

Institutional Market Opportunities for PEI Organics

Creating a pathway to food security through import replacement and a strengthened local food system.

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Report prepared by Morgan Palmer, Consultant

Executive Summary

The institutional market on PEI represents a large market share which is currently untapped by PEI organic producers. This research project examined PEI institutional market opportunities and challenges and examined the potential impact of local food procurement on carbon emissions, local rural economies and food security.

In theory, local food systems boost local economies; produce, distribute and process food more sustainably, and help solve social challenges like food insecurity and poor health by increasing access to fresh, healthy food. Furthermore, local food systems can be strengthened with reliable markets and public institutions have enormous purchasing power. When public procurement of local food increases, it was theorized that local food systems become more robust and offer social, environmental, and economic benefits, contributing to food security.

In summary the following was found:

- Economic benefits are expected from local food integration,
- Stabilising sustainable food systems and economic development work towards food security, and
- Opportunities likely exist for import replacement in institutional procurement, but it is difficult to know without baseline data.

Local food procurement was found to promote economic development. Multiplier effects (the amount of local economic activity triggered by a single purchase) exist for local food systems¹¹. Economic multiplier effects are estimated to be 1.2-2 per dollar spent for local food procurement, with the higher end reflecting more procurement from small, locally- and minority-owned businesses^{13,14}. By purchasing an additional 10% more per budget on local food, it was calculated that the following multiplier effects would be observed:

- Provincial facilities (long term care facilities, hospitals, correctional facilities): \$546,156 to \$910,260
- Private long term care facilities: \$793,919 to \$1,323,198
- Post secondary institutions food budgets: \$295,860 to \$591,729
- Public school lunches: \$410,544 to \$684,240
- Child care centres: \$191,544 to \$319,240

Community food security exists when “all residents have access to enough healthy, safe food through a sustainable food system that maximizes community self-reliance and social justice”⁵. To contribute to food security and have additional positive social and environmental impacts, institutional procurement must support sustainable food systems: the assumption that local equals sustainable is not always true^{2,10}. In Canada, household food insecurity is the inability to access food securely due to financial constraints⁸. Although often incorrectly defined as a “food” problem, food insecurity in Canada is actually more often an economic problem. Indeed it’s been shown that in Canada, food-based programs like community gardens and emergency food aid are ineffective in decreasing food insecurity because they do not address the root cause: lack of adequate income⁸. Economic benefits from local food procurement could contribute to decreasing food insecurity and its economic roots. However, these anticipated benefits should

be interpreted with caution. It needs to be considered how equally economic benefit is spread among community members: “trickle down economics” fail to create equitable economic prosperity¹³. Increasing the resilience of local food systems is important for food security, but will not solve the situation alone. The root causes of food insecurity must be addressed through appropriate and evidenced based social safety nets: society must ensure that all people have financial access.

Opportunities likely exist for import replacement in institutional procurement, but it is difficult to know conclusively without baseline data. Fresh produce is exempt from provincial procurement rules and presents an opportunity for public hospitals, long term care facilities, and correctional facilities. Private long term care and childcare centres provide similar “low hanging fruit” opportunities.

Processing on PEI needs further research. An estimated \$293,095 is spent by provincial institutions alone on frozen, prepared fruits and vegetables. The demand for this type of convenience product may increase as labour shortages continue. This type of product may provide an opportunity to maximize profits from seconds or seasonal abundance (thereby reducing food waste) and providing economic benefit. Processed foods (like frozen fruits and vegetables) would be subject to provincial procurement rules in public institutions; however, the new 10% price adjustment policy would help local organic versions of these products to be price competitive and it’s unlikely the products purchased currently are made with local ingredients.

Grower’s Station has the capacity to supply one or more institutions. However, a strategic growth plan would be necessary to capitalize on the large purchasing power of entire groups of institutions. This scaling up would be done best in partnership with a number of institutional partners who are committed to increasing their procurement of local, organic food over a number of years.

Baseline data is unavailable at a provincial level for current food spend and local food spend. Because of this, the completion of a carbon life cycle analysis was unattainable for this project. This requires further research.

For successful change, an institutional food vision needs to guide long term efforts in combination with removal of structural policy barriers and completed in partnership with the community. Public policy is required that defines and sets standards for food procurement. Best practices exist and can be followed, including the commitment to pay the true price of food that reflects external costs or benefits to society. Atlantic Canadian provincial policies and strategies are outlined in the jurisdictional scan, but more research is required to identify the most effective policies.

In conclusion, institutions present a large market opportunity. Creating policy and relationships to improve local food procurement would benefit organic farmers, the community, the economy, and the institutions themselves in addition to supporting multiple government priorities.

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Introduction

Project Background and Objectives

The institutional market on PEI represents a large market share which is currently untapped by PEI organic producers. Providing food to this market requires a collective distribution model, which has been the primary challenge in the past. With a model now in place, it may allow small organic farmers to scale up to reach institutional needs. The replacement of imported foods with local, organic food is expected to have positive social, environmental, and economic impacts. This research project examines PEI institutional market opportunities and challenges and attempts to quantify the impacts on carbon emissions, local rural economies and food security.

The project objectives were as follows:

- To provide economic impact estimates of local food integration,
- To identify and estimate impacts on local food security through stabilising local food supply chains,
- To estimate the impact on greenhouse gas emissions from a more localised and efficient food supply chain,
- To identify opportunities for import replacement in institutional procurement,
- To complete a jurisdictional scan of successful institution local food procurement relationships, and
- To identify potential challenges and solutions.

Potential Social, Economic and Environmental Impacts

The world is experiencing health, environmental, and economic emergencies. The current food system contributes to these crises, and fails to provide affordable, sustainable, and healthy food to the world's population. This is evidenced by our reliance on "cheap food", the true cost of which is often hidden. Social, environmental, and economic costs (or "externalities") of cheap food are not reflected in market prices. Therefore, food profits do not reflect harms to society¹. Cheap food has been referred to as "a strategy, a violence that mobilizes all kinds of work – human and animal, botanical and geological – with as little compensation as possible"².

However, citizens are paying: through increased health care costs, climate change adaptation requirements, depleted soils, loss of biodiversity³, and economic and social costs such as lower pay. Climate change is the most important issue facing food security at this time⁴.

Local food is often perceived as an antidote to cheap food. In theory, local food systems boost local economies; produce, distribute and process food more sustainably, and help solve social challenges like food insecurity and poor health by increasing access to fresh, healthy food. Furthermore, local food systems can be strengthened with reliable markets. Public institutions (such as hospitals, correctional facilities, long term care facilities, schools, and others) have enormous purchasing power. When public procurement of local food increases, it's theorized

that local food systems become more robust and offer social, environmental, and economic benefits, contributing to food security.

In order to test these assumptions, a mixture of reports and research papers from community organizations, government, and research journals were found online using the Google search engines. A wide variety of search terms were used such as “local food systems”, “sustainable food systems”, “food security”, “food insecurity”, “sustainable economic development”, “multiplier effect”, “public procurement”, and “institutional procurement” in various combinations to gather information reflecting various backgrounds and perspectives. Comparisons were made between “local” and “sustainable” food systems using the three elements of sustainability: social, environmental, and economic. Economic multiplier effects were explored. Best practices were gathered on how best to reach desired social, environmental, and economic outcomes and support food security with institutional procurement practices.

Community food security exists when “all residents have access to enough healthy, safe food through a sustainable food system that maximizes community self-reliance and social justice”⁵. The Food and Agriculture Organization of the United Nations (FAO)⁶ defines sustainable food as “that of a world in which food is nutritious and accessible for everyone and natural resources are managed in a way that maintain ecosystem functions to support current as well as future human needs. In our vision, farmers, pastoralists, fisher-folks, foresters and other rural dwellers have the opportunity to actively participate in, and benefit from, economic development, have decent employment condition and work in a fair price environment. Rural women, men, and communities live in security, and have control over their livelihoods and equitable access to resources which they use in an efficient way.” A sustainable food system ensures “food security and nutrition for all” while maintaining the economic, social and environmental foundations to ensure food security for future generations. FAO further states that “sustainable agriculture contribute[s] to ... food security ... in a manner that is environmentally, economically and socially responsible over time”⁷.

As researched and defined in Canada, household food insecurity is “the inadequate or insecure access to food due to financial constraints”⁸. Although often incorrectly defined as a “food” problem, food insecurity in Canada is actually an economic problem. Indeed it’s been shown that in Canada, food-based programs like community gardens and emergency food aid are ineffective in decreasing food insecurity because they do not address the root cause: lack of adequate income. The people most at risk for food insecurity are those at risk of other social economic disadvantages.

Public procurement is part of the UN Sustainable Development Goals as a way to encourage growth or resilience of sustainable food systems; these systems are fundamental for food security. Institutional food procurement has the ability to use purchasing power to influence the local food system through deciding “what food will be purchased (such as local, diverse, nutritious, healthy, and culturally appropriate), from whom it will be purchased (eg, from local smallholder farmers, small and medium-sized food enterprises, women, youth, and other vulnerable producer groups), and from what type of production systems it will be purchased (eg,

from agricultural production that ensures environmental sustainability and conserves biodiversity)⁹.

These definitions clarify that for food systems to contribute to food security, they must be “sustainable”: the assumption that local equals sustainable is not always true. First, local food doesn’t automatically result in lower environmental costs. This could be, in part, because “food miles” or the emissions generated from transporting food are often insignificant compared to emissions from production and processing¹⁰. Second, it’s important to consider who maintains power even in a local food system. If a local player’s goal is “endless capital accumulation above all else, then the local food system will mirror the unsustainable global food system”. Unless opening in a fair cost environment that rewards societal benefits from sustainable food production, processing, and distribution practices, local food system businesses are often pressured to externalize costs to be competitive. Furthermore, citizens (and institutions) will continue to operate in and rely on the global food system and local benefits cannot be gained at the expense of other communities globally².

In contrast, it appears that local food procurement alone does create opportunities for economic development. In theory, when dollars circulate in an economy, more income, wealth and jobs are created and food insecurity decreases. Multiplier effects (the amount of local economic activity triggered by a single purchase) exist for local food systems¹¹. The multiplier effect is based on the assumption that locally owned businesses spend more money locally, last longer in the community, and adapt to increased labour and environmental standards (versus non local businesses which may move to avoid increased standards and increased costs of doing business). When locally owned businesses serve local markets community economies are strengthened, resulting in greater social stability, higher population socioeconomics, and more political participation¹². Local businesses result in more economic benefits (or higher multiplier effects) than non local businesses¹³. Where businesses fall on the spectrum (ranging from 1.2 to 2 times the economic activity for every dollar spent) depends on if the company is owned locally or not, how large the company is, and whether or not it is minority-owned. The highest impacts come from small, locally- and minority-owned businesses¹⁴.

Using the Ontario Ministry for Long-Term Care daily raw food allowance (\$9.54/day/resident) it is estimated that the annual food budget of PEI public institutions are as follows:

- 7 hospitals, with a total of 507 beds representing 507 patients: \$1,765,425
- 19 public long term care facilities, representing 620 beds or residents: \$2,158,902
- 3 public correctional facilities, representing 158 beds or residents: \$550,171
- Meals on Wheels, a program that provides low cost meals to seniors, has meals prepared by these public institutions (1600 meals per month at \$4 each): \$76,800

Combined, these estimate a provincial food budget of \$4,551,298. If an additional 10% was spent on local food in these facilities, it would result in an additional \$546,156 to \$910,260 in the local economy annually, with the higher end reflecting more procurement from small, locally- and minority-owned businesses.

For privately owned long term care facilities representing 1,900 beds (or residents) the annual food budget is an estimated \$6,615,990. If an additional 10% was spent on local food in these facilities, it would result in \$793,919 to \$1,323,198 in the local economy, with the higher end reflecting more procurement from small, locally- and minority-owned businesses.

Changing 10% more per budget on local food could also result in the following:

- Post secondary institutions food budgets \$2,958,608 per year = \$295,860 - \$591,729
- School Food Program food budget \$3,421,201 = \$410,544 - \$684,240
- Child care centres food budgets \$1,596,199 = \$191,544 - \$319,240

(For more information on how these estimates were made, please see section PEI Institutions, Procurement Methods, and Purchasing Power of this report.)

Economic benefits from local food procurement could therefore contribute to decreasing food insecurity and its economic roots. However, these anticipated benefits should be interpreted with caution. Multiplier effects can overestimate local economic benefits because economic activities displaced are not always accounted for. It is also important to consider the inputs of production and if they are being sourced or produced locally¹¹. Finally, it needs to be considered how equally economic benefit is spread among community members: “trickle down economics” fail to create equitable economic prosperity¹³.

Local food procurement appears to benefit institutions. Many institutions have experienced supply chain issues caused by the Covid-19 pandemic and climate change related events. Relationships with multiple local suppliers help reduce dependence on a single supplier and create more resilient supply chains for institutions¹⁵.

Best Practices

Public institutions need to be funded adequately to ensure sustainable and local food procurement is achievable. If food budgets are underfunded, institutions will be forced to rely on “cheap food”². Local and sustainable food needs to be defined and purchasing goals need to be set^{14,16}. Food suppliers that provide economic, social, and environmental benefits to the community need to be paid accordingly².

Multi-year coordinated efforts are needed to result in successful system change. Procurement is but one aspect of this^{13,17}. Institutions need to begin by developing a shared vision of food. Shared visions encourage risk taking and experimentation and a long term commitment to change¹⁵ as well as helping overcome “inertia that can counteract change initiatives”¹⁷. As previously noted, a focus on sustainable food procurement will result in the most impact on food security.

Institutions must “scale up, scale out, and scale deep”^{16,17}. Scaling up includes leveraging purchasing power to support sustainable food systems. Issues with aggregation, distribution, processing and food safety must be addressed; local relationships are key to this. Scaling out

refers to advocating for changes to law and policy and the removal of structural barriers across multiple sectors and levels of government. Scaling deep refers to the change in cultural norms and beliefs. Institutional-level change “must be deeply rooted in people, relationships, communities and cultures”¹⁶. To succeed, community effort and involvement is required from the institutions themselves, and the communities they serve.

Public institutions can address the root causes of food insecurity by contributing to equitable and sustainable economic development¹⁹. This can be achieved through procurement of local food¹³ as well as by modeling good employment practices and by working with food suppliers that provide living wages²⁰. Multiplier effects of local food procurement are highest with small, locally owned businesses, in particular minority-owned businesses. Procurement policy should contain targets for these businesses. Institutional policy must be done in tandem with advocating for better social programs and mandated employment standards that ensures all people have adequate income to meet their basic needs^{1,8}

PEI Institutions, Procurement Methods, and Purchasing Power

In this section, institutional settings are described. Provincial and municipal government procurement policy and methodology is described in detail because those policies determine how large food budgets are spent in provincial hospitals, public long term care facilities, correctional facilities, municipal recreational facilities and others. Other institutions such as early learning and child care settings are included because although privately owned, they are subsidized by the provincial government, and often have nutritional policies that can include local food use guidelines. Settings such as schools and post-secondary education contract out food services, leaving procurement decisions to contractors that may be more concerned with the bottom line than supporting the local food system. However, those contracts can be used to enforce more local spending; the University of Prince Edward Island is a case study. Annual food spending, or purchasing power, has been estimated for each institutional setting. These calculations are estimates only. Many have been calculated using the Ontario Ministry for Long-Term Care daily raw food allowance. Prince Edward Island has a similar allowance but it is not available publicly.

Provincial Government

Prince Edward Island appears to be the only Atlantic Canadian province without a strategy to improve and strengthen local food systems despite strong community interest in local food procurement. (For other provinces please see the Jurisdictional Scan section in this report). This is evidenced by the following list of community efforts to encourage provincial procurement of local food to achieve community-identified goals:

- The PEI Food Security Network Sustainable Production and Distribution Working Group event “Alternative Food Marketing: Encouraging Local Health Institutions to Buy Local Food” (2015)²¹

- The PEI Home and School Federation resolution calling for a universal provincial school food program (2015) and resolution calling on the provincial government to create a provincial school food strategy highlighting the importance of local food use and knowledge (2017)²²
- PEI Food Security Network's annual meeting, partnering with the PEI Home and School Federation: "Getting More Local, Healthy Food into PEI Schools" (2017)²³
- The United Way, the City of Charlottetown, and the PEI Food Security Network event, "Let's Talk Food", resulting in Ideas for Action #7: Get more locally produced, healthy food into institutions (2017)²⁴
- In 2018, the province asked for community input for a Local Food Act which led to the PEI Food Security Network to respond that the focus of the act should be procurement of local food by public institutions. It encouraged the government to collect baseline data, research capacity of local producers and processors to supply institutions, and develop program goals and objectives reflecting a "more sustainable, locally based food system in which every person regardless of where they live, has access to healthy, food, provided by local producers who themselves have a livable income."²⁵
- Most recently, Cooper Institute has participated in the Atlantic Canada Food Systems Recovery vision²⁶ which includes as a main priority, "Leveraging government's procurement power" to "build and support local value chains by localizing food in public institutions"

The PEI Department of Agriculture and Fisheries has led several programs related to local food. The Community Food Security and Food Education Program provides small grants to community organizations in the subcategories of Community Food Security and Agriculture Awareness²⁷. The Food Awareness Act²⁸ community consultations did not appear to result in a local food strategy but instead became a subcategory of the above grant program. These programs do not provide leadership, coordination or targets on local food procurement.

Many government reports and recommendations could be achieved, at least partially, with increased local food procurement:

- In 2021, MLAs unanimously passed the first bill in Canada that sets explicit and binding targets for food insecurity reduction. The Poverty Elimination Strategy Act establishes targets for reducing the rates of poverty, food insecurity, and chronic homelessness on the Island²⁹
- Although not mentioned in the Premier's Office Truth and Reconciliation Commission Report³⁰, procurement policies are being used in other jurisdictions as an additional method of reconciliation
- The Net Zero Framework 2040 report states the most significant sources of greenhouse gases include agriculture (fertilizer use, livestock, and manure management 25%)³¹. If organic methods can reduce these emissions it would be beneficial to use local organic food procurement as a means to expand the industry on PEI
- In the Next Policy Framework for Agriculture (2023-2028)³², among the six priorities for agriculture development were: Environmental sustainability/targeted actions related to

climate change, community food security/local food networks and organic industry development³³

- In a recent Long Term Care Review, one of the most commonly suggested improvements were the “Need for improvement in meal and food”³⁴. Increasing the amount of local food alone increased menu acceptance among long term care residents in Ontario³⁵
- Health PEI Strategic Plan 2021-2024 Quality & Safety Strategic Goals prioritizes creating “a person-centered environment that fosters respect and safety to improve patient experiences and outcomes” including “Patient Experience: patient’s overall ratings of health service experiences”³⁶, which would include improved food services and meal quality, and
- Increasing fruit and vegetable intake is a primary goal of the Chief Public Health Office as outlined in the 2021 Chief Public Health Officers Report³⁷. The Heart and Stroke has also been advocating for increased access to fruit and vegetables in municipal recreational facilities³⁸.

Food procurement for all hospitals and public long term care facilities follow the provincial procurement regulations. The provincial procurement regulations and tender process is clearly outlined on the province’s website and involves bidders submitting responses to requests from government. The Perishable and Non Perishable agreement covers most food items purchased by the province. The provincial government posted this Request For Proposal in March 2022 to provide the following food products for the proposal term (June 1, 2022 to May 31, 2023):

- Bakery mixes, baking supplies and gluten free products and mixes
- Beans, pasta and rice
- Canned fruit, vegetables meats and fish
- Cereals and instant breakfast mix
- Cookies, crackers, crumbs and snacks
- Dairy products
- Dressings, condiments and pickles
- Frozen baked goods and entrees
- Frozen fruits and vegetables
- Jams, jellies, spreads, syrups, jellos, pie fillings and puddings
- Some processed proteins
- Seasonings, shortenings and oils
- Soup bases and soups
- Tea, coffee, and juices

There were two winning bids - one from Sysco Serca Food Service to the amount of \$1,484,290 and one for ADL Foods at \$511,567. Health PEI must purchase food items listed from these suppliers at the agreed upon price for the duration of the tender.

The Provincial Protein agreement includes most meat products purchased by the province. This was last posted in 2021, however only information about winning bids is provided from 2020:

1. Sysco Serca Food Service Atlantic Inc for \$275,599
2. ADL Foods for \$186,074 and
3. Gordon Food Services for \$164,604

Due to seasonal availability and price fluctuations, fresh fruits and vegetables are exempt from this bidding process. Eggs and milk are also exempt. These items are “locally purchased” - each individual institution has authority to choose a supplier³⁹. A full list of provincially run institutions and contacts is included in Appendix A.

Despite the lack of a local food procurement or local food systems strategy, Procurement Services has been working to improve access to institutional procurement opportunities for local suppliers⁴⁰. The provincial procurement policy now has a section on preferential treatment for local suppliers. It states that under certain thresholds, “[w]here bid submissions are evaluated on price, a procuring entity may give preferential treatment under subsection (1) by reducing the local supplier’s bid price by up to 10% for the purposes of evaluating the bids” and, “[w]here bid submissions are evaluated on a point system, a procuring entity may give preferential treatment under subsection (1) by reducing the price component of the local supplier’s bid by up to 10% for the purposes of evaluating the bids”. Of note is the exemption, “...a procuring entity may procure goods under those provisions by mutual agreement with a supplier where[...] (vi) from a philanthropic organization, approved by the Minister, or (vii) from a public body or non-profit organization”⁴¹.

Hospitals

There are seven hospitals in Prince Edward Island with a total of 507 beds representing 507 patients, each requiring 3 meals a day and snacks. Food service at the hospitals is overseen by food service managers and teams of unionized Red Seal Cooks. Work duties for cooks are outlined in contracts that reflect the collective agreement through the Canadian Union of Public Employees and the province. Each day’s tasks are detailed and outlined and each recipe is standardized ensuring consistency so positions can be filled seamlessly when cooks are sick or on vacation. The food service managers are responsible for menu development and ensuring that menus follow strict dietary requirements. Food Service Supervisors distribute menus to patients so desired items can be selected. Menus are then reviewed to ensure patients are receiving the correct clinical dietary requirements. Cooking for and feeding hundreds of people hot meals at the same time requires specialized equipment. Industrial kitchens are equipped with huge ovens, steamers, walk-in freezers and fridges, large prep areas, and dishwashing areas with dedicated staff. Meals often need to stay at a food safe temperature in a warming oven as it travels from the kitchen to the patient rooms (sometimes multiple floors away from the kitchen). Not all food maintains its quality and appeal during this process. Most hospitals also have cafeterias, open to staff and visitors and patients, which provide a variety of meals and snacks. The menus are less strict nutritionally and kitchen staff have more freedom to adapt recipes. Overall the whole process - from procurement to meal delivery - is highly organized and structured with many checks and balances to ensure food quality and safety is met.

PEI uses a raw food allowance which is not publicly available. However, using the Ontario Ministry for Long-Term Care daily raw food allowance (\$9.54/day/resident⁴²) it can be estimated that the food budget of public hospitals is roughly **\$1,765,425 per year**. (This estimate does not include cafeteria meals purchased by staff or visitors or meals received by out-patients.)

Long Term Care

Long-term care facilities in PEI include both public and licensed private nursing homes, as well as licensed nursing beds in private combined nursing facilities. There are nine public nursing facilities and ten public nursing homes in PEI and 47 privately owned long term care facilities (37 community care facilities and 10 nursing homes). There are 620 beds (or residents) total in public facilities and 1,900 beds (or residents) total in privately owned facilities.

Public long term care facilities follow the provincial procurement rules. Private long term care facilities procurement policies depend on the institution and how they choose to operate.

Food services for both public and private long term care institutions are similar to the hospitals. They are delivered by a Nutrition Services Department, and overseen by a Registered Dietitian or a Nutrition Services Manager with a nutrition degree. They are staffed by Red Seal cooks working in industrial kitchens, with multiple staff working overlapping shifts per day. As stated in the Community Care Facilities and Nursing Home Act Regulations, menus must meet dietary requirements including following Canada's Food Guide⁴³. These regulations do not state local food targets.

One example of a private long term care facility with high local food use is the Mount Continuing Care Community in Charlottetown. Institutions are often on large properties and the Mount is no exception. In addition to their own orchard and honeybees, the Mount has an agreement with The Burly Farmer. The Burly Farmer leases a quarter acre of land to farm, and in return provides the kitchen with a certain amount of vegetables per year. The farmers noted that the first year, they had agreement with the management of the facility, but when they showed up in the kitchen with 500 pounds of butternut squash, the kitchen staff was unprepared and there was a lot of waste. Since then they have learned to communicate directly with kitchen management about what's in season. The farmers noted that because it is a handshake deal, they worry about losing the land after years of soil building. The Burly Farmer also grows a variety of produce that wouldn't probably be recognizable to the seniors and their business model means they can't grow some staples and compete with lower prices (ie carrots). However, they harvested 6800 pounds of 30 types of produce and operated a CSA, which, being right in the city, is very easy to operate in terms of reaching a consumer base⁴⁴. The Mount orders potatoes from a local potato farmer, a handshake agreement that was in place prior to the Nutrition Services Manager's time there. They also purchase approximately 100 pounds a week of in-season local produce from the Mount Edward Grocery. The cooks are all trained in seasonal menus and use seasonal abundance for pickles, jams, and jellies or simply by offering a bowl of fresh apples or cherry tomatoes on the cafeteria line. Honey from the bees is also offered to residents daily as a sweetener for toast, coffee or tea. According to the

Nutrition Service Manager, the residents love the food and that they know where it comes from. When a local product is unavailable, they order from Gordon Food Services⁴⁵.

Using the Ontario Ministry for Long-Term Care meal allowance (\$9.54/day/resident) it is estimated that the food budget for public long term care facilities is **\$2,158,902** and private long term care facilities **\$6,615,990**.

Also of note for this section is Meals on Wheels, a program that provides low cost meals to seniors in chapters across PEI. While not an institution itself, the meals are often prepared in public institutions (hospitals or long term care) so the food purchased for this program adds to the estimated food budget. The price of meals varies, but in Charlottetown, the largest provider, meals are \$4 to cover food costs. All other costs are covered by volunteers or sponsors. They provide approximately 1600 meals per month⁴⁶, adding an additional estimated **\$76,800** to the provincial food budget.

Correctional Facilities

The three public correctional facilities in PEI have 158 beds total. Food service is either done in-house or supplied by local public institutions. Assuming these beds are filled year round, and that residents are supplied a similar menu to other institutions (calculated at \$9.64/day/resident), the food budget for these facilities is estimated at **\$550, 171**.

Municipal Government

The City of Charlottetown is currently working on a local food procurement policy⁴⁷ out of the Sustainability Office, which also supports the Charlottetown Food Council⁴⁸. This work is guided by the Integrated Community Sustainability Plan, which states, “the City of Charlottetown aims to promote local food production and procurement, improve food security, reduce food waste and use the culinary assets of the community to connect locals and visitors with food”. In 2021, the City also joined the Canadian Collaboration for Sustainable Procurement (CCSP), a member-based network of more than 30 Canadian public-sector institutions working together to align their spending with their values and commitments on sustainability⁴⁹. The CCSP 4 pillars of sustainable procurement include: Green or Environmentally Preferable Procurement; Ethical Procurement; Social Procurement; Indigenous or Aboriginal Procurement⁵⁰. The current procurement policy contains no language about “local” or “food”⁵¹.

The City of Charlottetown owns four large public buildings (arenas) that supply food. The City operates two small canteens in Simmons Arena and Cody Banks Arena, while the food services for Eastlink Centre and Bell Aliant Centre are contracted out⁵². Procurement, therefore, would follow the municipal guidelines for the first two while the food service providers would make procurement decisions for the second two facilities. Net sales for the Simmons Sport Centre canteen and Cody Banks arena were \$8,200 each in the 2022/2023 budget. The City of Charlottetown also often purchases food for meetings and events as outlined below:

Charlottetown Budget 2022/2023	
Canteen net sales	\$16,400
Meeting expenses	\$53,660
Events/luncheons	\$432,050
Inmate meals	\$22,600

Using the figures above, it’s estimated that the City of Charlottetown’s food budget could be as high as **\$524,710 per year**.

The City of Summerside procurement policy has a local preference section: “purchases up to \$15,000, a 5.0% preference to businesses located in Summerside, and a 2.5% preference to businesses located in Prince County”⁵³. The City has no food council or food related projects on their website.

Post Secondary Education Institutions

There are four post secondary institutions in PEI: The University of Prince Edward Island, Holland College, the Maritime Christian College - online, and the Collège de l’Île. The Maritime Christian College is an online service⁵⁴. The Collège de l’Île website contains no information about food services on its website⁵⁵.

The University of Prince Edward Island contracts its food services out and the company that wins the bid makes all of the food procurement decisions⁵⁶. The company is contracted to provide all food services across campus, exempting only small, student run programs such as the Panther Pantry and Chaplaincy Centre programs⁵⁷.

Although UPEI’s food service contract (previously with Chartwells, recent request for proposal closed January 2023) doesn’t contain specific targets for local food purchased, they do ask applicants to describe how they would use local food and include targets. The RFP also states “Annual reporting/dashboards should cover sustainability, local sourcing percentages” in addition to other markers. “Local” is defined in the following section:

“The University encourages supporting local producers when sourcing products. Island producers would be our first preference, however, sourcing in the Maritimes would also be considered local.”

- 22-1172 - Campus Wide Food Services Request for Proposal

When applying for the last contract, Chartwells committed to purchasing 30% of local food. The Chartwells staff understand the importance of serving local food and they find this gives them the flexibility to purchase better, fresh food. The food service director said, “We love it”. The food service staff find that students in general are interested in where their food comes from and how it’s made, including the broader social and environmental implications. However, they

continue to face challenges in meeting the 30% target. A major challenge is that cooks are “impossible to find” despite being unionized positions with better pay and hours than typical restaurant jobs⁵⁸.

To become a food supplier for Chartwells, companies must undergo the “vendor certification program”⁵⁹ (Appendix B for details) which outline the minimum requirements of regulations. If PEI organic farmers (“Local Non Meat Distributors”) wanted to supply to UPEI to Chartwells through Grower’s Station, they would be required to have a provincial inspection, a HACCP or GAP program, and a recall program. Current local suppliers include MR Seafood, Glasgow Glen, Larkin Brothers, Kays, Honeybee, KJL, ADL, McQuarrys, For Real Dough cookies, Harvest Wholesale, Juice Co, and Bento Sushi.

UPEI has a total of 5419 students and 828 employees. It also provides accommodation for up to 440 students in three different residence buildings on campus - often selling meal plans to those in residence.

Holland College has eight campuses across PEI. In 2020-2021, Holland College had 2530 full time students and 51 part time students, with 279 students in residence. They also had 729 adult education students and 1274 students enrolled in community education.

The food services contract for Holland College campuses goes through the same process and is also contracted to Chartwells. However, there appears to be no targets on local food procurement as the website does not mention local food beyond general advertisements⁶⁰. There is no mention of procurement policies on the Holland College website and no procurement division or staff. The exception is the Tourism and Culinary Centre, where food is prepared and served by the culinary arts students and procurement is completed by a designated Shipping, Receiving and Inventory Clerk.

To estimate the purchasing power of these institutions, the following calculations were made:

		# meals/day	food cost/meal	# snacks/day	food cost/snack	daily food cost	annual food cost
UPEI							\$1,780,570
students (-residence)	\$4,979	1	\$3	0		\$7,469	\$1,082,933
students in residence	\$440	3	\$3	1	\$1	\$1,981	\$402,042
staff	\$828	1	\$3	0		\$1,242	\$295,596

		# meals/day	food cost/meal	# snacks/day	food cost/snack	daily food cost	annual food cost
Holland College							\$1,178,038
full time students (- residence)	\$2,241	1	\$3	0		\$3,362	\$487,418
part time students	\$51	0	\$3	0		\$0	\$0
adult education	\$729	1	\$3	0		\$1,094	\$158,558
students in residence	\$279	3	\$3	1	\$1	\$1,256	\$254,968
community education	\$1,274	1	\$3	0		\$1,911	\$277,095

For both institutions it was assumed half of students (50%) would participate in the food services programs as listed above. Therefore, the total estimated food budget for post-secondary institutions is **\$2,958,608 per year**.

Public School Boards

The Public Schools Branch and La Commission scolaire de langue française (CSLF) operate 62 public schools offering kindergarten to Grade 12. School food programs vary but schools often offer breakfast, lunch, and snacks at varying costs and through varying programs. Breakfast and snack programs are often reliant on donations and volunteers and will not be considered for this project. The Public Schools Branch contracts out lunchtime food services in schools with cafeterias (15 schools) and schools without cafeterias have local vendors deliver lunches, whereas CSLF cafeterias are often operated by the same nonprofits that operate the schools. Similar to the post-secondary institutions, the food service contractors are responsible for procurement decisions.

For many years, Chartwells was awarded the food services contract for all schools with cafeterias, but recent community and government efforts have resulted in something different. The PEI School Lunch Program, a nonprofit⁶¹, was created to replace food services and provide more consistent, accessible, and better quality school lunches to all public schools. They operate from “hubs” - schools with cafeterias that have more kitchen space - and deliver to schools without cafeterias. The organization provides food services to 9 schools and plan to

expand every year. This program is subsidized by the provincial government and offers a “pay what you can” program, an anonymous way for families identifying as low-income to receive meals at lower or zero cost. The executive director and management is interested in using more local food, but there are competing demands, primarily difficulties in finding skilled kitchen workers. Food delivery is a challenge, as cooks lose labour time every time a food delivery is made, and so the organization can’t commit to multiple food suppliers. They have been exploring purchasing through a membership based buying club called UNIPCO to reduce food costs and simplify ordering⁶².

The Public Schools Branch school nutrition policy states, “Schools should strive to serve foods that are whole, minimally or un-processed, locally-sourced, seasonally available and prepared in a healthy way”⁶³, but the policy is not enforced. The CSLF website does not mention local food, food services, or a food and nutrition policy.

Assuming:

- the program expands to every public school (with a total student count of 21,061)
- 50% of students participate
- a food cost of 33% of the meal price (\$5.50)⁶⁴ and
- the program would be available to students every day school is open (179 days per year)

The annual food budget for this organization could be (at full roll out) an estimated **\$3,421,201** per year.

Early Learning and Childcare Settings

Childcare services fall into the following categories: unregulated child care (essentially only 5-6 children in care), and regulated child care. All child care in PEI is run by private businesses. Regulated child care includes early childhood centres, preschool centres, school-aged centres, family home centres, and Early Years Centres.

In 2019, 3,476 children attended centre-based programs full time, and 2,198 children attended part time. Of these, 2,329 children attended Early Years Centres, which are childcare centres that have received special designation from the province and that follow best practice guidelines above what is required for a licence. These centres must provide one meal and two snacks to full time attendees and snacks to part-time or school-aged children in after-school programs. Each centre hires a cook, typically trained (culinary arts diploma, food safety certificates) but not necessarily Red Seal certified. Cooks often work part time (approximately 20 hours/week). Early Years Centres are often in converted single family homes and therefore have a home-style kitchen and no industrial kitchen equipment to process food. Food procurement policy and methodology depends on the individual business. Typically these centres purchase groceries at full retail cost at grocery stores and food purchases are driven by lowest price. Early Years Centres are designated and provincially funded so must follow Healthy Living Guidelines which include menu planning guidelines reflecting Canada’s Food Guide.

Early Year Centres are privately owned but provincially funded. The Department of Education and Lifelong Learning Healthy Living Guidelines include menu planning guidelines which has the following stipulation about local food use: “Early learning and child care centres will try to use local products first, where possible.”⁶⁵ This policy is supported by staff through the Department of Education and Lifelong Learning, but not enforced.

Early Years Centres and other centres represent a growing market. The federal and provincial governments recently signed the Canada-Prince Edward Island Canada-Wide Early Learning and Child Care Agreement, which includes a commitment to designate up to 20 new Early Years Centres and add 452 new licensed childcare spaces. Many centres are being encouraged to become designated as Early Years Centres to receive subsidization. Therefore the purchasing power estimated (**\$1,596,199** per year) have included children that attend these centres:

Private centre-based childcare		# meals/day	food cost/meal	# snacks/day	food cost/snack	daily food cost	annual food cost
Total							\$1,597,199
full time	\$3,476	\$1	\$2	\$2	\$1	\$3,478	\$1,213,648
part time	\$2,198			\$1	\$1	\$1,099	\$383,551

Centres are closed on weekends and statutory holidays. The above is calculated assuming the centres are open the remaining 349 days per year.

Cost Comparisons and Capacity of Distribution Hub

The following data was gathered:

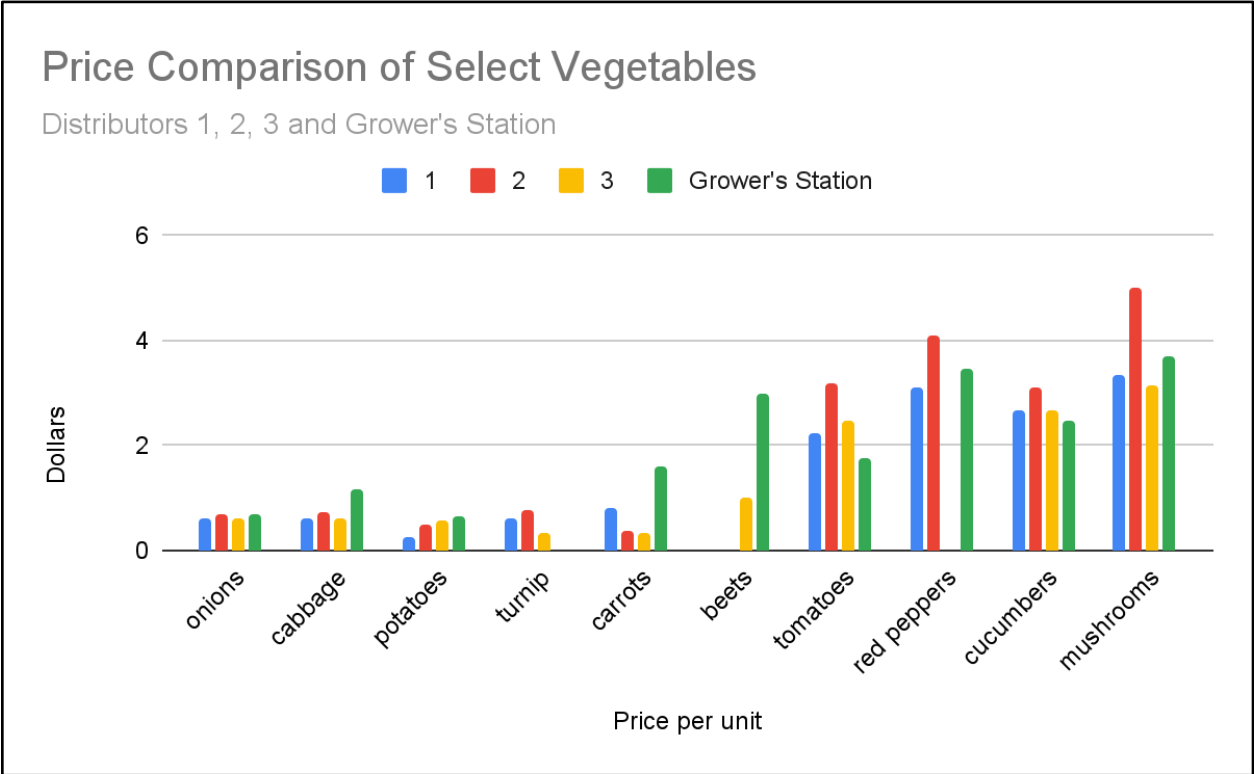
- 2022 total sales and volumes distributed from Grower’s Station,
- One year total sales and volumes from a Grower’s Station institutional client, and
- Purchasing patterns and food costs of “case study” institutions, not current clients of Grower’s Station

This data was compared and contrasted to explore the following questions:

- How do the prices of PEI organics (through Grower’s Station) compare to local/not local conventional products (through other distributors)?
- What are the annual needs of various institutions?
- Does Grower’s Station have the capacity to meet institutional demand? and
- What are the opportunities for processed fruits and vegetables?

Cost Comparisons

Prices from the case study institutions (other distributors, labelled 1 2 and 3) and Grower’s Station are compared in the following chart. Prices were gathered in October 2022 and adjusted so similar units were measured (ie, per kg).



Tomatoes and cucumbers from Grower’s Station were more affordable than the other distributors and a number of items were offered by Grower’s Station at a lower price than some distributors. The items from other distributors are not certified organic but it’s unknown if they are local products.

It’s important to note that Growers Station doesn’t provide wholesale bulk prices for all items. If farmers are interested in the wholesale market, this type of pricing would be something to consider and could make prices more competitive.

Annual Institutional Need

The following chart shows annual needs projected for the two case studies. Annual food costs per item were also calculated.

Long Term Care Case Study Annual Food Use				
Item	Purchasing Pattern	Quantity/Year	\$/Quantity	\$/Year

frozen vegetables	6 cases per week (8-12kg/case)	3744 kg	\$3.52/kg average	\$13,179
potatoes	100 lbs/day	16536 kg	unknown	unknown
fresh apples	18kg box every 2 wks	468 kg	unknown	unknown
fresh vegetables (local store)	100 lb/week	1467 kg	unknown	unknown
fresh vegetables (direct from farmer)	250lb tomatoes, 100lb beets, 18lb green tomatoes	167 kg	land lease	land lease
fresh carrots	100 lbs/week	2364 kg	50lb bag \$17	\$1,768
frozen fruit	1 case every 2 weeks	130 kg	\$7/kg average	\$910
canned fruit	1 case (6 cans) per week	886 L	\$4.05/L average	\$3,588
all purpose flour	20 kg bag/week	1040 kg	20kg \$23	\$1,196
whole wheat flour	2x20kg bags/week	2080 kg	20kg \$25	\$2,600
liquid eggs	4 x 1L cartons/day	1456 L	12kg case \$70.67	\$8,575
eggs	672 eggs/day	34944 eggs	case (15 dozen) \$51.05	\$9,911
oats	25 kg every 2 weeks	650 kg	25kg bag \$70	\$1,820
meat (local)	average \$670/week	unknown	unknown	\$34,840

This long term care facility has 120 beds and supplies meals to a childcare centre (approximately 30 children) and has a local food focused menu. However, note their reliance on frozen prepared vegetables, an item not currently available locally. For this institution, the average cost of frozen prepared vegetables is \$3.52/kg - **\$13,179** of the food budget. A similar theme was noticed for fruit use. Canned and frozen fruit were very popular and took up a large section of the fruit budget at an estimated **\$4,550** (frozen) and **\$3,588** (canned).

School Food Case Study Annual Food Use						
Item	Biweekly Purchasing		Quantity/Year (40 wks)		\$/Quantity	\$/Year
	Quantity	Pattern	Quantity	Unit		
tomatoes	32	kg	640	kg	\$4.96/kg	\$3,174
romaine	93	head	1860	head	\$5.08/head	\$9,449
potatoes	347	kg	6940	kg	\$0.55/kg	\$3,817
carrots	225	kg	4500	kg	\$0.84/kg	\$3,780
green onions	50	bunch	1000	bunch	\$1.29/bunch	\$1,290
onions	30	kg	600	kg	\$1.39/kg	\$834

garlic	1	kg	20	kg	\$9.82/kg	\$196
corn	80	kg	1594	kg	\$4.69/kg	\$7,476
green peppers	11	kg	220	kg	\$4.69/kg	\$1,032
apples	2800	each	56000	each	\$0.34/each	\$19,040
cucumbers	50	each	1000	each	\$1.75/each	\$1,750
red peppers	16	kg	320	kg	\$6.80/kg	\$2,176
cabbage	20	kg	400	kg	\$1.34/kg	\$536
mushrooms	8	kg	160	kg	\$7.39/kg	\$1,182
turnip	8	kg	160	kg	\$1.32/kg	\$211

This case study is for lunches provided to 9 schools. Please note that the menu changes seasonally so different items would be swapped out for those listed. These calculations were completed to provide a sense of need for this institutional setting.

Because fresh produce is exempt from the provincial bidding process, no information could be gathered on the quantity or types of fresh fruits and vegetables these institutions require, or whether or not they are currently receiving and using PEI items. An estimated **\$1,929,164** is spent by provincial institutions for fresh produce, milk and eggs combined. (With the provincial food budget an estimated \$4,551,298 and removing the figures from the five winning bids of the Perishable/Non Perishable and Protein Tenders, totalling \$2,622,134).

Distribution Hub Capacity

The table below compares the total volumes of food required by the School Food Case Study, the Grower’s Station institutional client, and the 2022 totals delivered by Grower’s Station. This attempts to demonstrate the current capacity of Grower’s Station.

Annual Totals of Institutions vs. Grower’s Station Capacity			
Item	School Food Case Study	Institutional Client	2022 totals Grower's Station
mushrooms	160 kg	1671 kg	3350 kg
tomatoes	640 kg	1492 kg	3390 kg
peppers	540 kg	289 kg	667 kg
cucumbers	1000 each	1047 each	7703 kg

The School Food Case Study (representing nine schools) and the Grower’s Station institutional client had similar needs for the above items. This also demonstrates that Grower’s Station delivered a much higher volume than what is required by both of these institutions.

The Long Term Care Case Study required an estimated **2767 kg** of fresh vegetables annually; Grower’s Station provided **6367 kg** total of fresh vegetables to the institutional client.

Comparing these numbers, it is clear that Grower’s Station is capable of meeting institutional demand; a growth strategy would likely be required to provide to multiple institutions or on a provincial level. **To create a scale-up plan for farmers and Grower’s Station, a pilot project is recommended with a partner institution (or institutions). Accurate projections need to be completed with details on menu and seasonal needs.**

100kg orders 3 times a week would be achievable with the current staff and vehicle, however, if an institution wanted a 500 lb (227kg) order in a single delivery, it would require two deliveries. Grower’s Station is expecting an additional vehicle with larger capacity, as well as a temporary employee this summer (2023). To provide to multiple institutions or to provide island-wide those upgrades would be essential. Of utmost importance would be planning with producers to grow the food required by the institutions⁶⁶.

Processed Fruits and Vegetables

Much of the produce used in institutional settings is washed, peeled, sliced/chopped and frozen. This is demonstrated in the Long Term Care Case Study annual totals chart (above). Provincial estimates of annual use and cost are provided below (data from the 2022 Perishable/Non Perishable Request for Proposals, see Appendix C). Costs were calculated using data from the Long Term Care Case Study. Only fruits and vegetables are included below; other processed foods, including potato products, are not included.

Provincial Use of Frozen Prepared Foods		
	Estimated Annual Use	Estimated Annual Cost
frozen fruit	8896 kg	\$62,272
frozen vegetables (excluding potato products)	65576 kg	\$230,828

It’s unlikely these convenience foods are made with local ingredients, and they must go through the Request for Proposal process meaning a local option would have a 10% price adjustment when compared to non-local foods. **This could provide an opportunity to maximize profits from seconds and crop abundance.**

Jurisdictional Scan

Background and Methodology

An Atlantic Canadian-focused jurisdictional scan was completed in November and December 2022 by studying policy reports, online information on programs and legislation, as well as gaining knowledge of practitioners and organizations through meetings and presentations (see footnotes).

Because of the necessity for policy for successful organizational change in procurement and use of local foods, and because much of institutional procurement is determined at the provincial level, a particular focus was placed on provincial policies related to local food procurement and provincial food and beverage strategies that highlight local food procurement. Provincial policies also determine purchasing of many public institutions including hospitals, public long term care, and correctional facilities. Other areas of focus included municipal procurement policies or food security related policy (only the largest municipalities per province were examined), post- secondary and public school board food and nutrition policies, procurement policies, or food service contracts with targets on local food purchasing, and provincial early years education food and nutrition policy that encourages local food use or education. The information gathered is organized by province, with subcategories of provincial and municipal government, post- secondary education institutions, public school boards, and early learning and childcare settings.

Nova Scotia

NS Provincial Government

Nova Scotia's Environmental Goals and Sustainable Prosperity Act states that "local food consumption is supported and encouraged, with the goal of 20 per cent of the money spent on food by Nova Scotians being spent on locally produced food by 2020"⁶⁷. This policy is not currently enforced⁶⁸.

The province also has a Sustainable Procurement Policy⁶⁹, focusing on economic, environmental, and social responsibilities:

- Economic: e.g., Support for the Local Economy Life Cycle Cost, Fiscal Responsibility
- Environmental: e.g., Greenhouse Gas Reduction, Waste Reduction, Toxic Use Reduction
- Social: e.g., Employee Health and Safety, Inclusiveness and Fair Wage, Health Promotion

There has been a strong community push for local procurement policy, primarily from FoodARC and the Ecology Action Centre. Their 2014 "Making Food Matter Report"⁷⁰ included recommendations on getting more local food in Nova Scotia's publicly funded institutions and

fostering cross-departmental collaboration around food systems change. Key issues that have arisen over time include producer capacity, distribution systems, processing infrastructure and collaboration and information sharing⁷¹. Since 2016, a number of projects have been completed in partnership with the Nova Scotia Departments of Health and Wellness and Agriculture, the Nova Scotia Health Authority, New Leaf Social Innovation and others including the Cultivating Change: Putting Food First in Nova Scotia program, and the interactive workshop and report released: Pathways to Healthy, Local and Sustainable Food in our Institutions: Harvest Report 2017⁷².

Currently, the Nova Scotia Department Agriculture Manager of Institutional Procurement has a ministerial mandate to increase local spend to 20% local procurement as part of the NS Food and Beverage Strategy. They are developing pilot projects to begin in the winter of 2023 to look at challenges, barriers, gaps, infrastructure, food safety requirements, etc. in partnership with stakeholders (long term care, hospitals, correctional facilities, K-12 education and post-secondary educational institutions). They plan to start with identifying total food spend, local (NS) food spend, and identifying opportunities to displace imported products. Food hubs and processors are key partners and “bridge the gap” with small and medium sized producers⁷³.

There is also a project ongoing with the IWK, the Nova Scotia Food and Nutrition Program Advisory Committee, and the Canadian Malnutrition Task Force Working Group to enhance public health through sustainable food procurement in public institutions. This project has led IWK Health to change food services to a room service model with a focus on local, sustainable and environmentally friendly menu options and has led to a major decrease in food waste^{74,75}. Partnering with the food hub, The Station, and Gordon Food Services (GFS) the institution is also purchasing approximately 180 cases/week of locally sourced and processed frozen mashed potatoes⁷⁶.

NS Municipal Government

In 2021, the city of Halifax added a new section to the procurement policy: the Social Value Framework⁷⁷. This outlines how considering social value can “create maximum benefit for the community and increase service quality and can also lead to cross-departmental savings and encourage organizations to enter the market.” ... “Including Social Value in the Municipality’s procurement processes maximizes investments in a way that produce additional value for communities and citizens”⁷⁸.

The Halifax Food Policy Alliance Food Charter states, “Supporting local farmers, fishers, and producers is an essential part of the food system. Local food strengthens our communities and helps us adapt to changes in the world”⁷⁹. However, no targets for municipal procurement of local food are set.

NS Post Secondary Education Institutions

Multiple stakeholders throughout Acadia University developed a campus-wide vision for food⁸⁰ to shift towards a more healthy, sustainable, and equitable institutional food system. Their current food service contract requires a minimum of 20% local spend (they are just under 30% now), moving to 50% by the end of the contract in 2030⁸¹ and they are members of the Certified Organic Campus Program⁸².

Dalhousie University has a Sustainable and Healthy Food Plan for 2020-2030 which connects to the UN Sustainable Development Goals. This focuses on plant-based and third-party certifications (Fair Trade). Depending on the season, local food can make up a very high (almost 80% of produce) percentage of food spend⁸³. At the Agricultural Campus, The Chef's Garden (a 1.1 acre farm) supplies vegetables for on-campus dining and education⁸⁴.

St. Francis Xavier University contracts its food services to Sodexo. Sodexo has committed to reduce its carbon emissions by 34% by 2025 and states that 51% of the products used on the STFX campus come from the Maritimes and 16% comes from small business⁸⁵.

Cape Breton University⁸⁶, Mount Saint Vincent University⁸⁷, Saint Mary's University and Université Sainte-Anne websites use "local food" marketing on their cafeteria websites but offer no additional information on local food purchasing targets. The Atlantic School of Theology, NSCAD University, Nova Scotia Community College, and University of King's College have no mention of food services online.

NS Public School Boards

Following a critical report of the state of school food in the province released in 2022, the province announced that the "outdated school food policy [is] being overhauled". No clarification was provided on whether local food purchasing targets will be set or enforced⁸⁸.

The Nova Scotia Coalition for Healthy School Food submitted its pre-budget submission in advance of the Nova Scotia 2022-23 budget and promoted investment in a school food program as an economic recovery strategy for the province, as a setting for job creation and industry renewal including through local food procurement^{89,90}.

NS Early Learning and Childcare Settings

Child care facilities in NS licensed by the province are encouraged to develop menus that expose kids to locally grown and produced products, and states "...buying food that is grown and produced within the province supports Nova Scotia agriculture and business and means that more money remains in the community. Locally grown, fresh food is often more nutritious if it is used shortly after harvest. When possible, regulated child care settings serve local,

seasonal food and beverages that are harvested, produced, or manufactured in Nova Scotia and Atlantic Canada.”⁹¹

New Brunswick

NB Provincial Government

The New Brunswick Department of Agriculture, Aquaculture, and Fisheries has a Local Food & Beverages Strategy, including the programs Grow NB, Buy NB, and Feed NB. The strategy reports, “NB households spend approximately \$2.4 billion on food each year. Much of that food is produced outside of the province. Although NB benefits from impressive export sales of \$531 million generated from agri-food and \$1.74 billion in seafood manufacturing (2019), improving the purchase and support of locally produced food and beverages can contribute to GDP growth through import substitution”. The strategy exists to enable the province to produce and process more of their own food to decrease reliance on imports. It estimates that publicly funded facilities spend millions of dollars annually on food in the province. Buy NB is the program responsible for increasing opportunities to increase local food procurement in those institutions. Currently they are working to promote the New Brunswick First Procurement Strategy and Policy, as well as the local food exemption under the Procurement Act⁹². The Act states, “the procuring entity shall observe the following order of priority, regardless of whether bid submissions are evaluated based on price or evaluated on a point system: (a) firstly, New Brunswick manufacturers if the goods to be procured are manufactured in New Brunswick; (b) secondly, New Brunswick vendors; and (c) thirdly, Atlantic suppliers. Preferential treatment permitted for New Brunswick suppliers 132A procuring entity may give preferential treatment to a prospective supplier from New Brunswick for the procurement of goods or services if the applicable trade agreements provide an exception for those goods or services or those goods or services are not subject to trade agreements”⁹³

NB Municipal Government

Moncton gives no preferential treatment to local vendors, except under the environmental considerations and social procurement exemption, defined as, “Social Procurement Social procurement is the achievement of strategic social, economic and workforce development goals using an organization’s process of purchasing goods and services from enterprises which qualify as a Diverse Vendor. The procurement of goods and services which fall BELOW the thresholds established for government funded bodies identified under the Province of New Brunswick’s Procurement Act[...] may be negotiated directly with a qualified Diverse Vendor by the Purchasing Manager, as directed by Moncton City Council.”⁹⁴

In the Social Inclusion department, Moncton has also listed the objective, “Significantly increase the percentage of local and sustainable food purchased by City facilities” under the Urban Agriculture and Food Security category⁹⁵.

NB Post Secondary Education Institutions

Mount Allison University first implemented a sustainable procurement policy for the campus dining services in 2006, which included a local, organic, and environmental clause in the Request for Proposals⁹⁶. Currently, a minimum of 40% locally sourced foods, increasing to 50% over time, are required. They define local food as farmed, fished, and produced within the “five-hour circle around Sackville, known to us as the Maritime Diet” which includes parts of New Brunswick, Nova Scotia, and Prince Edward Island⁹⁷.

The University of New Brunswick appears to have lots of food programming (including a garden that provides produce to campus), but no local food procurement policies targets⁹⁸. The St. Thomas University food services website has general statements about supporting local businesses⁹⁹. The New Brunswick Community College website has no mention of local food on their website, only that their dining room is run by hospitality students. Université de Moncton, Collège communautaire du Nouveau-Brunswick, New Brunswick College of Craft and Design, and the Maritime College of Forest Technology websites have no mention of food services online.

NB Public School Boards

New Brunswick’s 7 school districts follow the Department of Education and Early Childhood Development Policy 711 Healthier School Food Environment, which states: “Supporting local foods in public schools is important to enable learners to discover, be aware and feel connected through school activities and cross-curricular connections to how and where food is grown, cultivated, and harvested” and “Schools and food service providers should sell, serve, or offer foods and beverages that are locally-sourced, seasonally available and produced or manufactured in New Brunswick as much as possible”¹⁰⁰.

NB Early Learning and Childcare Settings

The Department of Education and Early Childhood Development operator manual provided for Learning Learning and Childcare Homes encourages, “Opportunities for children to learn about food and nutrition are provided (for example, setting the table, planting a garden, composting, trying new foods from different cultures, using local vegetables and fruit, age-appropriate cooking activities)”¹⁰¹.

Newfoundland and Labrador

NL Provincial Government

The provincial government had the goal to double provincial food self-sufficiency by 2022¹⁰². As part of the Way Forward on Agriculture¹⁰³, a pilot project was completed in 2018 and 2019 to

serve locally farmed products in public health facilities^{104,105}. They estimate this increase in food self sufficiency will generate an additional 500 person years of employment¹⁰⁶.

NL Municipal Government

Of the three largest cities (St John's, Corner Brook, and Mount Pearl), St John's seems to be the only municipality with a food policy council or food related policy. The food policy council, a partnership between the municipality and community organizations including Food First NL, wants to "Improve the environmental, social, and/or economic sustainability of local food production in City of St. John's facilities and programming" by "expand[ing] opportunities for farmers and fishers to sell at physical locations and through online purchasing in the City And Develop and implement procurement policies to support locally produced foods in City facilities¹⁰⁷. Food First NL has worked with several schools on pilot projects to increase local food¹⁰⁸ and were developing a pilot project to serve locally farmed products in public health facilities in 2019¹⁰⁹ but it's unclear if this work has resulted in policy change.

NL Post Secondary Education Institutions

The Memorial University of Newfoundland website states food and supplies are sourced locally where possible¹¹⁰ but no targets for local food procurement were found. Memorial University became a certified Fair Trade campus in 2016¹¹¹ and fair trade products are used throughout campus. An 85-acre farm in Labrador is in development¹¹². The press release doesn't state if they plan to supply food for food services on campus.

The College of the North Atlantic website does not mention local food targets¹¹³.

NL Public School Boards

There is no mention of local food in the Newfoundland and Labrador Provincial School Food Guidelines¹¹⁴ nor on the Newfoundland and Labrador English School Board or Conseil Scolaire Francophone websites.

NL Early Learning and Childcare Settings

The provincial Child Care Services Regulations for early childhood centres does not mention local food¹¹⁵.

Opportunities and challenges for PEI local processing and distribution to meet institutional product demand.

Meeting institutional demand relies on local food aggregation, storage, processing, and distribution¹³. Grower's Station provides opportunities for aggregation and distribution. Storage is primarily on-farm in the Grower's Station model. Processing opportunities appear limited, but this area requires further investigation due to challenges with obtaining information.

Opportunities and challenges (real and perceived) of institutional procurement of local food are discussed below.

Local Distribution

As demonstrated in the section "Cost Comparisons and Data from Distribution Hub", Grower's Station has the capacity to meet an individual institution's needs, but to scale up to meet the need of multiple institutions it would require the anticipated growth (employee and vehicle) for the coming season as well as a growth strategy in partnership with producers.

Local Processing

There are few options for processing in PEI beyond primary processing (ie, washing and bagging of raw produce). This could be a missed opportunity; foods like frozen fruit and vegetables are commonly used in institutions. There is no current working relationship with processing line companies in PEI. Current ownership and management is unclear and no further information was found. There are food processing space rentals, commonly used to conduct initial testing of products. FoodWorksPEI has a 28,000 square foot food processing space¹¹⁶ with three smaller bays (between 1100-1500 sq ft), and one large 10,000 square foot bay. The bays are available for lease through Finance PEI. Rates are negotiated based on the requirements with a base rate of \$18/square foot/year. Finance PEI has funding available to assist with custom adjustments¹¹⁷. BioFoodTech kitchens and pilot plants are also available for rent for \$120 to \$500 per day. There may be funding available through Innovation PEI for these types of projects.

Opportunities and Challenges

Institutional settings are different, and depending on the procurement policies, food service methods, and menu requirements, there are both challenges and opportunities. In general, there are perceived challenges and real challenges to increasing local food procurement in institutions.

Perceived challenges include a perceived lack of capacity of local producers and distribution, perceived conflicts with trade agreements¹³, and perceived higher costs of purchasing local food. As explored in this report, the capacity of local producers and distribution through

Grower's Station is anticipated to be adequate for institutional demand. Although trade agreements and complicated procurement methods create challenges for small local suppliers, trade agreements allow institutions to prioritize local suppliers or products (within thresholds)¹³. Finally, there is a potential higher financial cost to purchasing local foods, but not when you consider the true cost of food and the economic, environmental, and social cost of importing food, as discussed earlier in this report.

Real challenges include:

- A lack of provincial strategy to encourage and incentivize local food spending (and therefore, cost as the main motivation for purchasing decisions),
- A lack of baseline data demonstrating current spend vs. local spend in public institutions
- A limited harvest season for fresh produce,
- Local items not available through current institutional vendors/distributors,
- Labour market issues and difficulty hiring kitchen staff trained to use local foods,
- Keeping labour costs low¹¹⁸,
- Regulations (ie, federal inspections or other requirements) and other procurement policies that create barriers for small local businesses,
- Varying definitions of "local" food, and
- Identifying where ingredients in processed foods are from¹¹⁹.

Many of these barriers can be solved through social and administrative support and resources. Policy change and government support are the most cited solutions to increasing local food procurement in public institutions⁷⁰.

Opportunities include:

- An overall desire to re-localize the food supply. Many people understand the importance of resilient local food systems and some are motivated by the current issues with supply chains¹²⁰,
- Institutions are learning how to be adaptable with menu development and execution due to food price inflation and supply chain issues¹²¹, and
- The new 10% price adjustment and the exemption of fresh produce from the provincial procurement methodology.

Carbon Life Cycle Analysis

This part of the project intended to compare greenhouse gas emissions by replacing imported foods on a provincial level with local organic products. It's often assumed that local food results in a lower environmental impact by reducing greenhouse gas emissions from transportation. However, this appears to not always be the case. This work could not be completed due to the lack of baseline data and difficulties determining the origin of food currently purchased, as well as restraints like the short project duration and budget. Therefore this component requires further investigation.

Carbon emission reduction should also be considered for potential processing activities. If averting field waste from seconds or seasonal abundance to marketable products, that could result in decreased emissions.

Additionally, it could be examined how many “food miles” are spent by sending most food off-Island to be processed.

Food system sustainability is discussed in the “Potential Social, Economic and Environmental Impacts” section of this report.

Discussion

Fresh produce is exempt from provincial procurement rules. All public hospitals, long term care facilities, and correctional facilities appear to be encouraged to purchase local and this procurement is done at the discretion of the procurement staff. Education may be required: staff may be misinformed and believe produce must be purchased with contractors for other foods (this was the case in one interview). Private long term care would provide similar opportunities. The City of Charlottetown is interested in staying in touch; there could be an opportunity for partnership between the City, their recreation facilities, and the Heart and Stroke Foundation if the focus was on local healthy food. UPEI would be another potential future partner, but the regulations put in place by Chartwells to become a food provider would be more challenging to navigate. The School Food Program is focused on other priorities currently but is interested in featuring more local food. **Childcare centres provide an excellent opportunity; they currently purchase food from grocery stores at retail prices and would likely be interested in food delivery to save kitchen staff time.**

Best practices stress the importance of a collective vision for institutional food, made by the institution and heavily influenced by the institutional community. Significantly increasing local food spend often results from a long-term coordinated effort by the institution. A collective vision within a sustainability context may also be in PEI organic farmers’ best interest because it would likely help institutions overcome the “bottom line” mentality of food procurement. Sustainability is also top of mind for many due to climate change, and supporting sustainable food systems builds food security.

As an example, due to sustainability goals, some post-secondary institutions like Acadia University participate in the “Organic Campus Program”, a program that “cultivates student-led steering committees that advocate, educate, and promote organic on-campus”.

A PEI example of the need for institutional-wide engagement is the case study of the Burly Farmer and the Mount Continuing Care Home. A lot of food was wasted when the kitchen staff were unprepared for the seasonal volumes. Relationship building was needed between not only the institutional management and farmers, but kitchen management and staff.

Processing on PEI needs further research. A high volume of frozen, prepared vegetables is purchased by the institutional market every year and that may increase as skilled cooks become harder to hire. Explorations into local processing opportunities should identify low-labour techniques to address labour shortages and the increased cost of labour. Processed foods also may require additional storage. They may also provide an opportunity to use seconds or seasonal abundance (thereby reducing food waste) and providing economic benefit. This needs to be explored further. Processed foods (like frozen fruits and vegetables) would be subject to provincial procurement rules in public institutions; however, the new 10% price adjustment policy would help local organic versions of these products to be price competitive. The Station Food Hub in Nova Scotia provides a success story for local processing. The Station processes Nova Scotia potatoes into a frozen mashed potato product and has been supplying growing amounts to hospitals, enabling the hospitals to both save on labour and provide a local product on their menus.

Long term advocacy for provincial policy that supports sustainable and local food procurement is also recommended to address barriers to institutional procurement identified previously in this report. In order for procurement staff to not have to rely on “cheap food”, institutions must be funded adequately. Atlantic Canadian provincial policies and strategies are outlined in the jurisdictional scan, but more research is required to identify the most effective policies.

Finally, although it is clear that Grower’s Station has the capacity to supply one or more institutions, a strategic growth plan would be necessary to capitalize on the large purchasing power of entire groups of institutions. This scaling up would be done best in partnership with a number of institutional partners who are committed to increasing their procurement of local, organic food over a number of years. A multi-year collaboration would provide the time required for institutional change as well as the planning farmers would require to scale up production. In addition, more research can be completed with the collection of provincial baseline data, including the carbon life cycle analysis, both for import replacement as well as the opportunities presented by processing to reduce food waste.

Conclusion

Institutions present a large market opportunity. Creating policy and relationships to improve local food procurement would benefit organic farmers, the community, the economy, and the institutions themselves in addition to supporting multiple government priorities.

With the new collective distribution model (Grower’s Station), small organic farmers are likely capable of scaling up to meet institutional needs.

This project examined PEI institutional market opportunities and challenges and examined the impact of local food procurement on carbon emissions, local rural economies and food security. In summary the following was found:

- Economic benefits are expected from local food integration,

- Stabilising sustainable food systems and economic development work towards food security, and
- Opportunities likely exist for import replacement in institutional procurement, but it is difficult to know without baseline data.

Increasing institutional local food procurement can impact regional economies; however, simple economic growth does not necessarily result in equitable economic gains among community members. Multiplier effects are greater when locally-owned, small businesses are involved. Growing local food systems can also result in more stable supply chains for institutions.

To contribute to food security and have additional positive social and environmental impacts, institutional procurement must support sustainable food systems.

Public policy is required that defines and sets standards for food procurement. Best practices exist and can be followed, including the commitment to pay the true price of food that reflects external costs or benefits to society. For successful change, an institutional food vision needs to guide long term efforts in combination with removal of structural policy barriers and completed in partnership with the community.

Increasing the resilience of local food systems is important for food security, but will not solve the situation alone. The root causes of food insecurity must be addressed through appropriate and evidenced based social safety nets: society must ensure that all people have financial access.

References

1. Hendriks, S, de Groot, A, Ruiz, Acosta M, Baumers, H, Galgani, P, Mason-D'Croz, D, Godde, C, Waha, K, Kanidou, D, von Braun, J, Benitez, M, Blanke, J, Caron, P, Fanzo, J, Greb, F, Haddad, L, Herforth, A, Jordaan, D, Masters, W, Sadoff, C, Soussana, J, Tirado, M, Torero, M & Watkins, M. (2021). The True Cost and True Price of Food: A paper from the Scientific Group of the UN Food Systems Summit - A Draft. 44p. Retrieved from https://sc-fss2021.org/wp-content/uploads/2021/06/UNFSS_true_cost_of_food.pdf
2. Sumner, J & Stahlbrand, L (2019). Introduction to the special issue on food procurement. Canadian Food Studies. Vol 6 (1), 1-7. Retrieved from <https://doi.org/10.15353/cfs-rcea.v6i1.350>
3. Fitzpatrick, I, Young, R, Barbour R, Perry, M, Rose, E & Marshall, A. (2019). The Hidden Cost of UK Food: Revised Edition 2019. Sustainable Food Trust. Retrieved from https://sustainablefoodtrust.org/wp-content/uploads/2022/01/Website-Version-The-Hidden-Cost-of-UK-Food_compressed.pdf
4. Vermeulen, S, Campbell, B & Ingram, J. (2012). Climate change and food systems. Annu. Rev. Environ. Resour. 2012. 37:195–222. Retrieved from <https://sustainabledevelopment.un.org/content/documents/881annurev.pdf>

5. Halifax Food Policy Alliance. (2014). Food Counts: Halifax Food Assessment. Retrieved from <https://halifaxfoodpolicy.files.wordpress.com/2015/03/foodcounts-assessment-web-fin4.pdf>
6. FAO. (2014). Building a common vision for sustainable food and agriculture: Principles and Approaches. Retrieved from <https://www.fao.org/3/i3940e/i3940e.pdf>
7. FAO. (2018). Sustainable food systems: Concept and framework. Food and Agriculture Organization of the United Nations. Retrieved from <https://www.fao.org/3/ca2079en/CA2079EN.pdf>
8. Tarasuk V, Li T & Fafard St-Germain AA. (2022). Household food insecurity in Canada, 2021. Toronto: Research to identify policy options to reduce food insecurity (PROOF). Retrieved from <https://proof.utoronto.ca>
9. Swensson, L, Hunter, D, Schneider, S & Tartanac F. (2021). Public food procurement as a game changer for food system transformation: Comment. The Lancet Vol 15. Planetary Health e495-e496. Retrieved from [https://doi.org/10.1016/S2542-5196\(21\)00176-5](https://doi.org/10.1016/S2542-5196(21)00176-5)
10. Avetisyan, M, Hertel, T & Sampson, G. (2014). Is local food more environmentally friendly? The GHG emissions impacts of consuming imported versus domestically produced food. Environmental and Resource Economics. 58(3). doi:[10.1007/s10640-013-9706-3](https://doi.org/10.1007/s10640-013-9706-3)
11. Benedek, Z, Fertő, I, & Szente, V. (2020). The Multiplier Effects of Food Relocalization: A Systematic Review. Sustainability 12(9), 3524. Retrieved from <https://doi.org/10.3390/su12093524>
12. Shuman, M & Hoffer, D (2007). Leakage Analysis of the Martha's Vineyard Economy: Increasing Prosperity through Greater Self-Reliance. Retrieved from <https://mvcommission.org/sites/default/files/docs/leakagestudy.pdf>
13. Centre for Local Prosperity. (2021). Assessing the Potential for Local Procurement as an Economic Engine. Retrieved from <https://centreforlocalprosperity.ca/wp-content/uploads/2021/01/Assessing-Local-Procurement-Double-Page.pdf>
14. Endy, K & Karp, K (2014). A roadmap for anchor institution local food purchasing in Baltimore. Baltimore Integration Partnership. Retrieved from https://kkandp.com/wp-content/uploads/2015/10/Final_Final_Report_BIP_KR_11.pdf
15. Cunningham, N, Conner, D, Whitehouse, C, Blair, H & Krueger, J. (2022). Beyond procurement: Anchor institutions and adaptations for resilience. Journal of Agriculture, Food Systems, and Community Development, 11(3), 57–73. Retrieved from <https://doi.org/10.5304/jafscd.2022.113.006>
16. Reynolds, J & Hunter, B. (2019). From contracts to culture: Exploring how to leverage local, sustainable food purchasing by institutions for food systems change. Canadian Food Studies. Vol 6 (1), 8-21. Retrieved from <https://canadianfoodstudies.uwaterloo.ca/index.php/cfs/article/view/285/308>
17. Seth, C. (2019). Growing Change: Identifying factors to effectively facilitate a shift towards healthy, sustainable, and just institutional food systems. Acadia University Master of Community Development Thesis. Retrieved from <https://library-archives.canada.ca/eng/services/services-libraries/theses/Pages/item.aspx?idNumber=1224181370>

18. Farm to Institution New England. (2015). Leveraging contracts for local food procurement. Retrieved from https://www.farmtoinstitution.org/sites/default/files/imce/uploads/Guide_Leveraging%20Contracts%20for%20Local%20Food.pdf
19. Dragicevic, N. (2015). Anchor Institutions. Mowatt Centre & Atkinson Foundation. Retrieved from <https://www.nourishleadership.ca/resources-1/2018/6/6/anchor-institutions>
20. Saulnier, C. (2022) . Living Wages in Nova Scotia 2022. Canadian Centre for Policy Alternatives. Retrieved from <https://policyalternatives.ca/sites/default/files/uploads/publications/Nova%20Scotia%20Office/2022/09/LivingWagesinNS2022FINAL.pdf>
21. PEI Food Security Network. (2015). Alternative Food Marketing: Encouraging Local Health Institutions to Buy Local Food Report. PEI Food Security Network–Sustainable Production and Distribution Working Group. Retrieved from <https://peifoodsecurity.files.wordpress.com/2015/02/alternative-marketing-workshop-report-march-2015.pdf>
22. PEI Home and School Federation. (2017). Provincial School Food Strategy Resolution. Retrieved from <https://peihsf.ca/resolution/provincial-school-food-strategy/>
23. CBC News. (2017). More local food in schools part of PEI Food Security Network discussion. Retrieved from <https://www.cbc.ca/news/canada/prince-edward-island/food-security-school-local-food-1.4118478>
24. City of Charlottetown, PEI Food Security Network & United Way of PEI. (2017). Let's Talk Food Report & Summary. Retrieved from <https://peifoodsecurity.files.wordpress.com/2018/02/lets-talk-food-2017-report.pdf>
25. PEI Food Security Network. (2018). Submission Regarding a Food Awareness Act for Prince Edward Island. Retrieved from https://peifoodsecurity.files.wordpress.com/2018/12/peifsn_food_awareness_submission.pdf
26. Atlantic Canada Food Systems Recovery Vision. (No date). 10 Food Systems Priorities for Atlantic Canada's Recovery from COVID-19. Retrieved from <https://www.atlanticfoodvision.ca/>
27. Government of PEI. (2023). Community Food Security and Agriculture Awareness Program. Retrieved from <https://www.princeedwardisland.ca/en/service/community-food-security-and-agriculture-awareness-program>
28. Government of PEI. (2023). Food Awareness Act for PEI: A Discussion Guide. Retrieved from https://www.princeedwardisland.ca/sites/default/files/publications/af_food_awareness_act.pdf
29. PROOF. (2021). Prince Edward Island: The first jurisdiction to set explicit targets for reducing food insecurity. Retrieved from <https://proof.utoronto.ca/2021/prince-edward-island-the-first-jurisdiction-to-set-explicit-targets-for-reducing-food-insecurity/#1>
30. Government of PEI. (2022). Calls to Action: Truth and Reconciliation Commission of Canada. A Status Report for the Government of Prince Edward Island. Retrieved from https://www.princeedwardisland.ca/sites/default/files/publications/2022_trc.pdf

31. Government of PEI. (2022). 2040 Net Zero Framework. Retrieved from <https://www.princeedwardisland.ca/en/publication/2040-net-zero-framework>
32. Government of Canada. (2021). The Guelph Statement: A vision to 2028. Retrieved from <https://agriculture.canada.ca/en/about-our-department/key-departmental-initiatives/meetings-federal-provincial-and-territorial-ministers-agriculture/guelph-statement>
33. Government of PEI. (2023). Next Policy Framework (NPF) for Agriculture (2023 to 2028). Retrieved from <https://www.princeedwardisland.ca/en/information/agriculture-and-land/next-policy-framework-npf-for-agriculture-2023-to-2028>
34. Government of PEI. (2021). Department of Health Internal Long-Term Care Review 2021. Retrieved from <https://www.princeedwardisland.ca/sites/default/files/publications/20220609dhwlongterm-carereview.pdf>
35. Stephanie Crocker, Principal Consultant SCC Consulting. Phone call November 8 2022
36. Government of PEI. (2022). Health PEI Strategic Plan: 2021-2024. Retrieved from <https://www.princeedwardisland.ca/en/information/health-pei/health-pei-strategic-plan-2021-2024>
37. Government of PEI. (2021). 2021 Chief Public Health Officer's Report. Retrieved from https://www.princeedwardisland.ca/sites/default/files/publications/cpho21_report_web.pdf
38. PEI Heart & Stroke. (2020). Healthy Eating in PEI Recreation Settings: A Provincial Scan of Food Environments. Retrieved from <https://recreationpei.ca/wp-content/uploads/2020/11/HeartStroke-Report-2020.pdf>
39. Sanda Callbeck, Strategic Sourcing Officer, Health PEI. Phone call February 2023.
40. Sandra Callbeck, Strategic Sourcing Officer, Health PEI. Phone call November 2022
41. Government of PEI. (2020). Procurement of Goods Act Procurement of Goods Regulations. Retrieved from https://www.princeedwardisland.ca/sites/default/files/legislation/p22-1-1-procurement_of_goods_act_procurement_of_goods_regulations.pdf
42. Ontario Ministry of Long-Term Care. (No date) Chapter 3: Food and Nutrition in Long-Term-Care Homes. Retrieved from https://www.auditor.on.ca/en/content/annualreports/arreports/en19/v1_305en19.pdf
43. Government of PEI. (2005). Community Care Facilities and Nursing Homes Act Regulations. Retrieved from <https://www.princeedwardisland.ca/sites/default/files/legislation/C%2613G-Community%20Care%20Facilities%20and%20Nursing%20Homes%20Act%20Regulations.pdf>
44. Tom at the Burly Farmer. Phone call November 2022.
45. Katie Nordby, Nutrition Services Manager/Clinical Dietitian. Meeting and emails August-October 2022.
46. Keyshawn Bonamy, Executive Director Voluntary Resource Center. Phone call November 2022
47. Katrina Cristall, Climate Action Officer, City of Charlottetown. Email December 2022

48. City of Charlottetown. (No date) Food Council. Retrieved from https://www.charlottetown.ca/environment_sustainability/food/food_council
49. City of Charlottetown. (2021). City to Collaborate on Sustainable Procurement. Retrieved from <https://www.charlottetown.ca/cms/one.aspx?portalId=10500387&pageId=17414873>
50. Canadian Collaboration for Sustainable Procurement. (2021). 2021 Annual Report. Retrieved from https://www.reeveconsulting.com/wp-content/uploads/2022/03/CCSP_2021_State-of-Sustainable-Public-Procurement-in-Canada.pdf
51. City of Charlottetown. (2018). City of Charlottetown Policy: Procurement. Retrieved from <https://www.charlottetown.ca/common/pages/DisplayFile.aspx?itemId=15996732>
52. Katrina Cristall, Climate Action Officer, City of Charlottetown. Email December 2022
53. City of Summerside. (2002). City of Summerside Purchasing Policy. Retrieved from https://cdn5-hosted.civiclive.com/UserFiles/Servers/Server_4499283/File/Official%20Documents%20&%20Data/Policies/Purchasing/Purchasing%20Policy.pdf
54. Maritime Christian College. (No date). Website. <http://mccpei.com/>
55. Collège de l'île. (No date). Website. <https://www.collegedelile.ca/>
56. Ian Burge, Manager Procurement Services, UPEI. Phone calls and emails October and November 2022.
57. University of PEI. (No date) Bidders Instruction. Retrieved from <https://www.upei.ca/office-vice-president-administration-and-finance/procurement/tenders/instructions>
58. Angela McKenzie, Food Service Director UPEI. Meeting October 27 2022.
59. Dawn Devereaux, Senior Manager HSQA Compass Group, email communication November 2022.
60. Holland College. (No date). Sustainability. Retrieved from <https://www.dineoncampus.ca/hollandc/sustainability>
61. School Food Program. (No date). Website. <https://www.peischoolfood.ca/>
62. Katelyn McLean, Executive Director PEI School Food Program, Meetings and emails November 2022
63. Public Schools Branch. (No date) Nutrition in Schools. Retrieved from <https://psb.edu.pe.ca/nutrition-in-schools>
64. Katelyn McLean, Executive Director PEI School Food Program, Meetings and emails November 2022
65. PEI Healthy Eating Alliance & Education and Early Childhood Development. (2012). Healthy Living Guidelines for Early Learning and Child Care Centres on Prince Edward Island. Retrieved from http://www.gov.pe.ca/photos/original/eecd_healthyliv.pdf
66. Robert MacPherson, Grower's Station. Email and phone call February 2023.
67. Government of NS. (2007). Environmental Goals and Sustainable Prosperity Act. Retrieved from https://nslegislature.ca/legc/bills/60th_1st/3rd_read/b146.htm
68. Chaiti Seth, Community Development Lecturer Acadia University, meeting November 18 2022
69. Government of NS. (No date). Sustainable Procurement Policy. Retrieved from <https://novascotia.ca/treasuryboard/manuals/PDF/300/30301-02.pdf>

70. Activating Change for Community Food Security & Community University Research Alliance. (2015). Making Food Matter: Strategies for Activating Change Together. A participatory research report on community food security in Nova Scotia. Retrieved from https://foodarc.ca/wp-content/uploads/2014/11/Making-Food-Matter-Report_March2015rev.pdf
71. Activating Change for Community Food Security & Community University Research Alliance. (2015). Making Food Matter: Strategies for Activating Change Together. A participatory research report on community food security in Nova Scotia. Retrieved from https://foodarc.ca/wp-content/uploads/2014/11/Making-Food-Matter-Report_March2015rev.pdf
72. Food ARC. (2023). Cultivating Change: Putting Food First in Nova Scotia 2016-2019. Retrieved from <https://foodarc.ca/projects/current-projects/cultivating-change-putting-food-first-in-nova-scotia>
73. Krista Tobin, Manager, Institutional Procurement, Department of Agriculture. Presentation November 18 2022
74. Brenda MacDonald, Senior Director of the Nutrition and Food Services, Nova Scotia Health. Presentation November 18 2022
75. Andrea Penney, Manager of Food Services, IWK Health. Presentation November 18 2022
76. Rebecca Tran, Owner, The Station. Meeting November 18 2022
77. CityNews Everywhere. (2020). Councillors support, but also criticize new social procurement policy for HRM. Retrieved from <https://halifax.citynews.ca/local-news/councillors-support-but-also-criticize-new-social-procurement-policy-for-hrm-2547837>
78. Halifax Regional Municipality. (2021). Procurement Manual. Retrieved from https://cdn.halifax.ca/sites/default/files/documents/business/doing-business-halifax/Procurement_Manual_2020-04-01.pdf
79. Halifax Food Policy Alliance. (No date). Food Charter. Retrieved from <https://halifaxfoodpolicy.wordpress.com/food-charter/>
80. Acadia University. (No date). Healthy and Sustainable Food. Retrieved from <https://sustainability.acadiau.ca/food.html>
81. Chaiti Seth, Community Development Lecturer Acadia University, email November 29 2022
82. Choose Organic Canada. (No date). Organic Campus. Retrieved from <https://choosecanadaorganic.ca/organic-campus-program/>
83. Dalhousie University. (2022). Sustainable and Healthy Food Plan. Retrieved from <https://cdn.dal.ca/content/dam/dalhousie/pdf/dept/sustainability/resources/publications-and-plans/Sustainable%20and%20Healthy%20Food%20Plan%20Final.pdf>
84. Dalhousie University. (No date). Food Services. Retrieved from https://www.dal.ca/dept/sustainability/campus-initiatives/Procurement_and_Waste/FoodServices.html
85. University of Saint Francis Xavier. (No date). Sustainable Dining. Retrieved from <https://www.stfx.ca/why-stfx/sustainability/what-were-doing/sustainable-dining>

86. Cape Breton University. (No date). Sustainability. Retrieved from <https://www.dineoncampus.ca/cbu/sustainability>
87. Mount Saint Vincent University. (No date). Sustainability. Retrieved from <https://www.dineoncampus.ca/cbu/sustainability>
88. CBC News. (2022). N.S. working on universal school lunch program following critical report. Retrieved from <https://www.cbc.ca/news/canada/nova-scotia/school-lunch-program-nova-scotia-auditor-general-public-accounts-committee-1.6630546?fbclid=IwAR3jQUIMltG0DcnMvUmeo3Acyqgh9s802Pg3ScuolHylLfcypH9x4WZ2hiM>
89. Saltwire. (2022). Outdated school food policy being overhauled, Education Department officials say. Retrieved from <https://www.saltwire.com/atlantic-canada/news/outdated-school-food-policy-being-overhauled-education-department-officials-say-100787795/>
90. Government of NS. (No date). Healthy Eating Strive for Five. Retrieved from <https://novascotia.ca/dhw/healthy-communities/healthy-eating-strive-for-five.asp>
91. Government of Nova Scotia. (No date). Manual for Food and Nutrition in Regulated Child Care Settings. Retrieved from https://www.novascotia.ca/coms/families/provider/documents/manual-food_and_nutrition.pdf
92. Government of NB. (No date). New Brunswick Food & Beverages. Retrieved from <https://www2.gnb.ca/content/gnb/en/departments/10/food-and-beverages-nb.html>
93. Government of NB. (2014). New Brunswick Regulation 2014-93 under the Procurement Act. Retrieved from <https://laws.gnb.ca/en/showfulldoc/cr/2014-93/#codese:132>
94. City of Moncton. (2018.) Corporate Procurement Policy. Retrieved from https://www5.moncton.ca/docs/policies/Corporate_Procurement_Policy.pdf
95. City of Moncton. (No date). Urban Agriculture and Food Security. Retrieved from <https://www.moncton.ca/guides-moncton-social-inclusion/urban-agriculture-and-food-security>
96. Ecology Action Centre. (2007). Local Food Procurement Policies: A Literature Review. Retrieved from <https://d3n8a8pro7vhmx.cloudfront.net/greenbeltfund/pages/419/attachments/original/1553176812/LocalFoodProcurementPolicies.pdf?1553176812>
97. Mount Allison University. (No date). Sustainability at the dining hall. Retrieved from <https://mta.ca/current-students/student-life/eating-campus/sustainability-dining-hall>
98. University of New Brunswick. (No date). Sustainable food. Retrieved from <https://www.unb.ca/initiatives/sustainability/programs/food.html>
99. St. Thomas University. (No date). Sustainability. Retrieved from <https://stuca.campusdish.com/Sustainability>
100. Government of New Brunswick. (2018). Department of Education and Early Childhood Development Healthier School Environment Policy 711. Retrieved from <https://www2.gnb.ca/content/dam/gnb/Departments/ed/pdf/K12/policies-politiques/e/711A.pdf>
101. Government of New Brunswick. (2018). Operator Manual: Early Learning and Childcare Homes. Retrieved from

- <https://www2.gnb.ca/content/dam/gnb/Departments/ed/pdf/ELCC/OperatorManualEarlyLearningChildcareHomes.pdf>
102. Government of NL and Labrador. (No date). The Way Forward. Retrieved from <https://www.gov.nl.ca/thewayforward/>
 103. Government of NL and Labrador. (No date). Agriculture Summit: Agriculture Sector Workplan. Retrieved from https://www.flr.gov.nl.ca/agriculturesummit/pdf/Agriculture%20Sector-Workplan_Final.pdf
 104. Food First NL. (No date). Getting more healthy, local food into our public institutions. Retrieved from <https://www.foodfirstnl.ca/institutional-food>
 105. CBC News. (2019). Health authorities looking locally in effort to improve N.L. hospital food. Retrieved from <https://www.cbc.ca/news/canada/newfoundland-labrador/health-authorities-local-food-initiatives-1.5265402>
 106. Government of NL and Labrador. (No date). The way forward on agriculture: Sector work plan. Retrieved from https://www.gov.nl.ca/ffa/files/Agriculture-Sector-Workplan_Final.pdf
 107. Food First NL. (No date). St. John's Food Policy Council. Retrieved from <https://www.foodfirstnl.ca/our-projects/sjfcc>
 108. Food First NL. (No date). Farm to School. Retrieved from <https://www.foodfirstnl.ca/farm-to-school>
 109. Food First NL. (No date). Institutional food work: Getting More Healthy, Local Food into our Public Institutions. Retrieved from <https://www.foodfirstnl.ca/institutional-food>
 110. Memorial University. (No date). Being Green. Retrieved from <https://mun.campusdish.com/BeingGreen>
 111. Memorial University. (No date). Fair Trade Campus. Retrieved from <https://www.mun.ca/ancillary/food-services/fair-trade-campus/>
 112. Memorial University Gazette. (2019). Farming the North. Retrieved from <https://gazette.mun.ca/campus-and-community/farming-the-north/>
 113. College of the North Atlantic. (No date). Cafeteria. Retrieved from <https://www.cna.nl.ca/MyCNA/Facilities/Cafeteria.aspx>
 114. Government of NL and Labrador. (2021). Provincial School Food Guidelines. Retrieved from <https://www.gov.nl.ca/hcs/files/Provincial-School-Food-Guidelines-Jan-2022.pdf>
 115. Government of NL and Labrador. (2007). Child Care Services Regulations, 2005, under the Child Care Services Act. Retrieved from <https://www.assembly.nl.ca/Legislation/sr/regulations/rc050089.htm>
 116. FoodWorks. (No date). Website. Retrieved from <https://foodworkspei.ca/>
 117. Michael Good, Director of Company & Product Development, Food Island Partnership. Email November 2023.
 118. Trisha Viaene, Manager Riverview Country Market. Meeting November 2022.
 119. Sustain Ontario. (2015). Local Sustainable Food Procurement for Municipalities and the Broader Public Sector: Toolkit. Retrieved from https://sustainontario.com/greenhouse/custom/uploads/2016/09/Toolkit_Final25-11.pdf

120. Growing Access to Good Food in Nova Scotia's Publicly Funded Institutions; Preliminary Qualitative Research Findings. May 2022. FoodARC, Mount Saint Vincent University.
121. Katie Nordby, Nutrition Services Manager/Clinical Dietitian. Meeting and emails August September October 2022.