

Annotated Summary of Reports Pertaining to Food Sovereignty in Nunavut

Draft

Executive Summary

This annotated summary of reports pertaining to food sovereignty in Nunavut has been developed to support the ongoing discussion and efforts to advance food sovereignty in Nunavut communities.

In Nunavut food sovereignty means the right to nutritious locally sourced food. For Inuit this translates to country food, such as Arctic char, seal, narwhal, caribou, berries, birds, and shellfish. In Nunavut, harvesters play an integral role in Inuit food sovereignty. They provide country food that feeds communities, reinvigorates Inuit cultural practices, and stimulates local economies.

Specifically, Inuit food sovereignty means the right to healthy and nutritious food, the right to culturally appropriate food, the right to food harvested through ecologically sound and sustainable methods and the right to access wildlife in ways that empower communities and stimulate local economies.

Country food is central to Inuit culture. In Nunavut, the harvesting industry empowers Inuit, transmits Inuit Qaujimajatuqangit, promotes knowledge, skills and Inuktitut language transfer and safeguards Inuit cultural traditions and values related to harvesting, preparation and sharing of food.

It is widely recognized that resources and supports are lacking to promote to a future for Nunavut Inuit where country food is a readily available choice for families and harvesting is a viable livelihood. Through Qikiqtaaluk Business Development Corporation's (QBDC) Qikiqtani Food Sovereignty Implementation Solution (QFSIS) Project these resources and supports will be identified in collaboration with the Qikiqtani communities.

QBDC was created to stimulate local, regional and territorial economic development opportunities. Creating partnerships and collaborating with communities, QBDC works to build prosperous, more self-sufficient communities by creating work and capacity building opportunities.

Improving access to country food and supporting harvesting infrastructure is one avenue QBDC is working with Qikiqtani communities to build prosperous and more self-sufficient communities. The QFSIS Project is an essential first step to establish the necessary community-based infrastructure to support harvesters and communities in achieving food sovereignty.

The goal of the QFSIS Project is to support access to country food and develop enabling technologies so that Inuit can improve food sovereignty on a community and regional level. The Qikiqtani Food Sovereignty Implementation Solution is an essential first step to establish the necessary community-based infrastructure to support harvesters and communities in achieving food sovereignty.

To this end, this *Annotated Summary of Reports Pertaining to Food Sovereignty in Nunavut* compiles the available and relevant information respecting country food consumption and food sovereignty in Nunavut. This compilation does not represent an exhaustive list.

Each report within is summarized in content and with perspectives for application in Nunavut. The perspective for application to the QFSIS project represents the opinions of the authors.

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1.0 Inuit Food (In)Security in Canada: Assessing the Implications and Effectiveness of Policy

Title: Inuit Food (In)Security in Canada: Assessing the Implications and Effectiveness of Policy

Type of Publication: Policy Review, published in Queen's Policy Review Vol 2, No.2

Author: Hilary Ferguson, Ryerson University

Date: Fall 2011

This paper analyzes available data at the time of writing (2011). Based on the data the paper looks at the causal factors behind Inuit food insecurity, mainly looking at socioeconomic and environmental factors, as well as the positive and negative impacts of territorial national and international policy and legislation. The paper also discusses government and community responses to these policies.

Interpretation

Written in 2011, the general state of food insecurity for Nunavut Inuit has not improved significantly over the last decade. The same challenges are faced, and the same needs are evident. This multi-faceted problem remains complex and of critical importance and while written a decade ago the papers content is still relevant.

Application to Qikiqtani Food Sovereignty Implementation Solution

The paper points to several challenges that will be evaluated through this project

- The study points to socio-economic change as a factor, specifically stating:
 - "As a result of the shift from a traditional to a more modernized economy, there is competition between traditional food consumption and a more westernized diet based on the convenience of prepared foods. Youth are less interested in hunting as a result of increasing opportunities in the wage economy and there has been a decline in the number of Inuit hunters"
- The cost of harvesting is identified as an obstacle:
 - "Furthermore, the cost of hunting is estimated to be more than \$200 for a weekend hunt requiring inputs such as gas and ammunition, especially demanding for individuals with insecure incomes."
- The study also points to changes in the traditional sharing culture:
 - "With increased hunting cost, and the scarcity of caribous and walrus, hunters are increasingly reluctant to share country food.
- The study also identifies the necessity of working community freezers:
 - "Community freezers are also a strong focus of various local organizations that aim to provide storage facilities for what is harvested during community hunts. These are usually managed by hunter and trapper organizations and are run during the warmer summer months to keep harvests frozen. Many freezers are currently in a poot state and require repairs or replacement, a condition that is described as a threat to food security since problems with freezers can result in food spoilage.

2.0 Recommendations for an Improved Nutrition North Canada Subsidy Program

Title: Recommendations for an Improved Nutrition North Canada Subsidy Program **Type of Publication:** Recommendation document submitted to Nutrition North Canada

Author: Nunavut Tunngavik Inc. **Date:** November 30, 2016

This document highlights the inadequacies of Nutrition North Canada's subsidy program in Nunavut. Less than one percent of the Nutrition North Canada budget has contributed to increasing access to country food. As well, the removal of subsidies for hunting, fishing, and harvesting equipment has prevented Inuit from participating in and strengthening local food systems.

The food system in Nunavut includes harvested country food and store-bought food, both which are essential to food security. The current subsidy model preferentially supports availability of imported, store-bought food rather than locally harvested food. The authors propose a realignment of the subsidy that recognizes food as the right of northern Canadians, stating the subsidy should create a relationship between the federal government and northern communities, rather than retailers.

This document stresses the importance of country food to Inuit culture, including the transfer of traditional knowledge related to harvesting, sharing, preparing, and consuming food.

The authors suggest several other ways to improve the Nutrition North Canada subsidy, such as increasing the budget to accommodate inflation and population growth, verifying the benefits of the subsidy are being passed to the consumer, allowing small businesses to become eligible Nutrition North suppliers, and to create a separate program specifically designed to provide a subsidy for harvesting equipment and increased access to country food.

Application to Qikiqtani Food Sovereignty Implementation Solution

This document shines a light on the importance of Inuit and northern government input in the federal government's Nutrition North Canada subsidy. It also highlights the importance of locally sourced country food as essential food sources and to promote and preserve Inuit culture and traditions.

Throughout the Qikiqtani Food Sovereignty Innovative Solution, care should be taken to discuss food security concerns and needs of local Inuit and to promote harvesting, sharing, and preparing country food.

3.0 Recommendations on Northern Sustainable Food Systems

Title: Recommendations on Northern Sustainable Food Systems

Type of Publication: Recommendation document

Author: National Indigenous Economic Development Board

Date: February 2019

This report highlights the complex meaning of food for Northern Indigenous people and suggests food is linked to identity culture and a way of life. Food is central to the physical, emotional, spiritual, and mental health of Indigenous peoples. Within Inuit culture there is a strong commitment to sharing country food with family and community members.

The authors provide five recommendations to address the gap in food sovereignty in the north. The first recommendation is to implement policy tools to support harvesters and facilitate the procurement of traditional foods for use in schools and government and facilitate food inspections. These policies would be co-developed with Indigenous governing bodies.

The second recommendation is to develop and enhance local small-scale Indigenous commercial fisheries. This would include the support for local processing facilities.

The third recommendation is to enhance and alter federal subsidy programs. This includes support for local food production and harvesting through Nutrition North Canada as well as introduction of Northern income allowance and indexed federal income tax rates. They also recommend economic development supports to enable locally owned supply and distribution chains for market foods.

The fourth recommendation is an infrastructure investment strategy to take advantage of future economic development opportunities. These investments include deep water port construction, airport improvements, and road enhancements.

The final recommendation is a simplification of funding opportunities for Northern individuals, communities, and businesses.

Application to Qikiqtani Food Sovereignty Implementation Solution

Food security in Nunavut requires a combination of support for harvesters, facilities for processing country food, development of local Inuit commercial fisheries, enhancements to Nutrition North Canada to include country food, creating income equality, and addressing the lack of infrastructure.

4.0 A Northern Food Security Monitoring and Contingency Planning Solution

Title: A Northern Food Security Monitoring and Contingency Planning Solution

Type of Publication: Recommendation document

Author: Canadian Northern Economic Development Agency

Date: 2021

COVID-19 emphasized the vulnerabilities of the food, fuel, and medical supply chains in the far north and that there is no "Plan B" solution. IndigenousTech.ai Corporation proposed a monitoring and contingency planning solution to safeguard the northern supply chain during the COVID-19 pandemic.

The project team proposed an Indigenous-led Information Technology solution that monitors and tracks the health of pilots and truckers with rapid notification to Northern Affairs Canada and the Canadian Military if concerns arise.

The proposed solution involved collecting data on Northern Indigenous Communities' supply chains on a weekly basis, storing data on a protected service, data analysis by artificial intelligence, and notification to Department of National Defence if potential issues arise.

Application to Qikiqtani Food Sovereignty Implementation Solution

The pandemic brought to light the vulnerabilities of supply chains in the north and impacts this can have on food security. Supply chains should be evaluated for improvements that can be made including resiliency to future emergencies.

5.0 The Commercialization of Country Food and Food Security: The Case of Greenland and What Nunavut Can Learn

Title: The Commercialization of Country Food and Food Security: The Case of Greenland and What Nunavut Can Learn

Type of Publication: Recommendation document in response to *Nunavut Food Security Strategy and Actiona Plan 2014-16*

Author: Joanna Petrasek Macdonald, Catherine Huet, and Dr. James Ford, McGill University **Date:** April 2015

This report examines the feasibility of developing and promoting country food markets in Nunavut based on the model of common open air traditional food markets in Greenland.

The authors conducted a literature review and key informant interviews focused on the importance of country foods for Inuit, the nutrition transition, and the alternative methods of traditional food access in both Nunavut and Greenland.

Specifically, the report addresses the questions: 1) How do commercial country food markets in Greenland operate? 2) Do country food markets affect food security? 3) What can Nunavut learn from Greenland's experience with country food markets?

The report provides a thorough overview of Greenland's system and the factors which make traditional food markets operational including licensing and reporting requirements, policy, quotas, government economic support, and collaboration and cooperation of various stakeholders. However, the report recognizes that what works in Greenland took 150 years to develop, is still not prefect and may not work in Nunavut because of the differing socioeconomic and historical contexts.

While some benefits of country food markets in Nunavut were discussed, the general perception was that there are many challenges and reasons why a market would not be feasible or desirable in Nunavut. Challenges and problems discussed were deterioration of sharing networks, pressure on wildlife sustainability and the lack of scientific data on wildlife stocks and harvesting rates, barriers to harvesting such as the amount of resources required to hunt.

Application to Qikiqtani Food Sovereignty Implementation Solution

Key take home messages from the report's literature review and interviews which are applicable to the Qikiqtani Food Sovereignty Implementation Solution project are:

- Improved harvester support programs are needed
- There is an agreement that food harvested in Nunavut should stay in Nunavut and that any initiative should come from Nunavummiut
- There are mixed opinions and perceptions on the idea of country food markets in Nunavut
- Professional hunting is a full-time job and livelihood in Greenland however in Nunavut hunting
 may not be a viable livelihood given the current situational limitations such as the caribou ban,
 and inadequate harvester support programs.
- The physical infrastructure to support country food markets does not exist in Nunavut communities
- There is an agreement that the audience who should be served is the population presently excluded and most in need which includes low-income households, Elders, single parents, and teenagers living on their own.

6.0 Inuit Community Roundtable – Iqaluit

Title: Inuit Community Roundtable - Iqaluit

Type of Publication: Briefing Note

Author: Community Solutions Network, Future Cities Canada

Date: Fall 2019

In September 2019, an Inuit Community Roundtable was held in Iqaluit, Nunavut which provided an opportunity for harvesters, community members, Elders, and youth to share knowledge, experiences, and approaches to adapting to changing climate, environment, and society. It also provided an opportunity for researchers, service providers, and government to learn and share.

The key themes identified for the Roundtable were technology and ice safety for harvesters, wildlife stewardship, and intergenerational uses of technology. The most beneficial and accessible innovations for communities are often those that reinvigorate traditional design techniques with modern digital technology.

The Roundtable highlighted food security in Nunavut. The issue of food security is often discussed, but there is often not a link between safety and food security. Safety concerns around sea ice stability, harvesting equipment and being on-the-land should be considered in policies, programs, and funding.

Participants in the Roundtable provided insight into food insecurity and its link to changes in climate and lack of technology. Participants suggested that community-based solutions to build food security while considering on-the-land safety and hunting technologies are required.

The Roundtable also provided information on services available to harvesters such as SmartICE sea-ice monitoring which provides information on safe and unsafe area in terms of ice stability. Other Government of Nunavut programming was highlighted such as providing free SPOT devices as well as food security and poverty reduction programs which address gaps in harvesting requirements and food needs of families.

Application to Qikiqtani Food Sovereignty Implementation Solution

This Roundtable provide insight into concerns that could be addressed in the Qikiqtani Food Sovereignty Implementation Solution. These include addressing safety concerns while hunting on-the-land by providing access to reliable equipment and safety gear.

Inuit should also be aware of the services available to them to increase safety while hunting on-the-land and the status of sea ice.

7.0 Nunavut Wildlife Harvesting Survey 2004

Title: The Nunavut Wildlife Harvest Study

Type of Publication: Harvesting study for the Nunavut Wildlife Management Board

Author: Heather Priest, Nunavut Wildlife Management Board; Peter Usher, P.J. Usher Consulting

Services

Date: February 2004

This study summarizes the harvesting data that was collected monthly from Inuit hunters over five years, from June 1996 to May 2001. The results of the study were to be used by the Nunavut Wildlife Management Board to aid in the management of wildlife resources in Nunavut. It considers the basics needs level of Inuit. Information collected included the species of animal harvested, the number of animals harvested and the location, age, and sex of the animal.

The authors of this study suggest that the sample of harvests from each community do not fully and accurately represent the hunter population and that harvesting rate are higher than catalogued in this study. This paper outlines the challenges in obtaining accurate hunter response due to fieldworker staffing difficulties, hunters not wanting to be interviewed, non- or variable response rates and under reporting of certain species such as eggs and shellfish.

While the authors do not provide specific information on how much harvesting impacts Inuit in this study, it does show that harvesting is an important aspect of Inuit culture and provides food for families and communities. For example, the mean harvested ringed seal over the five-year time period was over 25,000 animals each year. For Arctic char, almost 200,000 were harvested each year. From this study one can calculate basic needs levels for Inuit.

Application to Qikiqtani Food Sovereignty Implementation Solution

This paper provides insight to the challenges in obtaining accurate harvesting data in Nunavut. These challenges will be taken into consideration throughout the Qikiqtani Food Sovereignty Implementation Solution project when attempting to reviewing hunters' activities and food distribution costs.

8.0 Collaborating toward improving food security in Nunavut

Title: Collaborating toward improving food security in Nunavut

Type of Publication: International Journal of Circumpolar Health 2013, 72: 21201

Author: Jennifer Wakegijig, Geraldine Osborne, Sara Statham and Michelle Doucette Issaluk,

Government of Nunavut Department of Health

Date: April 2015

This paper identifies food security factors in Nunavut and summarizes the work by the Government of Nunavut since 2003. The summary ends with the development of the Nunavut Food Security Coalition in 2014 and their collaborative efforts to develop a territorial food security strategy to address pervasive food insecurity in the context of poverty reduction. The Nunavut Food Security Coalition is a partnership between Inuit organizations and the Government of Nunavut.

This paper outlines several factors that affect food security in Nunavut, including changing environmental conditions and therefore changing availability of country food, a reduction in the number of active harvesters due to changing socio-cultural conditions, high cost of obtaining food, and low incomes and money management skills.

Four main components of food security are recognized by international agencies and academics as the primary factors relevant to food systems:

- 1. Availability sufficient food consistently
- 2. Accessibility enough resources to obtain food
- 3. Quality adequate nutritional and cultural value
- 4. Use how to utilize food

Application to Qikiqtani Food Sovereignty Implementation Solution

This paper shows the complex factors that relating to food security in Nunavut as well as suggests the challenge of lacking policy implementation resources and political will as potential issues. Food security in Nunavut requires a combination of strategic thinking and planning and collaborative efforts to address socio-economic issues.

9.0 Nunavut Food Security Strategy and Action Plan 2014-16

Title: Nunavut Food Security Strategy and Action Plan 2014-16

Type of Publication: Action plan document **Author:** Nunavut Food Security Coalition

Date: 2014

This action plan document, created by Nunavut Food Security Coalition, was published in 2014, and while data and references are from over a decade ago, many of the same issues are relevant.

The Nunavut Food Security Coalition outlines four components of food security: availability (wildlife or groceries in stores), accessibility (ability to go hunting or to buy groceries), quality, and use (how to store, prepare, consume food). These four factors are complex in Nunavut.

This document outlines several objectives of the Nunavut Food Security Strategy.

- Country food to promote country food as a foundational food for Nunavummiut, to support
 harvesters and promote country food sharing, to explore sustainable commercialization of
 country food, and improve infrastructure.
- 2. Store-bought food to develop relationships with commercial partners to promote and encourage healthy eating, to increase healthy food options in stores and to reduce the cost and increase access of store-bought food.
- 3. Local food production to support research efforts and project initiatives that explore ways of producing food locally.
- 4. Life skills improve life skills by providing resources, training, and sharing.
- 5. Programs and community initiative to enhance and extend school nutrition programming for children, to support and promote community-based programs that support food security.
- 6. Policy and Legislation provide food security through relevant policy and legislative measures.

Application to Qikiqtani Food Sovereignty Implementation Solution

This document demonstrates the complexity of food security in Nunavut that will be evaluated and can be addressed in the Qikiqtani Food Sovereignty Solution project. These include:

- Accessibility of country food this document suggests the high costs of harvesting equipment and low incomes have affected the ability of Nunavummiut to access country food. As well, weakening community sharing networks have affected accessibility.
- Availability increased population and changing environmental implications have impacted the availability of country food.
- Use loss of traditional knowledge and limited food preparation space and skills have impacted the use of country food.

10.0 Serving Country Food in Government-Funding Facilities and Community Programs

Title: Serving Country Food in Government-Funded Facilities and Community Programs

Type of Publication: Guideline publication for serving country food

Author: Nunavut Food Security Coalition

Date: unknown

This document provides recommendations for food being served to high-risk populations, such as people who are already sick or who have weakened immune systems.

This document highlights the importance of choosing country foods from experienced hunters who are knowledgeable in the processing of foods. It outlines safety of the storage of country food such as storing it at a temperature of four degrees Celsius or colder, or completely frozen.

The authors discourage fermented or aged foods for people who are sick or immunocompromised.

This document also provides information on how to safely prepare country foods, such as keeping raw foods separate from cooked, ensuring proper cleaning tools and surfaces, thawing meat properly, keeping track of the temperature of meat while cooking, washing hands, and not handling food while sick.

The authors provide information on the different ways to serve country food such as frozen Arctic char and seal meat, and cooked caribou and polar bear. They provide information on common parasites and bacteria that can be harmful if consumed. The document outlines how to properly prepare and serve the food to ensure it is safe for consumption.

Application to Qikiqtani Food Sovereignty Implementation Solution

Key takeaways from this document are based on the processing and safe preparation of country food. Items that could be related to and included in the Qikiqtani Food Sovereignty Implementation Solution are:

- Food processing facilities having thermometers to check the temperature of meat
- Providing food-safe packaging such as butcher paper, aluminum foil and food-safe plastics
- Labelling and tracking harvested country foods
- Storing foods in freezers or fridges (under 4°C)
- Providing food labels and tracking sheets to harvesters

11.0 Food Policy in the Canadian North: Is there a role for country food markets?

Title: Food policy in the Canadian North: Is there a role for country food markets? **Type of Publication:** Opinion piece, published in Social Science & Medicine, Vol. 152

Author: James Ford, Joanna Petrasek Macdonald, Catherine Huet, Sara Statham, Allison MacRury

Date: 2016

This publication examines Greenland's country food market model and draws on semi-structured interviews to determine if country food markets offer a feasible, sustainable, and effective model for improving the access, availability, and quality of country good in Nunavut.

The paper discussed that the Greenlandic country food market experience has largely been positive. In Nunavut, however, while potential benefits of such markets were recognized, an underlying theme challenged whether they would provide the basis for strengthening the food security of the most vulnerable community members most in need of support. Findings suggested that alternative programs to address food insecurity would likely have greater success, including increasing emphasis and funding for harvester support programs, providing education and training in food preparation, investing in community freezers, and enhancing food support mechanisms.

The study found that negative attitudes towards selling country foods are softening, and in light of the food security challenge facing Nunavut, there is interest in exploring new ways of improving country food access, availability, and quality. While the idea of country food markets was received with caution, there was openness for further examining how markets might be developed.

The paper concluded that Nunavut is not currently in the position to develop country food markets given knowledge gaps and regulatory and institutional conditions including:

- Gain perspectives of community members. Efforts to promote country food markets must be community-led and driven, and flexible to local circumstances
- Some degree of regulatory oversight on harvesting wildlife is needed if country food markets are to be promoted in Nunavut. Several wildlife populations are already under stress, and climate change, resource development and increasing demand due to population growth could further affect the sustainability of wildlife.
- Regular monitoring and evaluation of wildlife populations for species being commercially sold is important for reinforcing sustainable management and ensuring food safety. However existing research in Nunavut is likely insufficient for informing the regulatory structure needed to support country food markets.
- The pricing of country foods in markets needs to be examined. If country food markets are to
 enhance food security, they need to provide enough food at an affordable price consistently,
 yet it is unclear if harvest levels supplying markets would be enough to achieve this, or if an
 affordable price would meet the costs of harvesting.

Application to Qikiqtani Food Sovereignty Implementation Solution

There are many knowledge gaps that must be addressed prior to implementing country food markets in Nunavut including:

- 1. Consulting communities to gain perspectives of community members on country food markets.
- 2. Identifying and resolving regulatory issues around wildlife management and harvesting.
- 3. Examining how the system would be funded and administered.
- 4. Studying how future risks such as climate change and resource development would affect sustainability and effectiveness of country food markets.

12.0 Food insecurity in Nunavut following the introduction of Nutrition North Canada

Title: Food insecurity in Nunavut following the introduction of Nutrition North Canada **Type of Publication:** Research, published in Canadian Medical Association Journal, 2019: 191

Author: James Ford, Dylan Clark, Angus Naylor

Date: 2019

Nutrition North Canada, a food retail subsidy intended to improve food access and affordability in isolated communities, was assessed for its impact on household food insecurity in Nunavut. This study defines household food insecurity as insecure or inadequate access to food because of financial constraints. In 2012, the Canadian average of households experiencing food insecurity was almost 13 percent. Nunavut has consistently had the highest rates of food insecurity in Canada, reaching 47 percent in 2014.

Nutrition North Canada was launched in 2011 and was fully implemented in 2013. This retail subsidy was intended to make perishable, nutritious food more affordable and accessible in remote northern

communities. Nutrition North Canada works by providing a retail subsidy to southern suppliers and northern retailers who are expected to pass the full subsidy to consumers.

In this study, data from 2007 to 2016 from the Canadian Community Health Survey was used to determine whether the introduction of Nutrition North Canada provided changes in rates of self-reported food insecurity in Nunavut. This study used data from households in ten Nunavut communities.

The data analysis in this study showed the annual rates of food insecurity in the included communities was approximately 33 percent before the launch of Nutrition North Canada. During implementation of Nutrition North Canada in 2011, approximately 39 percent of households reported being food insecure. After full implementation in 2014, 47 percent reported being food insecure.

Interpretation

With the implementation of Nutrition North Canada, most non-perishable foods and all non-food items were excluded from the subsidy. With challenges of shipping perishable foods to remote communities and therefore limited access to fresh produce and meats, Nutrition North Canada may have worsened access to foods as prices of non-perishable foods rose.

This study suggested that subsidised food was possibly being consumed in the most affluent households in Nunavut, while the economically vulnerable households were challenged with higher prices of non-perishable foods.

Application to Qikiqtani Food Sovereignty Implementation Solution

This study suggests that the reliance of Nutrition North Canada for nutritious food and food security is not working. Another approach must be considered to create food security in Nunavut households.

13.0 Food insecurity in Nunavut: Are we going from bad to worse?

Title: Food insecurity in Nunavut: Are we going from bad to worse?

Type of Publication: Research, published in Canadian Medical Association Journal, Vol. 191

Author: James Ford, Dylan Clark, Angus Naylor

Date: 2019

This commentary paper provides an overview of the complex interactions between availability and access to store and traditional foods. These interactions should be what determines food policy in Nunavut.

Standard food surveys such as the one used in *Food insecurity in Nunavut following the introduction of Nutrition North Canada* often lack cultural aspects and provide a simple snapshot of the state of the food system at a particular point in time. This paper asks the question: would rates of food insecurity have increased without the implementation of Nutrition North Canada?

This paper looks at four other aspects that may impact food insecurity in Nunavut. The first is social changes due to the impacts of colonialism and its legacy. It is suggested that there is less harvesting of traditional foods in younger generations and less intergenerational transfer of traditional knowledge.

The second aspect is a demographic change across Nunavut. The population in Nunavut has increased significantly and household size and crowding have become a problem. Research has shown that population growth can dilute traditional food-sharing networks.

Thirdly, harvesting restrictions of various species have been implemented in Nunavut over the last ten decades. For example, caribou populations have declined significantly, resulting in limited harvesting.

The fourth aspect is climate change. The changing climate has been linked to declining caribou populations and increasing stress on other species regularly consumed by Inuit.

Application to Qikiqtani Food Sovereignty Implementation Solution

Addressing food subsidization, such as Nutrition North Canada, is just one aspect of many actions needed to address food insecurity in Nunavut. Strengthening harvester support programs, investing in infrastructure and skill development and supporting community wellness programs, reconciliation and healing should all be addressed in creating food security in Nunavut.

14.0 Food Sovereignty and Harvesting

Title: Food Sovereignty and Harvesting **Type of Publication:** Informative document

Author: Qikiqtani Inuit Association

Date: March 2019

The Qikiqtani Inuit Association (QIA) developed the Food Sovereignty and Harvesting document to highlight the need for a renewed policy frameworks and funding models that recognize Inuit leadership in decision-making and long-term strategic planning around food sovereignty in Nunavut.

This document provides information on the shortcomings of the Nutrition North Canada program highlighting that the program does not subsidize hunting, fishing or harvesting equipment, does not access country food, preferentially supports imported animal proteins and protects the interests of retailers rather than the public.

QIA envisions a Nunavut where country food is a readily available choice for families and harvesting is a viable livelihood.

This document provides suggestions on how to achieve food sovereignty in Nunavut. These include:

- Renewed policy frameworks and funding models
- Investing in harvesting enabling infrastructure that facilitate access to land and waters
 - Marine infrastructure, multi-use facilities, food processing plants, training facilities
- Funding harvesters and Inuit steward programs
 - Provide harvesters wages
 - o Provide equipment, tools, and supplies
- Provide skills development and mentorship programs
 - Elders and youth programs

Application to Qikiqtani Food Sovereignty Implementation Solution

This document outlines the complex factors that relating to food security in Nunavut and suggests actions to achieve food sovereignty. Actions on achieving food sovereignty should be Inuit-led and should be applied at the community level.

Food security in Nunavut requires a combination of strategic thinking and planning and collaborative efforts to address socio-economic issues.

15.0 Food Insecurity and Food Consumption by Season in Households with Children in an Arctic City: a cross-sectional study

Title: Food insecurity and food consumption by season in households with children in an Arctic city:

a cross-sectional study

Type of Publication: Research article, published in BMC Public Health, Vol. 17

Author: Catherine Huet, et al.

Date: 2017

This research article compared food security and food consumption patterns between households with and without children, compared food security and food consumption patterns between seasons, as well as identified factors associated with food insecurity for households with children in Iqaluit, Nunavut

The study found that food insecurity is high (32.9 percent) among households with children in Iqaluit but did not significantly differ by season. Demographic and socioeconomic characteristics of the person responsible for food preparation, including low formal education attainment, unemployment, and female and Inuit identity were associated with increased odds of food insecurity in households with children. In households with children, food insecurity was significantly higher when people in the household consumed more retail foods. Conversely, food insecurity was lower for households where people consumed more fruits and vegetables, and cooked fish.

The prevalence of food insecurity among households with children in Iqaluit (33 percent) was lower compared to other studies conducted in Kugaaruk (83 percent) and in 16 Nunavut communities (70 percent). A variety of factors could explain the lack of seasonal differences. The study found that retail foods were consumed more frequently than local foods in Iqaluit which might reflect the nutrition transition taking place in many Inuit communities – households are increasingly relying on retail rather than local foods. Alternate local food access points (food shipments, soup kitchens and food banks) might help negate seasonal scarcities. Iqaluit's economy is wage-based and less dependent on subsistence activities compare to other communities, thus decreasing the influence of climatic and seasonal conditions on subsistence activities compared to other communities. Local food consumption was not associated with food security status in Iqaluit.

Application to Qikiqtani Food Sovereignty Implementation Solution

Food security interventions in Iqaluit should be designed differently than those in other smaller Nunavut communities. Retail foods were consumed more frequently than local foods, suggesting that food security

interventions should consider the affordability of healthy retail food choices, in addition to programing increasing the availability of local foods. Future policies and interventions should consider the underlying social determinants of health, such as low formal education attainment and gender, which continue to aggravate food insecurity in Iqaluit.

16.0 Summary of the Nunavut Hunting Regulations

Title: Summary of the Nunavut Hunting Regulations: 2021-2022

Type of Publication: Public regulations

Author: Government of Nunavut Department of Environment

Date: 2021

The Government of Nunavut Department of Environment publishes a summary of the Nunavut Hunting Regulations to provide a general outline of hunting areas in Nunavut. The regulations provided apply to hunters who require a harvesting license to hunt. The hunting rights of Indigenous people in Nunavut are based on traditional use and land claim rights and are different from other hunters.

There are three classes of licensed hunters in Nunavut: Nunavut Resident who has been living in Nunavut for at least three months, a Non-Resident Canadian citizen who lives outside Nunavut or a Non-Resident Foreigner.

This document outlines the requirements of a hunting license and species authorization tags and approval for harvesting of certain species by the local Hunter and Trappers Organizations. It also provides details on prohibitions such as wastage of meat, raw pelt or hide, and where and when one cannot discharge a firearm.

There is also information about how to tag harvested animals as well as information on what to do if one shoots a diseased animal or comes across a problem bear and needs to kill it in self-defence.

The Hunting Regulations provide a summary of the annual harvesting limit for each animal species as well as specific regulations based on each species.

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The annual harvesting regulations and limits for each animal species must be respected. Throughout the Qikiqtani Food Implementation Sovereignty Solution these regulations should be considered. This project shall require any hired hunters to follow the Nunavut Hunting Regulations.

17.0 Inshore Fishery Training and Capacity Program

Title: Inshore Training and Capacity Program: Municipality of Qikiqtarjuaq

Type of Publication: Funding application developed on behalf of the Municipality of Qikiqtarjuaq

Author: Mike Cook

Date: 2019

This proposal provides information on the Nattivak Hunters and Trappers Association's (HTA), in Qikiqtarjuaq, Nunavut, aspirations to develop a sustainable operations and maintenance plan for its freezer and food processing area. The project proposal includes developing a business case for a community country food market.

The Nattivak HTA is currently developing its inshore fisheries development strategy which aligns with the development and implementation of a community country food market. The inshore fisheries strategy objectives include:

- Training and capacity development for hunters and fishers as well as the HTA Board, administration, and the community at large
- Addressing food insecurity within Qikiqtarjuaq through the adaption of a food sovereignty approach which prioritizes a "Fish as Food First" influenced methodology
- Provide vital leadership and management in the development of economic opportunities for fishers and hunters, while protecting our resources for future generations
- An ecological approach to fisheries activities and development work

The project objectives are to develop a business plan for a country food market in Qikiqtarjuaq. One of the methods of analysis is to conduct a community survey to address knowledge gaps, such as amount and type of species harvested, community consumption levels, harvester participation rates, and community access to country food. Throughout this project the Nattivak HTA is intimately involved in all aspects, including the writing of the business plan.

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This proposal provides some key suggestions on how to create a community driven food sovereignty solution. By involving the local HTA and community members in each step of the project process, the community can increase its capacity and skills.

The Qikiqtani Food Sovereignty Implementation Solution can draw on this project for key information to implement such as working closely with the local Qikiqtani HTAs and community members and gathering survey information on animal harvesting and consumption in each community. Information on the sustainability of Qikiqtarjuaq's freezer and food processing facility can be used to drive the Qikiqtani Food Sovereignty Implementation Solution needs assessment and business plan.

18.0 Inuit Nunangat Food Security Strategy

Title: Inuit Nunangat Food Security Strategy **Type of Publication:** Action summary document

Author: Inuit Tapiriit Kanatami

Date: July 2021

The Inuit Nunangat Food Security Strategy advances Inuit-driven solutions for improving food security and creating a sustainable food system in the north. The goal of this document was to create a national understanding of the prevalence of food insecurity among Inuit, to facilitate a national understanding of

the drivers of food insecurity, and to coordinate measurable actions by governments and stakeholders to improve food security. The author notes that the drivers of food insecurity are interconnected and there is not one single cause of food insecurity in the north.

This document outlines the Inuit Nunangat food system, highlighting the fact that most foods Inuit consume are shipped by air and sea. The authors also suggest that broader social and economical impacts are impacting food security in the north, such as poverty, high living costs, climate change, and diminishing Inuit self-determination.

As action strategies this document provides five priority areas:

- 1. Food systems and well-being integrating Inuit-led food security and poverty reduction initiatives
- 2. Legislation and policy create sustained Inuit engagement on food security solutions, promote regional food security strategies and community programs to provide food and food skills for Inuit
- 3. Programs and services build evidence-based programs and services, support local food programs
- 4. Knowledge, skills, and capacity support Inuit country food harvesting and sharing systems, and promote programs that teach Inuit harvesting knowledge and skills and advocate for marine and harvesting infrastructure
- 5. Research and evaluation provide in depth research on food security in the north and evaluate existing food programs, policies, and initiatives

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This document outlines the complex factors that relate to food security in the Inuit Nunangat and suggests actions to achieve food sovereignty.

The Qikiqtani Food Sovereignty Implementation Solution can draw on some of these actions such as engaging with Inuit to understand their food sovereignty needs and wants, as well as building a food security program that is sustainable and Inuit-led.

19.0 Hunter Harvester Guardian Program Evaluation Toolkit

Title: Hunter Harvester Guardian Program Evaluation Toolkit

Type of Publication: Program evaluation guidelines

Author: MakeWay, Shari Fox

Date: 2021

In 2021, MakeWay released the Hunter/Harvester/Gradian Evaluation Toolkit to create a set of processes and tools that provide the impacts of full-time hunter programs in communities. MakeWay worked directly with northern and Indigenous organizations to create the toolkit. The toolkit supports organizations and communities to plan, design and implement evaluations to assess the impacts of their Harvester or Guardian program. The toolkit allows hunters and communities identify what support hunters need, what activities they take part in, and the outcomes of their activities.

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This toolkit could be useful in assessing the outcomes of the QFSIS project. Using a hunter/harvester centred approach, the Project Team could evaluate the following items:

- 1. What is required to support hunters/harvesters/guardians?
- 2. What are the types of activities hunters/harvesters/guardians engage in?
- 3. What activities benefit the community?
- 4. What cultural significance do hunter/harvester/guardian programs provide to the hunter, their family, and community?