

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

Hilary Fergurson
Ryerson University

ABSTRACT

Food insecurity affects Inuit communities throughout Canada's Arctic. Those who are most vulnerable are often the most impoverished. Furthermore, while the duality of Inuit food systems has the potential to support a diverse supply of food, various pressures threaten these food systems. Even when food is available it is not necessarily accessible or acceptable as a result of overlapping social, economic, environmental and political factors. Such factors include socioeconomic change; climate change and geography; the impact of specific policies and legislation; and the influence of the international community and environmental organizations. Currently, there are several policy initiatives at the federal and territorial level, as well as local community level responses that aim to directly target the problem of Inuit food insecurity. These approaches are significant; however, a more multi-faceted approach must emphasize policies that: (1) improve purchasing power by reducing poverty, (2) address the reality of climate change and Inuit adaptation within a warming arctic environment, and (3) recognize the potential impacts of political interventions and external influences. In doing so, Inuit communities should be more directly engaged in the process of policy development. Collaborative research should thus be included in the development of policy solutions that consider the various causal factors related to food insecurity.

Introduction

Food security, as defined by the United Nation's Food and Agriculture Organization (FAO), exists "when all people, at all times, have physical, social and economic access to sufficient, safe, and nutritious food that

meets their dietary needs and food preferences for an active and healthy life”.¹ Achieving this level of food security is a problem within Inuit communities throughout Canada’s north. Most often, food insecurity results from a lack of access to food rather than a lack of food availability.² In addition to access and availability, the elements of quality and acceptability in terms of traditions and culture are considered important aspects of food security.³ Thus, a variety of social, economic, political and environmental factors must be considered when addressing food insecurity through policy instruments. These multiple factors often interact and thus it is difficult to isolate and categorize causality. It is also difficult to determine appropriate, effective policy responses that adequately address the various root causes of food insecurity. Multiple policy solutions are required to address the variety of overlapping causes that result in food insecurity.

Canada’s Inuit communities are located in Nunavut, the Inuvialuit region of the Northwest Territories, Nunavik in northern Quebec, and Nunatsiavut on Labrador’s northern coast. Food insecurity is a common problem for Inuit living throughout all of these areas, regardless of the specific region in question. Inuit health care, which is directly linked to the promotion of food security, is governed under four Land Claim Agreements that share authority over health services with the federal government. Jurisdiction over Inuit health is complex and often uncoordinated, since it is administered by federal as well as provincial/territorial government.⁴ The federal government funds Inuit health services and programming through the First Nations Inuit and Health Branch, which is under the management of Health Canada.⁵ Provincial and territorial health care systems are responsible for providing health services to Inuit, and also distribute funds for Inuit-specific health programming.⁶ It has been recognized that Inuit Land Claims Agreements are related to health and food security. If these agreements are strengthened and implemented to their full potential by all levels of government in a coordinated manner, health will be better addressed in Inuit communities.⁷

First, this paper defines the problem of food insecurity within Inuit communities based on available analysis.⁸ Secondly, the causal factors behind Inuit food insecurity are discussed, referring mainly to socioeconomic and environmental factors, as well as the positive and negative impacts of territorial, national and international policy and legislation in regards to the accessibility of food. Third, government and community responses are discussed in terms of their successes and shortcomings, and finally, recommendations are provided in order to suggest additional, and perhaps more effective, responses to food

insecurity. Inuit are presented as the main stakeholders; however, the interests and role of different levels of government, and the influence of environmental organizations and the international community, are also explored throughout.

Food Systems and Food Insecurity in Canada's Inuit Communities

Inuit food systems include a blend of semi-subsistence hunting and fishing for traditional foods and store-bought foods imported from other regions.⁹ A variety of country foods are commonly included in the traditional Inuit diet, including berries, narwhal, ringed seals, walrus, beluga whale, caribou, arctic char, polar bear and a variety of migratory birds.¹⁰ The duality between traditional and store-bought foods has the potential to create a diverse supply of food; however, because of various pressures, Inuit food systems are not secure. For example, a study completed by Indian and Northern Affairs Canada (INAC) found that 84%, or five out of six households, in Kugaaruk, Nunavut were considered food insecure in 2001.¹¹ More recently, research conducted in 2007/2008 found that 70% of Inuit preschoolers in Nunavut go hungry.¹² Furthermore, over half of the children who were studied in this sample are also classified as overweight, indicating that the foods that children do consume are often high in calories and low in nutrition. Inuit food insecurity levels are much higher than Canada's overall average household food insecurity measures, which was 7.7% according to data from 2007-2008.¹³

Inuit who are most vulnerable to food insecurity are the most socially and economically disadvantaged, including families on social assistance, single mothers, elders who rely on a pension fund, and individuals with substance abuse or gambling addictions.¹⁴ Women are described as particularly vulnerable to food insecurity as they often skip meals to provide for their families.¹⁵ Households without an active hunter also suffer because they cannot access traditional foods as easily.^{16,17} Furthermore, even with access to social assistance, many Inuit lack the purchasing power required to access adequate amounts of nutritious food.¹⁸ Poverty, particularly when combined with additional barriers, constrains access even when food is available: "Sufficient supplies of food may usually be available, but for reasons such as weather, cost, harvest participation or policy/legislation, they may not always be accessible to all people".¹⁹

The inability to access adequate nutrition through food intake has negative health implications. Shortages of key vitamins occur as a result of low intake of fruits and vegetables, which are not widely available in

northern communities and which are typically costly even when subsidized.²⁰ Diseases associated with poor nutrition in Inuit communities include diabetes and heart disease, as well as dental issues. Obesity is also highly linked to malnutrition.²¹ Furthermore, reports publicize that in 2008 the tuberculosis rate of Inuit was found to be 185 times higher than for the non-Aboriginal Canadian-born population, with poor nutrition considered a contributing factor.²² The maternal health of Inuit females is another significant problem, which is likely a consequence of mothers skipping meals to provide for their families, resulting in poor birth outcomes and long-term negative health effects for both mother and child.^{23,24,25} The infant mortality rate is three times higher for Inuit in comparison to Canada's non-Aboriginal population.²⁶ For children, poor food security has a negative impact on both academic performance and psychological development.²⁷ All of this is related to the quality and quantity of food that is available and accessible.

The Factors of Inuit Food Insecurity

Food insecurity in the Inuit population is a result of various social and economic factors, many of which relate to transitions from the traditional way of life. The physical environment and climate change, as well as northern geographies and the remote and isolated location of Inuit communities, also have an effect on access to food. In addition, various forms of policy and legislation influence food security both negatively and positively, with many regulations having an indirect impact on Inuit livelihoods. The international community and environmental organizations certainly have influence over how the Canadian government develops policies that relate to Inuit livelihoods, as exemplified by the European Union's ban on seals. Furthermore, it is important to recognize that although these factors can be separated into categories for analysis, many of these factors are interlinked. For example, changes in Inuit hunting practices are likely a result of socioeconomic and cultural transitions, as well as environmental pressures, animal rights campaigns, and the influence of policy and legislation.

Socio-economic Change

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.²⁸ 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.^{29,30} This is attributed to an increase in schooling, as well as an

increased focus on wage-based employment, which reduces the time that can be spent on developing traditional hunting practices.³¹ Barriers to hunting also compromise food security for those who do wish to harvest traditional foods, since many lack access to the capital equipment required to hunt and fish.³² 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.³³

Overall, this shift is problematic because access to traditional foods is considered beneficial to the physical and mental health of Inuit populations. In addition to containing antioxidants, vitamins, phytochemicals and micronutrients, they are also believed to prevent diabetes and cardiovascular disease since they provide high levels of healthy fatty acids.^{34,35} Unfortunately, the less traditional components of the Inuit diet tend to be unhealthier, with higher levels of unsaturated fats, salt, sugar and carbohydrates.³⁶ Inuit's tie to the land is also an important factor to consider, since tradition can help strengthen identity; however, it is noted that youth are participating less often in activities such as hunting, which can have negative impacts on mental health.³⁷ Furthermore, food insecurity is clearly associated with socioeconomic stressors that can be detrimental to mental health.

In an effort to improve access to traditional foods, a new trend of selling country foods has arisen.^{38,39} This is helpful, however, only for those who can afford to purchase it. It also signifies a weakening of the traditional practice of food sharing, whereby food must be purchased instead: "With increased hunting cost, and the scarcity of caribou and walrus, hunters are increasingly reluctant to share country foods".⁴⁰ Evidently, poverty is attributable to lower levels of food security in Inuit communities, as those who lack secure livelihoods that support purchasing power cannot access quality foods:

...although [Inuit] might prefer healthier choices, such as fruits and vegetables or whole wheat products, either they are not available, or the difference in quality and costs can make convenience/confectionary foods a more sensible choice in terms of cost, quality and ability to 'fill kids up'.⁴¹

It is also difficult to plan healthy meals when fresh produce is not consistently available.⁴² Environmental pressures further compound these various forms of socioeconomic change.

Geography, Environment and Climate Change

Climate change highly impacts residents of Canada's Arctic territories, particularly Inuit, as they rely heavily on the natural environment and their traditional knowledge of it. Altered weather patterns produce uncertainty. Climate change challenges Inuit hunters; ice flows are melting sooner and freezing later making the hunting season shorter, animal migratory routes have become less predictable, and hunting on sea ice has become more dangerous.⁴³ As the weather warms Inuit must adapt to their changing surroundings and harvesting techniques must evolve as new climatic conditions arise. These changing conditions are accompanied by new risks associated with harvesting, which may reduce access to hunting grounds and therefore reduce supplies of traditional foods.⁴⁴ It is also significant that "hunters are taking more risks at the same time as their knowledge about the environment is becoming less profound".⁴⁵ Unfortunately, with a small population and "limited industrial activity, there is little their governments and residents can do to slow or stop climate change because they contribute so little to global greenhouse gas emissions."⁴⁶

Furthermore, the quality of the traditional foods that are accessed also relates to the environment. Persistent organic pollutants (POPs) and heavy metals have been found to contaminate and bio-magnify within traditional sources of food, which has reduced confidence in these foods and caused some Inuit to rely more on store-bought foods.^{47,48} In terms of human health effects, these contaminants have been associated with neuromuscular development and visual recognition/memory impairments, lowered gestation periods and reduced head circumference and birth weights.⁴⁹ In 1991, the federal government established a Northern Contaminants Program (NCP) to research the level of POPs and heavy metals in Inuit country foods.⁵⁰ The findings of a report conducted by the NCP, the Canadian Arctic Contaminants Assessment Report, concludes that there has been a reduction in most contaminants with Arctic residents in Canada; however, some contaminants, although they are at low levels, seem to be increasing and thus further monitoring is required.⁵¹

Finally, beyond these environmental factors, it is also important to recognize that geography also relates to isolation and regional economic disparities in terms of location. For example, Inuit communities are remote and the cost of transporting produce into these regions is high, which has an impact on the price of food. As a result, food in northern regions is priced much higher than in Canada's urban communities.⁵²

The Impact of Policy and Legislation

In addition to environmental and socioeconomic factors, policies and legislation have simultaneously protected and weakened Inuit food security levels. In terms of negative influence, hunting quotas established under the federal *Species at Risk Act, 2002*, are perhaps the most limiting forms of regulation. Quota systems directly constrain the Inuit's ability to hunt certain animals, which "restricts the flexibility with which hunters can respond to changing accessibility of hunting areas and abundance of animals".⁵³ For example, narwhal and polar bear hunting is limited to specific numbers, and polar bear hunts are only permitted during certain times of the year. It is anticipated that as climate change puts further pressure on certain animal species in the Arctic, additional quotas will be developed and existing quotas will be tightened further.⁵⁴ Often, hunting quotas do not take into account environmental constraints or opportunities resulting from climate change. This is important, since, for example, access to narwhal depends on sea ice conditions. Furthermore, quotas provided to one community are not transferable to another.⁵⁵ If the system had greater flexibility, communities who lack access to a species as a result of environmental barriers would be able to trade their hunting rights to a community with greater access to these species.^{56,57}

Other legislative instruments have also presented barriers. The *Firearms Act, 1995*, for instance, constrains Inuit access to the weapons required for hunting traditional food sources. People have noted waiting over two years to obtain gun licenses in Nunavut.⁵⁸ The cost and time associated with legal requirements to register firearms and obtain licenses can also be problematic.⁵⁹ That being said, there are accommodations under this act for Aboriginals through the *Aboriginal Peoples of Canada Adaptations Regulations (Firearms)*, which allows for oral license applications, including language interpretation if required. For hunting purposes, licenses can also be issued to Aboriginals under the age of eighteen.⁶⁰ Nonetheless, flexibility surrounding the *Firearms Act* is unlikely to bend any further as a result of Canada's rural-urban divide.⁶¹ It is improbable that those who control policy will support less restrictive laws, regardless of the fact Inuit and other residents in more rural or isolated areas use firearms safely and responsibly for hunting purposes.

The policies of independent grocery stores also seem to have a negative impact on food security. In the Arctic region food prices are three to four times higher than in southern Ontario.⁶² Retailers face higher costs than elsewhere even with subsidies as a result of higher shipping expenses and losses due to poor food handling and spoilage.^{63,64} Some private retailers in the north are known to mark up prices higher than is

reasonable, taking advantage of residents through price gouging.⁶⁵ In contrast, cooperatives, such as Arctic Co-operatives Ltd., reduce this problem, since the members of the cooperative are also its owners. Through the cooperative system

“...a portion of the profit stays in the community, either through re-investment in the co-op operative or directly in the hands of co-op members. This difference in how profits are distributed acts as a self-imposed restriction on the co-ops. They try to make enough money to cover their costs while any extra profit is distributed to the members. Earning excessive profits, or price gouging, does not make sense, as these excessive profits would simply be distributed back to the members who most likely were the same people who paid the higher prices.”⁶⁶

This arrangement can enhance food security as food prices will likely be reduced.

Historically, policies less directly related to hunting practices or the natural environment have also had an impact on Inuit traditions and culture. The residential school system and Inuit relocation are perhaps the most illustrative examples of this: “Relocation resulted in the loss of familiarity with the land and its resources. Relocated Inuit peoples had to make adaptations in diet and resource harvesting in order to survive”.⁶⁷ Furthermore, as a result of residential schools, entire generations of Inuit were not at home to learn about traditional hunting from their parents. Adults who went through this system have not always had hunting knowledge to pass on to their own children.⁶⁸ Both of these policies resulted in the reduced ability of some Inuit to hunt food for their families and to pass on traditions that encourage greater food security.

However, not all policy impacts have been negative. For example, the *Nunavut Land Claims Agreement* and the *Territorial Lands (Yukon) Act* have enabled Inuit communities to gain more direct management of their land, wildlife and economies.⁶⁹ Such legislation has distributed greater power to Inuit communities, allowing for the co-management of resources. One successful example of this is the narwhal hunting quota system, which was developed by Inuit in collaboration with Canada's Department of Fisheries and Oceans.⁷⁰ Furthermore the *Canada Wildlife Act* has protected the fishing and hunting rights of Aboriginals on federal lands, while also protecting the species on which many Aboriginals rely on for traditional foods.⁷¹

The Influence of the International Community and Environmental Organizations

Canada's federal government is often forced into situations where it must balance the interests of Inuit communities, environmental groups and various world powers.⁷² Hunting quota systems provide an example of such relationships, as they relate to a variety of stakeholders, including Inuit, the international community, environmental organizations and activists, as well as governments in Canada and elsewhere. Unfortunately, when quotas are developed to placate environmental groups or to ratify international conventions, Inuit suffer if local hunting rights are not recognized. Furthermore, it should be recognized that it is not Inuit communities that are responsible for environmental degradation and species loss, since Inuit traditions and hunting rights account for the interests of future generations.

Inuit livelihoods and incomes rely on the hunting of animals that have highly marketable skins and which also provide food.⁷³ As mentioned, many of the animal species that Inuit hunt are regulated by government quotas. However, it is significant that the Canadian government has often taken sides with the country's Inuit population by standing behind traditional harvesting methods even when the international community disputes this policy, as exemplified by support for seal and polar bear hunts. For example, while harp seal hunts off the coast of Newfoundland and Labrador were, and continue to be, the focus of international controversy, the Canadian government advocates on behalf of Inuit seal hunts. Nevertheless, the high level of international attention has affected the Inuit's relationship with the ringed seal, a different species of seal, on which they rely more readily for food and income.^{74,75} The negative press surrounding the European Union's proposed ban on harp seal hunts lowered any existing demand for ringed seal products, decreasing prices.⁷⁶ Indirectly, the associated loss of income for Inuit communities negatively impacts purchasing power, and thus food security.

Polar bear hunts have also been subject to controversy. In 1973, the *International Agreement for the Protection of Polar Bears and their Habitats* was ratified; however, this did not put an end to Native-guided sport hunts in Canada, which were initiated in 1970. These hunts now occur in Nunavut and the Northwest Territories, and provide great economic benefits within participating communities.⁷⁷ Despite this initial support from all levels of government, more recently, as a result of the signing of the *Convention on International of Endangered Species*, the Nunavut government was pressured to reduce the number of licenses it

allows for polar bear sport hunts. These hunts bring participating communities \$25,000 or more per bear, which once killed are also used as a food source.^{78,79}

Finally, how Inuit traditional knowledge is appropriated and/or disregarded by the scientific community can also influence food security. A US-funded interest group, the International Union for Conservation of Natural and Natural Resources' (IUCN) Polar Bear Specialist Group provides an interesting example of this, whereby the decisions it makes affect Inuit's access to food. Inuit knowledge is described as being both 'validating' and as 'posing challenges' to the group's scientific stance on polar bear conservation.⁸⁰ These specialists typically reference traditional knowledge only when it justifies scientific findings that support their notions of conservation, which tends to undermine Inuit food security. Interestingly, Inuit elders and hunters are permitted to be observers of this group's committee, but do not have a say in final decision-making. This is highly problematic, since Inuit have historically managed natural resources very well and are likely better placed than non-Inuit to place restrictions on their own communities' access to polar bears through harvesting. Furthermore, the ITK expresses concern that despite being members of the IUCN, they are not consulted on its decisions regarding polar bears, which are now classified as 'vulnerable' species by the IUCN.^{81,82} Overall, Inuit communities tend to disagree with this classification as it restricts their responsible use of this important traditional resource.

Policy Responses to Inuit Food Insecurity

Evidently, policies have the potential to shape social change, including the ways in which food systems and traditions evolve. The federal and territorial governments, local communities, and non-governmental organizations have developed various programs aimed at strengthening food security in Inuit communities. The impact and effectiveness of these policy responses and legislative instruments need assessing. Policy has the ability to positively and negatively affect Inuit economies, which can have profound consequences on both household income and household food security levels. Several of these programs have been useful, while others have been counterproductive or require adjustments to increase their effectiveness. Many require greater funding and support, specifically those that are of a smaller scale and which are run at the community level.

In addition to the various forms of income support available to all residents of northern regions through transfers from the federal government, including Employment Insurance, Old Age Security, northern

tax benefits, and housing support programs, the Government of Canada launched the Federal Food Mail Program.⁸³ This program was specifically aimed at providing enhanced access and availability to quality foods by subsidizing healthy foods in northern communities. This program was a combined effort between INAC, Canada Post and Health Canada. It shipped perishable foods north at reduced postal rates to over 70,000 people in 80 communities weekly, and regularly conducted surveys to assess nutrition levels and food prices.⁸⁴ The Federal Food Mail Program has succeeded in reducing the food price gap between Ottawa and northern communities.⁸⁵ There are, however, barriers to establishing individual accounts, which make up only 5% of the program, since credit cards are required and the process involves filling out a significant amount of paperwork.⁸⁶ Furthermore, the government does not monitor the prices of the foods that it subsidizes when they are sold in grocery stores, meaning that many businesses may potentially engage in price gouging.⁸⁷

The Federal Food Mail Program has been criticized for overemphasizing a diet composed of subsidized foods imported into communities rather than encouraging diets to include traditional foods.⁸⁸ As a result of this criticism, the Conservative government opted to adjust the program and broaden its focus. In April 2011, Nutrition North Canada replaced the Federal Food Mail Program. This new program no longer involves Canada Post but will incorporate higher subsidies for healthier foods and lower subsidies for less nutritious foods.⁸⁹ It will also subsidize the transportation of traditional foods that have been harvested and commercially produced in the north, facilitating its movement between processing areas and community retailers. It is hoped that this program will also focus more on monitoring how grocery stores market the goods that are subsidized. Despite these changes, according to Inuit Tapiriit Kanatami (ITK), the program will likely pose administrative concerns for small retailers who may be “overburdened by program requirements” and therefore excluded from participation.⁹⁰ Furthermore, this new program is criticized because subsidies from the Food Mail Program have lapsed before the new program has been implemented, for allowing only retailers (and not individuals) to receive subsidies, and for neglecting to engage in consultation with communities during the development phase.⁹¹ ITK also emphasizes the need for more adequate advertising of the program throughout the north so that all Inuit communities can understand and participate in the program.

In addition, with a focus on education, INAC and Health Canada have developed a version of ‘Eating Well with Canada’s Food Guide’ for First Nations, Inuit and Métis, which is tailored to include the traditional

dietary habits of Aboriginals.⁹² It also explains how residents of remote, rural regions can combine store-bought and traditional foods in a healthy way. Furthermore, the community level is also involved in the development of educational programs; however these initiatives often lack government funding. Healthy Foods North, which worked in the Northwest Territories and Nunavut to encourage healthy eating and to prevent malnutrition related to poor food choices, is an example of such health promotion. Unfortunately, this program was closed in September 2010 due to a discontinuation of funding from the federal government.^{93,94}

INAC has also developed the Climate Change Adaptation Program (CCAP) – Assisting Northerners in Assessing Key Vulnerabilities and Opportunities.⁹⁵ This program aims to assess the risks of climate change in northern communities, including increased vulnerability to food insecurity. It incorporates Inuit communities and organizations in the development of planning and programming in the face of environmental uncertainty. This includes the initiation of programs that will support emergency management and food security measures in response to climate change.⁹⁶

Territorial governments also offer various forms of support, many of which focus on food security. The Nunavut Harvesters Support System, established by Nunavut Tuungavik Inc., funds Inuit hunters in purchasing equipment, including weapons, ammunition, snowmobiles and survival suits.⁹⁷ The Nunavik Inuit Fishing, Hunting and Trapping Support Program run by the Kativik Regional Government (KRG) also provides community-owned boats and funding for community freezers.⁹⁸ These programs require more support from governments.⁹⁹ It is also noted that the distribution of the harvest collected throughout the community via support from these types of programs is not enforced for individual hunters unless food is harvested during a community-organized hunt.¹⁰⁰ Furthermore, it is argued that the future of these programs would be more secure if they were included as a component of the region's land claim agreement, which would mandate program support in the long-term.¹⁰¹ At the local level, educational outreach regarding nutrition and emergency support through food banks, community kitchens and drop-in centers where households can seek additional food sources are common.^{102,103} Short-term emergency initiatives are also managed by community agencies and church groups, which organize funds to provide food baskets to households in need. 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 (HTOs) and are run during the warmer summer months to keep harvests frozen.¹⁰⁴ Many freezers are currently in a poor

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.¹⁰⁵ As the climate changes, community freezers may become even more important for the safe storage of traditional food after hunts.

Policy Recommendations

Studies undertaken in Nunavut identify several policy responses suggested by Inuit community members.¹⁰⁶ These include additional government funding for the Harvester Support Program and additional community hunts, the maintenance of community freezers or the purchasing of new ones, the creation of more food banks, and increased food subsidies. Salaries for hunters and encouraging greater competition between suppliers to reduce freight costs are also suggested. The bottom line is that policy requires research that directly involves the participation of those residing in affected communities. Inuit communities have experienced a “long history of policy initiatives that were inappropriate in the Arctic context because they were based on research by non-local researchers, who define the terms of well-being for indigenous communities in relation to a worldview different from that of local residents”.¹⁰⁷ Policies that promote and apply Inuit traditional knowledge can help preserve culture while promoting both food security and adaptive measures in the face of socioeconomic transitions, climate change, and the pressures of external government policies and organizations.¹⁰⁸

Further strengthening the ownership of resources and the policy-making process will enable Inuit communities to be more directly involved in decision-making. Positive past examples can inform future developments. For example, adjusting hunting quota systems based on Inuit traditions and livelihood requirements can help solidify food security, as has occurred in the past.¹⁰⁹ In this same vein, policy initiatives should encourage the development of cooperative grocery stores, which have the potential to include community input and build stronger systems of ownership. This can potentially be linked to Nutrition North Canada, which should monitor and enforce consumer protection to better facilitate access to healthy foods in order to prevent price gouging. These types of policies are likely to encourage and strengthen traditional networks of sharing.¹¹⁰

Research and education should be involved in this process, and must incorporate Inuit perspectives. The relationship formed through CCAP must be capitalized on to continue investigations into climate change and its effects on food security. Furthermore, education should

incorporate health promotion in order to encourage the planning of healthy meals. Of course, this greatly depends on the availability and accessibility of nutritious food options in terms of pricing and quality. Research on POPs must also be continued to determine exactly what quantity of traditional food is safe to eat.¹¹¹ It is important to continuously monitor contamination levels, since government policy is encouraging Inuit to continue to rely on their traditional diets for food security and health benefits. Also in relation to POPs and education, INAC notes that “the most successful health promotion strategies appear to focus on improving the availability of nutritious foods, rather than on changing habits and behaviour through negative messaging related to foods with more contaminants in them”.¹¹² For example, pregnant women can be encouraged to consume fish and caribou rather than marine mammal fat, thereby reducing the level of contaminants in their diet.

Conclusion

Food insecurity affects Inuit communities throughout Canada's Arctic, bringing negative health implications. Those who are most vulnerable are often the most impoverished. Even when food is available it is not necessarily accessible or acceptable as a result of various overlapping social, economic, environmental and political factors. The various causal factors include socioeconomic transitions, geography and climate change, the impact of policy and legislation, and the influence of the international community and environmental organizations. These factors are addressed by various government policies that directly target the problem of Inuit food insecurity. Such approaches are significant; however, some policies and programs require improvements in order to increase their effectiveness.

Ford et al. highlight that “scholarship on food security... focuses on access to resources as determinants of vulnerability, so that disasters are not due only to exposure to natural events, but also to social, economic and political conditions that make people susceptible”.¹¹³ This reasoning connotes the need to link the issue of food security to broader policy goals. The immediate aspect of food security should not be the only objective of policy-makers. A long-term vision and standardization of the methodologies, determinants and indicators of food security are required to improve access and availability to food that is of acceptable quality as defined by Inuit communities. A multi-faceted approach must emphasize policies that improve purchasing power by reducing poverty, that address the reality of climate change and Inuit adaptations within a warming Arctic

environment, and which recognize the impact of political interventions and external influences. These approaches should rely on Inuit participation and ownership over the decision-making process in order to reduce dependence and to increase self-sufficiency according to traditions.

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NOTES

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⁵ *Ibid.*

⁶ *Ibid.*

⁷ *Ibid.*

⁸ It is important to recognize that the food security statistics that are referred to throughout are not necessarily comparable, since they apply different methodologies. The ethical considerations and methodological limitations associated with such studies must also be examined when developing policy, an issue that is beyond the scope of this particular paper.

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