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FISH 464: Final Research Paper

Who Decides? Inuit Food Sovereignty in a Changing Arctic

Introduction

Inuit food insecurity in the Arctic region has become a chronic issue over the past hundred years due to colonial processes that have systematically undermined Indigenous food systems. Other stressors include the expansion of the market-based economy, environmental contaminants that pollute land and sea food sources, and high rates of poverty (Anthony 2013). Underlying these issues is the increasingly dire threat climate change poses to wild, culturally critical foods, including belugas (*Delphinapterus leucas*), ringed seals (*Pusa hispida*), and the bowhead whale (*Balaena mysticetus*) (Kishigami 2005; Panikkar and Lemmond 2020).While food security efforts dominated by external forces have fallen short (and often exacerbate existing issues) (Fafard St-Germain et al. 2019; Ford et al. 2012), Inuit peoples are finding innovative and sustainable ways to reclaim their right to healthy, culturally appropriate, and self-determined food (Wesche et al. 2016). The effort to regain community and self-determination in relation to food is known as food sovereignty, a term which in recent years has become increasingly critical for Indigenous advocacy. This paper argues that addressing Inuit food insecurity requires a shift away from a food security model that maintains external dependency and towards a food sovereignty model, which recognizes the historical and cultural context of food insecurity and centers Inuit autonomy. I will first provide an overview of the Arctic food crisis and the current food security model operated on by non-Indigenous Arctic actors, then contrast these with Inuit-led efforts to rebuild local food systems. The last section will address climate change and how it may influence Inuit and Western governmental negotiation of key food resources.

Background

Clyde River, Nunavut, just saw the opening of its second grocery store in 2019. Before the grand opening of Baffin Bay General Store, a small establishment housed in two transformed shipping containers, the only grocery store that existed for miles around was the Northern Store, which is owned by the corporation Northern Direct (LeTourneau 2019; Cecco 2015). In Northern Store, one can wander the aisles to see prices such as 28.58 USD for a bunch of grapes, or $27

for baby formula (Sarmiento 2019). These high prices are characteristic of Arctic grocery chains, where the remote nature of the places they serve means exorbitant shipping costs for any imported foods. Leesee Papatsie, founder of a Facebook group that highlights the high prices of Arctic grocery stores, reported that she spends $500+ a week to feed her family of five in Iqaluit, the capital of Nunavut (Sarmiento 2019). Meanwhile, in the recent National Geographic documentary *The Last Ice* (2020), Inuit youth advocate Maatalii Okalik enters Nunavut Country Food, a store that sells locally harvested Arctic foods in Iqaluit. She examines a fillet of Arctic char (*Salvelinus alpinus*) and comments on the changing color of the fish. She remembers them as a healthy dark red, but lately the harvest has been characterized by a lighter pink- a sign of contaminants and worsened condition of the fish meat (NatGeo 2020).

The tension between the high costs of imported food and the increasing challenges associated with harvesting country (wild, culturally important) food is one that many Inuit communities must navigate daily to ensure families do not go hungry. In Nunavut, over 70% of Inuit households are classified as food insecure (Panikkar and Lemmond 2020). In the Inuvialuit Settlement Region (ISR) of Western Canada, ~50% of Inuit households experience food insecurity (Kenny et al. 2018). In Alaska, at least 19% of the Native population are classified as food insecure, with higher percentages among those living in rural areas (Walch et al. 2018). These numbers have continued to rise as food system stressors, including climate change, globalization of trade, and encroaching industry, pile up. Yet food insecurity must be contextualized within Western colonization, which has led to a profound loss of self-reliance (Panikkar and Lemmond 2020). Forced transition from a semi-nomadic lifestyle to permanent settlements, assimilation and forced Western education, and the wage economy has led to a shift in ways of living among Inuit communities (Wesche et al. 2016; Panikkar and Lemmond 2020). Correspondingly, the types of food consumed has shifted from a diet of primarily wild and local food to a mix of country and store-bought, largely Southern (below the Arctic in North America), foods (For et al. 2012; Wesche et al. 2016). Colonial processes have increased community dependency on external food sources and support. For example, a wage economy means less time to hunt. However, country foods and cultural sharing networks remain integral to Inuit food systems throughout the Arctic (Quintal-Marineau 2017).

Today, Inuit rely on a diversity of methods to keep food on the table, and chronic food insecurity in the Arctic will not be solved by a silver bullet. Instead, a portfolio of approaches

(policies, funding, research, etc.) that shift power back to communities and rebuild local, sustainable networks of food is called for (Gerlach and Loring 2013). Discerning which approaches support this shift is necessary (see appendix). Further, because food insecurity is a multi-dimensional issue, solutions are complex and will require multiple Arctic actors to agree on terms and goals. Currently however, a gap exists between Western and Inuit definitions of food security. The first uses a reformist ideology focusing on market-driven approaches and does not redistribute power to Inuit communities (Panikkar and Lemmond 2020). It also does not consider the cultural context in which food is situated. The latter definition of food security, one articulated by the Inuit Circumpolar Council Alaska (ICCA) (2020), emphasizes the critical role food sovereignty plays in achieving food security, and therefore calls for the power of Inuit peoples to determine their own food systems. This fundamental difference in approach to food insecurity underlies ongoing negotiations between Indigenous Arctic communities and the state.

Reformist Food Security Interventions

The UN Food and Agriculture Organization (FAO) (2008) defines food security as met when all people, at all times, have physical, social, and economic access to enough food that is safe, nutritious, and meets dietary preferences. To achieve this, food sources must meet four criteria: availability, access, utilization, and stability- absent one of these dimensions one is deemed food insecure (FAO 2008). Non-Indigenous Arctic actors including the UN, Canada, the United States, and associated corporations are attempting to address Inuit food insecurity through subsidies, nutrition education, and community food programs (CFPs). These efforts largely focus on meeting the four criteria without considering underlying causalities or the cultural importance of food, leading to failure to adequately address the problem (Panikkar and Lemmond 2020). Western measures of food insecurity can also further obscure on the ground reality for Inuit communities. For example, the USDA Food Security Survey Module is used to estimate prevalence of food insecurity in Alaska, but it does not consider access to country food, is focused on cash as the primary determinant of access, and invokes Western standards for a "balanced" diet (Walch et al. 2018).

One prominent subsidy program implemented by Canada is called Nutrition North Canada (NNC). It is designed to provide isolated areas in Northern Canada with higher access to perishable, nutritious food through subsidizing fresh (Southern) food (QIA 2019; Fafard St-

Germain et al. 2019). It also has a nutrition education component. NNC predominantly serves Indigenous communities but gives full control to Northern retailers and Southern suppliers over the supply chain and product (Fafard St-Germain et al. 2019). NNC therefore does not offer decision-making power to affected communities, and it further incorporates Arctic food systems into a market economy (QIA 2019). Canada has claimed that the program has been successful, yet since implementation food insecurity in Nunavut has risen from 33.1% in 2010 to 46.6% in 2014 (Fafard St-Germain et al. 2019). It is likely to have raised prices for non-perishable goods, only increased consumption of nutritious foods inequitably, and increased Southern market control (Fafard St-Germain et al. 2019). A more effective subsidy program would subsidize Inuit hunting, such as the Harvesters Support Grant, which offers resources directly to communities and strengthens local food networks (QIA 2019; Brown 2020). NNC, however, is a case of a Western governmental program that uses a reformist food security framework that worsens the root causes of hunger in the region.

Another common strategy for addressing food insecurity is community-based food programs (CFPs) such as food banks and soup kitchens. CFPs rely on donation models and are largely run by faith-based organizations or non-profits; they have been the most direct response to food insecurity in Canada in the past three decades (Tarasuk et al. 2019). Because Inuit communities are particularly vulnerable to food insecurity, they represent a high proportion of CFP usage. Ford et al. (2012) found that almost 20% of households in Iqaluit, Nunavut received food from CFPs from 2008-2009. Most users self-identified as Inuit, many were unemployed, and a significant number had not completed high school (Ford et al. 2012). However, a study based out of Fairbanks, Alaska, found that Indigenous users of the local food bank reported lesser quality of donated foods and lack of culturally important foods; some also reported religion being enforced alongside food support (Fazzino and Loring 2009). The religion aspect is particularly important to mention because it highlights how CFPs are often connected to projects of assimilation and charity with strings attached. People in both studies reported the critical role CFPs play in ensuring that they and their families are fed, but also that they are one of several strategies to cope with food insecurity, including cultural sharing practices, hunting, and selling belongings to buy food (Fazzino and Loring 2009; Ford et al. 2012).

Food banks rely on a charity model that normalizes the idea that communities must be dependent on external forms of support (Fazzino and Loring 2009; Tarasuk et al. 2019). CFPs

have also been shown to increase profits for corporate food providers by providing an affordable surplus disposal option and improving public relations (Fazzino and Loring 2009). While CFPs are reformist versus transformative, there is more that can be done to have them best support Inuit users, including promoting local foods, assisting access to hunting equipment, and participating in sharing networks (Ford et al. 2012). Importantly, the food bank researched in Nunavut was reported as being many users' main source of cultural foods, with events such as Caribou (*Rangifer tarandus*) stew once a week (Ford et al. 2012). CFPs are an example of an intervention that does not redistribute control of food to the community but is a critical service for chronically food insecure households.

The case studies of Nutrition North Canada and Arctic Community Food Programs demonstrate food security approaches that fail to center Inuit self-determination and reinforce colonial ideology. Food is treated as a commodity, rather than a basic human right (QIA 2019). With crises such as COVID-19, Canada and the U.S. continue to claim that their relief efforts have been successful in helping communities while not consulting them. In an interview for this study, Dr. Shari Fox, an Arctic scientist specializing in collaborative research with Inuit communities, gave an example of a COVID-19 relief effort where hundreds of turkeys (*Meleagris gallopavo*) were supplied to Inuit Nunavut communities by the Canadian government (Fox 2021). Here again, the question is only if enough food is available, while the cultural element and the importance of Inuit decision-making is entirely sidestepped. There may be hundreds of turkeys, and the narrative is that people then have access to food, but the underlying power imbalance that contributes to food insecurity remains (not to mention that turkeys are not at all a common or preferred food in the region). For thousands of years, Inuit survived and thrived in the Arctic environment, and while colonization and climate change continue to add stressors, the reclamation of community determination is key to rebuilding sustainable and culturally appropriate food systems.

The Push for Food Sovereignty: Inuit-led Methods to Address Food Insecurity

Approaches to food security that do not recognize affected community decision-making power fail to address the root causes of food insecurity. The present-day Arctic food crisis is a cumulative process resulting from undermined local food systems and a systemic power imbalance between settler colonial actors and Indigenous communities (Fazzino and Loring

2009). One could argue that the food crisis is in this way manufactured, because while the externally dominant narrative is that the Arctic is a food dessert (Cecco 2015), Arctic peoples have innovated sustainable methods for feeding communities for over ten thousand years. In the words of elder Wesley Aiken, an Iñupiaq Elder from Alaska, sea ice is a "beautiful garden" (Huntington et al. 2019). Creative projects to demonstrate the bounty of Arctic foods and food culture even include an award-winning cookbook by Sámi youth called EALLU (2017). The dynamic relationships Inuit have with each other and the land have not disappeared with ongoing colonization and globalization, rather they continue to adapt and serve as a critical safety net for combatting compounding crises. It is the Inuit peoples themselves who best know what is needed to address food insecurity in their own regions. As Dr. Fox summed it up: Let communities decide (Fox 2021).

Food sovereignty is defined by the Inuit Circumpolar Council of Alaska as the right for all Inuit to define their own hunting, land, and water policies, to determine appropriate distribution of food to maintain ecological health, and to ensure access to traditional foods (ICCA 2020). The ICCA sees the achievement of food security as inextricable to the attainment of food sovereignty and uses a conceptual framework that adds healthy environment and culture to the pillars of food security (fig. 2). Their definition contrasts with the reformist FAO model that Western interventions have used and emphasizes Inuit decision-making and sociocultural health. Further, the Qikiqtani Inuit Association (QIA) of Nunavut calls for a shift entirely away from the idea of food security and towards food sovereignty, which they define as the right to nutritious, locally sourced food that empowers Inuit to feed their own communities (QIA 2019). QIA (2019) stresses the importance of being culturally and community-minded in approaches to food management and incorporating Inuit knowledge, language, and community self-sufficiency. Food sovereignty calls for decolonization of Indigenous food systems in the Arctic and a return of control to Inuit peoples. It is essential not only to ensuring people in the Arctic region do not go hungry, but also to maintaining community and ways of life.

Food must be understood within a web of relations in the Arctic. In an open letter, Inuk Pitseolak Pfeifer pushes back against the use of the word "subsistence" when discussing the Inuit hunting economy, because it places a complex socio-economic and cultural governance system at an individualized survival level (QIA 2019). Hunters are community leaders, hard workers, innovators, and keenly connected to *uumajuit* (Inuktun for animals) and land (QIA 2019).

Country food is relied on by many Inuit communities, and consequently they depend on hunters and the availability of marine resources. For example, the blubber, or *maktaq*, of beluga whales has vital nutrients and is often shared among hunters and villagers, which reconfirms and reproduces social relations while providing a critical food source (Kishigami 2005). Supporting food sovereignty efforts means supporting hunters and harvesters, which benefits their communities as a whole and contributes to rebuilding local food systems.

Inuit food sharing practices go beyond the distribution of *maktak* to encompass an ancestral and modern practice of a sharing economy, known in Inuktitut as *ningiqtuq* (Quintal-Marineau 2017). *Ningiqtuq* and associated practices fall outside of food security approaches that focuses on cash to purchase food and challenges the individualized nature of many food support programs. Sharing practices not only strengthen culture, but they are also a practical response to modern-day food stressors. They provide mutual assistance to those in need and support community well-being and strength, which in turn means more sharing and equity amongst people in the future (Kishigami 2005). One effort that arises from food sharing traditions are community freezers, where wild foods are stored for people who do not have the resources or ability to hunt themselves (Organ et al. 2014). Ice cellars and underground food caches have been a historically common way to store wild food, but with melting permafrost and modern food-storage regulations, community freezers are an increasingly used option (Organ et al. 2014). Community food sharing is a vibrant cultural practice that reproduces social relations, builds resilience, and provides practical relief to families in need.

Because food is a crucial element to Inuit life ways, food sovereignty also encompasses passing on traditional knowledge and healing the modern-day generational gap that has occurred with colonial pressures such as Western boarding schools (Wesche et al. 2016). Government food programs can also erode community connection to wild foods. Panikkar and Lemmond (2020), in interviews with hunters and trappers from Kugluktuk and Cambridge Bay, recorded multiple people who associated reliance on government and money with loss of traditional knowledge. Programs such as Nutrition North Canada that increase corporate control over the Northern food supply are also contributing to Inuit youth becoming increasingly dependent on Southern, market foods (Wesche et al. 2016). In an answer to this, Inuit communities across the Arctic are implementing new youth education programs that promote and preserve the transmission of *Qaujimajatuqangit* (Inuktitut for Inuit body of knowledge) (Wesche et al. 2016;

Kenny et al. 2018; QIA 2019). A Traditional Food Program in Inuvik, Northwest Territories, ran from 2015-2016 in which Indigenous Arctic youth engaged in the full cycle of wild food procurement, from harvest to consumption and sharing (Kenny et al. 2018). Youth in the program also worked with Inuvik's Long Term Care Centre to learn from elders (Kenny et al. 2018). The program enhanced Indigenous youth's land-based knowledge and incorporated additional cultural elements such as teaching Northern Indigenous languages Inuvialuktun and Gwich'in (Kenny et al. 2018).

Experiential learning of land-based skills is also increasingly being incorporated into school curricula. Researchers Wesche et al. (2016) followed two such school programs in the Northwest Territories: a fishing program in Fort Resolution for kids k-12 and a Wild Snack program at *Deh Gah* Elementary and Secondary school in Fort Providence. Like the Inuvik initiative, the schools partnered with community members to teach Indigenous youth wild food harvest, medicinal properties, and cultural roles (Wesche et al. 2016). Challenges encountered by the two schools included sustainability of funding and long-term community engagement (Wesche et al. 2016). More funding towards programs such as these is therefore called for. Schools serving Inuit youth should diversify curricula to incorporate culturally relevant studies and land-based experiential learning. Case studies from Inuvik, Fort Providence, and Fort Resolution demonstrate the importance of Inuit-led educational programs that transmit traditional knowledge and provide the foundations for long-term food security by enhancing local youth skills and autonomy (Table 1) (Wesche et al. 2016; Kenny et al. 2018; QIA 2019).

Adaptive Capacity, Food Sovereignty, and Climate Change

The two school programs outlined above grew out of the need to adapt to ongoing food system stressors, most notably in the realms of environmental damage and climate change (Wesche et al. 2016). Climate change is an increasingly dire threat to Inuit food systems and Arctic ecology. It impacts the availability and safety of wild foods and the methods used to obtain them including hunting, trapping, and storing (Panikkar and Lemmond 2020). Melting ice means a loss of transportation, hunting grounds, and habitat, while increased industry in the Arctic means higher toxins and rates of disturbances that interfere with marine mammal migration and life histories (Huntington et al. 2019; Panikkar and Lemmond 2020). Rebuilding sustainable and local food systems in the context of climate change will require a diverse

portfolio of food sources and methods (Gerlach and Loring 2013). For example, community gardens and greenhouses are being researched to expand the food-growing capacity of the Arctic region (Chen and Natcher 2019). However, there can be a cultural disconnect with initiatives such as these, which largely base nutritional values on Southern models that prioritize greens over the mineral, protein, and lipid-rich diet standard for the Arctic food system (Fox 2021). While greenhouses may be one element of a changing Arctic, it is critical that Inuit communities have options and decision-making power. In the face of climate change, non-Indigenous Arctic actors must do more to enhance the adaptive capacity of Inuit communities and support their right to choice in their food systems.

Co-management of marine resources is a major area in which increased respect of Inuit leadership directly improves community well-being (ICCA 2020). While the model of co-management implies collaboration between state governments and Inuit communities, the reality is often far from this. Common concerns from Inuit hunters and community members include red tape, coercion, lack of understanding of Inuit ways of life, overly restrictive and inflexible quotas, and a lack of true communication between entities (ICCA 2020). Climate change and associated effects on marine resources exacerbate these issues as migration patterns may change the timing of the harvest and conservation becomes increasingly pressing (ICCA 2020). For example, in the case of beluga co-management in Nunavik, local Inuit and the Canadian Department of Fisheries and Oceans (DFO) have had ongoing disagreements about appropriate quota amounts since the establishment of the co-management framework in 1996 (Kishigami 2005). Kishigami (2005) noted that a difference between many hunter perceptions of beluga management and the DFO's was the first saw hunting as a necessary function for ensuring the animals return, as it fulfills reciprocal relationships, while the DFO argued that hunting is harmful to beluga population levels. Inuit in Nunavik's dissatisfaction with the current framework must be contextualized within lack of true collaboration on the part of the DFO however (Kishigami 2005). Suggestions to improve co-management frameworks include a shift from single species, resource-based management systems to place-based systems that prioritize Inuit knowledge and prevent erasure of traditional foods (ICCA 2020). Improving co-management to integrate Inuit knowledge and decision-making power is a step towards food sovereignty and is especially critical in the context of ecological disruption.

Quotas and other resource management regulations are largely determined through research, which speaks to another portion of enhancing Inuit adaptive capacity: research sovereignty (Huntington 2019; ICCA 2020). In a changing Arctic, it is crucial that local communities have the tools to carry out research that ensures sustainable use of ecological resources and an understanding of associated risks that may come from economic development (Huntington 2019; Fox 2021). The Fort Providence school program included a research methods portion in its wild foods program to monitor toxicity levels for example (Wesche et al. 2016). Meanwhile, residents in Clyde River, Nunavut, established an Inuit-run research center (Huntington 2019). Dr. Fox spoke to the importance of making grants accessible to these community-based research efforts, and further emphasized how connected research sovereignty is to food sovereignty (Fox 2021). The effects of climate change are currently unfolding, and its unknowns means it is essential that communities have the structures in place for self-determination so that as things change, they can drive how they respond. This means local, community control over every aspect of food- from research to distribution to consumption.

Conclusion

The Arctic is home to a rich ecosystem that has served as the food pantry of Inuit peoples for thousands of years. In the last one hundred years however, colonization and globalization has disrupted Arctic food ecologies and decreased Inuit autonomy- leading to a crisis of food insecurity across the region. Western state interventions claiming to address food insecurity often exacerbate inequity. Approaches to addressing Inuit food insecurity must shift from a reformist food security model that is based on Southern standards and market initiatives to an Inuit food sovereignty framework through supporting local efforts to rebuild sustainable food systems and centering Inuit right to control. Food sovereignty is not only a practical solution to chronic food insecurity, it is an end unto itself. In the face of extreme climatic changes and ecological disruption, enhancing the adaptive capacity of vulnerable communities and increasing their decision-making power is essential to creating a more equitable and humane global food system. While this paper provides an overview of food security versus sovereignty efforts in the Arctic region, more specific place-based studies are called for. There is regional variation in every aspect that was discussed, and Arctic Inuit communities represent a diversity of backgrounds, cultures, and perspectives.

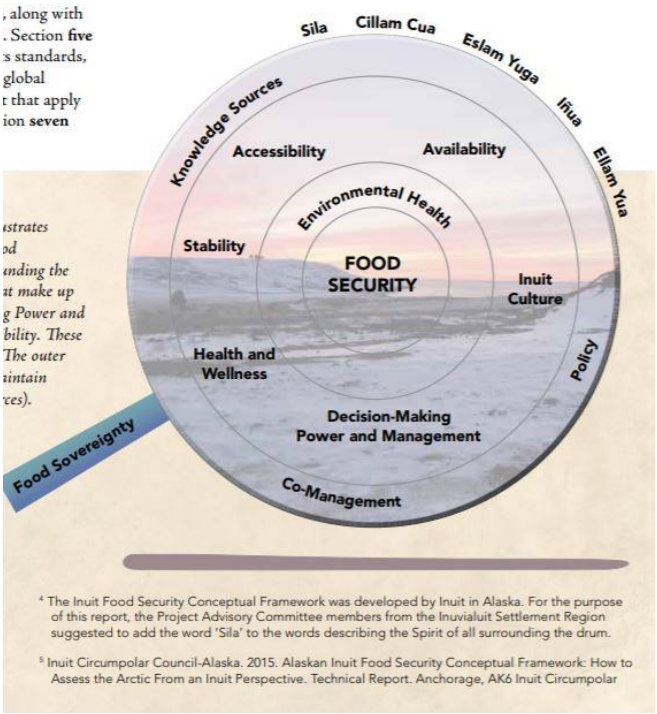

Fig. 1 Inuit Food Security Conceptual Framework by the ICCA (2020). The framework is shaped like a drum, with six dimensions to food security. Each piece is interconnected. Notably, the handle is food sovereignty because it is required to hold the rest (ICCA 2020)

Well-being element	Activity	Food Security Pillar
Education	• Increased knowledge of wild food harvesting, preparation and consumption for youth	• Improved food *use* through knowledge sharing
Cultural continuity	• Supported land-based initiatives and local cultural and linguistic practices • Facilitated inter-generational knowledge sharing between Elders and youth	• Improved food *use* through knowledge sharing
Social networks	• Facilitated relationships between harvesters, staff and children at the school	• Improved food *use* through knowledge sharing • Increased *access* to wild foods
Food consumption	• Provided wild foods to youth and community members	• Increased *access* to wild foods
Food distribution	• Formalized distribution methods for wild foods in the community	• Increased *access* to wild foods

Table 1 Contribution of Land-Based Programs to Community Food Security and Well Being. Using the food security pillars, it expands access and use definitions, and demonstrates the diverse benefits of experiential land-based programs. Table by Wesche et al. (2016)

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Appendix

Category	Reformist Food Security Model	Food Sovereignty Model
Framing	• Food insecurity as an individual/household issue • Food insecurity is largely a $ problem • Savior narrative • Culture, historical context, and power dynamics ignored • Standards of success made by external, reformist institutions such as FAO or USDA • Development	• Food insecurity as a result of a systemic power imbalance • Access to wild foods integral • Anticolonial • Inuit are autonomous and knowledgeable • Involves sociocultural and ecological health • Inuit-defined • Food security dependent on sovereignty • Entitlement
Characteristics	• Controlled by external entities • Charity model • Non-collaborative • Market integrated • Southern-origin foods and diet standards • Industry-based with some locally sourced aid	• Centers Inuit leadership and decision-making power • Offers direct support • Builds back local food systems • Decolonial • Wild foods key • Enhances adaptive capacity and self-reliance • Facilitates knowledge transmission
Approaches	• Subsidies to market suppliers • CFPs such as food banks and soup kitchens • Nutrition education programs • Disaster relief that floods market • Inflexible regulatory frameworks • Co-management in name only • Corporate donations	• Hunting and harvesting subsidies • Direct funding to Inuit communities • Inuit-run education programs • Community freezers • Research sovereignty • Enhanced authority of Inuit political institutions • Inuit first harvest priority

Table 2 Comparison Between Reformist Food Security and Transformative Food Sovereignty Models. While not all initiatives are clear cut, some may be steps toward food sovereignty. This table is provided as a tool for discernment