholders involved in food initiatives. When people define for themselves what constitutes success there are often differences that can be seen between groups with differing characteristics (Dyke & Murphy, 2006). When funders define what makes a food initiative successful and demand proof of this success in reports it can cause tensions. These food

However, funding that was designated for food-related activities often had quantitative reporting expectations related to food outputs which did not fit with the holistic role of the food initiatives or with Indigenous worldviews of food (ANA, 2012). This can cause tensions particularly when there are layers of bureaucracy between the people who generate expectations for success and the people who are on the ground administrating the funding. The people mediating these relationships are under the tension of both ends of the relationship and have limited power to change the top down expectations to better fit the community desires. This same type of tension is often experienced by social science academics that need to work within a structured system but know that the process does not fit the culture of how the research participants operate or that the outcomes the academic system is looking for would not be beneficial for research participants (Castleden et al., 2015).

There were many similar themes and elements between the two empirical chapters. One of the important commonalities was cultural reclamation, which is also called cultural resurgence. Intergenerational connections are one part of cultural reclamation that was both a goal and an element of success for food initiatives. There was an emphasis on getting Elders involved in many of the food initiatives and there was also an emphasis on getting youth involved and teaching them skills in all the initiatives. Through the activities food initiatives undertook they created opportunities for Elders to share their knowledge with young people, which gave pride to the Elders, affirmed their experiences and knowledge, and made them feel valued. Intergenerational transfer of knowledge is an important aspect of Cree culture (Radu et al., 2014). These intergenerational connections were about more than just food knowledge, there were connections to language, culture, and ceremony. The transfer of knowledge from Elders to

young people is of high importance in Indigenous communities across Canada and has been hampered by the loss of language in younger generations, the intergenerational trauma that has weakened social connections, and the increased mortality rates of Elders because of their age and poor health (Christensen & Poupart, 2012; TRC, 2012; Viscogliosi et al., 2017).

The importance of youth to communities in general and to food initiatives specifically came out throughout the research. This focus on youth was related to the importance of intergenerational connections, youth being the ones that Elders were connecting with, but the importance went beyond that. The theme of *mino pimatesewin* which was identified in chapter three showed that all the initiatives were working to make the good life possible for the present and future generations. Therefore, it makes sense that the youth, who will become the next generation are such as important focus, especially since there a strong emphasis on caring for youth and caring for future generations in Cree culture and in most Indigenous cultures in Canada (Islam, Zurba, Rogalski, & Berkes, 2017). Interestingly even initiatives which are not directly focused on cultural reclamation, like Grow North, still operated out of a place of viewing youth as the most important group to focus on.

Another factor related to the importance of youth is that all the food initiatives had some association with a local school and many of them operated out of a school. This could have been due to a research bias based on the snowball method (Noy, 2008) of recruiting communities that started with Grow North, a regional program of the Frontier School Division (FSD). It is also possible that the high percentage of school based food initiatives increased the importance of youth in a way that would not have been observed in predominantly community-based food initiatives. However, it is more likely that the community emphasis on youth influenced the

goals of the food initiatives because throughout conversations and interactions outside of interviews the importance of youth and the next generation was mentioned.

The placement of the food initiatives within school environments and in partnership with schools has been facilitated by the growing interests within the education system to include Indigenous culture in curriculum and to increase community involvement (FSD, 2009). Schools are also a prime place for food initiatives with an emphasis on youth because of the unique position of adults in schools to support and run these programs as professionals that have been trained in teaching techniques and working with youth. Therefore, even though there are challenges with the education system in Canada and its colonial history (Mendelson, 2008) they can be a good place to run food initiatives from, especially when it is in partnership with other organizations in the community and when there is community support. However, it appeared that school-based food initiatives that were run by educators who were from the community had greater success than ones run by educators that moved into the community to teach. This may be because the food initiatives were often run during holidays and required lots of volunteer time. This emphasizes the importance of community support and points to the need for further research about what could make school based food initiatives successful in remote and Indigenous communities.

Another aspect of cultural reclamation, which is connected to a more holistic worldview, is the idea that food, especially country food, is a type of medicine rather than food and medicine being separate entities. Food as medicine is a common idea in many Indigenous cultures in Canada (Cidro et al., 2018, p. 37). This idea has come through in the visits, conversations and interviews throughout my research. Most recently, at Resetting the Table, the 2018 Food Secure Conference in Montreal, one of the keynote speakers, Elisa Levi, said food is medicine and I

could see nods of agreement from people all over the audience (November 2, 2018). The idea of food as medicine fits into the health and the cultural reclamation theme and it should be recognized as an important part of food initiatives in northern Manitoba. However, I did not start with the idea that interviews about food initiatives should include questions about medicine or that they might lead to discussions about medicine. In retrospect this is a concept that I should have explored more and included the idea of food as medicine in my interviews. I would encourage other allied researchers to consider incorporating this idea into food initiative research.

The last objective, looking for the best way to support food initiatives in northern

Manitoba, is something that this research has tried to address through analysis and discussion.

Some further ideas for ways to support food initiatives will be discussed in a final subsection on future thoughts. However, more research specifically on this topic would be beneficial.

Particularly research methodologies that work with the community and test out different models of support.

5.1.2 Connections with Food Sovereignty and Indigenous Food Sovereignty

The original goal of this research was to examine the impacts that food initiatives teaching food skills in northern Manitoba are having on food sovereignty. However, through the research journey I came to see that although there is a positive impact on food sovereignty it might not be the right question. A better alternative would be to examine the impacts through the lens of Indigenous food sovereignty. Although Indigenous food sovereignty brought more understanding about the impacts these type of food initiatives had even that concept did not fully explain what was happening. This subsection will look first at how the impacts of these initiatives are in part explained by food sovereignty principals, then it will compare the impacts

to the four pillars of Indigenous food sovereignty and lastly will look at the ways even the term Indigenous food sovereignty might not fit.

This research was proposed and initially conducted through the lens of food sovereignty because of my interest in the topic and my belief that it was a concept that could contribute to solutions to the food crisis in northern Manitoba. However, food sovereignty was not a term that people in the communities involved in the research used without prompting during interviews or informal interactions, nor did they use phrases often associated with food sovereignty, such as food systems or food policy. Nevertheless, there were many concepts that came out through the research that appeared to resonate with the concept of food sovereignty and some of the goals increased food sovereignty principals in the communities where they operated. This tendency for food sovereignty to be observed even when that term is not mentioned has also been observed in other contexts (Desmarais & Wittman, 2014; Gupta, 2015).

Some concepts of food sovereignty, such the definition that says "Food sovereignty is the peoples', Countries' or State Unions' RIGHT to define their agricultural and food policy, without any dumping vis-à-vis third countries" (La Via Campesina, 2003) do not fit very well with the goals and elements of success of the food initiatives involved in this research because of the emphasis on food policy, agriculture and international trade. A better fit is the seven pillars food sovereignty that were expressed in the People's Food Policy for Canada, six of which were adopted from the 'Forum for Food Sovereignty' in Nyéléni, Mali (FSC, 2015; Schiavoni, 2009). Some of the pillars can clearly be seen in the themes and goals of the food initiatives. For example, building knowledge and skills is a pillar that mirrors the theme of enabling and empowering food activities. Another pillar, localizing food systems, can be seen in the goal of making food accessible and other goals that work towards food skills. Some of the pillars, such

as local community control over the food system are aspects that many research participants wanted more of (FSC, 2015).

Although there is some resonance with food sovereignty the concept does not explain all ideas that are important to the northern food initiatives that participated in this research.

Indigenous food sovereignty is a concept that more fully connects with these food initiatives.

There is purposefully no standardized definition of Indigenous food sovereignty but there are four pillars that are generally accepted: the sacred or divine nature of food; active participation in your food system; self-determination of food and health; and policy reform (Morrison, 2011).

These fit closer to the themes found in chapter three and the elements that created success in the food initiatives found in chapter four.

Food is sacred or divine is the first pillar of Indigenous food sovereignty. Although none of the interviewees explicitly talked about this concept the interview questions did not directly illicit comments about the nature of food. Indirectly, some of the themes and goals showed that participants viewed food as more than a commodity and as culturally important. The theme of cultural reclamation encouraged cultural values, which would include the sacred nature of food. For example, the goal of including more medicinal teachings and the view of food as medicine show that food is culturally important. Moreover, many of these food initiatives were working to strengthen connections between food, land and people. In particular, previous research with the Ithinto Mechisowin Program in OPCN showed how the community was working to redefine the words food and sovereignty, as relational concepts that connect food, land and people, rather than seeing food as a commodity and sovereignty as control over something (Kamal, 2018, p. 179, Kamal et al., 2015, p.570-571).

The second pillar is participating in and taking an active part in your food system (Martens, 2015; Morrison, 2011). The themes of improving health and empowering food activities contained the most explicitly action-related goals which would connect to this pillar. Within the health theme, goals such as increasing physical exercise and providing opportunities to partake in activities that are healing were all action-oriented and gave opportunities for people to participating in their food system. In the theme of food activities, goals such as increasing the number of gardens, teaching hunting skills and providing spaces for people to grow food together increased participation. All the food initiatives were teaching practical skills and providing opportunities for people to participate in their food systems and to continue to practice the food activities on their own.

Self-determination of food and health is the third pillar of Indigenous food sovereignty. It speaks to a communities need to be able to control their own food, health and wellbeing without being dependent on food that is controlled by capitalist or corporate sources (Morrison, 2008). Food initiatives in northern Manitoba can be seen as working towards this pillar with all the themes of goals and the importance of self-determination can be seen in all the dimensions that influence how a food initiative functions. For example, in the health theme and the food activities theme, it was seen that communities were choosing for themselves what types of food they considered healthy and therefore what they wanted the food initiatives to promote (chapter 3). As well, it was found to be important for initiatives to self-determine what type of skills they wanted to teach, what type of governance they wanted, and what scale they wanted to influence (chapter 4). Therefore, food initiatives in northern Manitoba can be a catalyst for communities to take steps of self-determination when they decided what is important for food and health in their community and work to make it possible.

In addition, there was a connection between how much community control, or self-determination, there was over the goals and organizational structure of a food initiative and how much support there was from community members and local organizations (chapter 4). Support from the local community was one of the elements that contributed to the success of food initiatives. Therefore, it could be said that self-determination is an element of success.

The last pillar of Indigenous food sovereignty is policy reform of legislation that otherwise hinders country food activities and being out on the land. None of the food initiatives are actively involved in lobbying for policy reform. However, many individuals have participated in Wa Ni Ska Tan (the Alliance of Hydro-impacted communities). This could be seen as a way for people representing food initiatives to make connections beyond their community to affect decision making and policy. As well, there are now at least two people who have been heavily involved in the food initiatives that were part of this research that are now elected officials in their communities, Ervin Bighetty as mayor in Leaf Rapids and Shirley Ducharme as Chief in OPCN. It has yet to be seen what impact this will have on these food initiatives and whether this is an indication that some participants in food initiatives in northern Manitoba might start getting involved in policy reform. Although policy reform is not currently an activity for the food initiatives in this research there are some food policies that were identified as barriers and much of the environment contaminations have come from government policies. Therefore, these type of policy reforms could positively impact all the themes of goals.

All the pillars of Indigenous food sovereignty could be seen as making *mino pimatesewin* more or of a reality for their communities through encouraging people to view food as sacred, by getting them involved with their food systems, by finding ways for self-determination and by working towards policy reform that would allow future generations to live the good life.

Therefore, *mino pimatesewin* and Indigenous food sovereignty could be seen as complementary concepts.

Although there is a resonance between the Indigenous food sovereignty pillars and the themes and elements of success of food initiatives found through this research the term Indigenous food sovereignty was not mentioned during the research. A similar pattern of people not using the term Indigenous food sovereignty but food initiatives still demonstrating many of the principals was also found by Cree researcher Tabitha Martens when she did research with people working with food programs in Indigenous communities throughout western Canada. Martens had discussions with people about how using 'fancy words' like Indigenous food sovereignty could cause barriers in communication so she always used less academic words to introduce the idea during interviews (Martens, 2015, p. 63). Since the people who are practicing food work on the ground do not commonly use the term Indigenous food sovereignty it can be seen as a helpful framework but outsider researchers should be cautious about imposing this term onto the work of Indigenous communities. Additionally, the term should be used with caution because sovereign implies dominion over another being which is a concept that is foreign to many traditional Indigenous world views (Daigle, 2017). Lastly, the term Indigenous food sovereignty should not replace the words from Indigenous languages that describe the work communities are actually doing (Daigle, 2017).

5.1.3 research journey

I began my research journey with the knowledge that I knew very little about Indigenous people in Manitoba and had never even visited northern Manitoba. Therefore, I wanted to spend time getting to know people and spending visiting the north before making a decision about what food related topic I would research. Due to the fact that I had horticulture skills I could use and

that it was the first northern community I visited, I chose to spend two months volunteering with the Grow North program in Leaf Rapids. During this time, I started to build relationships with people in Leaf Rapids and other communities that had gardening initiatives. Through these connections I came up with my original research direction and I decided I wanted to help different programs, within a similar geographic region, to learn from each other and build networks in order to contribute to positive social change, as part of the PAR methodology that I intended to use (Brydon-Miller et al., 2003).

The way I worked to create these opportunities for food programs to learn and connect was through assisting in planning and facilitating workshops that taught horticulture skills to leaders of food initiative throughout northern Manitoba. The intention was to create a space where food initiatives could learn from the successes and challenges of other programs and they could encourage each other in the similar work they were doing, creating solidarity.

Another way I hoped to give back to the research participants was to do some evaluations in order to determine the impact of school food initiatives on student food security. However, this was not completed through this research for several reasons. The process of evaluating all the food initiatives within schools in the FSD is a task that would have taken more resources, expertise and time that I had during my Masters program. A questionnaire that I developed with the assistance of another researcher was distributed electronically throughout FSD but the responses were limited. The responses were only from adults and there were too few to do any quantitative analysis. Gathering more data, including some from students, would have required more time intensive methods than an online questionnaire. As the research progressed the focus narrowed to the five food initiatives identified in the methods and a full evaluation of the impact on students became unpractical. Therefore, I decided I was unable to complete this type of

evaluation and the original participant who requested the evaluation agreed with my revised research direction.

Through the research process there were things that I observed in others and the I learnt about myself. There were certain ideas that were shared with me in the interviews by people who were funders or organizers of multiple initiatives that were not shared by people who lived in a community and worked directly with a food initiative. I chose to privilege what was shared by the people working directly with the food initiatives, who were mainly Indigenous, and to make this the focus of the results and discussion. However, I would like to discuss some potential reasons for these differences. It is possible that people were unwilling to share because of an asymmetry of power. I made it clear that the results would be shared with funders and organizers, which could have made people hesitant to fully disclose perceived failures for fear of losing support. It is possible people did not want to share with me because I was an outsider, a settler researcher who lived in the south, who would only be present for a short time. It is also possible that the people who worked directly with the programs were too close to the situation and could not see the situation in the same way that outsiders did. The reason that I hoped accounted for most of the difference was that their worldviews were different and the things that were important to funders or organizers were not important to the on the ground practitioners. However, likely all these possibilities contributed to the differences.

Part of my journey was learning that it is important to listen to and reflect what the majority of the community members shared in the research results rather than focusing on some of the negative aspects or disparities that some people focused on. This was difficult for me because my academic background is in natural sciences that taught that everything that appears in the research should be discussed. However, I learnt that doing research with people, that will

affect their lives and their communities, is very different from doing research with fish, the focus of my undergraduate research. This change can be seen in fact that the original proposal was focused more on the challenges and barriers for food initiatives but through the process of building relationships and conducting the research the focus transitioned to the looking mainly at the positive aspects that contributed to success.

Another choice I made was to include Leaf Rapids in the research even though the community and the food initiative is different than the rest of the communities and food initiatives. I included Leaf Rapids because of the relationships I had developed there and because it is a regional initiative that was influential for many gardening initiatives. Leaf Rapids was the only community that was initially built as a mining town. It has now become more Indigenized post the mine closure but it is still distinct from the First Nations communities around it. However, throughout northern Manitoba there are several towns that started explicitly to service a mine (ex. Sherridon, Snow Lake, Lynn Lake), so it is not an unimportant type of community to look at, just distinct.

As someone who wanted to be an ally, interested in doing research with Indigenous communities, there were many complexities, power-dynamics, and legacies that I had to learn about, work through and continue to wrestle with. At points I still struggle with whether it was good or helpful for me to undertake research in mainly Indigenous communities. However, I have come to the conclusion that I have the opportunity to reflect back through my eyes what I learnt and to share good news stories of success in an academic context where those stories do not often get told. At my best points, I hope that I can carry forward what I have learnt into settler contexts and contribute to positive social change that makes room for decolonization and Indigenous resurgence.

5.2 Future directions

5.2.1 My new responsibilities

Despite my lack of understanding at the beginning of my research and my misgivings in the middle of whether this was an appropriate type of research for me to be involved in the process in now completed, I have collected and analyzed information from food initiatives all over northern Manitoba. Therefore, I now have a responsibility to develop meaningful ways to communicate these results with the research participants. In order to do this, I have several steps that I plan to accomplish over the next five months of spring and summer. Firstly, I will share the finished thesis with participants that have requested it in whatever format, electronic or hardcopy, they prefer. I will also create two easily accessible documents based on the empirical chapters. These documents will be shorter than the chapters, in plain language and include pictures from the food initiatives. I will share these accessible documents with participants and make them available for any food initiative, community or organization that is interested.

In the summer months I will visit all the communities with participant food initiatives and visit in person with as many participants as possible. This trip will be an opportunity to discuss the final results and hear if there are any additional materials or types of sharing participants would like me to do. During my visits I will also explore the possibility of doing a PEKE webinar in the fall with a community food practitioner. PEKE stands for Partners for Engagement and Knowledge Exchange (PEKE, n.d.), which is a partner of the First Nations Health and Social Secretariat of Manitoba (FNHSSM, n.d.). They have been conducting webinars since 2014 in order to share relevant knowledge and encourage knowledge translation and exchange between researchers and organizations in a community centric way (PEKE, n.d.).

During the next five months I will participate in a shared learning call through NMFCCC. These calls occur regularly and are open to any community or organization that is part of the collaborative, so this will be a way to share the information beyond the participant communities. In addition, I will consider sharing my findings at a Wa Ni Ska Tan gathering and attempt to publish the empirical chapters in order to add these good news stories to the academic literature.

I now also have a personal responsibility as a settler Canadian that understands more about the impacts of colonization. I want to continue to unpack the ways I am complicit with colonialism and ways that I can let go of or use my white privilege to support the work others are doing. I see this potentially happening through social movements, such as 'Meet me at the Bell Tower' or other initiatives like that. However, this is something that will need more consideration.

5.2.2 Suggestions for supporting initiatives

The importance of cultural reclamation, communities self-determining what is best for their context and looking towards creating a better life for future generations was evident throughout the food initiatives in northern Manitoba. All of these aspects should be supported as new food initiatives emerge. Additionally, the food initiatives have wide ranging impacts that should be encouraged through networks, funding and research in ways that encourage community self-determination and cultural reclamation.

Although influencing funding is not explicitly named as part of the policy reform that Indigenous food sovereignty attempts to do, it could be an interesting avenue to explore. Funding and lack of resources was found to be a barrier to food initiatives in this research. The expectations and limitations of funding have been found to influence the activities organizations undertake and their governing structure (Chao, 2007; Krawczyk, 2018; Regan & Oster, 2002).

Therefore, policies that make more government funding available and accessible for activities the support Indigenous food sovereignty could and should be considered part of the reform. On the other hand, there are some scholars that warn against becoming dependent on funding or expecting the colonizer to support decolonizing work (Corntassel, 2012; Simpson, 2014), so this could be a contentious idea.

5.2.3 Potential future research

One area of research that was of interest to participants that my Masters research was not able to address was an evaluation of the food programs that are occurring within FSD. There is not any capacity within FSD to conduct this type of evaluation and they would like to know whether their food initiatives are positively impacting the health and behaviour of their students and whether the curriculum they have created is an effective tool for their educators. This is particularly important in northern Manitoba because FSD is the largest school division (FSD, 2009) and even some First Nations communities have contracted them to administer their schools. If an evaluation was to be done I would recommend a participatory evaluation model that works with the practitioners and administrators to determine what are the best pieces to evaluate in which ways (O'Sullivan, 2012). However, in order for this type of evaluation to be successful it would need the support of administrators from several schools and perhaps the support of an additional superintendent.

There was also an interest in finding out how to get schools motivated in implementing gardening programs. However, in light of the colonial history and known tensions with gardening in some communities this would be an important question to explore with a decolonial lens to determine if promoting gardening initiatives is a positive direction for FSD to move in.

Getting community support was challenging for some school based food initiatives so it could be

helpful to investigate connections between type of food activities, introducing new skills or reskilling, and self-determination for schools in First Nations communities or schools with predominately Indigenous students.

Research should continue to focus on solutions-oriented inquiry and promoting good news stories in Indigenous communities. Community support and control over food initiatives was found to be an element of success, so another area of research could be looking for ways to empower community supported initiatives to begin. All the food initiatives in northern Manitoba, whether they are school-based or community driven, will continue to change and evolve. Therefore, there could also be research to further investigate how these changes impact the way food initiatives operate and elements of success.

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APPENDIX A: INFORMED CONSENT FORMS AND SUMMARY OF RESEARCH



Department of Environment and Geography

Winnipeg, Manitoba Canada R3T 2N2 Telephone (204) 474-9667 Fax (204) 474-7699 environment_geography@umanitoba.ca

Informed Consent Form (Individual Interview honorarium)

Research Project Title: Implication of Education Programs and Outreach <u>for</u> Food Sovereignty

Researchers: <u>Kendelle Fawcett and Stéphane McLachlan</u>

Sponsors: Social Sciences and Humanities Research Council (SSHRC), Northern

Scientific Training Program (NSTP)

This consent form, a copy of which will be left with you for your records and reference, is only part of the process for informed consent. It should give you the basic idea of what the project is about and what your participation will involve. If you would like more detail about anything mentioned here, or <u>for that matter</u> information not included here, <u>please</u> feel free to ask. Please take the time to read this <u>consent form</u> carefully and to understand <u>the</u> accompanying information.

The goal of this research project is to identify and learn about food production programs in Northern Manitoba. The research will be a tool to identify success stories and impacts on participants and communities, encourage strengths in the programs, to identify areas that need to be improved and to promote control of food systems by local communities. The outcomes of this research will be used to help refine education programs related to food and the research will also be incorporated into Kendelle Fawcett's Masters thesis project on food production in northern Manitoba and food sovereignty.

You are being asked to participate in an individual interview <u>that</u> could last up to two hours. There will be a variety of open_ended questions in the interview which are designed to allow you to share your experience and knowledge of food programs and activities generally and directly related to specific food programs.

With your permission, the interview will be voice recorded using a tape recorder. The captured information will be used to generate transcripts of the session._All of the information that you provide will be kept strictly confidential and will be stored in a locked cabinet at the Environmental Conservation Lab at the University of Manitoba, accessible only by the researchers on this project, for the five-year duration of the project. All audio and originally written records will be destroyed after being transcribed.

In order to show our appreciation of you sharing your time and knowledge regarding these topics, a \$50 honorarium cheque will be sent to you from the University of Manitoba in four to six weeks if you so choose.

In order to celebrate the importance of your voice and experiences, we will (where possible) identify people by name in any outcomes that arise from these sessions. However, our research, education, and outreach are iterative and you will always be able to choose to remain anonymous, if you so wish. Indeed, you will be free to withdraw at any point in this process.

After <u>your</u> interview is transcribed you will be given a copy to review. After all the interviews are completed a brief summary of the major themes will be available to you. Progress reports on the research will be made through newsletters and possibly a website. Final results of the research will be disseminated in presentations to <u>those</u> communities involved, administrative bodies and funders. Results will be given in written form to each group of people involved.

Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in this research and agree to <u>participate</u>. You are free to withdraw your participation and /or refrain from answering any questions you <u>prefer</u>, without <u>any negative consequences</u>. Should you wish to withdraw <u>at any time</u>, you would do so by contacting the primary investigators using the <u>information</u> below. Your continued participation <u>reflects</u> your initial consent, <u>but please</u> feel free to ask for clarification or <u>additional</u> information at any time.

If you have any questions about the research or the outcomes, please contact Kendelle <u>Fawcett at xxx-xxx-xxxx</u> or <u>Kendelle.Fawcett@umanitoba.ca</u> or <u>Dr. Stéphane McLachlan at xxx-xxx-xxxx or Steph.McLachlan@umanitoba.ca</u>.

The Joint-Faculty Research Ethics Board at the University of Manitoba has approved this research. If you have any concerns or complaints about this project you may contact the above-name<u>d researchers</u> or the Human Ethics Secretariat at xxx-xxx or humanethics@umanitoba.ca. A copy of this consent form has been given to you to keep for your records and reference.

In conclusion, please indicate in the check-off boxes below whether you are interested in participating in this research.

A	Permission to audio-record for resear OR No permission to either audio-record	rch purposes, which will later be transcribed & analyzed; for research purposes
В	Permission to release identity in any research outcomes that arise from these interviews; OR No permission to release identity in any research outcomes that arise from these interviews	
Nam	e	Affiliation (if any)
Address		Phone Number
Email Address		Fax Number
Participant's Signature		Date
Researcher's Signature		Date



Department of Environment and Geography

Winnipeg, Manitoba Canada R3T 2N2 Telephone (204) 474-9667 Fax (204) 474-7699 environment_geography@umanitoba.ca

Informed Consent Form (Individual Interview gift)

Research Project Title: Implication of Education Programs and Outreach <u>for</u> Food Sovereignty

Researchers: Kendelle Fawcett and Stéphane McLachlan

Sponsors: Social Sciences and Humanities Research Council (SSHRC), Northern

Scientific Training Program (NSTP)

This consent form, a copy of which will be left with you for your records and reference, is only part of the process for informed consent. It should give you the basic idea of what the project is about and what your participation will involve. If you would like more detail about anything mentioned here, or <u>for that matter</u> information not included here, <u>please</u> feel free to ask. Please take the time to read this <u>consent form</u> carefully and to understand <u>the</u> accompanying information.

The goal of this research project is to identify and learn about food production programs in Northern Manitoba. The research will be a tool to identify success stories and impacts on participants and communities, encourage strengths in the programs, to identify areas that need to be improved and to promote control of food systems by local communities. The outcomes of this research will be used to help refine education programs related to food and the research will also be incorporated into Kendelle Fawcett's Masters thesis project on food production in northern Manitoba and food sovereignty.

You are being asked to participate in an individual interview <u>that</u> could last up to two hours. There will be a variety of open_ended questions in the interview which are designed to allow you to share your experience and knowledge of food programs and activities generally and directly related to specific food programs.

With your permission, the interview will be voice recorded using a tape recorder. The captured information will be used to generate transcripts of the session._All of the information that you provide will be kept strictly confidential and will be stored in a locked cabinet at the Environmental Conservation Lab at the University of Manitoba, accessible only by the researchers on this project, for the five-year duration of the project. All audio and originally written records will be destroyed after being transcribed.

In order to show our appreciation of you sharing <u>your time and knowledge regarding these</u> <u>topics</u>, we would like to give you a small gift, if you <u>so</u> choose.

In order to celebrate the importance of your voice and experiences, we will (where possible) identify people by name in any outcomes that arise from these sessions. However, our research, education, and outreach are iterative and you will always be able to choose to remain anonymous, if you so wish. Indeed, you will be free to withdraw at any point in this process.

After <u>your</u> interview is transcribed you will be given a copy to review. After all the interviews are completed a brief summary of the major themes will be available to you. Progress reports on the research will be made through newsletters and possibly a website. Final results of the research will be disseminated in presentations to <u>those</u> communities involved, administrative bodies and funders. Results will be given in written form to each group of people involved.

Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in this research and agree to <u>participate</u>. You are free to withdraw your participation and /or refrain from answering any questions you <u>prefer</u>, without <u>any negative consequences</u>. Should you wish to withdraw <u>at any time</u>, you would do so by contacting the primary investigators using the <u>information</u> below. Your continued participation <u>reflects</u> your initial consent, <u>but please</u> feel free to ask for clarification or <u>additional</u> information at any time.

If you have any questions about the research or the outcomes, please contact Kendelle <u>Fawcett at xxx-xxx-xxxx</u> or <u>Kendelle.Fawcett@umanitoba.ca</u> or <u>Dr. Stéphane McLachlan at xxx-xxx-xxxx or Steph.McLachlan@umanitoba.ca</u>.

The Joint-Faculty Research Ethics Board at the University of Manitoba has approved this research. If you have any concerns or complaints about this project you may contact the above-named researchers or the Human Ethics Secretariat at xxx-xxx-xxxx or humanethics@umanitoba.ca. A copy of this consent form has been given to you to keep for your records and reference.

In conclusion, please indicate in the check-off boxes below whether you are interested in participating in this research.

1	A	Permission to audio-record for research purposes, which will later be transcribed & analyzed; OR No permission to either audio-record for research purposes
]	В	Permission to release identity in any research outcomes that arise from these interviews; OR No permission to release identity in any research outcomes that arise from these interviews
Name		Affiliation (if any)
Address		Phone Number
Email Address		
Participant's Signature		ipant's Signature Date
Researcher's Signature		rcher's Signature Date

Short summary of research to be given to participants before consent form is signed



Department of Environment and Geography

Winnipeg, Manitoba Canada R3T 2N2 Telephone (204) 474-9667 Fax (204) 474-7699 environment_geography@umanitoba.ca

The goal of this research project is to identify and learn about food production programs in Northern Manitoba. The purpose is to identify and celebrate success stories and positive impacts as well as provide opportunities for programs to strengthen themselves through learning. The process will involve interviewing people participating in, leading and administrating food production programs in Northern Manitoba. Exploratory conversations with a large range of people will be conducted and then specific communities and programs will be identified for indepth interviews. Results from the research will be given to individual participants in the study as well as presented to communities that were involved, administrative bodies and funders.