Making Food Matter:

STRATEGIES FOR ACTIVATING CHANGE TOGETHER

A participatory research report on community food security in Nova Scotia.

Produced by:

Activating Change Together for Community Food Security (ACT for CFS)



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Acknowledgements

This report was made possible through the commitment and efforts of hundreds of individuals.

The Community-University Research Alliance: Activating Change Together for Community Food Security (ACT for CFS) involved a team of nearly 70 organizational partners from communities, universities and government, along with students and staff, all committed to participatory action research, participatory leadership and a common vision for community food security - representing true collaboration.

We would like to acknowledge the tremendous contributions of all those involved in leading this project, through their participation on the Joint Management Team, Program Coordination Committee and as co-leads and members of the Working Groups and task teams. We would also like to thank our Advisory Group for providing regional, national and international expertise.

This report highlights findings from Participatory Community Food Security Assessments conducted in four communities in Nova Scotia, hosted by the following organizations with additional local partners, research assistants and volunteers: Shelburne County Seeds and the Tri-County Local Food Network (Eastern Shelburne County); Kids Action Program (Northeastern Kings County); Chebucto Connections and St. Paul's Family Resources Institute (Spryfield); and Pictou County Food Security Coalition (Pictou County). The commitments and contributions of these partners are at the heart of the research in this report, as is their passion and ability to mobilize and engage communities around food.

We also gratefully acknowledge the contributions of partners with several related research projects, which helped to augment data from the Participatory Community Food Security Assessments including: Community Food Security in Pictou Landing First Nation project; the Informal Food Economy in Nova Scotia project; the Nova Scotia Participatory Food Costing and Voices for Food Security in Nova Scotia projects; and the Spatial Analysis of Food Insecurity in Four Nova Scotia Communities project.

We are also grateful to many project staff, research assistants and students for their immense skill, expertise and ongoing commitment to participatory research. Special thanks to Janet Rhymes and the Results Review Committee for their contributions to the preparation of this report, to our Coding Advisory Group and Analysis Teams for guiding the analysis of the research results, Sarah Sawler for the community profiles, and to Alan White for graphic design of the report. As well, we would like to thank all of our partners and stakeholders who reviewed a draft report and provided such meaningful feedback.

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Finally, there is not enough room here to name everyone who has contributed to this project, the research and this report. For a list of partner organizations, please visit: **foodarc.ca/actforcfs/partners-supporters** and for a list of some of our many contributors, please see the end of this report.

Sincerely,

ACT for CFS Co-Directors

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FOREWORD

The last decade has seen a significant increase in the awareness and activity relating to food and food issues in Nova Scotia. Smaller, independent pockets of concern, research, and action have grown to become dynamic, diverse, and connected food movements both within Nova Scotia and across Canada and internationally.

With nearly 70 organizational partners, *Activating*Change Together for Community Food Security (ACT for CFS) represents a significant number of those working on the front lines of community food security issues and policy change in Nova Scotia, along with regional, national and international partners. From our previous participatory research and experience, we saw many of the problems facing producers and families in this province and also recognized that our traditional systems – with silos between sectors and jurisdictions and top-down approaches – often work against the kinds of long-lasting, systems change that we seek.

This report is the result of over a decade of partnerships and both builds on and contributes to the growing movement in Nova Scotia and beyond for long-lasting change for food security. The findings and strategies within this document reflect the wisdom, resilience and passion of all partners and the insights from hundreds of people who participated in our research.

The ACT for CFS team has a vision of community food security in Nova Scotia in which individuals, families and communities have access to enough affordable, healthy and culturally appropriate food, produced in socially, economically and ecologically sustainable ways. It is about creating healthy, vibrant communities where there is community self-reliance, local decision-making and social justice for everyone. It is about food security for all and sustainability within food systems through long-term, holistic and systemic approaches.





Food has familial, social, cultural, and spiritual meanings and is central to individual and community identity and connection. Community food security is integral to our health, well-being, quality of life and the vitality of our communities - now and into the future. For community food security, we need food systems that are:

Healthy

HEALTHY food systems provide supportive environments for equitable access to appropriate amounts of safe and nutritious foods as a resource for physical, emotional, spiritual, and mental health for all people. People are able to satisfy their needs and preferences, and have the knowledge, resources and abilities necessary to improve their own health.

Just

JUST food systems honour the rights of all individuals to dignified and equitable access to food, including the economic and social resources to do so. People working within these systems are able to earn an appropriate living and are treated fairly. JUST food systems also ensure that everyone has equitable opportunities and abilites to participate in decisions that affect them.

Sustainable

SUSTAINABLE food systems maintain the health of the environment without jeopardizing the ability of current and future generations to harvest and produce food (farming, fishing, hunting, and foraging). SUSTAINABLE food systems restore and protect natural resources, because without healthy environments, we will not have food.

We recognize that achieving healthy, just and sustainable food systems means building healthy, just and sustainable communities and societies.

We invite you to read this report to learn about many of the realities and opportunities relating to food in our communities.

We hope this report supports ongoing efforts, challenges us all to think differently about how to achieve healthy, just and sustainable food systems, sparks dialogues within organizations and communities, and catalyzes new partnerships and opportunities to activate change together to make food matter.







Introduction

Food is central to our lives and Nova Scotians have always been innovative, resourceful and resilient when it comes to our food, whether it be growing, harvesting, distributing, preparing or eating it! Our rich history and diverse culture of food traditions are deeply rooted in our physical and spiritual connections to both the land and sea. Our farming and fishing sectors are an integral part of the social fabric of our communities, with more potential to contribute positively to rural livelihoods, economic prosperity and the nourishment of our populations. It is clear that Nova Scotians care about and support the people around them, are concerned about the health and vitality of their communities and are primed to take action using existing resources to create healthy, just and sustainable food systems for all.

Yet, we know from over a decade of nationally recognized research on food security that we are far from realizing healthy, just and sustainable food systems in Nova Scotia. There are growing numbers of individuals and households unable to access the foods they need; many farmers and fishers struggle to make a viable living; mothers lack the supports they need to initiate and sustain breastfeeding; and many First Nations communities experience challenges accessing the traditional and country foods central to their food security. Increasingly, people are disconnected from the sources of their food, and we risk losing the skills and capacity needed for community self-reliance. These issues are further compounded by food and economic systems that continue to place profits and economic growth ahead of people and the well-being of communities, threatening democratic engagement in decisions that directly affect food choices and the health of our environment, local food systems and province.

Our vision of community food security in Nova Scotia includes access to enough affordable, healthy and culturally appropriate food, produced in socially, economically and environmentally sustainable ways that promote self-reliance and social justice.



Activating Change Together for Community Food Security

Rooted in lived experiences, real community needs and innovative solutions to social and policy change for community food security, the *Community University Research Alliance (CURA): Activating Change Together for Community Food Security* (ACT for CFS) is a five-year (2010-2015) participatory action research project funded by the Social Sciences and Humanities Research Council of Canada.

Building on the community-based participatory research and partnership of the Food Action Research Centre (FoodARC) and the Nova Scotia Food Security Network, ACT for CFS involves nearly 70 community, university and government partners at local, provincial and national levels, with representation across multiple sectors and disciplines. Partners aim to increase knowledge and awareness of community food security, identify promising practices, and enhance engagement, collaboration and capacity for social and policy change to create the conditions for community food security for all Nova Scotians.

Q Our Research

ACT for CFS partners and team members undertook two major research initiatives to better understand the components of, and factors contributing to, community food security in Nova Scotia over a four-year period (2011-2014):

1 AN EXPLORATION OF THE POLICY LANDSCAPE FOR COMMUNITY FOOD SECURITY IN NOVA SCOTIA

Forty-one interviews (2011-2012) were conducted with individuals and organizations with a stake in community food security in Nova Scotia (including health, anti-poverty, agricultural, fisheries, and government sectors) to identify challenges and opportunities for building community food security in Nova Scotia.

2 PARTICIPATORY COMMUNITY FOOD SECURITY ASSESSMENTS

Participatory Community Food Security Assessments were conducted in four case communities in Nova Scotia -Eastern Shelburne County, Northeastern Kings County, Spryfield (Halifax), and Pictou County. A participatory process was used to select the communities to provide representation of both rural and urban communities and diverse elements of food systems in Nova Scotia.

A three-phase, rigorous mixed methods participatory research approach was applied to the data collection, analysis and integration of qualitative and quantitative data on community food security. Research activities described in this report were conducted in compliance with the Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans.

In PHASE 1 (2011-2012), we engaged over 400 people representing community members, project partners and other provincial stakeholders to identify priority areas and gaps in knowledge relating to community food security. These conversations informed data collection on 10 primary indicators of community food security within all four case communities; each community also explored one unique issue of interest. In PHASE 2 (2012-2014), community-based researchers, trained in research methods, gathered both quantitative and qualitative data, representing over 200 people's experiences, stories and connections to community food security across the four selected communities. Guided by an experienced research advisory team, PHASE 3 (2013-2014) involved thematic analysis of the data, through which common patterns, relationships, contradictions, and contextual information were identified and used to construct a rich narrative of community food security at the level of each case community, as well as provincially. Research results were validated through a process of checking with community researchers and partners, and trustworthiness was ensured by drawing upon multiple data sources and methods, as well as other related research, including the results from the Policy Landscape research mentioned above. While the findings represent perspectives, issues and opportunities for change from these four communities, they hold significant relevance for communities across Nova Scotia, at a provincial level, and for other communities in Canada.

i The Nova Scotia Food Security Network is currently merging with other provincial food networks to form Good Food Nova Scotia.





✓ What Did We Learn?

The Participatory Community Food Security Assessments generated rich stories of community food security in Nova Scotia, organized by key themes of interrelated areas important to creating healthy, just and sustainable food systems for all.

Participants told us that building community food security in Nova Scotia must include consideration of...



SYSTEMS THAT SUSTAIN LOCAL FOOD IN OUR COMMUNITIES

We heard that people think it is important to support their local food producers, but find it difficult to access locally produced food in their communities. Local food systems in Nova Scotia often involve well-established, small, family run endeavours that contribute to the local economy and barriers exist for the next generation to enter into farming and fishing. Participants named several factors significant in the realization of stronger systems to support the production, harvest, distribution, and sale of local food across the province. These include the need for local food-related physical infrastructure; scale-appropriate regulations that support small businesses; community support, awareness and education; and addressing issues of economies of scale to improve the economic viability for small businesses. We also heard about the value of involvement in local food production through hunting, fishing, foraging, backyard and community gardens, and other informal methods of acquiring food, but learned that better supports are needed to enable community members to grow, catch and share their own food.



PHYSICAL ACCESS TO HEALTHY FOOD IN OUR COMMUNITIES

Many citizens experience challenges in getting to where food is sold or shared within communities. While a broad range of food outlets were available in each community, the overwhelming majority of food outlets were restaurants, fast food and convenience stores with these three retail types outnumbering grocery stores by a ratio of 10 to 1. Physical access to a variety of healthy foods was described by participants as dependent on the relative distance to grocery stores, the availability and accessibility of affordable transportation, household income, transportation infrastructure, and access to childcare. Action related to these factors, particularly solutions to overcome cost-related barriers and access to transportation, could improve physical access to food in Nova Scotia.







FOOD INSECURITY AS EXPERIENCED BY INDIVIDUALS AND FAMILIES IN OUR COMMUNITIES

Some community members, particularly low-income groups, are more vulnerable to experiencing food insecurity than others, struggling to put food on the table for a variety of reasons. Participants described a number of coping strategies to augment their food budget and help stretch food within the household. While we heard reports of positive experiences in using community-based food programs, we also heard about the stigma, judgment, humiliation, powerlessness, and stress that accompany the use of community-based emergency food assistance programs, and as a result, that many people in need do not or are reluctant to use these programs. Community participants spoke of the need to improve the types and spectrum of supports available for "at-risk" groups in ways that also contribute to self-reliance and dignity, including moving beyond emergency food assistance models. Some also recognized the critical need to address root causes of food insecurity, including improving individual and household economic security so that all Nova Scotians have access to enough healthy food.



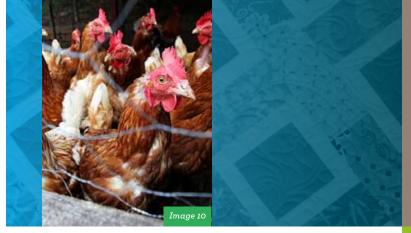
FOOD AND COMMUNITIES: IDENTITY, COMING TOGETHER AND COMMUNITY SELF-RELIANCE

There are deep-rooted connections between food and community. Food brings people and families together and gives them a sense of culture, history and identity. Sharing food is an essential part of building healthy communities and is a way that people support and care for one another. Many Nova Scotians are becoming disconnected from food, and communities in Nova Scotia risk losing important skills, capacity and knowledge related to food production, harvesting and preparation. We heard from participants that there is a need for continued investment and participation in activities that preserve these skills for current and future generations.



CONDITIONS THAT SUPPORT BREASTFEEDING

Breastfeeding is a critical component of community food security. There are many conditions and factors that influence mothers' decisions to initiate and continue breastfeeding, some of which are very specific to individual breastfeeding experiences, while others relate more broadly to social expectations of women and mothers. Participants identified that providing a greater range of supports is one of the most significant factors to enable mothers to overcome barriers to breastfeeding and create more accepting and breastfeeding friendly communities in Nova Scotia.





UNIQUE PLACES WITH IMPORTANT PERSPECTIVES **ON COMMUNITY FOOD SECURITY**

A unique research project was undertaken within each community to explore a food issue of community importance. Each project has also informed our understanding of community food security in Nova Scotia.

OUR LOBSTER, OUR COMMUNITIES

Fifteen individuals involved in different aspects of the lobster industry in Eastern Shelburne County participated in in-depth interviews. Consistent with experiences shared about farming, participants described the industry as integral to individual and community identity and heritage. They spoke of challenges within the industry, particularly concerns about economic sustainability and the related aspects of quality, price, distribution, regulation, marketing, and sales. Participants also identified opportunities to strengthen the lobster industry, including enhancing local control over decisions, exploring regulation and pricing options to ensure a fair price, increasing local demand for lobster, and taking action to ensure the economic and environmental sustainability of the fishery.

http://foodarc.ca/ourlobster-ourcommunities

Changes in Farming

Interviews were conducted with 12 farmers in Northeastern Kings County representing a range of small and large operations, produce and livestock farms, some new and some passed down through generations. Participants talked about barriers relating to current infrastructure and support for local food production, processing and sale. Issues of land ownership and land use zoning were also of significance to the viability of the industry. Several opportunities to enhance farming were identified, including continuing support for and enhancing educational programs for small-scale and new farmers, addressing issues that impact the economic viability and sustainability for small and family farms, growing opportunities for the Nova Scotian labour market within the agricultural sector, and creating mechanisms to protect the natural environment and increase sustainable agricultural practices.



ACCESS TO FOODS FOR SPECIAL DIETS

Twelve *Spryfield (Halifax)* residents were interviewed about the challenges and barriers they experience in accessing foods needed for special diets (e.g., foods required for health reasons, culturally specific foods, etc.). Participants spoke of a lack of local availability and transportation as barriers to foods needed for their wellness and health. To improve accessibility, availability, affordability, and variety of foods needed for special diets within Spryfield, participants suggested improving access to information, financial assistance and programs for families with special dietary needs, raising awareness of these needs and opportunities to fulfill them, and continuing to support, expand or create programs to address needs identified.

COMMUNITY FOOD SECURITY IN PICTOU LANDING FIRST NATION

In partnership with the ACT for CFS project, community members in *Pictou Landing First Nation* led a separate research project to explore community food security in their community through Storysharing and Photovoice. Participants named the environmental pollution in Boat Harbour as a significant barrier to self-sufficiency and access to traditional and country foods, as community members no longer trust the safety of the land and water to grow, catch and harvest foods. Income constraints and lack of local access to healthy foods are also concerns. Pictou Landing First Nation community members described opportunities to strengthen community food security as improving community availability and access to healthy and traditional foods, creating more supports for individuals and families when there is not enough food, supporting learning about food and advocating for policy changes and action at different levels of government.

http://foodarc.ca/project-activities/pictou-landing-cfs

Building Community Food Security in Nova Scotia

This Nova Scotia study of community food security shows that food is central to our communities, and that it is vital we *make food matter* in order to create the conditions for healthy, just and sustainable food systems. We are a resilient and resourceful people, skilled at earning a living and feeding our families from what is around us. Our food systems are more global, less diverse and more consolidated, which has implications for our local food choices, the availability and accessibility of healthy and local foods and the sustainability of local economies and the environment. Perceptions and assumptions dominate how we think and talk about others' experiences with community food security and can impede working together for change.

While there is a great deal of consistency within and across the four communities, the results represent a diversity of opinions and experiences and suggest that there are contradictions and tensions to overcome. This is unsurprising, given the broad array of factors that contribute to community food security.

For example, decisions and policies made by municipal, provincial and federal governments in everything from community planning (including zoning and by-laws), transportation, infrastructure, community and social programs (e.g., for individuals, families, new immigrants, seniors and youth), agriculture, fisheries, environment, natural resources, health, education, trade, and (community) economic development all impact community food security in Nova Scotia. There is no one solution to addressing challenges described by participants, thus requiring a range of diverse and coordinated efforts through the involvement of multiple stakeholders.

The path forward will require us to work collaboratively, holistically, systemically and cross-sectorally within the fields that influence community food security in Nova Scotia. The framework, along with associated goals and strategies, offered in this report is grounded in the participatory research process described, along with significant input on the final draft report from 54 ACT for CFS project partners and participants.



Our recommended approach to address the findings of this provincial study on community food security includes five interrelated fields of influence and accompanying goals. These are consistent with an agro-ecological approach, 1 demonstrated to improve the resilience and sustainability of food systems, and a population health approach² that extends beyond improved community and population health to include a sustainable and integrated food system, strengthened social cohesion and citizen engagement and community resilience, productivity and vitality.

1. MAKE FOOD MATTER



Broaden the emerging cultural shift that focuses on healthy, just and sustainable food systems and build inclusive communities in Nova Scotia through cross-sectoral coordination and partnership, dialogue, action, research, and accountability and ensure this results in social and policy change.

INCOME AND COSTS OF LIVING

Shift thinking, practice and policy from short-term to long-term solutions to build sustainable livelihoods, and create strong social policies that enable all people to have adequate livable incomes.

3. FOOD SYSTEMS INFRASTRUCTURE AND ENVIRONMENT



Create the conditions that foster strong and resilient local food systems with the essential ingredients needed for health, environmental sustainability, food justice, community self reliance, and vibrancy.

COMMUNITY AND SOCIAL SUPPORTS



Create supportive and inclusive environments for people to live healthy lives by strenthening and connecting successful community and social supports and resources, building on existing momentum and readiness for change.

FOOD SOVEREIGNTY AND THE RIGHT TO FOOD



Respect and honour the rights of everyone now and for future generations to have access to healthy, just and sustainable food. This includes food as a basic human right for everyone, but also democratic rights to civic engagement, dialogue, advocacy, action, and accountability within our food systems and civil society.

- 1 De Schutter, O. (2010). Report Submitted by the Special Rapporteur on the Right to Food. Office of the United Nations High Commissioner for Human Rights, 1-21. RETRIEVED FROM: www2.ohchr.org/english/issues/food/docs/A-HRC-16-49.pdf
- 2 The Public Health Agency of Canada. (2013). What is the Population Health Approach? RETRIEVED FROM: www.phac-aspc.gc.ca/ph-sp/approach-approche/appr-eng.php





Call to Action: Timely Opportunities for Change

All of the above goals and strategies are important. However, five opportunities are emerging in Nova Scotia as timely for action with the potential to bridge more than one of the issues reflected in our research findings, offering improvements to both food access and strengthening local food systems.

1. Use holistic approaches to Making Food Matter:

It is vital that groups work together through integrated and coordinated approaches to break down silos between sectors, geographies and jurisdictions, as well as address differences in perspectives to ensure long-lasting and sustainable solutions. Leadership within and from governments is essential.

2. Adequate liveable incomes:

While reflecting a long-term vision, there is a need to shift from stop-gap income supports and minimum wages to creating a system to guarantee adequate liveable incomes for all Canadians. This idea is supported by our research and is gaining attention as different sectors explore models for implementation and feasibility. A "think tank" or forum should be convened to research and explore options.

3. Mobile/pop-up fresh and local food outlets:

Access to healthy foods is a challenge for many in Nova Scotia and producers encounter barriers in distributing their foods. The creation of mobile or pop-up retail fresh and local food outlets holds potential for improving food access and can help small producers distribute their foods.

4. Scale-appropriate food regulations:

Regulations on licensing, quality assurance, labelling, food safety and handling, and distribution impact anyone wanting to grow, catch, harvest, produce, process, distribute, and sell or share food with others. These regulations, however, impede small-scale operations and informal activities and their capacity to concretely and positively impact community food security. Pilot projects could test strategies to create a spectrum of regulations for different scales of activity.

5. Institutional procurement:

Many institutions currently rely on established, just-in-time food distribution systems that favour large-scale suppliers and distributors. If these same institutions were able to purchase from local, small-scale suppliers (e.g., fishers and farmers), then they could contribute to creating market predictability (e.g., relatively stable prices and quantities). However, alternative distribution systems are needed to address the infrastructure, supply management and distribution challenges experienced by many small-scale suppliers and the corresponding challenges of institutions in sourcing from multiple suppliers to provide healthy, just and sustainable food.

There are many challenges to overcome to create healthy, just and sustainable food systems for all Nova Scotians, but we have all the needed ingredients, and the support and momentum for change is growing in Nova Scotia, elsewhere in Canada and internationally.

The time to act is now. Community food security provides an important opportunity to drive local economic prosperity, strengthen our communities and support good health, for all Nova Scotians.



Section 1: INTRODUCTION



SETTING THE STAGE: WHAT IS COMMUNITY FOOD SECURITY AND WHY DOES IT MATTER?

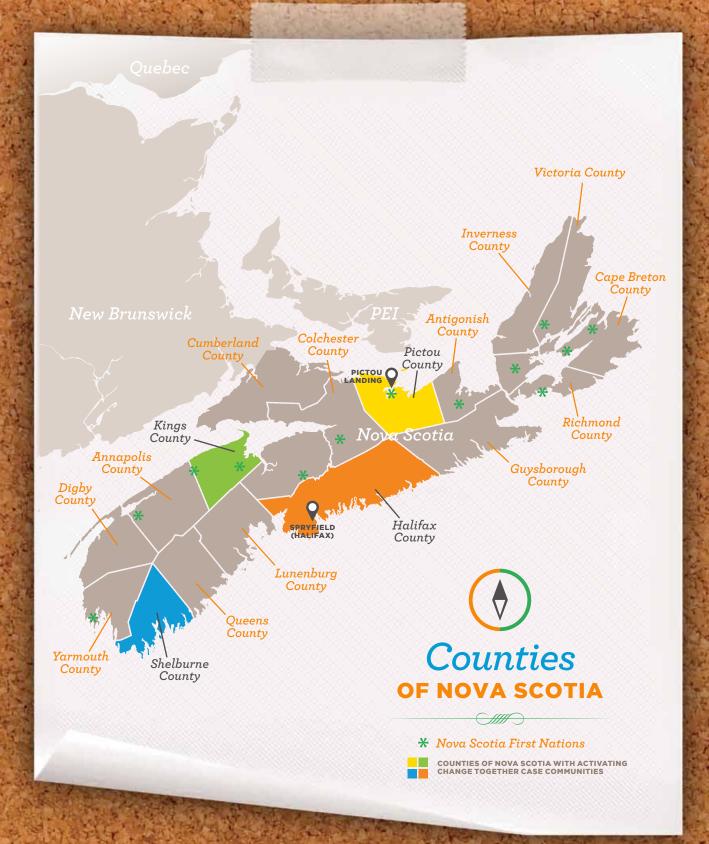
With about 921,727 people living in an area of 55,284 square kilometers, Nova Scotia is the second smallest province in Canada. This is traditional Mi'kmaq territory, with 13 Mi'kmaq First Nation communities and 34 reserve locations. Nova Scotia's total population is made up of 93.9% non-immigrant, 5.3% immigrants, and 0.8% non-permanent residents.¹

Bordering the Atlantic Ocean, Nova Scotia is comprised of a peninsula, as well as Cape Breton Island and more than 3,800 coastal islands, with no place in Nova Scotia more than 67 kilometers from the sea. Our unique communities and regions include two cities (Halifax and Sydney) and numerous small towns that serve as commercial hubs for the more rural (and remote) regions, with 43% of Nova Scotians living in rural areas.² The Annapolis Valley is the largest of several farming areas found inland, along river valleys. Our connection to the sea has meant a rich fishing history along the province's rugged coast and the ocean-moderated climate that comes with it.

Declines in the traditional resource-based economy and manufacturing sectors leave the province's largest employers as: retail, healthcare, the public sector, and education. ii,3 Nova Scotia's per capita GDP is significantly lower than the Canadian average⁴ (just over half the GDP of Canada's richest province, Alberta), in addition to an unemployment rate hovering at 10%.5 Although our history is one of hard work, resilience and self-sufficiency grounded in local knowledge, many families have one breadwinner working outside Nova Scotia where employment is more stable with higher wages, notably Alberta. As a result, maintaining our communities (including municipal infrastructure, such as public transit, roads and sidewalks), sustaining year-round local employment that earns more than minimum wage, and reducing outmigration continue to be among our greatest challenges.

ii Provincial Community Counts as of 2011 show 42.6% of Nova Scotians are employed by retail, healthcare and social assistance, educational services, and public administration combined. Only 10.8% are employed in agriculture, forestry, fishing, hunting, and manufacturing.







From a Community Food Security Perspective

Nova Scotians have always been innovative and resourceful when it comes to food-gathering, growing, preserving, selling, and eating the rich bounty that surrounds us. We are known for our good home cooking, community suppers and food-sharing, farming, fishing, and our once-strong co-operative movement. Our farming and fishing sectors have the potential to support rural livelihoods and nourish our communities, although they are not without challenges and conflict. Farmers and fishers often face hardships due to high production costs and low market prices, including tighter regulatory demands and associated costs. A declining population and economy also means limited markets for local food and the associated challenges of maintaining food systems, economic and other infrastructure that results from a small population that is spread across many rural communities.

Current statistics paint a picture of a province with strong agricultural diversity and growing interest in farming. In 2011, we were the only province to demonstrate an increase in total number of new farms - up 2.9% from 2006.⁶ While trends vary by farm size and type of farming, overall this increase reflects a shift towards small-scale diversified farms focusing on direct markets or niche farms geared towards value-added products. While positive, this growth is offset by the fact that our diet remains primarily made up of foods imported from outside Nova Scotia. In 2008, only 13% of our food dollars actually made it back to local farms. This is down from 17% in 1997.⁷

iii A. Singh, personal communication, October 27, 2014.

NOVA SCOTIA 2011 2.9% INCREASE IN NEW FARMS

A similar situation is playing out in our coastal communities, where the landed value of fishing activities is estimated to be more than \$750 million dollars⁸ and where Nova Scotia is ranked as Canada's second major exporter of seafood.⁹ The bulk of this seafood, however, is consumed outside of Nova Scotia, with 112,472 tonnes exported in 2010 compared with 2.2 tonnes being consumed in-province. Despite this economic contribution, the Nova Scotia fishing industry has experienced some of the most significant job losses in Canada and those involved in this sector are increasingly struggling to make a viable living.¹⁰ In 2006, the average employment income (in real dollars) of self-employed fish harvesters in Nova Scotia was reported to be \$23,955, a decline of nearly 33% since the year 2000.¹¹





Adding to this, our farmers and fishers are growing older, with an average age of 55 years. ^{6,12} Without new entrants in these industries, we face a potential loss of wisdom, experience and traditional knowledge. Considered alongside the barriers to enter these sectors, the succession and future survival of local food in Nova Scotia is uncertain.

Local challenges are worsened by global and corporate food systems that continue to place profits ahead of the people who are involved in food production, distribution and consumption, and economic systems that value economic growth over social development. This has led to the distancing of communities from having ownership and decision-making power over producing their own food and being able to eat well¹³ - a tension between food as an economic opportunity and access to food as a human right. Tim Lang, in "Food Policy for the 21st Century: Can it be both radical and reasonable?" describes this tension as a struggle between citizens seeking democratic control over food choices and food systems and corporate control (pg. 218)."14 In Nova Scotia, for example, the grocery industry has become increasingly consolidated, with three major players now controlling 78% of grocery sales.⁷

Shifts in the grocery industry have also concentrated the locations of stores, ^{15,16} as many retailers abandon neighbourhood stores for large "big box" stores. This has implications for our ability to access a variety of healthy food, particularly for people living in rural or isolated areas and people with low incomes (and limited access to private or public transportation). ^{17,18}

78% OF N.S. GROCERY SALES CONTROLLED BY THREE COMPANIES

Environmental contamination and the impact of global climate change on our ecosystems has affected the availability, supply and safety of traditional infood – further compromising the food security and food sovereignty of our aboriginal communities, 19 already more likely to be food insecure. 20 The United Nations Special Rapporteur on the Right to Food has named agroecology as a framework 21 for re-orienting systems to contribute to the progressive realization of the human right to food, with a key focus on environmental sustainability.

Nova Scotians continue to be affected by growing income inequality in Canada, a situation where 86 of the wealthiest individuals (and families) hold the same amount of wealth as the poorest 11.4 million combined.²² The widening gap between the rich and poor has served to compound the barriers our communities face in trying to achieve a basic level of economic security and sustainability.²³

iv Defined as "all of the food species that are available to a particular culture from local natural resources and the accepted patterns for their use within that culture." ²⁶





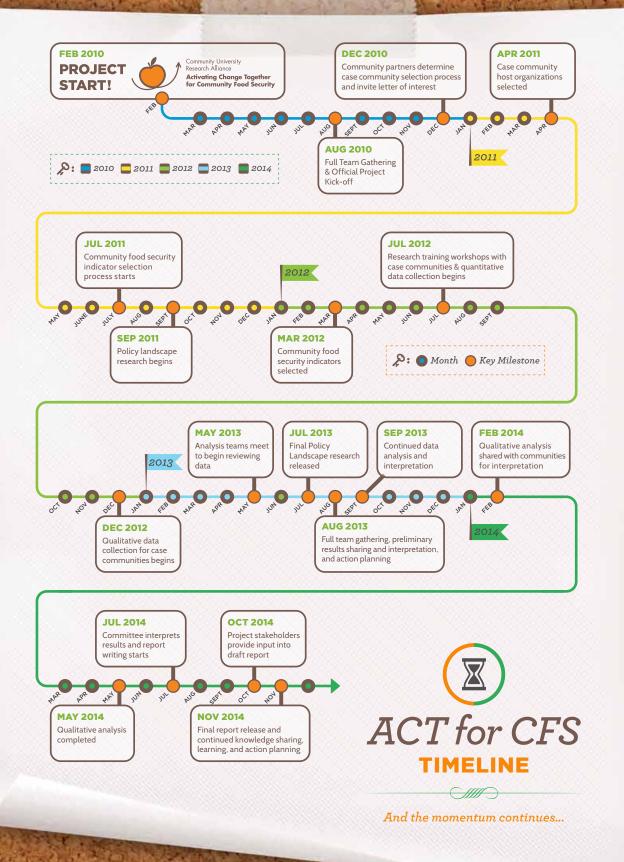
17.5% NOVA SCOTIANS EXPERIENCED FOOD INSECURITY IN 2012

Rising costs of living alongside precarious employment conditions, inadequate social assistance rates²⁴ and minimum wage (despite recent increases)²⁵ make it challenging for people with low incomes to afford a nutritious diet once other essential needs are covered, putting them at risk of food insecurity. National research suggests that 17.5% of Nova Scotians (or 67,800 households) experienced some level of food insecurity at some point during 2012²⁷ - with a higher prevalence reported among families with children, lone-mothers and lone-women and men. These numbers are especially concerning given the many negative and interrelated impacts of food insecurity on multiple dimensions of health including nutritional status, child development, social inclusion, and chronic illness. 28,29 Further, we are especially concerned for those who may be additionally burdened with special dietary needs due to chronic conditions that increase food costs. For example, in a comparison study, gluten-free products required by those with celiac disease were on average 242% more expensive than regular products, ³⁰ leaving many without the resources necessary to effectively manage their chronic conditions and creating an impossible choice between healthy foods and essential medications.

Community food security is a holistic concept in which breastfeeding is a key component of food security for infants, families and communities. As a critical component of infant and child health and development, breastfeeding provides a sustainable, renewable resource that increases in supply in response to increasing demand. 31 The ability of mothers in Nova Scotia to meet personal breastfeeding goals is compromised by aggressive marketing of breast milk substitutes and public attitudes against breastfeeding.³² We know that 86.7% of Nova Scotia mothers initiated or tried to initiate breastfeeding in 2012, but only 20.1% continued exclusive breastfeeding for the recommended six months duration.³³ These rates are lower than the national average of 90.3% and 24.2%, respectively. Further, breastmilk substitutes may be difficult to access for lowincome mothers and few systems, public or communitybased, appear equipped to respond to this specific need.³²

In Nova Scotia, there is incredible momentum building amongst a multitude of sectors, organizations and citizens concerned about food, health, our economy and the sustainability of our communities, environment and food systems. We heard from many Nova Scotians who believe in the preservation of local food traditions and are passionate and interested in where their food comes from, how it tastes and how their food choices affect the people and world around them. We spoke with members of communities who believe in the right to safe, nutritious and acceptable food and in the right for everyone to have the opportunity to meet their fullest potential.

The challenges are plenty, but so is the support for food systems that are healthy, just and sustainable.







The Community-University Research Alliance (CURA):
Activating Change Together for Community
Food Security (ACT for CFS) is a five-year (2010-2015)
participatory action research project aiming to enhance
community food security for all Nova Scotians, funded
by the Social Sciences and Humanities Research Council.
It is rooted in lived experiences, real community needs
and innovative solutions and draws upon diverse
perspectives and different forms of knowledge to
inform policy change for community food security.

ACT for CFS emerged from over a decade of participatory action research in Nova Scotia and across Canada on food security, including addressing the realities and experiences of individuals and families living in low-income circumstances in accessing enough, healthy food through social and policy change. The research results presented here are also situated within a growing body of research and action, within Nova Scotia and Canada on different aspects and approaches to addressing community food security.

Our journey to better understand and create the conditions for community food security in Nova Scotia involved a partnership between the *Food Action Research Centre* (FoodARC) at Mount Saint Vincent University, the Nova Scotia Food Security Network and nearly 70 community, university and government partners at local, provincial and national levels. This dynamic group of partners includes representation from diverse groups relating to: child and family support and development, health, anti-poverty, food production, women, human rights, rural vitality, environmental sustainability, community development, advocacy and policy change, and First Nations.



We worked together to:

- explore how policies impact community food security in Nova Scotia;
- better understand community food security in Nova Scotia, including exploring food systems and their impact on food access;
- · increase the knowledge and skills of partners; and
- use the knowledge and findings from the research to support action plans and policy change to build community food security.

Our work has been collaborative from the outset, with working groups and engagement processes involving both community and academic partners in every phase of the participatory action research. Collectively-identified values that guide our work include:

- · meaningful relationships;
- · sharing power and responsibility;
- building individual, organizational, community, and systems capacity;
- · participatory methods and leadership approaches;
- transformative ways of understanding and taking action;
- unique contributions and perspectives of all team members and participants;
- responsive and accountable leadership;
- · clear and transparent decision-making processes;
- · accessibility of opportunities to participate; and
- · activities rooted in real community needs.

Q Research

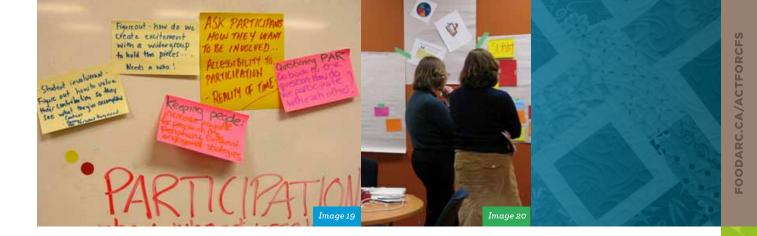
ACT for CFS partners and team members undertook two major research initiatives to better understand the components of, and factors contributing to, community food security in Nova Scotia over a four-year period (2011-2014). We structured our research to truly value the voices of Nova Scotians through two major research initiatives, supported by additional related research and project activities. vi

1 EXPLORING THE POLICY LANDSCAPE FOR COMMUNITY FOOD SECURITY IN NOVA SCOTIA

Led by the Policy Working Group of ACT for CFS, 41 interviews were conducted (2011-2012) with a diverse range of individuals and organizations with a stake in Nova Scotia's food systems. Particular efforts were made to engage groups often marginalized, including minority groups, farmers and fishers, as well as health, anti-poverty, and government representatives. The purpose of this research was to draw on the knowledge of these stakeholders, in combination with other reports, to identify challenges and opportunities for building community food security in Nova Scotia through collaborative policy development and change. Presented in a separate report, vii these findings have informed our understanding of opportunities to impact community food security in Nova Scotia, including the fields of influence and the call to action in Section 3 of this report.

- v Participatory action research is a process of inquiry, learning, critical analysis, community building, and social change that engages those impacted by an issue in all aspects of the research process. This approach incorporates multiple, diverse perspectives through an iterative process of planning, acting, observing, and reflecting.
- vi Additional collaborative research was conducted on approaches to: community learning and development, mobilizing collectively gained knowledge through action for social change, and developmental evaluation.
- vii Research results can be found here: http://foodarc.ca/actforcfs/results-publications





2 PARTICIPATORY COMMUNITY FOOD SECURITY ASSESSMENTS

The second major research initiative, which is the primary focus of this report, is the Participatory Community Food Security Assessments through which community partners were invited to gather local level information and experiences of community members on different aspects of community food security.



Four communities in Nova Scotia – Eastern Shelburne County, Northeastern Kings County, Spryfield (Halifax), and Pictou County – were selected through a participatory process to represent both rural and urban communities and diverse elements of food systems in Nova Scotia. Each Assessment has been led by local organizations with other community leaders and groups in partnership with university researchers. While every Nova Scotian community is unique, we believe these findings may be relevant to many other communities in this province and elsewhere.

A three-phase, rigorous mixed methods participatory research approach was applied to the data collection, analysis and integration of qualitative and quantitative data on community food security.

PHASE 1 (2011-2012): What did we focus on and why?

There are many aspects of community food security that could be considered in an assessment. Starting with our collective vision of community food security, followed by an extensive literature review, we then consulted with over 400 community members, project partners and provincial stakeholders to identify priority areas and gaps in knowledge relating to community food security. Case communities and project partners worked together to group indicators into categories and embarked on a prioritization process considering local priorities, knowledge gaps and diversity in types of knowledge to narrow the list to ten indicators of community food security for data collection across all four case communities. These include:

- · Opportunities and barriers to selling food locally;
- Community participation in food-related activities;
- · Programs that support food education and skills;
- Formal food production;
- · Physical accessibility of food;
- · Availability and range of food outlets;
- · Economic accessibility of food;
- Supports for populations vulnerable to food insecurity;
- Supports for community development and cooperation;
- · Conditions that support breastfeeding.



Section 1: INTRODUCTION



Each community also identified one unique issue of interest that addressed an important aspect of community food security in Nova Scotia.

- Our Lobster, Our Communities (opportunities and barriers within the lobster industry in Eastern Shelburne County);
- · Changes in farming in Northeastern Kings County;
- Experiences in accessing foods needed for special diets in Spryfield (Halifax); and
- Community food security in Pictou Landing First Nation (led by Pictou Landing First Nation).

Many other factors were also identified as contributing to community food security, but could not included within this research project.

PHASE 2 (2012-2014): How was data collected?

Community researchers were trained in research methods and gathered quantitative and qualitative data between July 2012 and March 2014 using: inventories, surveys, interviews, and focus groups, Storysharing, Photovoice, and participatory video representing people's experiences. A total of 201 people viii across all four communities participated in the qualitative research (18 took part in two research methods). We spoke to a variety of people, including:

- Those involved with gardening, farming, fishing, food distribution, and food retail;
- Individuals vulnerable to food insecurity;
- · Mothers about their experiences with breastfeeding; and
- Service providers from local community groups, health services, non-profit organizations, and schools.

viii This number does not reflect those who participated in the: Policy Landscape research, the informal economy research, and community food security in Pictou Landing First Nation. In addition, the team partnered with the Nova Scotia Participatory Food Costing project to gather data on food affordability and local food availability within each community and the Spatial Intelligence for Health Knowledge (SILK-LAB) to combine inventory data with spatial analysis. For more information on our methods and research participants, please see Appendices A, B, and C.

PHASE 3 (2013-2014): How did we analyze and interpret data?

This phase involved a holistic case study approach to construct a rich narrative of community food security at the level of each case community, as well as provincially. Findings emerged from a rigorous process of coding the qualitative data for patterns, relationships, explanations, contradictions, and contextual information and then putting these in context using quantitative data and secondary data, as well as looking for patterns across and within the case communities. A participatory approach to data analysis involved community level interpretation, examination of preliminary findings, detailed coding, and quality checking under the guidance of experienced team members. We drew upon three frameworks to inform the qualitative data analysis: community food security, 34,35,36 and socio-ecological³⁴ and political economy³⁷ perspectives. The results were further interpreted by those most involved in the research, as well as team members and key stakeholders, to contribute to this report. We ensured trustworthiness throughout the research by drawing upon multiple data sources and methods, as well as other related research, including the results from the Policy Landscape research mentioned above. The results were further interpreted by those most involved in the research to contribute to this report. Research activities described in this report were conducted in compliance with the Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans and reviewed by the Mount Saint Vincent University Research Ethics Board.







Considerations

Our findings represent a diversity of opinions and experiences, which are sometimes reflected in data that may appear inconsistent or contradictory. In this report, it was important to present these findings in ways that respect the lived experiences of people in these case communities by most closely representing what individuals said. It is important to value the diversity and difference of opinions and should be considered when reading these research results.

In addition to being rooted in individual lived experiences, the results from the Participatory Community Food Security Assessments have been further put into context by drawing on multiple data sources included: ACT for CFS Policy Landscape research; ix Participatory Food Costing; research by Pictou Landing First Nation on community food security; research on different aspects of the informal food economy in Nova Scotia; ii and data from other research.

Each community is also preparing a community-specific report, and we recommend reading these to gain greater insights of those living and working in each place, important to each community. While the findings represent perspectives, issues and opportunities for change from these four communities, they hold significant relevance for communities across Nova Scotia, at a provincial level, and for other communities in Canada.

- ix http://foodarc.ca/actforcfs/results-publications
- x http://foodarc.ca/actforcfs/food-costing
- xi http://foodarc.ca/project-activities/pictou-landing-cfs/
- xii Knezevic., I., (Forthcoming). *Under the (dinner) table: Nova Scotia's informal food economy.* (2013 Postdoctoral project, Publication in progress).

We've structured the results of this report around the interrelated themes that emerged from the assessments into the following sections: Systems that Sustain Local Food in Our Communities; Physical Access to Healthy Food in Our Communities; Food Insecurity as Experienced by Individuals and Families in Our Communities; Food and Community: Identity, Coming Together and Community Self-Reliance; and Conditions that Support Breastfeeding. Brief profiles of each case community, along with the findings related to the unique indicator research, are presented in Unique Places with Important Perspectives on Community Food Security in Nova Scotia. Specific data sources for each section are provided as footnotes. Direct quotes from research participants are in italics and include a note to identify theperspective of the participant; photos from Photovoiceparticipants include a quote caption that the participantoffered in relation to her/his photo. Each section of results also includes a description of opportunities for change identified directly by those participating in the research to address the challenges and issues they described.

The final section of this report, *Building Community Food Security in Nova Scotia* includes strategies to more broadly address factors influencing community food security at community and broader systems levels. This section was informed by many years of participatory research and collaboration with partners and through a process of engaging project partners in critical discussion to further interpret research results and identify strategic opportunities for change.



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SYSTEMS THAT SUSTAIN LOCAL FOOD IN OUR COMMUNITIES

The systems that sustain local food in our communities encompass a range of elements: infrastructure, regulations, policies and supports for those seeking to earn sustainable livelihoods through producing (e.g., growing, harvesting, catching), processing (e.g., butchering, packaging, freezing), distributing, and selling food. Most of what we heard represents the ideas and perspectives of the 63 individuals who participated in interviews within their respective communities involved in small to medium-scale privately owned businesses producing, processing and selling food.

We also heard from community members - through Storysharing, Photovoice and focus groups-about accessing local food within their communities, including being able to buy local food, but also about personal efforts to grow, harvest, catch, process, exchange, and share food with others as a way to get the food they wanted and/or be self-reliant (termed "informal economy" xiii).



☑ What We Learned?

WHAT DOES "LOCAL" MEAN TO YOU?

"Local" means different things to different people in Nova Scotia reflecting where food is grown, how far it has traveled and the percentage of food processed within a geographic area.





Photovoice: Mary Lou Gervais

"... if it is Atlantic Provinces, I still think of it as local. You know, I would rather buy a PEI potato than something from Idaho."

~ Retailer, Local Market

Participants sometimes distinguished between local food produced for local sale and food produced locally for sale elsewhere.

xiii An informal economy is defined as "...the production, distribution and consumption of goods and services that have economic value, but are neither protected by a formal code of law nor recorded for use by government-backed regulatory agencies."38





HOW WE ENGAGE WITH OUR LOCAL FOOD SYSTEMS

Most participants who were interviewed about their involvement in local food systems had been involved in privately owned food businesses for five or more years, while others represented new and emerging ventures - some transitioning from producing food for personal use to trying to earn a living; most participants described these as "family run" or "generational." Several participants also described being involved in more than one aspect of food systems, for example, taking on production, processing, distribution, and sales.

"I've been involved in the lobster and fishing business for 45 years...."

~ Lobster Retailer



"I'm a farmer. I am primarily direct sales.

I sell at the farmers' market, the local farmers'
market and a few other order programs like CSA
[Community Supported Agriculture]. ... So we are
a producer, a harvester, process, seller all in one."

~ Farmer, Mixed Produce

In addition to those earning a living in local food systems, some participants described their involvement in local food production as a way to feed a family, be healthy, to have food to share with others through gifts, exchanges or barter, connect to community, and carry on cultures and traditions; these include hunting, fishing, foraging, and backyard and community gardens.

"...That would be perfect for people, you know? You could buy twenty-four meat kings [chickens] and butcher them and put twelve in your freezer and sell twelve and get your money back ... Because all I'm doing is wanting to get a little bit of money back to keep my animals."

~Homestead, Mixed Farm





"Family Food Cycle: My preference is to produce my own food [...] for the last four years we have not bought potatoes, not even seed potatoes [...] We also grow a wide variety of other vegetables and fruits, accounting for around 10% of our total food intake."



Photovoice: Martin Willison

THE VALUE OF GROWING YOUR OWN

Participants who were interviewed specifically about their involvement in the informal food economy^{xiv} perceived their activities as a way to (socially, culturally and economically) challenge industrial food systems, with respect to their impact on habitat loss, unsustainable agricultural practices, climate change, and unhealthy foods (e.g., use of "chemicals").

xiv Knezevic, I. (2014). *Under the (dinner) table: Nova Scotia's informal food economy.* (Postdoctoral Project, Forthcoming).





These same participants felt that that for some people, these informal methods of producing one's own food could be an important component of feeding one's family, although it might not have been an important factor for them specifically. This idea is supported by data from the four case communities in which service providers surveyed named community gardens and other informal methods of acquiring food as being a key support for people experiencing food insecurity. Such alternatives to buying food may make a difference in building food security for individuals and families within Nova Scotia.

THE DEMAND FOR LOCAL FOOD

The interest and demand for local foods is changing. Some participants associated this interest with: a perception of local foods as higher quality, concern over food safety issues with products from industrial food systems, and the effects of marketing and promotion on the interest in local foods, including acknowledgement of promotional efforts from governments and some grocery stores to better source, label and promote local products.

"... So I think that that's been helpful. And the Select Nova Scotia really highlighting Nova Scotian products with the restaurants. And I think Taste of Nova Scotia is a good one. You know, it's supported in part by funding. Like I think people are really trying ..."

~Farmer



"... I think the consumer now is ... asking and looking at labels. They're wondering where this came from. They want it to be grown closer to where they live. They don't want it coming from half way around the world."

~Community gardener

A few participants spoke of interest in supporting local economies and neighbours to keep money in the community.

Participants named many tensions that exist within the changing landscape of local food. While generally viewed as a positive shift, the demand for local was also understood to still be relatively small – offering both an opportunity to expand, but also presenting the risk of being perceived as a niche market with limited potential to grow. Participants were also of the belief that while consumers were looking for product of a specific quality (e.g., local, organic), they were also expecting products of a price similar to that of foods produced through the conventional food system – expectations that do not align. Further, results suggest that community members living on low incomes are interested in participating in the local food system, but are likely restricted in doing so due to their inability to afford local and sustainably produced food at a fair price for the producer.**v

"We are used to having fruits and vegetables from other countries at all times, so that could be it's hard to make people believe and convinced that they should eat what's in season and that you don't need to eat strawberries in January, or I don't know, some imported things ..."

~Restaurant Retailer



"But then there is only a certain percentage of people who are willing to pay a bit more for local food and who can afford to pay a little bit more."

~Farmer, pork

xv Maritimers were found to be more willing to pay a premium to purchase local food items over non-local food items than other Canadians.³⁹



SUPPORTIVE INFRASTRUCTURE

Adequate local infrastructure, such as space, facilities and structures that enable us to produce, process, store, distribute, and sell local food in Nova Scotia was identified as critical for sustaining local food in our communities; for example, farmers' markets and local abattoirs were named as key assets. A range of participants from different communities and involved in the local food system in different ways also described gaps or inadequacies in infrastructure: fighting consolidation and centralization ("perceived as cheaper") of processing infrastructure; need for more and different infrastructure ("more local abattoirs," "a good freezer-plant," "just more processing plants"); "year-round space" and "enlarged farmers' markets" that are indoors with longer hours ("open pretty well all the time"; central points for distribution and sale; space for local retailers; and better access to the internet for some rural residents to enhance marketing and sales efforts. A few participants spoke of a need for more kitchens available at low cost to meet food safety regulations for people sharing food (e.g., community kitchens programs, suppers, etc.) or seeking to make the shift from self-sufficiency to small business.

Several participants suggested solutions, illustrating our Nova Scotian resilience and creativity, including both formal and informal cooperation.

"I would love to see small processor facilities that could be rented or mobile that would serve the seasonal needs of local processors."

~Former Market Coordinator



"I'd like to see cooperative, some kind of cooperative formed whereby we take advantage of bulk buying, healthy [food] bulk buying ..."

~Community Member, Storysharing

Access and protection of land was talked about by both those producing foods for a living and those producing for themselves. For example, participants living in less rural areas noted that communal space for planting and growing food was particularly significant as access to space for home or personal gardens may be limited.

Those interviewed about their participation in the informal economy also spoke of protection from climate change and habitat loss as important.

LOCAL FOOD ECONOMICS

The extra time, effort and relative returns (based on production costs) were also of concern for some producers and retailers.

"... I sell a dozen organic eggs for \$4.50, which is laughable in terms of what it really costs me to produce, like it probably costs me \$4.35 to produce that dozen eggs."

~Market gardener



"That [direct-sales] is very time-consuming and energy consuming. And you have to live that lifestyle to [do that] ...Or you have to have somebody within your organization that's willing to do that. And that's a big part of [it] ..."

~Farmer, Egg and Beef

Many of the small to medium-scale local producers and fishers (primarily lobster) we spoke with discussed challenges with economies of scale. It was perceived that standards set through "big business" and government regulations appeared to favour larger producers, which allows them to produce food at much lower costs. These limitations make it hard for small-scale producers and fishers to consistently provide foods at a price that citizens are willing or able to pay. As a result, the people we interviewed that were involved in local food systems – both producers and small scale processers/retailers–felt that people cannot always earn a living working in local food systems.

"... The only barrier is like what you're catching... You don't really know how much you're going to go out and get...

Because you're kind of just at the mercy of the sea, whatever you're going to catch."

~Lobster fisher





"... Quebec can bring it [sweetcorn] in here at a \$1.99 a dozen... But we can't... You know, we can't do it for \$1.99 a dozen. And if [the grocery stores] want to do it at that, we can't do that because it doesn't make any sense for us..."

~Producer/Retailer, Dairy and Produce

The difficulties in sustaining local food production are compounded by an aging producer population and loss of farms.

"... farms are all being shut-down, the next generation isn't taking them over because there is no money to be made there - they have to run the farms part time and work full time, and it's just too much ..."

~Distribution and Retailer





Rain, rain, go away, mommy and I have to grocery shop today. When you don't have the means, the simple things in life become very challenging. I support local, but local doesn't support me."



Photovoice: Tasha Belong

ACCESS TO LOCAL FOODS

Many participants, including both food producers/ processors and consumers spoke of government policies and practices that are designed to support large-scale ventures, but that don't support smaller enterprises and the informal economy. This includes approval processes, health and safety requirements and other oversights. For example, chicken, egg and dairy farmers all talked about the quota system and associated licenses as challenging. As described by one community member below, these oversights were perceived to make accessing local foods within our communities more challenging.

"Well, you can't get it as easily as you used to.

You used to be able to go down to the wharf and ask
the guy for a haddock, and he'd chuck it up to you,
and that was that. But now they're not allowed.

The fishermen can't even take one home
for his supper until it's counted."

~Community member, Storysharing

Many people pointed out the difficulty of accessing local food, and that it is not always readily available in their communities. Data collected from Nova Scotian grocery stores in a previous study found that 26.1% of items in the National Nutritious Food Basket were produced or processed in the Maritime Provinces, with the most common items being items that store well (e.g., fish, some meats, potatoes, onions, apples, bread products, milk, etc.). This represented an increase of 5.4% since 2010. 11 Despite evidence of availability increasing, participants felt that availability, combined with cost, was an obstacle to participation in local food systems, especially for populations vulnerable to food insecurity.





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Opportunities Identified by Participants

Those who participated in this research offered many perspectives on what were seen as opportunities for strengthening local food systems and addressing identified challenges. In particular, participants emphasised the key role of physical infrastructure in supporting food-related activities in local communities. In order for food initiatives to flourish in our communities, there was a perceived need for scale-appropriate regulations that reduce the prohibitive burden experienced by many individuals and groups. Attention needs to be paid to ensuring the economic sustainability of small to medium-scale food producers who are the backbone of our rural communities. Local food systems will benefit from increased promotion to wide-ranging audiences of the benefits and availability of local and sustainably produced food and through increased supports for alternative food systems.

Ensure a robust physical infrastructure for food-related activities.

- Review and amend laws, planning practices, and development and conservation strategies to support food production (e.g., gardens and agricultural lands), including protecting and restoring the natural environment (e.g., forest lands for hunting, streams for fishing).
- Fill gaps in existing physical infrastructure to expand production, processing, storage, and retail opportunities (especially direct sales) for individuals and businesses (e.g., freezers, greenhouses, abattoirs, community kitchens, year-round/indoor farmers' markets).
- · Facilitate the improvement and coordination of local food product transportation/distribution.

Introduce scale-appropriate regulations to allow community-based and privately-owned food initiatives to flourish.

• Introduce scale-appropriate regulations (e.g., licensing, certification, food safety, processing) to reduce prohibitive burdens on individual, community, and small-medium business activities in producing and sharing food, including supports for producers transitioning into the formal food economy.



Assist small/medium scale food production to be economically sustainable and to support individual/family self-reliance.

- Enhance financing programs (e.g., start-up capital, grants, micro-loans) for new and expanding food initiatives.
- Create succession strategies for farming and fishing industries, so new entrants have access to essential materials (e.g., equipment, land, boats, licenses) and fishers and farmers can retire.
- Create and enhance financial incentives and supports to make it easier and economically viable to engage in local food-related activities (e.g., reduce agricultural land taxes, create input and equipment rebates, provide tax credits for individuals who grow their own food, invest in business development and marketing for producers).

Raise awareness of the benefits and availability of local and sustainably produced food.

- Continue and expand labeling and marketing programs (e.g., Taste of Nova Scotia, Select Nova Scotia).
- Assist citizens, organizations, institutions, and wholesale/retail businesses in buying local food through the
 creation of food networks, providing information (e.g., online databases, directories, registries, labeling) and
 facilitating connections (e.g., establish local food buying clubs, establish local food procurement policies for schools).
- Build awareness and knowledge for all ages (e.g., in schools, through online marketing, etc.) about local foods and seasonal buying, and enhance opportunities and funding to build food skills and literacy (e.g., knowledge of healthy foods, producing, preserving, and preparing local foods) through schools, community-based programs and formal training for fishers and farmers (e.g., intergenerational mentors, garden networks).

Support alternative food networks.

- Provide education, funding and networking opportunities to nurture new and existing cooperatives, trading and bartering systems, opportunities for personal food production, and Community Supported Agriculture (CSA).
- Pilot initiatives that connect local food producers/retailers and citizens in ways that enhance access and affordability of local foods and economic development.
- Support opportunities for people to produce, catch and harvest their own food by reducing barriers (e.g., license costs, lack of access to necessary equipment, land, etc.) and through learning opportunities (e.g., skill building).



(\mathbf{W}) More food for thought...

VOICES ANTIGONISH LOCAL FOOD BOX PROGRAM: "BUILDING COMMUNITY THROUGH FOOD"

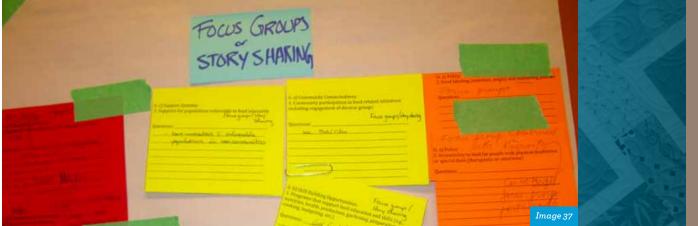
Connecting local food producers directly with consumers has been the focus of the VOICES Antigonish Local Food Box Program located in Antigonish, Nova Scotia. By encouraging local buying and selling of produce, the program offers unique opportunities for producers, consumers and the broader community. It improves residents' access to healthy, fresh, local food, and simultaneously provides farmers with a venue to market, network and sell their products for a fair price. It also includes investment and support of the local economy, contributing to the vitality and sustainability of the community and local food systems. In addition to this program, VOICES Antigonish has been advocating for better access to locally produced food within the town. To further this mandate, local partners (VOICES Antigonish, the Antigonish Food Security Association, the Local Food Store Committee, and the Canadian Association for Community Living) have launched an expanded food box program through Our Food Store, featuring an on-line store where customers can order different sized bags of food every week, assembled from products in and around Antigonish with featured educational and promotional resources (i.e., recipe ideas, storage tips, nutritional facts, and producer profiles). This has allowed for a significant expansion in the program, with 2014 sales of over \$10,000 of locally produced foods directly supporting our producers, fair wages for two Canadian Association for Community Living employees, and program expansion overall.

For more information, please visit:

http://sustainableantigonish.ca/community-initiatives/voices/

http://ourfoodstore.com





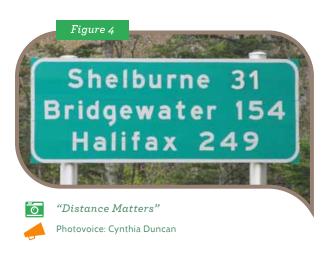


In order to increase our understanding of how people access food in their communities, we spoke to people about what supports or hinders their ability to physically access healthy, affordable food through Photovoice, Storysharing and focus groups for populations vulnerable to food insecurity, as well as by drawing on spatial analysis and local food availability data (Nova Scotia Participatory Food Costing). Surveys with community-based service providers, information on the number of food outlets within each community, and analysis that explored the relationship between store locations and socio-economic factors that are known to impact people's ability to access food also contributed to our understanding of community food security in Nova Scotia.



PHYSICAL ACCESS TO FOOD

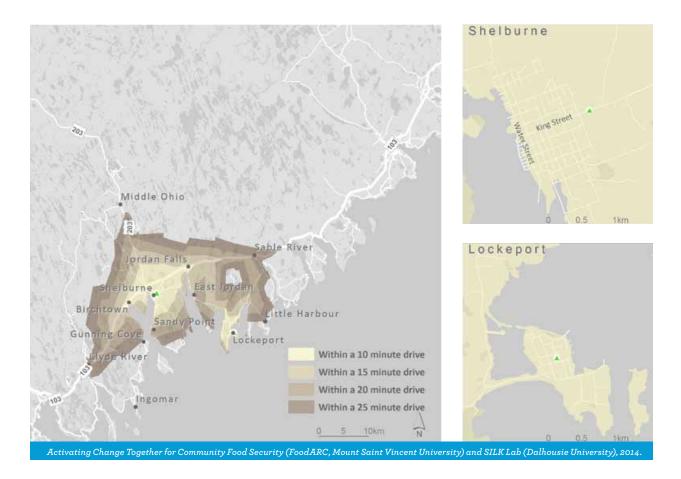
For many people, simply physically getting to where food is sold or shared is a challenge. We heard that where one lives makes a big difference in one's ability to access food. In some Nova Scotian communities, there are no local, easy-to-get-to venues with fresh, affordable food, and this has an impact on health and well-being.



"... but for me, if I wanted to buy food that is not in a convenience store that costs twice as much, I would have to drive 27 kilometers really ... I feel that it is an example of a barrier that people ... have because we have no public transportation or anything like that ..."

 ${\tt ~Community~Member, Photovoice}$





Eastern Shelburne County

Grocery Store Service Areas

This map reflects the scarcity of grocery stores in Eastern Shelburne County (just two stores, represented by the green triangles) and emphasizes the relationship between transportation and food access, with many residents needing to drive 15 minutes or more to a grocery store. Within each of the four case communities, there was a broad range of food outlets available, such as grocery stores and specialty food stores (e.g., butchers), but the overwhelming majority of food outlets across all communities were restaurants, fast food and convenience stores with these three retail types outnumbering grocery stores by a ratio of 10 to 1.



33



TRANSPORTATION

Many people in Nova Scotian communities talked about lack of access to affordable transportation, including issues of being able to afford a car, the expense of taking a taxi if you don't have a car and limited or no public transport in many areas of Nova Scotia. As one survey participant noted, "Rural communities suffer. Grocery stores are leaving, local convenience stores are closing, [and] rural communities have to travel long distances to access food" (Community-based Service Provider).

When asked what affects people's ability to get the food that they need or want, one community member replied: "Transportation for one, being able to get there" (Community Member, Focus Group).

Several individuals from different communities talked about a lack of transportation and availability of fresh food outlets affecting the types and amounts of food people can access.

"... For those living in small remote rural communities, a lack of transportation can seriously impact the ability to obtain fresh, healthy and affordably priced foods. Small corner stores and markets within walking distance carry items which are typically priced higher than similar items in a larger grocery store. Selection and variety are usually diminished as well, especially with regards to fresh meats and produce. ..."

~Community Member, Photovoice



"We have no public transportation or anything like that ..."

~Community Member, Photovoice

Further, paying for transportation diverts money from food budgets, compounding access and affordability.

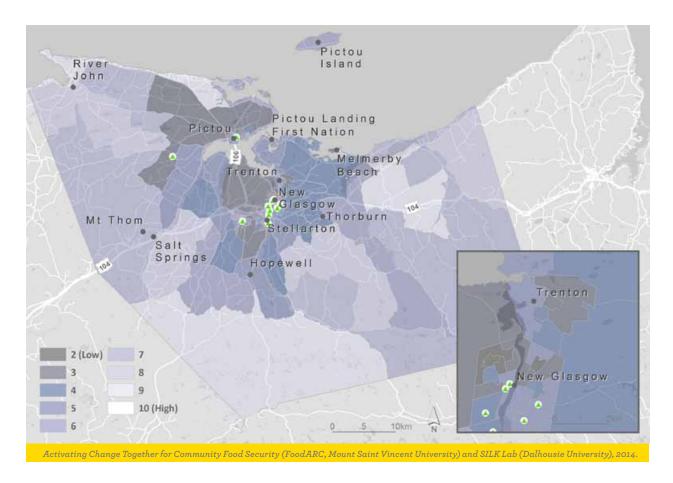
"Cabs are expensive and cut into food budget."

~Community Member, Photovoice



"... a lot of things can be accessible but if, if you're low income and you have you know restricted budgets and not a reliable means of transportation then things get really difficult."

~Community Member, Photovoice



Pictou

County

 lova $\mathit{Scotia}_{\lambda}$

Pictou County, NS

Potential Food Insecurity Risk based on Grocery Store Locations

RELATIONSHIP TO ECONOMIC ACCESS OF FOOD

Often times, we see relationships between both physical and economic access to food. Spatial analysis allowed each community to create a picture of potential risk for food insecurity within a community by taking into consideration socio-economic factors and physical access to foodoutlets (e.g., distance to stores). This map of Pictou County shows areas of relative risk for food insecurity within the community, aiding community members, businesses and community leaders in identifying areas that could benefit from improved transportation to grocery stores or theprocess of locating of grocery stores. Lighter areas indicate higher potential risk of food insecurity, as these areas have socio-economic characteristics that contribute to the risk of food insecurity and are also farther from food outlets.



OTHER COMPOUNDING CHALLENGES

Physical access to food can become even more challenging for some. For example, lack of available childcare means additional challenges in getting to and from a grocery store or food bank with young children in tow, especially for lone parents. As one mother shared, "I've got a little one who doesn't always want to walk. She's four. She doesn't always want to walk; sometimes she wants to take a stroller. So how am I going to get a stroller and pull a buggy? ..." (Community Members, Focus Group). In another community, we heard how crumbling infrastructure, like sidewalks, can add to accessibility challenges.



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"The walk of life. The stroll of the low." $\,$

Photovoice: Tasha Belong

"I can't imagine being on crutches, you know, a cane like an old person, a stroller, a wheelchair, any sort of...physical mobility issue trying to get up that uh the hill...it's like a constant obstacle course ..."

~Community Member, Photovoice

When creating inventories of food retail outlets, case community researchers emphasized the importance of physical barriers to accessing food by also assessing whether food outlets are wheelchair accessible. Not all locations were wheelchair accessible, and this creates further physical access barriers.

THE MANY WAYS WE ACCESS FOOD

In the context of community food security, it is relevant to explore what the food economy outside of the traditional market system (buying food) and consider which informal or partly formal community food activities people are involved with and why.



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"One of the many crumbling sidewalks in [this community]. It is a constant obstacle course maneuvering up and down streets by foot. I cannot even imagine trying to do so with a mobility issue such as needing a cane, crutches, or a wheelchair."



Photovoice: Shelby Caldwell

Survey participants reported a diversity of ways that people get their food outside of the market system. These included: do-it-yourself methods, such as backyard gardening, hunting and fishing, and foraging; participating in institutional and community-based food programs such as school meals and hot lunches; socio-cultural food events, such as feasts, potlucks and celebratory meals. Community-based emergency food assistance programs were also named, although generally considered a last resort and associated with judgments. A small number of participants recognized that some people are obtaining food through less socially acceptable means, such as garbage dumpsters and gleaning food from farmer's fields after the harvest.

A related piece of research specifically examining the informal food economy and its relationship to community food security *vi* in Nova Scotia included an exploration of participants' motivations for participation in the informal food economy. For some, these activities are to save money and survive on low incomes, and informal food options can help offset some of the effects of poor physical food access. This is less true for others, for whom there are additional benefits. Some people felt that: "... It's really all about our social partnerships and connections and feeling part of the community. Others shared that, "It's not important for saving money but certainly it's important to know the quality of the food...," and for others, "... You gotta take people back to nature..."" ... 42

xvi These findings are from fourteen in-depth interviews conducted in 2013 as part of Postdoctoral research at FoodARC by Dr. Irena Knezevic with individuals involved with (or knowledgeable about) the informal food economy in Nova Scotia. The participants varied in age, gender, and place of residence (urban and rural, from across the province).







Opportunities Identified by Participants

Opportunities to improve food accessibility within the case communities also emerged through these discussions. Three broad areas of suggestions were thought to have the potential to positively influence the affordability, accessibility and variety of nutritious foods available to all community members. In particular, it was clear that reducing income and other cost-related barriers would help ensure everyone could afford a basic, nutritious diet. In addition to improving economic access, participants placed significant value on community investments to improve the physical accessibility of food within communities through improved transportation systems, increased diversity of types of food outlets and other community-based support systems.

Reduce income and cost-related barriers that impact community members' abilities to get to food.

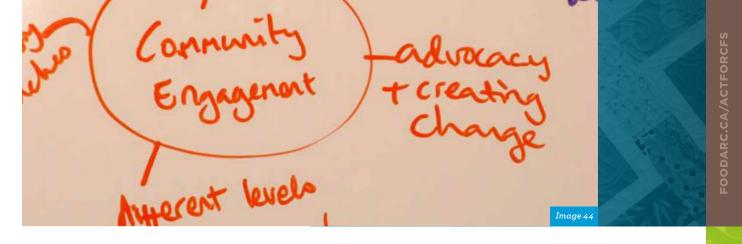
- Enhance incomes and income supports (e.g., review and increase rates for Income Assistance, Employment Insurance, minimum wages, pensions, disability), so that individuals can afford healthy food and the costs associated with accessing it.
- Enhance access to and affordability of childcare, including part-time/as-needed spaces.

Include access to food in community planning.

Review and change by-laws and planning practices to ensure communities have both good access for all to
transportation and introduce incentives/disincentives for ensuring that neighbourhoods and communities have good
access to food outlets carrying fresh, healthy food (e.g., financial incentives for convenience stores to offer fresh food).

Create and invest in cooperative and community supports that remove barriers to accessing food.

- · Invest in affordable, accessible and safe transportation, especially in rural communities.
- Develop and support cooperative/community-based transportation solutions (e.g., sharing rides, community vans, home food delivery systems, grocery shuttle programs) to enable community members to better access food.
- Combine shared buy-in-bulk food programs along with delivery systems to reduce the number of trips, as many cannot afford multiple trips or lack the physical ability to carry or space to store bulk items.
- Expand investment in community-based food-related programs (e.g., gardens, community kitchens) and reduce barriers to participation (e.g., transportation, inclusive access).
- Facilitate food barters, exchanges, food lending, and other informal ways for people to share and access food.





FOOD INSECURITY AS EXPERIENCED BY INDIVIDUALS AND FAMILIES IN OUR COMMUNITIES

Food insecurity is defined as a situation that occurs whenever the availability of nutritionally adequate and safe foods or the ability to acquire acceptable foods in socially acceptable ways is limited or uncertain. 43,44 We wanted to learn more about who is vulnerable to food insecurity in our communities, including how they describe this experience and what might help.

This section is primarily informed by what we heard from research participants who may be at-risk of experiencing food insecurity (through focus groups), as well as information from service providers (through surveys), community members who participated in Storysharing and Photovoice, and the Nova Scotia Participatory Food Costing Project.



THOSE MOST AT RISK

We know that some people are more vulnerable to food insecurity than others. ²⁷ Participants in our research identified many groups in their community as "at-risk" of experiencing food insecurity or as underserved/ overlooked by support systems. They described groups for whom services are available, and for whom these supports are essential: people living on government assistance or fixed/low incomes, young women and/ or lone mothers, people with disabilities or addictions, seniors, and children/ youth.







"When you are in pain, whether it is visible or not, it diminishes your ability and desire to access food."



Photovoice: Shelby Caldwell

Often overlooked and underserved groups include: aboriginal populations, people experiencing mental health challenges, new immigrants, people living with chronic diseases, lone men (especially seniors), and post-secondary and continuing education students. For example, using methods developed by the Nova Scotia Participatory Food Costing Project, a lone man 55 years of age on income assistance in the community of Spryfield would be facing a deficit of \$623.65 at the end of the month, after paying for basic living expenses and a basic basket of nutritious food. **xiii* The quote below highlights the challenges experienced in meeting basic needs when living on a low income.

"... I was on assistance before and they, I think they gave me, what \$860 bucks...for a family of four for the month that's what you got and that included your rent, \$650 is what they allow for your rent, and then you get like \$200 and some dollars for the rest of the month, that's all you get! When you're on assistance, like how can they expect you to go and buy groceries with \$200 for a month?"

~Community Member, Focus group on supports for populations vulnerable to food insecurity

For households dependent on income assistance, small increases in the allowance over the last decade did has not decreased risk for food insecurity. However, people relying on income assistance are not the only ones experiencing difficulties in our communities. Our research shows that a a Nova Scotian family of four with both parents earning minimum wage (in 2013) would be in a deficit by \$515.39 at the end of one month after paying for basic expenses and a basic of nutritious diet. We also know that despite increases in minimum wage, analysis of changes in the costs of living over the past decade revealed that many families in Nova Scotia would still face monthly deficits if purchasing a nutritiously sufficient diet. 44

"Two income families are even struggling to make enough money to feed their families healthy food; many of them are going in debt just to do this."

~Community-based provider of supports and services

A COMPLEX BALANCING ACT

We also know that the experiences of food insecurity and impacts on health are compounded by the interrelationships between inequalities relating to race, culture, gender, income, education, and other factors. ⁴⁵ In other words, some people in our communities face complex and profound challenges. Some research participants shared personal barriers, such as chronic pain, for example, that kept them from accessing the foods they needed.

Limited access to food arises within the context of complex and competing demands for scarce resources. 46 Faced with difficult and seemingly "impossible decisions" 47 related to resource allocation, participants of our study spoke of foregoing food in order to free up money for other, more inflexible household expenses.

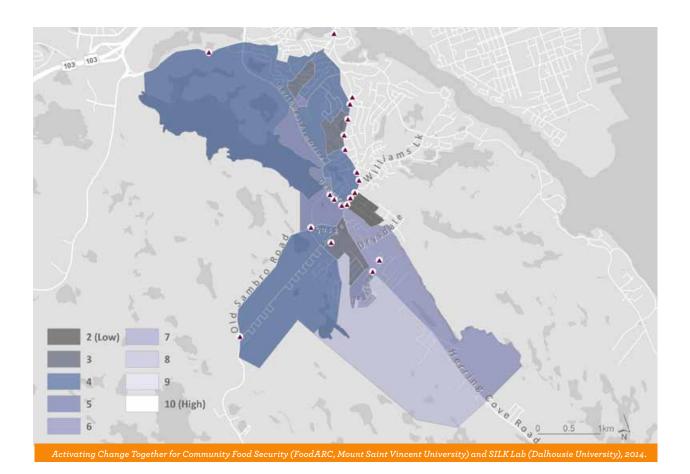
"... I always pay my rent first and whatever is left over I have for food."

~Community Member, focus group on supports for populations vulnerable to food insecurity

xvii Please see Appendix C for details.



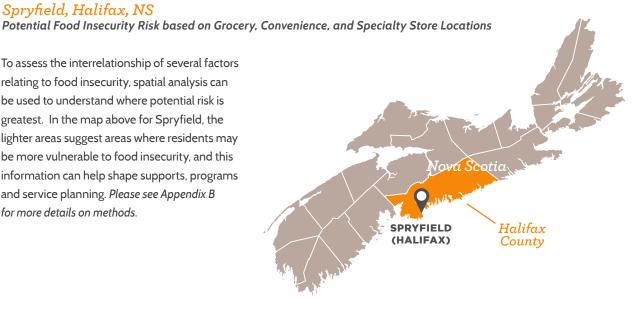
39



Spryfield, Halifax, NS

for more details on methods.

To assess the interrelationship of several factors relating to food insecurity, spatial analysis can be used to understand where potential risk is greatest. In the map above for Spryfield, the lighter areas suggest areas where residents may be more vulnerable to food insecurity, and this information can help shape supports, programs and service planning. Please see Appendix B







"The process begins. A lot of time and organization goes into saving a few dollars, but it's a necessary hassle."



Photovoice: Rachel Alders

MANAGING FOOD INSECURITY

In the face of adversity, people will use many strategies to cope – a number of which relate to household management of limited food resources. ⁴⁸ In order to augment their food budget and help stretch their household food supplies, participants talked of: seeking sales and using coupons, cooking on a budget/avoiding food waste (making soups, freezing foods), and/or compromising their nutrition in order to get "more" food. As one participant put it, "...when you start throwing all the balls up in the air, you realize how many you are juggling just to get food in your cupboards" (Community Member, Photovoice).

Some management strategies relate exclusively to how food is distributed within the household. Individuals from several communities talked about going without food to ensure that children or other family members are fed first.

[Participant 1]: "That's right. My kids come first. Like I don't care if I eat but my girls, like gee, they deserve..."

[Participant 2]: "I'm the same way. I'll go without eating like so my kids can eat too."

~Community Members, Focus group on food insecurity

While our findings show evidence of the resiliency of Nova Scotians, the unfortunate reality is that many people in our communities are going without healthy food. We heard about the implications this has on one's health and well-being.

"... Often times, greater quantities of lower quality foods, the cheapest available are purchased not to nourish but to stop the sensation of hunger. It goes without saying that this practice can undoubtedly lead to diminished health and well-being".

~Community Member, Photovoice

RESPONSES TO FOOD INSECURITY IN OUR COMMUNITIES

When asked where people in their community could go to get support when they needed it, participants in our study overwhelmingly described charitable food assistance programs, predominantly food banks, as a key community response to food insecurity.

[Focus Group Facilitator]: "So the first question is people in our community sometimes don't have enough money for food for their families.

Where can people go to get food if they need it?"

[Participant]: "Food banks".

~Community Member, Focus group on food insecurity

Also mentioned were food, financial and other material support provided by family and friends, as well as organizations such as faith groups, community groups, health centres, helplines, the Department of Community Services, breakfast and lunch programs, schools, educational programs (particularly cooking and wellness programs), soup kitchens, and even private and business donations.

Some participants also listed federal and provincial programs that assist with living expenses, such as heating fuel rebates, tax rebates and shelter/housing support, demonstrating the importance that non-food supports can offer for those vulnerable to food insecurity.



THE EXPERIENCE OF FOOD INSECURITY

People talked about experiences of humiliation, embarrassment, judgment, stress, lack of dignity and feelings of powerlessness related to not being able to obtain enough healthy, nutritious food in socially acceptable ways. This was closely tied to the experience of hearing the opinions and assumptions that are made about why people are living with poverty and food insecurity from others, including those involved in charitable food assistance programs. These feelings of stress and powerlessness were particularly evident in the stories people shared about their experiences accessing some charitable food assistance programs.

"... The stress of that one little thing of going grocery shopping can lead to a heart attack ... I've only got \$40 for groceries but I really should be putting on my light bill and not eating and you know, the whole thing of not telling your family because you don't want them to know right? ..."

~Community Member, Focus group on food insecurity



[Participant 1]: "Degrading, humiliating. Speaking from personal experience, it is humiliating."

[Participant 2]: "I had hard times and I'll tell you that I was, I couldn't bring myself to go to the food bank, that's one thing I simply could not do."

[Participant 3]: "I almost starved before I went..."

~Three Community Members in conversation, Focus group on food insecurity

We also heard that negative experiences do not occur for every person accessing charitable food; some participants appreciated welcoming environments and friendly faces. People identified many challenges with the food banks in their community; often they differentiated between "good" or "bad" programs based on factors such as poor quality food, food safety concerns, limits to the quantity of food, anonymity and ability to choose what food you need. One community member noted, "... every food bank is different, because you go to [food bank name] ... and you're treated like a queen ... You get to choose your food. It's like almost going for groceries" (Community Member, Focus group on food insecurity).

Other options for accessing food, such as through community kitchens, food box programs and community dinners, were mentioned less often by people vulnerable to food insecurity. However, the welcoming environments and healthy foods available at these other community-based food programs were perceived more positively than community-based charitable food assistance models.

"... It's called the community kitchen.

And it's once a month. What they do is you go down and there's a group of you and you make up a meal and you bring it home for your dinner that evening ... It'll feed your whole family. And if you only have a family of say two or three it could last you literally a few days. I mean, you get a pan, it's like this big, this deep, and they fill it ... it's free."

 ${\it ~-Community~Member, Focus~group~on~food~insecurity}$



"And I think that [referring to participation in community programs] also promotes not only helping each other but like communicating with people around, getting to know people..."

~Community Member, Photovoice



MOVING BEYOND CHARITABLE FOOD ASSISTANCE

People expressed an appreciation and desire for more services that meet the needs of their community, commenting frequently on ways to improve or enhance these services. At the same time, most survey respondents described these programs as only "somewhat effective" in addressing food insecurity and few people and organizations are focused on the root causes of this issue. For example, out of 65 survey respondents across all four communities, only 18.5% rated the effectiveness of assistance programs as extremely or very effective. A total of 81.5% of respondents rated such programs as "somewhat effective," "very little," or "not at all" effective in meeting community needs.

Our findings also suggest that we all hold opinions and assumptions of others' experiences with poverty and food insecurity, including beliefs and stereotypes about who is "deserving" of support. These perceptions tend to reflect broader societal views that place blame on individuals, rather than drawing attention to systems and policies that fail to recognize or support our right to food. For example, community participants in focus groups from three different communities commented on the "habits" of households in their communities living in low-income circumstances:

"But they always have big televisions and other things that we don't have - like cell phones!"

 ${\it ~-Community~Member, Focus~group~on~food~insecurity}$

"...such a high rate of unemployment so they don't know how to deal with their money, they don't have budgeting skills ... so there's a lot of skills missing that a lot of us take for granted. ..."

~Community Member, Focus group on food insecurity

Being vulnerable to food insecurity not only exposes one to judgement, it also makes one vulnerable to other potential risks. As one community member explained "...and he [her child] won't go into the school because he's afraid that the teachers will call Children's Aid. So his dad tells him like don't go into the school, stay away from school, because if they find out he has nothing to eat they'll call Children's Aid on us ..." (Community Member, Storysharing).

While research participants talked about ways to improve existing community programs and the increased need in communities, some survey respondents also spoke of the need to address the deeper, systemic issues.

"I find it disturbing that the assumption is that we need these services and programs to supplement people rather than providing them with the income that they require in order to maintain their dignity and not be dependent on the system and charity of others."

~Community-based service provider

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Opportunities Identified by Participants

Based on the lived experience of those vulnerable to food insecurity, key opportunities emerged. Strengthening economic opportunities by addressing inadequate incomes and the rising costs of living is seen as key to addressing the challenges of food insecurity experienced by those living on low incomes. This strategy, while fundamental to ensuring economic access to food, was thought to be only one piece of the puzzle. Participants articulated a valuable role for community-based strategies in improving the social structure of communities (as social capital) and in increasing our collective ability to build food security within our communities through supporting self-reliance. While ideally we would not have a need for charitable food assistance programs, participants also identified ways to foster more dignified access to food through these programs which are reflective of the challenges experienced by those living with food insecurity.

Address social inequities, such as poverty and unemployment, racism and sexism.

- Ensure adequate livable incomes.
- Engage in dialogue to raise awareness, understanding, and compassion for others.

Sustain and expand initiatives that help reduce non-food related costs of living.

- Enhance access to and affordability of childcare, including part-time/as-needed spaces.
- Enhance other financial supports (e.g., heating fuel rebates) that reduce the cost of living.
- · Invest in affordable, accessible and safe transportation, especially in rural communities, including cooperative/community-based transportation solutions (e.g., sharing rides, community vans, etc.).
- · Increase affordable, diverse, inclusive, accessible, and safe housing units for people of all ages, backgrounds and needs.

Strengthen, expand and sustain community-based food programs as essential social capital that serves people of all ages and backgrounds and improve self-reliance.

- · Develop and enhance community and social supports and services for groups vulnerable to food insecurity and reduce barriers to accessing programs for overlooked and underserved groups (e.g., those experiencing mental health difficulties, new immigrants, youth that are neither served by schools or community programs).
- · Raise awareness of opportunities to participate in food-related programs and reduce barriers to participation (e.g., cooking and gardening programs).

Provide community members with dignified access to healthy food by addressing the current gaps and challenges in the emergency food assistance model and by strengthening and creating programs that connect community members with healthy, local food.

- · Invest in and coordinate cooperative responses, such as healthy food bulk buying, farm gleaning programs, food boxes, mobile fresh food trucks, and community kitchens.
- · Change or enhance organizational policies within emergency food programs to allow for greater and more equitable access for people at risk of food insecurity (e.g., longer hours of operation, safe and indoor waiting areas, delivery or transportation assistance, fewer restrictions on the frequency of access, more food, more variety of healthy and fresh foods, more non-food items).
- · Explore alternative program structures, policies and procedures that ensure each person retains her/his dignity and autonomy (e.g., being able to make a choice of which supports to accept, and equitable and fair distribution of items to accommodate different family sizes and special needs).



\bigcirc More food for thought...

QUEST FOOD EXCHANGE - British Columbia

Quest is British Columbia's (BC) largest not-for-profit food exchange program. With the assistance of local food suppliers, over 400 social service agency partners and other community stakeholders, Quest has created a social enterprise model that has become a hub of food redistribution in the Lower Mainland of BC. Through their unique programs (most notably, their Non-For-Profit Grocery Markets) Quest strives to re-direct and -distribute food that might otherwise go to waste to organizations and people who need it most.

As one of four core programs, Quest's Non-For-Profit Grocery Market provides an array of food and household items to referred clients at significantly reduced costs (50-70% less than most other retailers). Clients are empowered to choose what suits their dietary needs, preferences and lifestyles, providing these individuals and their families with a dignified shopping experience. Clients are also encouraged to partake in Quest's many volunteer opportunities, through which they gain access to Grocery Market honoraria, workshops/on-the-job training programs, and practical work experience for re-entry into the job market. Based on a three-prong approach - reducing hunger with dignity, building community and fostering sustainability - Quest Food Exchange steps away from the charity model, focusing instead on building self-sufficiency for their clients and their community.

For more information about Quest's Non-For-Profit Grocery Market and other re-distribution programs, please visit: www.questoutreach.org



\bigcirc More food for thought...

MINCOME

For a four-year period in the '70s, the poorest families in Dauphin, Manitoba, were granted a guaranteed minimum income (MINCOME) by the federal and provincial governments. ⁴⁹ This was part of five field experiments conducted in North America to investigate the impact of a Guaranteed Annual Income (GAI) on the labour market. Little was known about what unfolded over those four years in the small rural town, until 2009, when a team of researchers from the University of Manitoba begun to piece together the story by using census data, health records, and the testimony of the program's participants. What they found was that GAI program has the potential to improve health and social outcomes at the community level. During the period that MINCOME was administered, hospital visits dropped 8.5%. Fewer people went to the hospital with work-related injuries, and there were fewer emergency room visits from car accidents and domestic abuse. There were also far fewer mental health visits and increased Grade 12 graduation rates. For the many self-employed farmers in the Dauphin community, MINCOME provided a significant increase in income, offering some support and stability in the face of an unpredictable farming lifestyle, influenced by factors such as changing agricultural prices and weather conditions.

For more information on the MINCOME project, please visit:

http://public.econ.duke.edu/~erw/197/forget-cea%20%282%29.pdf



45

(w) More food for thought...

INTEGRATED FOOD PROGRAMS

The Stop Community Food Centre bases their programs on community cohesion and self-reliance. The Community Food Centre (CFC) Model focuses on providing emergency access to food in a dignified setting, while also teaching a variety of food skills to build participants' capacity to make healthy food choices for themselves and their families. They believe that when program participants are involved in planning and decision making this helps to reduce the stigma and judgement associated with many food programs oriented to marginalized and vulnerable groups. The Stop also encourages participants to become involved in food and poverty related issues relevant to their own community.

To find out more about The Stop Community Food Centre, please visit: www.thestop.org/home

In Nova Scotia, the Dartmouth Family Centre has partnered with Community Food Centres Canada to explore the creation of a similar model in North Dartmouth within the context of unique community needs.

Dartmouth Family Centre website:

Community Food Centres Canada website:

www.dartmouthfamilycentre.ca

http://cfccanada.ca

Other similar models of integrated food progamming exist in Nova Scotia and Canada. For example, many family resource centres bring together emergency food programs, cooking classes and community gardens to participants, while supporting self-advocacy, enhancing social and community capital and contributing to community food security.



(w) More food for thought...

TORONTO'S MOBILE GOOD FOOD MARKET

FoodShare's Mobile Good Food Market is an example of a project that aspires to improve individual and community access to high quality, affordable, culturally diverse fruits and vegetables. The mobile market uses a retro-fitted truck to travel across greater Toronto, focusing on bringing healthy food to neighbourhoods that face both economic and geographic barriers to food access (especially those with high populations of seniors, newcomers, people with disabilities, and single parents with young children).

While the program prioritizes food that is local and seasonal, it also acknowledges the significance of foods that meet cultural and spiritual needs, with an understanding that these foods are sometimes not grown in Canada. The Mobile Good Food Market leverages FoodShare Toronto's existing infrastructure, partnerships and supports and builds on over two decades of work to improve healthy food access in Toronto. The Mobile Good Food Market works in partnership with community organizations and neighborhood leaders to manage all operational aspects of the market, and each market uniquely reflects its community and is a vibrant and important gathering place for neighbours to meet, share information and celebrate.

For more information about Toronto FoodShare's Mobile Good Food Market, please visit:

www.foodshare.net/mobilegoodfoodmarket









We were struck by the depth of connections between food and community throughout the many different conversations held with diverse community members across all four communities – food matters a lot! The following findings are drawn from participants involved in all of our qualitative research methods: interviews with those involved in local food, focus groups with mothers about breastfeeding, focus groups on supports for those vulnerable to food insecurity, Storysharing in relation to community participation in food-related activities, and Photovoice in exploring issues accessing food, as well as surveys and related research on the informal food economy.

➤ What We Learned?

In Nova Scotia, we enjoy growing, harvesting and sharing food. Food brings people together, provides a sense of culture, history and identity and is evidence of our self-reliance and our value for family and community.



"... I take it for granted how hard my dad works to get lobsters, especially as of two years ago ... it's a definite backbone in our community ... and I don't think we emphasize enough on how important it is that we keep it local and that bigger corporations don't come in ..."

 ${\it ``Community Member, Photovoice'}$





"Community caring, sharing and enjoying a meal together."



Photovoice: Anonymous

"... I think it feeds your soul, you know. Because there's not very many people that don't like companionship and friends and laughter."

~ Community Member, Storysharing





"Many hands make light work."



Photovoice: Anonymous

"It brings continuity. It's a way of the generations handing down from one to the other. It connects us ... it gives us an identity."

~ Community Member, Storysharing

Sharing food is one way we show support for each other and our communities, in good times and in bad. This also helps people feel connected to their communities and good about themselves. Many made a distinction between emergency food assistance programs and helping neighbours, because it's "... coming from the heart ..." (Community Member, Focus group on supports for populations vulnerable to food insecurity).

"I have a friend who has been sick and we ...
decided as a group of friends to get together
and provide her, provide meals for her while
she was going through her treatment ..."

~Community Member, Storysharing

Community members with whom we spoke feel we are at risk of losing food-related skills and knowledge due to increased reliance on fast food and convenience foods. As well, we're becoming disconnected from the sources of our food and no longer understand where it comes from. This can also be described as a loss of food literacy, "a collection of inter-related knowledge, skills and behaviours required to plan, manage, select, prepare, and eat food to meet needs and determine intake (pg. 54)."50 One farmer noted, "...we have a whole generation...that don't know where their food comes from." (Producer, Meat and Eggs). This is also true for hunting knowledge and skills, as one hunter said, "We are a dying breed. Without a doubt a dying breed. When our generation is gone, this hunting deal is pretty much history."⁴²

Communities support participation in a range of food-based activities, including exhibitions, community gardens, food sharing, community kitchens, feasts, and potlucks. Participants talked about a number of valuable community programs that are in place to help people learn cooking and preserving skills, healthy eating and cooking on a limited budget, including several run by food businesses and grocery stores, and spoke of the benefits of community cooperation.

"And we can work together and we can build ways that we can share, whether it be teaching one another or sharing ..."

~Community Member, Photovoice

While of great value, some expressed concern that the role of community supported food programs can sometimes be undervalued, including concerns about the consistency of services provided. As one service provider noted that "...great programs are offered for a short time due to funding restrictions and it would be excellent [to] offer them over a longer period."



"Anybody can come — as long as you're not in school. But we don't want just ladies — we'd like to have men come too, but — it's always just young ladies, and we have a fantastic group. And they're all lowincome. We have a couple ladies that work. But they, you know, they're not making big money. So we try to teach them how to make low-income meals that are absolutely delicious. We've had—we got the grant and then when we started running out of money, we tried to have a couple fundraisers. We did a yard sale...and we made \$110 dollars. But you know what; \$110 has kept us going for three months. It's a great, great thing..."

~ Community Member, Storysharing

"... [The government] should be providing financing to, to promote educational programs and other things like that but mostly I, I would prefer to see them investing in things rather than setting us up for long term reliance on them."

~Community Member, Interview about local food

Many service providers surveyed acknowledged that these food-based programs can serve as a gateway to other programs and supports to further enhance individual and community food security, reducing marginalization and barriers to inclusion.

Opportunities Identified by Participants

The presence of food-related social support and community connections was identified by case community participants as another valuable opportunity to establish an inclusive and secure food systems. During the research process, Nova Scotians acknowledged the varied role of food in terms of community identity, exchanging knowledge and creating community ties to the local food environment. Those who participated considered the inclusion of these factors to be integral in establishing successful community-based food programs.

Value the critical role food plays in our communities and its contribution to community development, community identity and environmental sustainability.

- Support networks, information sharing, infrastructure, and community assets to further enable sharing and exchanging food and being self-reliant in getting food (e.g., catching, growing, cooking).
- Ensure that practices, scale-appropriate regulations and policies support these food-related activities, nurturing these efforts rather than hampering them.
- Facilitate more working together, innovation and local leadership centred on food.

Continued >>>



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Improve and create new opportunities for people of all ages to learn from each other and increase food literacy.

- Integrate gardening and food preparation in school curricula.
- · Create and enhance opportunities for intergenerational learning, particularly skills for growing, catching, foraging, harvesting, preserving, and hunting, such as through mentoring programs.
- · Build on the success of initiatives that build critical food literacy, empowering participants towards self-advocacy and creating a sense of community through the development of human and social capital.

Strengthen and coordinate access to the diverse programs that are successful in connecting community members with food, each other and social supports.

- Evaluate programs and initiatives using meaningful measures as defined by participants.
- · Use insights from these programs to help strengthen and sustainably fund community-based food programs to ensure they are effective, inclusive, extend their reach and enable true capacity development and skill building.
- · Improve communication and navigation systems so people can better access community food security related programs and services.



(\mathbf{W}) More food for thought...

KIDS ACTION PROGRAM'S GREAT BEGINNINGS FOOD BOX PROGRAM - Annapolis Valley

The Kids Action Program's (KAP's) Great Beginnings Food Box is based upon the non-for profit structure of Toronto's Good Food Box Program. Program participants receive a subsidized food box of fresh produce, with home delivery as a complimentary service. As a result, KAP's Food Box Program provides valuable economic and social benefits for the recipients. The home delivery of the food box helps to augment the food budget of participants by reducing the need to pay for transportation. The subsidization of the program is another source of economic support that leaves participants with a greater budget for food or other expenses. Socially, KAP's Food Box Program promotes the development of support networks through the distribution of nutrition resources as well as interactions between staff and participants. KAP also provides a socially acceptable means for people to obtain affordable and nutritious foods, without the stigma associated with charitable food assistance. These examples demonstrate that the KAP Food Box Program is a valuable resource in improving community food security.





CONDITIONS THAT SUPPORT BREASTFEEDING

ACT for CFS partners consider breastfeeding a key component of community food security. Breastfeeding contributes to food security for infants and families and is a component of sustainable food systems. Further, the broader social and environmental aspects which foster or hinder breastfeeding in our communities are interconnected with those that influence food insecurity in other ways (e.g., marketing and food availability). As a result, community partners undertook research to provide insight into the factors that influence women in their decisions to begin and continue to breastfeed. We talked with both mothers who met their breastfeeding goals and mothers who did not meet their breastfeeding goals through focus groups and one-on-one interviews to better understand infant and child food security and how this related to community food security.



✓ What We Learned?

MIXED MESSAGES

Participants painted a picture of an over-arching conflicting and unsupportive culture for breastfeeding. While society tells mothers that breastfeeding is the preferred feeding method –something that "good mothers" should do⁵¹ – many people disapprove of the exposure of breasts in public.⁵²

"...I mean I just feel like breast milk is the best option for a baby. And we know that. The stats tell us that. But also from a...like a bonding, mom-child bonding perspective. Like the research, you know, tells us that that's the best thing for baby."

~ Mother, Breastfeeding Goals Met

"...mothers don't want to go out, or feel overwhelmed at the idea of going out — 'oh my God what if I have to feed my baby, I'm in the mall what am I going to do?' And it just stresses people...

It needs to be more acceptable..."

~ Mother, Breastfeeding Goals Met

For mothers returning to work outside the home, a lack of supportive policies and practices exacerbates their challenges. 52,53

"... They don't... A lot of employers don't want [you] to stop [working] so that you can go breastfeed..."

~ Mother, Breastfeeding Goals Met







"The family food cycle: Nursing mom needs healthy food"



Photovoice: Meghan Hapgood

SUPPORTS THAT MAKE A DIFFERENCE

These conditions and factors affect mothers' interactions with family members, friends, other mothers, as well as health professionals. Many participants discussed healthcare systems that neglect to recognize and address barriers women experience. Support from all of these groups is important to breastfeeding success and includes, but goes beyond, emotional support and encouragement.⁵⁴ As one mother described, "I think mom ...basically fed me and got me water, which I didn't realize until she left, it would be 2 o'clock in the afternoon and I hadn't eaten anything... "(Mother, Breastfeeding Goals Met). It is also about the people having the information they need when they need it, as opposed to offering opinions or inaccurate advice. For example, a common and powerful piece of misinformation relates to the belief that some women do not produce enough milk, which was mentioned by several participants and influenced their decisions to discontinue breastfeeding.

"...a lot of my family is just like "It's just so much easier to bottle feed. Why would you bother to go through that?" ..."

~ Mother, Breastfeeding Goals Not met



"... It's not that he [male partner] didn't support me...he was just constantly concerned that ... that she wasn't getting what she needed, because his mom had never breastfed and his grandmother hadn't breastfed, he hadn't been around anybody so he didn't know necessarily how it worked..."

~ Mother, Breastfeeding Goals Met

COMPLEX FACTORS

What society considers "normal" for feeding infants also influences feelings of judgment and stigma for women personally. Women feel powerful emotions of guilt and stress⁵⁵ with the judgment that comes from not meeting breastfeeding expectations—their own or those of others.

"I felt like ... I failed."

~ Mother, Breastfeeding Goals Not Met



"In the prenatal classes that I went to there was a pretty strong push. Quite honestly you are almost well...I have a guilt complex...but you would almost be made to feel like you were a second grade mother if you didn't..."

~ Mother, Breastfeeding Goals Met

Despite the challenges, several mothers perceived a growing acceptance of breastfeeding in the broader community, which was perceived as helping to promote breastfeeding as normal and natural, supporting women's decisions and abilities to meet their breastfeeding goals. Women were empowered by knowing they have a right to breastfeed in public. Individual confidence and self-efficacy may contribute to this empowerment, encouraging mothers to make their own decisions, maintain their commitment to breastfeeding and engage in self-advocacy.

"Like to make a choice that I am going to do this regardless of the looks I may or may not get or conscious of other people's discomfort but choosing to do it. And I think showing that confidence helps other people become more comfortable too."

~ Mother, Breastfeeding Goals Met





Opportunities Identified by Participants

As a key component of community food security, project participants identified the need for breastfeeding support. Establishing breastfeeding friendly environments and peer support networks were strategies discussed by participants, which would provide opportunities for increased public exposure and positive perceptions of the practice and allow breastfeeding mothers to share experiences. Normalizing both the act of breastfeeding, as well as the corresponding challenges, can make more women feel supported in their choice to breastfeed.

Foster and advocate for breastfeeding friendly environments.

- Highlight public breastfeeding policies and provide education and training for communities and businesses to implement them.
- Create breastfeeding-supportive workplaces by working collaboratively with employers (e.g., through workplace education programs, piloting flex time programs, Making Breastfeeding Your Business initiative).
- Continue to monitor and expand the implementation of Baby Friendly Initiative (BFI) standards in hospitals and communities. 56
- Support mothers, family members, and community voices in advocating for change when policies are not implemented and rights are not respected.

Create wide-reaching peer support networks to normalize challenges experienced by new mothers and provide opportunities to share breastfeeding experiences.

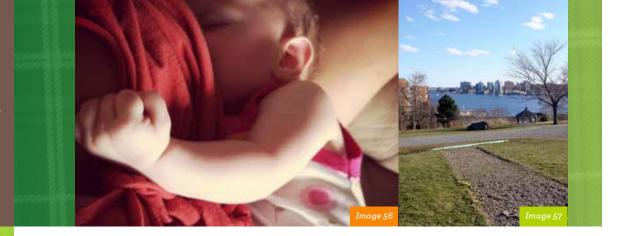
- Continue to fund and expand community-based programs and support groups for families, including making services accessible in rural communities.⁵⁶
- Increase accessibility to professionals that support breastfeeding, including midwives, doulas and lactation consultants.

Continue efforts that publicly raise awareness of the importance of breastfeeding to foster positive perceptions of breastfeeding and increase support.

- · Continue efforts to make breastfeeding more visible.
- Raise awareness publicly and integrate information about breastfeeding early in life, for example through school curricula.
- Profile and share success stories related to informed breastfeeding support.

Continued >>>





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Provide accurate information (and associated training, if appropriate) for mothers, families and healthcare professionals to aid women in making informed decisions and overcoming barriers to meeting breastfeeding goals.

- Ensure healthcare professionals and staff/volunteers within community-based supports who work with mothers and families are knowledgeable about how to encourage breastfeeding, show empathy for breastfeeding mothers and are non-judgmental. Past research has shown a need for increased funding and resources to engage and educate both health professionals and the broader community.⁵⁶
- · Sustain Public Health's critical role in creating supportive breastfeeding environments through their work to promote, protect and support breastfeeding.⁵⁷



(w) More food for thought...

PEER SUPPORT FOR BREASTFEEDING: THE FRIENDLY FEEDING LINE: MOM-TO-MOM PHONE SUPPORT FOR BREASTFEEDING MOTHERS

The Friendly Feeding Line is a telephone support program for breastfeeding women living in Yarmouth, Shelburne and Digby Counties of Nova Scotia. Women referred to the Friendly Feeding Line are paired with a "support mother" (volunteers trained in peer support and who have previous experience breastfeeding) prior to, or directly following, delivery until their baby is three months of age. The role of the "support mother" is to offer information, resources, and encouragement to breastfeeding women based on their knowledge and understanding of breastfeeding. The program strives to increase breastfeeding initiation and duration rates within their respective community and to help normalize and foster more positive breastfeeding experience

For more information about the South West Nova District Health Authority Breast Feeding Friendly Line, please visit:

http://www.swndha.nshealth.ca/pages/bfi.htm

Tatamagouche Peer Support: For another example of peer support, watch the documentary "Mama Milk" highlighting the success of breastfeeding moms in Tatamagouche, Nova Scotia:

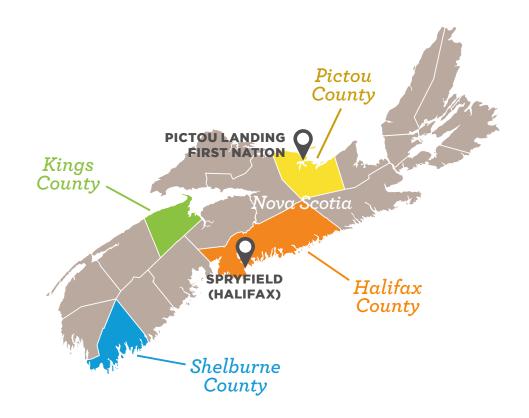
https://www.youtube.com/watch?v=YvTwTEkD7eQ







Our Nova Scotian communities are unique in many ways. Each of the four Nova Scotian case communities involved in this research chose to focus on one issue of particular relevance to their community and that was also identified by project partners as a priority in better understanding community food security in Nova Scotia.. While the issues and findings reflect each specific community, we believe the insights from this research will be meaningful to many others.





Community Profile: Eastern Shelburne County

Eastern Shelburne County's greatest strength may be its tight-knit community. An area traditionally sustained by its fishing industry, it's populated by the kind of neighbours everyone wants-warm, caring people willing to help each other in a pinch.

"There's a real sense of place here, a real sense of social capital," says Sheila Bird, Population Health Promoter for the South West District Health Authority. "We're very connected to each other and there are huge social supports here. In some ways, it's a really good thing. Everyone knows who needs what and they try to support each other."

In smaller, tight-knit communities, social support networks are critical for many to get by when times are tight. These social connections can also create challenges in addressing food needs in the community; for example, people may be too ashamed to use local food banks because of the stigma and judgment they experience. Often, they're already accepting help from family and they don't want the rest of the area to know they need support.

In an area with a number of small, isolated communities, this self-reliance has always been a part of life. After all, many of these communities don't have easy access to food or grocery stores. Eastern Shelburne County, for example, only has one major grocery store and one smaller, independent store. "Without transportation it is very clear that accessibility is a huge barrier for people,' explains local researcher Patricia Vanaman.

While Bird and the other group members involved in contributing to the community and provincial report set out to address some of these issues within the community, they also hope to help create awareness throughout the rest of Nova Scotia, working with others.

"The group that worked together on Photovoice literally committed three months of volunteer time into making Photovoice more than just a research project," says Bird. These volunteers embraced the participatory action research approach and not only took photos that tell the story of the community, but also set up exhibitsincluding two travelling exhibits-that displayed the work within the larger context of the project and helped to organize and host the launch of the exhibit.

The project itself has put the community's natural collaborative tendencies to use in new ways. The participatory nature of the research and the close relationships that have developed between members of the research team have inspired both members of the community and the research group to action new projects. One example is Shelburne Grows, a project spearheaded by the research team that promotes backyard gardening.

"One thing we all have here is access to land," says Bird. "We started by holding a community brainstorming event, and since then, we've held seed-sharing workshops, had people talk about different ways to grow, and started community gardens at the group home and the elementary school. It's exciting to think that we can use the research and start thinking about action."





Our Lobster, Our Communities

One community researcher, with support from community and university partners, conducted in-depth interviews with 15 individuals directly involved in the lobster industry in Eastern Shelburne County. The purpose of this research was to gain a better understanding of what is happening in the lobster industry with respect to price, distribution, regulations, opportunities and barriers, and selling locally. This research has resulted in a video "Our Lobster. Our Communities" (http://foodarc.ca/ourlobsterourcommunities) and associated report that is being shared across Nova Scotia to spark discussion and action. While this research is specific to the lobster industry, the experiences and lessons learned may hold relevance for other fishing communities and for other fisheries in the province.

What Was Learned

Situated on the Southeastern shores of Nova Scotia. life is linked to the sea in Eastern Shelburne County. The local economy has always revolved around a range of marine-related industries, including lobster and other fishing, and shipbuilding. Those involved in the lobster industry are incredibly passionate about their work lobster fishing was never described as a job, rather, it was an integral part of one's heritage and livelihood.

> "You get too far away from salt water and we start to get a little twitchy ..."

> > ~ Lobster Industry Professional



"... I was born, bred, growed up fishing ... The easy part of it is you love it ..."

~Lobster Fisher

The rich histories of Eastern Shelburne County as a fishing community play a central role in how people are connected to, and define themselves as, individuals and as a community. Lobster was described as a strong economic driver for the local community and vital part of the sustainability of rural and coastal areas of Nova Scotia. As such, it needs to be supported and preserved.

"... That is all we have now is the lobster industry and with that lobster industry it is what is keeping our town alive..."

~Lobster Buyer

Lobster fishers, however, face many challenges. Our data show how the perceived over-regulation by the government can lead to feelings of dishonesty, uncertainty and mistrust among those involved in the industry and in communities.

"...so many rules and regulations and fishery officers peeking up through the bushes and hiding around the wharves, trying to catch you for doing something. Yeah, the government made my life hell really. ..."

~Retired Lobster Fisher

Respondents clearly saw no place for a quota system in the lobster fishing industry. The industry is not currently regulated within a quota system, but participants feared implementation of a quota system as a potential and foreseeable challenge that could have irreversible and negative implications on the lobster industry.

> "... I think [the quota] is going to be the ... destruction of the lobster industry ... if it ever comes to quota, and big companies can buy the quotas ... they'll have one boat fishing the five licenses."

> > ~ Lobster Buyer





Our research also suggests that the lobster industry has undergone some major changes – both positive and negative. This includes, among many things, increases in catch, changes in technology and equipment, and the increasing age of harvesters.

"We say that the big change of lobsters, there's so many more lobsters. And they're numerous. Lobsters are numerous ... My opinion is, and barring something happening, there's a big lobster fishery for quite a few years to come."

~ Lobster Fisher



"...back when I started ... there would be 3 or 4 young guys that would buy an old rig somewhere and go for the season ...Younger people around.

It's unusual today."

~ Lobster Fisher

When it comes to selling lobster, participants made it clear that the majority of their product is being distributed and sold outside of Nova Scotia. As one fisherman noted: "... I would say between 90...around 95% I would say leaves Nova Scotia, if not higher. You said why? Because we haven't got the people to consume the amount of lobster that we land ..." (Lobster Fisher). While there was certainly a desire to sell more lobster locally, there is not a large enough market for lobster in Shelburne and surrounding areas to enable fishers to make a viable income only through local sales.

"And in terms of selling locally, the challenge of course in Shelburne County and any county and my county is population. There are only so many people."

~Lobster Industry Professional

The price of lobster determines a fishing family's income and is based on a complex balance between supply and demand in a globalized market with lots of intermediaries.

"Yes, that is the simple – supply and demand.

When the demand is high, and the supply is not so much, the price has to go up. So at the beginning of the season, there's a lot of supply. Right?

And then the demand is the same as before.

The price has to go [down]..."

 ${\it ~~Lobster~Buyer}$

Lobster fishers try to maximize their income under these circumstances, but many things are out of their control, or in the instance of "holding" lobster, involve considerable financial risk.

"... I mean we're all looking for the best price we can get. And that's how the whole business operates anyway. What I do, I have holding facilities. ... And depending on the quality, if they're good hard-shelled lobsters say in the fall, and the price is good, I'll sell them. But if the price is low, I'll save them. I have like a system where I hold them in cages, crates."

~Lobster Fisher





Participants Identified the Following Opportunities

Participants valued the local lobster industries as a food source that makes a contribution to the local food system, as well as significant aspect of community identity. Participants identified increased local control, price regulation and local marketing strategies as opportunities to establish sustainable and effective lobster industries throughout Nova Scotia.

Ensure local control over the lobster fisheries, so that people in the industry and their communities have a voice in key decisions and pricing.

- Maintain owner-operator fleet separation policies that keep lobster fleets separate from processors.
- Create and strengthen policies, practices and regulations that favour small-scale operations. Remove or change those that create unfair advantages for large-scale fishery operations.

Explore regulation and pricing options to ensure a fair price for fishers.

- Investigate a tiered pricing system that recognizes differences in quality (e.g., hard shell, soft shell) with appropriate value.
- Push for more and broader community and industry engagement in examining the impacts of potential quota systems and other regulations on the lobster industry.

Increase local demand/market for lobster by promoting our product, locally and globally, as quality food we can take pride in.

- Market Nova Scotia lobsters within the province, across the country and around the world.
- Use direct sales to grow the local market within communities.

Take action to ensure the economic and environmental viability and sustainability of the fishery.

- Provide incentives to ensure new fishers are able to enter the industry and create succession strategies to foster the retention of skills and knowledge (e.g., through mentorships) and ability of fishers to retire.
- · Take action on climate change to ensure the long term sustainability of our oceans and lobster habitats.





Community Profile: Northeastern Kings County

In Northeastern Kings County, food is in abundance. There are acres of lush farmlands and produce-rich orchards. In fact, there's so much food that it's literally lying aroundafter falling off the trucks that carry the food out of the Valley. And according to Debbie Reimer and Donna Ellis of the Kids Action Program, this is where many of the area's food access challenges stem from.

"It amazes me that there is food insecurity in this Valley, when it such an amazingly fertile location," says Reimer. "A lot of our food is grown here and yet, we ship most of it out. Meanwhile, here in the Valley, we have people who can't afford to eat."

Ellis says that many of the food security problems in the area began about twenty years ago when the first large grocery store opened in New Minas. According to community members, there used to be plenty of smaller grocery stores, and you could always buy food at the end of someone's driveway. But the new larger grocery store spawned a price war with the other retailers in the area, and eventually, many of the smaller stores began to close.

"It's quite a distance to get to a grocery store now," says Ellis.

"There are still a few other stores in the area, but they're smaller and more expensive. And there's no bus service, so people really need a vehicle or someone else to drive them around."

Reimer believes that the ACT for CFS study has helped them raise awareness of food insecurity, an important first step towards resolving some of the challenges identified in the research that they conducted in partnership with others. One of the key challenges identified by the research, and highlighted by both Ellis and Reimer, is the judgment and assumptions that people experiencing poverty and food insecurity face within the community.

Common assumptions about people experiencing food insecurity – for example that they lack knowledge around healthy food choices or cooking and budgeting skills – fails to recognize the root causes of food insecurity.

Reimer shares a friend's comments about this problem: "I don't need people telling me that I need to change how I eat. I know that, but I can't afford to buy healthy food. I buy what I can afford."

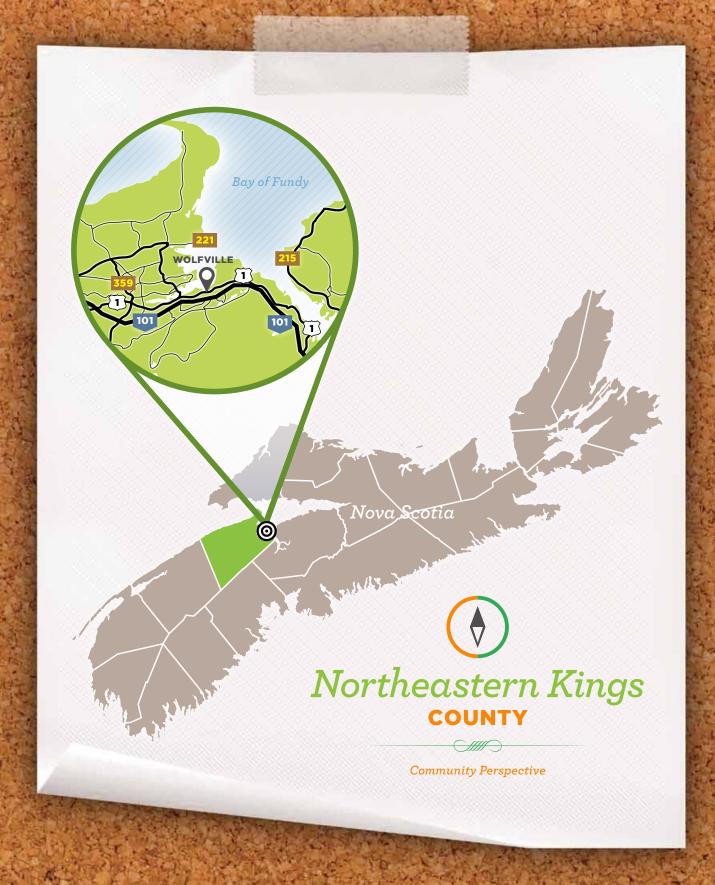
The awareness driven by the collaborative, community-based participatory research process isn't just removing assumptions and stigma, it's also connecting people who, until now, have been working separately on issues of food security.

"Through this work, I've realized that there are many, many other people working towards these goals out there in the community, and it's only through participating in these projects that I've connected with them," says Ellis. "We're all starting to work together."

Throughout their involvement with community-university research, Ellis and Reimer have worked on a number of related community projects. They've been delivering food boxes to pregnant mothers, they've planted a vegetable garden at the local daycare, and they've consulted on the new daycare food regulations.

Reimer spoke of one particularly innovative idea that they got off the ground: "We did backyard gardening in dirt bags. We had to use bags of dirt because some people had nothing to plant in, since they didn't have the land. So we said, 'We'll figure this out. If you don't have dirt, we'll bring the dirt to you."





Changes in Farming in Northeastern Kings County

Community researchers conducted in-depth interviews with 12 individuals directly involved in farming in Northeastern Kings County to understand current community infrastructure and support for local food production, processing and sales, potential changes in local production, processing, farming (including loss of farmland), and the economic realities of farming. We talked to people who farm in a variety of ways, including organic farming, seed-saving, meat and dairy production, u-pick operations and small and large operations, some new and some passed down through generations.

What Was Learned

Running 126 km in length between the North and South Mountain ridges and along the Bay of Fundy, the Annapolis Valley is one of the most vibrant and productive agricultural areas of Nova Scotia. Currently known for apples, wineries and mixed produce, the Valley historically produced fresh and canned products for much ofthe Maritimes and Northeastern United States.

As with lobster fishing, for some people we spoke with farming is a lifestyle that is integral to individual and community identity and heritage. We heard that it is important to value farming as integral to the vitality of communities and to ensure access to healthy, sustainable food.

"It's part of who I am. I don't know anything different. I grew up on a beef farm... I can't get away from it as hard as I try."

~Farmer, Participant 2



"... Farming is a lifestyle, not a job ..."

~Farmer, Participant 7

Participants spoke of an aging farming population and the need for new farmers, including opportunities for individuals to take over established farms (vs. starting from scratch), although either option was described as cost prohibitive unless ownership was passed within families. They also spoke of the critical supports that aided them in the start-up phase of their careers, including gaining hands-on knowledge, skills and mentoring from their own family, community members and/or other farmers. There were, however, insufficient governmental and formal financial incentives and programs aimed at supporting farming and young farmers.

Earning a living from farming takes a lot of work. Participants spoke of the skills needed to produce food and keep up with the daily business of farming.

"... Let me tell you, to work on a farm, you've got to achieve some skills ... And know that, you know, life isn't simple. You know, farming is complex.

A lot more complex than what people think."

~Farmer, Participant 1

Several participants spoke about the economic challenges associated with farming. For example, rising costs of farm inputs put a strain on farmers: "... costs have gone up substantially. Even in some cases, three times as much. If you look at your input costs, they've gone up three-fold..." (Farmer, Participant 3). The farmers we spoke with use a diversity of strategies to manage, including sometimes working off-farm to supplement their incomes, particularly early in their careers.

While important, regulations designed to protect agricultural land also contribute to the conflicting economic realities for some farmers.

"... If a farmer wants to sell their land, they're not allowed to sell their land. Well, what's the retirement fund? It's not like we have a pension plan..."

~Farmer, Participant 2



"... You know, it's not a black and white issue. It's shades of grey. And it needs to be treated that way ..."

~Farmer, Participant 7

Direct sales (farmers' markets, for example) offer farmers opportunities to both increase sales and financial returns, as does diversifying the business (e.g., through agri-tourism). But, there's a need to market their products, not just produce them, and participants mentioned some government programs that help.

"... I am glad the government put together the whole Buy Local movement ... And the Select Nova Scotia really highlighting Nova Scotian products with the restaurants. And I think Taste of Nova Scotia has been a good one ..."

~Farmer, Participant 9

This is tempered with the reality that trying to earn additional income by developing new products and business relationships takes time and resources.

"... We either don't have time to do it or, if we hire somebody to help us with it, it's a lot of money going out and not much money coming in..."

~Farmer, Participant 10

Being able to offer a steady income and benefits to farmers and farm labourers helps people stay in farming and in the community. But, the work is demanding, requires skills, the hours are long and irregular, it's seasonal employment, and employee wages are often only at or just above minimum wage – an amount that many participants said they struggle to afford. As a result, many with whom we spoke said that they find it hard to attract and retain local labour; "to find good people, it is difficult" (Farmer, Participant 4).

Several participants described how workers brought in as migrant workers through the Seasonal Agricultural Worker Program (SAWP) or Temporary Foreign Worker Program (TFW) for Occupations Requiring Lower Levels of Formal Training) have been playing an increasingly important role in the viability of farming in the area. Between 2006 and 2010, the number of SAWP workers entering Nova Scotia under the program almost tripled (from 322 to 985). Season Government wage subsidies for these workers are a benefit for farmers, but programs don't necessarily cover the additional housing and living expenses employers also need to provide; some participants felt that the net benefits of the subsidies are not as high as they may initially appear.

"I think they're [migrant workers] playing a huge role. I would say from my observations on a lot of the farms in the area, 75% [to] 80% would be migrant workers, at least ... it might even be 95% migrant workers now."

~Farmer, Participant 3



"... Obviously it's cheaper for farmers to hire migrant workers because they only pay half the wage. So the government is subsidizing that. And if the government would subsidize Nova Scotians you might see a different story."

~Farmer, Participant 9

The treatment of farm workers, particularly migrant workers, was described by participants as variable and seemingly dependent on the individual farmer and situation. It may also be potentially dependent on which program is being used to access the workers, as the SAWP and TFW program differ, but with evidence that workers do not always benefit (experiencing social isolation and becoming vulnerable to potential human rights abuses).⁵⁸ This program takes advantage of the needs of farmers trying to secure their harvest as they face rising costs and the needs of foreign workers seeking employment far from their home countries. This program takes advantage of the needs of farmers trying to secure their harvest as they face rising costs and the needs of foreign workers seeking employment far from their home countries, but does not create long-term solutions to the issues faced by both groups.

Participants spoke of other changes of concern in farming, including a shift to grow more corn and soy because of their profitability, which has made land more scarce and costly for those seeking to expand existing or start new farms. Some also spoke of concern for increased use of GMO (genetically modified organism) crops and viewed organic farming as an opportunity for entrepreneurship in agriculture.



$oldsymbol{Q}_{oldsymbol{c}}$ Participants Identified the Following Opportunities

Participants emphasized a number of opportunities to address the challenges identified relating to the vibrancy and sustainability of local food production. In particular, participants stressed a need for supports that would enhance both economic viability and environmental sustainability for existing small-scale farms by encouraging new entrants, using initiatives such as pension options, financial incentives, training and mentorship programs, and improved marketing of local products.

Continue to support and enhance existing educational programs for small-scale and new farmers.

• Strengthen and invest in educational programs relating to farming knowledge, business, and marketing, including formal and informal training and mentorship (e.g., ThinkFARM).

Address issues that impact the economic viability and sustainability for small and family farms.

- Increase investments to expand opportunities for improved marketing, direct sales and the development of specialty products.
- Increase investments to expand programs that help consumers value and experience local agriculture and see value in a sustainable agricultural sector.
- Explore pension options for farmers and other programs to lessen the need for farmers to sell vital agricultural land to support their families.
- Advocate and facilitate more and broader community and industry engagement in determining regulations and zoning practices to retain agricultural land and healthy seeds and soil.

Grow opportunities for the Nova Scotian labour market within the agricultural sector.

- Investigate possibilities for facilitating local hiring for farm workers (e.g., through subsidies) and reducing dependence on temporary foreign workers.
- Enhance financial incentives and supports for new farmers to access and afford land and equipment, particularly opportunities to take on existing farms from retiring farmers.

Create mechanisms to protect the natural environment and increase sustainable agricultural practices.

• Create programs to encourage more organic farming (e.g., assistance in transitioning to organics, financial assistance for required infrastructure and certification, marketing of organics and other sustainable practices).





Community Profile: Spryfield (Halifax)

Food has always played a major role in the Spryfield community. From its very beginnings, when Captain William Spry began using the land to grow crops and raise livestock, until the late 1960's, when lost farmlands and increased urbanization made farming unsustainable, the community was generally able to support itself by consuming and selling its own food.

Now, the Spryfield area is a sprawling mix of rural and urban communities, with the Village of Spryfield at its core. According to Kristen Hollery, Community Ministry Director at St. Paul's Family Resources Institute, the centralization of resources within the Village of Spryfield can leave neighbourhoods and outlying communities fairly isolated. This can cause problems for low-income community members and those living in rural neighbourhoods, like Sambro and Harrietsfield, which only have once-a-day bus service.

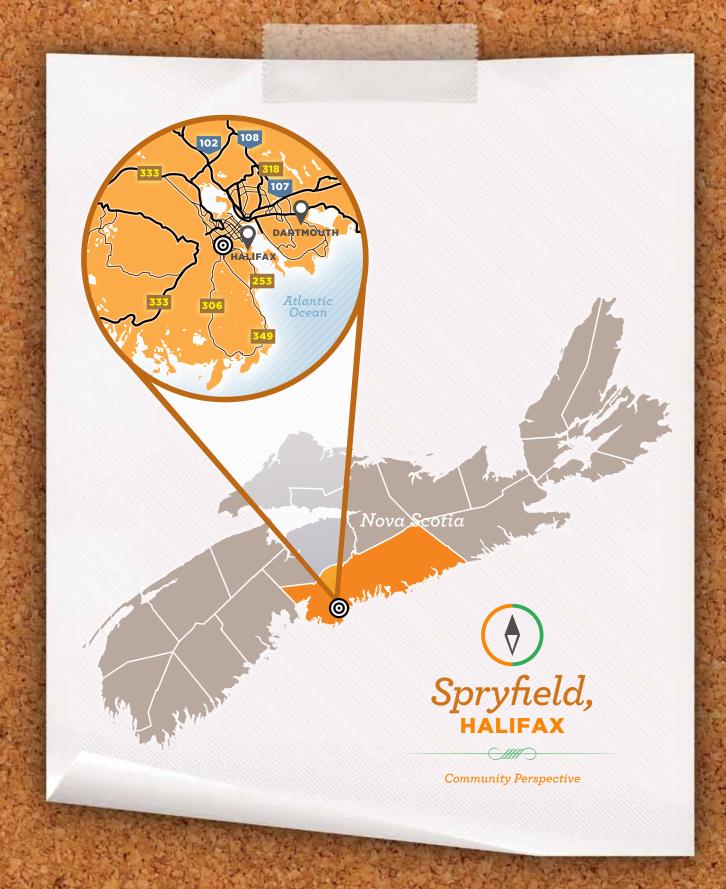
Over the last twenty-five years, Marjorie Willison of Chebucto Connections has witnessed a range of challenges experienced by many different community members relating to food – from nursing mothers to seniors to new immigrants to families struggling to pay bills—including low rates of breastfeeding, a lack of access to healthy, affordable food, and people's desire for local and culturally appropriate foods.

When Hollery and Willison heard about the opportunity to work on a community food security study that would highlight the issues and raise awareness, they decided to get involved. And the findings were more or less what they expected. "I used to volunteer at one of the local elementary schools, and I'd see the same kids out all the time," says Hollery. "Through the research we heard that kids weren't coming to school because they didn't have enough food and they were scared that child services would come get them. It validated my thoughts and made me really sad."

The community-based research team in Spryfield had success with their focus groups, surveys and interviews. It was important to offer food and babysitting money to support community members to participate, "and people like to give their opinions, so if you give them a venue where they're going to be heard, your response will be that much better" says Hollery.

The fact that the community now has the solid data on community food security generated by the study gives Willison hope; "We're excited to share the results with the community and engage community members in conversations about how to create positive change."





Access to Foods for Needed Special Diets in Spryfield (Halifax)

Community partners conducted interviews with 12 community members living in the Spryfield area to better understand the kinds of challenges and barriers they experience in getting foods relating to special diets (e.g., foods that are culturally, religiously or ethnically important), foods needed for health reasons (e.g., to help manage diabetes or gluten intolerance) and preferred foods for philosophical reasons (e.g., local foods, vegetarian foods, etc.). Participants identified seeking foods for themselves, a member of their family, or their entire family, and offered a range of reasons including: celiac disease, intolerances to dairy, wheat, and lactose, dairy free, vegetarian for religious reasons, culturally specific foods (e.g., goat), and local foods. These kinds of foods may be harder for people to find within their community and may be more expensive.

🗹 What Was Learned

Spryfield is a suburban community within Halifax City, with only two grocery stores in the neighbourhood. The community is culturally diverse and has a relatively high immigrant population.⁵⁹ In 2011, one quarter (25.9%) of Spryfield residents were of low-income (higher than the Nova Scotian average of 17.4%), which impacts the ability of many to access the foods they need and prefer. 60

The residents we spoke with said the foods they need and prefer are not available at local grocery stores, so they must leave the area to buy them. Participants often spoke of seeking preferred foods in specialty stores in other areas of the city (e.g., stores specializing in certain cultural foods) or other grocery stores with larger selections of speciality foods. This results in increased transportation challenges.

"We like...goat meat but we cannot easily find it because we need to go far away and [it's] always expensive also."

~Community Member, Participant 11

For some wanting culturally appropriate foods, the products "from home" are just not available or need to be ordered online. And, higher costs are also a challenge.

"... they are certainly more expensive than your regular foods, like, a loaf of bread you could pay six dollars for..."

~Community Member, Participant 9



"We don't always have the money ... it seems like everything healthy is more expensive ..."

~Community Member, Participant 1

If food is not affordable in Spryfield (in an urban centre), then it may present an even bigger barrier in small and rural communities.

Some participants mentioned the challenges of eating outside the home, in addition to being unable to physically access and purchase raw ingredients within the community. A few participants also spoke about the need for better food labels and signage, so that people are informed about food ingredients, both in stores and community settings (e.g., childcare and resource centres).

Participants also spoke of supports and opportunities to improve access and affordability to foods for special diets, including: delivery services, bulk buying and increased variety in existing stores. One person wished that healthy foods and foods needed for special diets were more available through the food bank. Another participant suggested that growing food in the community (e.g., through backyard and community gardens) could help.



• Participants Identified the Following Opportunities

Participants were able to identify several specific supports and opportunities to improve access and affordability to foods needed for special diets. This includes improved access to information, financial assistance and other support programs for families with special dietary needs. Increasing awareness of these needs and the opportunities to address them with service providers and local businesses within communities would help ensure community-based initiatives are more responsive to this need.

Improve access to information, financial assistance and programs for families with special dietary needs.

- Review special diet allowances for people receiving Income Assistance to better reflect the true, higher cost of many health-related special diets.
- Ensure individuals and families are aware of available financial assistance and remove barriers to accessing assistance.

Raise awareness of the needs and opportunities to improve the variety and availability of preferred foods needed for special diets in the community.

- Increase education about special dietary needs and preferred foods with businesses, community-based service providers (e.g., food banks, community programs, childcare centres) and health care providers, including the need for labeling of foods.
- · Advocate for local businesses to provide increased variety and availability of foods needed for special diets.

Continue to support, expand or create programs that improve access to preferred foods and foods needed for special diets.

- · Strengthen and sustain opportunities and programs for backyard and community gardens and food sharing.
- Initiate and facilitate community cooperation, such as bulk buying and shared delivery options.
- Provide transportation assistance (e.g., community transportation, increased transportation allowances) for those needing to travel outside the community to access foods for special diets.



Community Profile: Pictou County

Pictou County is a rural area that's historically relied on a combination of industry and agriculture. It is also an area that has recently experienced a number of job losses and environmental challenges generated through its industries, impacting community food security in the region. Pictou County residents, organizations and businesses are working together to meet these challenges head on with community and entrepreneurial spirit. This approach of coming together to address challenges is one embraced by the Pictou County Food Security Coalition. As Lindsay Corbin, Public Health Nutritionist with the Pictou County Health Authority and chair of the Coalition, says, "We were really interested in the participatory action research process as a way to engage community members directly both the general public and producers - to understand their experiences and ways we can all make a difference."

The community was enthusiastic about participating in the overall research, particularly when it came to the interview process. Abby Brothers, one of several community-based researchers with the Coalition, believes this was because she was able to arrange the meeting times around research participants' schedules. She laughs as she explains, "For a couple of the interviews, I followed them around a field and asked them questions while they worked. For others, I'd chat with them for an hour or two while we had coffee, and they really liked that."

While not always included in food security work, breastfeeding is a very important aspect of this issue. For Coalition members familiar with breastfeeding issues, there was no surprise about the predominant attitude towards breastfeeding expressed in the

research. Brothers shares that "The younger mothers aren't as comfortable breastfeeding in public, and they really need support from their families and others, but they aren't getting it."

Brothers says that her collaboration with the Pictou County Food Security Coalition gave her the opportunity to make a difference through smaller offshoot projects. "For example, when I was doing research with one of the groups, they identified that growing garlic is great for mental health. We were able to base a project on mental health and how to grow garlic. It was really valuable because garlic's really expensive to buy in the stores. Those little side effects were great."

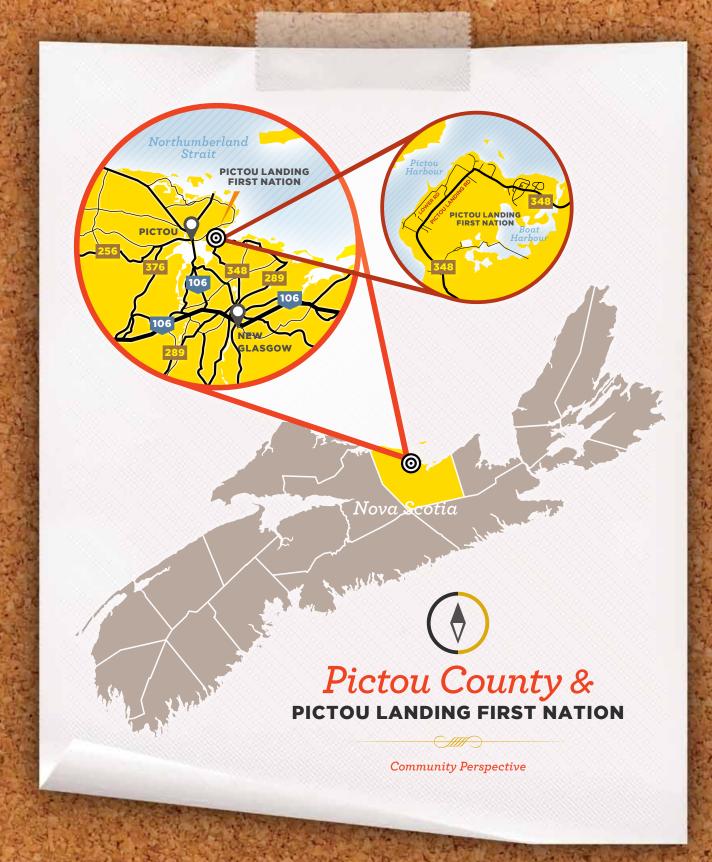
It's not just the little projects, though, that are making a difference. "Being part of a provincial project on community food security is helpful for us, because it connects us to other communities and organizations," says Corbin. "We're using the momentum from the research to hold community events to share our results and get people excited about action."

Community Food Security in Pictou Landing First Nation

Community members from Pictou Landing First Nation embarked on a separate research project to explore issues relating to community food security and food insecurity.

Through Photovoice and Storysharing residents highlighted the impact of pollution as major concerns. "The mill pipes wastewater effluent directly into Boat Harbour, which is part of this First Nation community," says Corbin. The research conducted by members of Pictou Landing First Nation was very powerful in showing that "They used to fish from Boat Harbour, and they can't anymore. Also, it affects their soil, so they're hesitant to create community gardens and grow their own food."





Community Food Security in Pictou Landing First Nation

Sparked by initial conversations within Pictou County about the need to better understand issues surrounding Aboriginal food security in Nova Scotia, Pictou Landing First Nation representatives became engaged and initiated a community-specific project. With funding support from the Atlantic Aboriginal Health Research Foundation and ACT for CFS, this project explored community food security/ insecurity in Pictou Landing First Nation. The final report, a policy brief, and accompanying video can be found at:

foodarc.ca/project-activities/pictou-landing-cfs/

There is a need for more research and action to address food security in First Nations communities.



🗹 What Was Learned

Community-based Researchers in Pictou Landing First Nation engaged community members in learning about community food security through local events and in research activities, including creating an inventory of resources, programs and gaps in the community, as well as using Storysharing and Photovoice to identify and explore local issues.

Participants from Pictou Landing First Nation identified a number of assets that contribute to their community food security including Elder knowledge, their school meal program and kitchen staff, community gardens and the Aboriginal Diabetes initiative. However, several challenges and concerns were also identified.

There is no grocery store and only one convenience store in the community. With no public transportation and the closest grocery store a 20-minute car ride, accessing healthy food is a challenge for community members.

"A lot of people ... can't get there [to the grocery store]. It's not that they don't necessarily have the money...to buy the groceries, but to pay twenty bucks for a taxi both ways...why would you wanna blow that kind of money?"

> ~Community Member, Pictou Landing First Nation, Storysharing 61

Low family incomes make it challenging for people to afford healthy foods. This is compounded by the lack of local food and transportation, limited cooking skills (for some) and limited access to traditional foods.

"When it comes to diabetic food I know what you're supposed to eat and what you can't eat and what you're supposed to buy, but planning to afford it is something else."

> ~Community Member, Pictou Landing First Nation, Storysharing 61

Pictou Landing First Nation is located next to Boat Harbour where, since 1967, the wastewater effluent from the Abercrombie pulp mill is piped for the solids to settle before the water makes its way to the Northumberland Strait. The smell from the mill and effluent, and the pollution of water and soil, means people don't trust the soil due to fears of contamination. It also limits access to traditional local foods, such as berries, seafood and wild game.

"Everybody else down here used to pick berries and have gardens, and they used to eat from the gardens, carrots, potatoes, corn, peas, tomatoes, whatever, and now these days, you can't do that. We'd eat a lot healthier then.

We used to live off the land, and we used to swim down at the shore [now an unsafe swimming area] before pollution came, and we would never even go home for lunch. We'd have strawberries, and blueberries, and green apples, and sore stomachs after too! (Laughter) But all we would do is dig out clams at the shore, and bring a pot and cook clams there."

> ~Community Member, Pictou Landing First Nation, Storysharing 61





Participants Identified the Following Opportunities

The following recommendations emerged from Pictou Landing First Nation through their research project and are reproduced here word for word from their report:⁶¹

Improve community availability and access to healthy and traditional foods

- Bring back Tapitat market (small road-side market that used to sell farm-fresh produce from Pictou County, based on season and availability).
- More community gardens/ greenhouse/ raised bed gardens.
- · Look into partnering with a farm to grow produce on one part of their property.
- · More healthy foods in the existing store.
- Community freezers/community storage (for wild game and bulk buying).
- · Food deliveries and/or meals-on-wheels for elders.
- · Shuttle service for grocery shopping.

Create more supports for individuals and families in emergencies.

• Create a food bank for emergency relief (currently, community members need to travel to New Glasgow with no transportation supports).

Support learning about food and sharing food and healthy living.

- Budgeting classes.
- · Make greater use of the existing Food Mentoring Program.
- More inter-generational events where youth can learn traditional foodways (e.g., hunting, fishing, mushroom/berry/medicinal plant picking, etc.) from elders.
- Find ways to organize events such as regular cooking and canning classes, gardening workshops and organized moose hunts for women and youth.
- More food education in the curriculum -e.g., hands-on garden work and visits to farms.
- · School food policy.
- Involve all school kids in meal/snack preparation or menu planning.

Continued >>>



Continued from previous section...

- School kitchen staff are already a resource for food budgeting, cooking healthy inexpensive meals find ways to utilize their knowledge without overworking them.
- · Continue disseminating information on existing resources about healthy eating.
- Offer programs that can support greater access to physical activities.
- Explore the possibility of improved after-hours access to the gymnasium for youth.

Advocate for policy changes and action at different levels of government.

- There is a need for all levels of government to take food insecurity more seriously –those in position of power rarely experience such challenges and there is a need to bring food (in)security more effectively to the forefront of social policy.
- Take the issue of Boat Harbour pollution seriously at all levels of government and start to remedy the environmental damage.
- Adjust social assistance rates for lone parent families to allow for purchase of nutritious diet.
- Offer programs that can support all of the recommendations from Pictou Landing First Nation and in other Mi'kmaq communities.







This Nova Scotia study of community food security shows that food is central to our communities, and that it is vital we make food matter in order to create the conditions for healthy, just and sustainable food systems.

We are a resilient and resourceful people, skilled at earning a living and feeding our families from what is around us.

"I take it for granted how hard my dad works to get lobsters ... I think it's definitely a backbone in our communities, our lobster and our fishing industries and I don't think we emphasize enough on how important it is that we keep it local and that bigger corporations don't come in ... I mean, our communities wouldn't be here if it wasn't for lobstering and fishing."

~Community Member

Our world has changed, and we're part of global food systems like everyone else.

"We're a grocery store society. We've been raised to be that way. People go in and they want the strawberries to look like they're fresh and they just came off the truck yesterday. And to do this, the grocery stores go to the most economical and most cost efficient ... source."

~Manager, Farmers Market

These changes have implications for our local economies. For example, small and medium sized family owned farms are disappearing at an alarming rate and those holding on are struggling to make a living.

"And it's actually, right now it's going the other way in Pictou County, we're losing producers. ... because they, they can't make a living at it ..."

~Cooperative Beef Farmer

And, many Nova Scotians do not have enough to eat, or worry about feeding themselves and their families.

"I've seen kids - kids, mind you - eating out of green bins.

That was a real wake-up call for me."

~Community Member





Perceptions and assumptions are predominant in how we think and talk about others' experiences with community food security and can get in the way of working together for change.

"For me personally, it's gone past humiliating, it's gone past the point where you cry. You come home [from the food bank] and you have your little bags of groceries and, how am I going to feed my children with this? Although I'm very grateful, how, how do I...?

You sit there and cry and think "what can I make? Can I make a soup?

~Community Member

There are many contradictions to overcome.

"It's a sad thing because the farmer's not really asking too much at that higher price at the farmers' market ... it's a fair price. ... But there is, for a long, long time farmers haven't got a fair price for their food. ... I think people are ... a lot more willing than they used to be to buy local food ... I don't think it's because the middle to lower income people aren't willing to, it's because their budget maybe just won't allow them to."

~Mixed Produce Farmer

But, we have all the ingredients for community food security, and the support and momentum for change is growing.

"The way I describe it and the way I think of it is - when you're waiting for a pot of water to boil and at first you just get these little air bubbles – just the trapped air and not a proper boil?

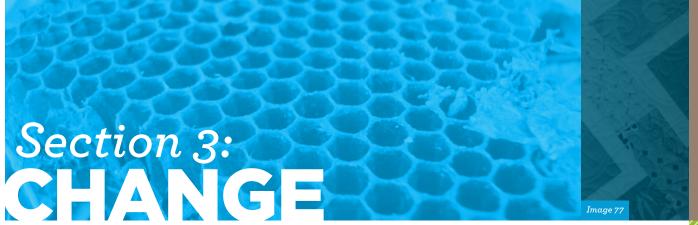
That's what it was like for many years. But now the water is starting to boil because there's so much going on. As soon as something gets into the general population, then it's not just the foodies or the few people who think it's a good idea, but people, generally."

~Backyard/Community Gardener

There is no one solution to addressing challenges described by participants, thus requiring a range of diverse and coordinated efforts through the involvement of multiple stakeholders. The path forward will require us to work collaboratively, holistically, systemically and cross-sectorally to address the various fields, policies and practices that influence community food security in Nova Scotia.

The time to act is now. Nova Scotia is what it eats! We believe community food security provides an important opportunity to drive local economic prosperity, strengthen our communities and support good health, for all Nova Scotians.





Introduction

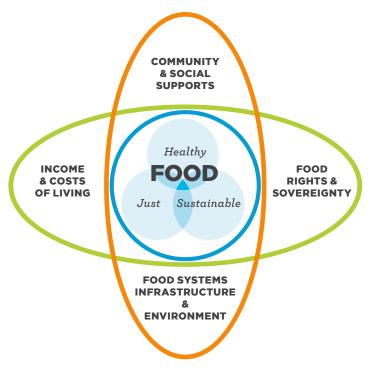
Section 2 of this document described the experiences of research participants relating to different indicators of community food security, along with a range of complex and interconnected challenges and opportunities.

These findings align closely with what is known about the social determinants of health, including the influence of individual determinants on food security, but also the intersectionality of these determinants at an individual and community level. These findings point to the need for an integrated approach to creating the conditions to support health and recognize and address the social and economic forces that impact community food security. These findings point to the development of social and community capital as key to creating food systems that are healthy, just and sustainable.

The findings of this Nova Scotia study on community food security also align closely with an agroecology framework, ²¹ which places environmental and economic sustainability, democratized control over food systems, and alternatives to the current industrial food systems at the heart of what is needed to realize the right to food. Our findings suggest that these principles need to extend to fisheries, given the importance of fishing as a food source and role of fishing industries as the economic backbone of many coastal communities in Nova Scotia.

We have drawn from the frameworks that inform our understanding of community food security, these research findings, the expertise and knowledge of ACT for CFS team members, and other governmental and organizational policy initiatives and recommendations to create the framework depicted here. It reflects the broad intersecting fields that influence community food security, with food at the centre, along with associated approaches needed to make food matter.

Positive change in each field can contribute to achieving healthy, just and sustainable food systems, but could also impact a related field – either positively or negatively. Building healthy, just and sustainable food systems also means building healthy, just and sustainable communities and societies. It is vital that we take a holistic approach and reflect not only on the opportunities for addressing multiple, interrelated issues, but also the risks of not doing so.



Below is a description of each field of influence with an associated goal and a range of strategies encompassing short-term improvements and longer-term systems change through practices that are relevant to:

- · Citizens and community leaders;
- · Students, academics and universities;
- · Non-profit organizations and advocates;
- · Municipal governments;
- · Provincial governments and departments;
- Federal government and departments (including federal roles in international bodies);
- Food producers and food-related businesses.

While each group has a responsibility to seek opportunities for change within its own sphere, we all have a responsibility to work across sectors, jurisdictions and silos to effect change.

As you read this section, we ask that you consider:



WHAT ARE YOU/IS YOUR ORGANIZATION ALREADY DOING TO CONTRIBUTE TO HEALTHY, JUST AND SUSTAINABLE FOOD SYSTEMS?



WHAT ELSE COULD YOU/YOUR ORGANIZATION TRY/DO?



WHAT ELSE COULD YOU/YOUR ORGANIZATION TRY/DO WITH OTHERS?



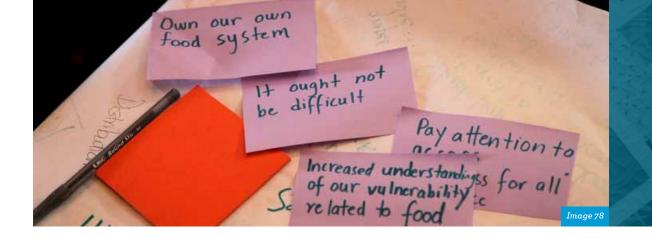
WHAT QUESTIONS DOES THIS REPORT RAISE AND WHAT TYPES OF INQUIRY CAN HELP ANSWER THEM?



WHAT CHANGES COULD YOU/YOUR ORGANIZATION MAKE TO ADDRESS THESE ISSUES HOLISTICALLY?

The strategies below have emerged from the participatory research described in this report (including the opportunities identified by participants) and from many years of collaborative work with commnity, provincial, national, and international partner organizations in addressing complex and interrelated aspects of community food security. Some strategies have been put forward previously through our own research or that of partner organizations, but remain relevant and are supported by the current research. Others are supported by existing acts, initiatives, and departmental-level programs of the Government of Nova Scotia and the Government of

Canada, but require concerted and additional effort to achieve. For example, the Nova Scotia Thrive! strategy, the Nova Scotia Housing Strategy, the Nova Scotian Environmental Goals and Sustainable Prosperity Act, ThinkFARM, and the emerging response to the Now or Never Report from the OneNS Coalition all have the potential to contribute to community food security in this province. A list of the existing policy documents and recommendations that were used to inform this section can be found in Appendix D; some of these documents provide details to support the amendment or creation of policies.





Make Food Matter

Food is at the centre of our health, our families, our cultures, and our communities. We need to shift our values and attitudes to reflect the importance of food. We need to work together – across geographies, sectors and differences – to critically challenge our own assumptions, listening and learning with others to achieve the vision of healthy, just and sustainable food systems. This is something within which every individual, organization and government plays a role.

GOAL: Broaden the emerging cultural shift that focuses on healthy, just and sustainable food systems and build inclusive communities in Nova Scotia through cross-sectoral coordination and partnership, dialogue, action, research and accountability and ensure this results in social and policy change.

- BUILD awareness of issues relating to community food security with individuals, communities, organizations, and governments across Nova Scotia.
- FOSTER dialogues on issues relating to community food security involving multiple sectors, levels and jurisdictions, including community members from diverse backgrounds and those involved in formal food systems.
- RECOGNIZE that there is no one solution, but a variety
 of actions and opportunities, some of which may be in
 conflict in the short-term. Ensure a diversity of voices
 are involved in proposing and implementing changes.

- INVEST in and facilitate collaborative, multi-sectoral, participatory and community-based action and research to understand the issue, create solutions together and assess the impact of individual and collective action.
- REALIZE existing provincial commitments (e.g., Thrive!)
 to create high levels of collaboration, coordination and
 integration within government departments, and with
 business and community partners through associated
 mechanisms (e.g., development of a Provincial Food
 Strategy, creating and connecting networks) to build
 community food security.
- REVIEW all existing and new municipal, provincial and federal
 policies for impacts on community food security in relation
 to the lens of healthy, just and sustainable food systems
 and establish related accountability frameworks to measure
 the impact of these policies on community food security.
- EMBED evaluation into organizational and government programs to illuminate and connect what is working in ways that are meaningful to those most involved in the program, including indicators of community food security that can be tracked over the long term and shared publically (e.g., through Community Counts, Thrive!, and Nova Scotia's Vital Signs®).
- BUILD inclusive and equitable societies, addressing social inequities (e.g., based on unemployment, income, gender, race) and challenge our own assumptions to understand how our perceptions and judgments of others prevents us from listening and working together.







Income and Costs of Living

Adequate livable incomes need to be balanced against the increasing costs of living, particularly related to meeting basic needs. Food is the flexible part of a household budget and as costs increase, the amount available for food goes down, forcing people to make decisions between competing basic necessities. This field of influence relates to the social and economic policies that can help create sustainable livelihoods for all, including supports for income and expenses, such as childcare, housing, education, and transportation, as well as creating stable employment opportunities with fair wages for everyone in all communities.

GOALS: Shift thinking, practice and policy from short-term to long-term solutions to build sustainable livelihoods and create strong social policies that enable all people to have adequate livable incomes.

- STRENGTHEN the social safety net and design and invest in social and income support systems that help our most vulnerable citizens become self-sufficient, including reviewing and enhancing existing public and private programs (e.g., Income and Social Assistance, special diet allowances; federal and provincial child benefits; sustainability and adequacy of public pensions; support for persons with disabilities; and Old Age Security) and examining taxation trends that widen the gap between wealthy and poor.
- PROVIDE programs and financial assistance to positively impact the costs and standards of living, address social inequities and support healthy people and communities. This includes investing and facilitating access to adequate, safe, accessible and affordable housing for all; designing communities

- to ensure access to healthy foods; enhancing supports for families with children (e.g., increase the National Child Benefit; childcare subsidies and providing more affordable childcare services to families); and developing safe, accessible, and affordable public and community transportation options.
- CONTRIBUTE to creating a robust and diversified economy, including: enhancing food-related labour markets, social and food-related entrepreneurship and the creation of stable jobs in urban and rural communities that target low-income Nova Scotians; increase supports for people working in precarious sectors of the labour force; and protect vulnerable workers (including Seasonal Agricultural Workers).
- FOSTER social and alternative economies for food and non-food needs, such as: community economic development; cooperative initiatives to increase access and affordability of healthy, sustainable, local foods for producers, businesses, and individuals and families; remove restrictive policies and facilitate bartering and other systems to exchange labour and goods.
- BETTER ENABLE informal economic food activities, including: protecting and restoring the natural environment and revising policies to enable individuals to hunt, fish, forage, and grow food. Introduce scale-appropriate regulations to enable sharing and exchanging of food.
- ENSURE all citizens have an adequate liveable income to support basic needs, which will allow everyone to contribute to a healthy productive society and vibrant, healthy communities.



Food Systems Infrastructure and Environment

We need to pay attention to how and where our food is produced or harvested, processed, and how it gets to people in their homes, schools and childcare centres, workplaces, and communities. Food is a key opportunity for driving community economic development in rural and urban communities in Nova Scotia. Food systems infrastructure relates to all of the things that enable people to access and/or produce their own food (e.g., garden, hunt, or harvest), farm or fish for a living, distribute and sell food, and share food with others – now and for future generations.

GOAL: Create the conditions that foster strong and resilient local food systems with the essential ingredients needed for health, environmental sustainability, food justice, community self reliance and vibrancy.

- INVEST in critical infrastructure, programs and financial supports along food supply chains for small-medium scale initiatives to enhance long-term sustainability and for individuals and communities to enhance self-reliance, including: assist with costs for new entrants to farming and fishing; invest in community/shared infrastructure (e.g., gardens, kitchens, freezers and other equipment); facilitate bartering and informal food activities; review and create financial incentives and remove financial barriers for those producing food for sale or personal use; create succession strategies for farmers and fishers and mentorship programs to ensure intergenerational knowledge and skills are not lost.
- ENHANCE market opportunities for local sales of local food by: creating networks across the supply chain and producer groups; enhancing distribution channels and related infrastructure; enhancing marketing and labeling campaigns; providing financial incentives and supports for retailers to source healthy and sustainable foods; and setting goals for local procurement for all public institutions.
- STRENGTHEN food-related business development and marketing (e.g., ThinkFarm) including for: those transitioning from informal to formal food economies, co-operatives and community economic development initiatives.

- While maintaining critical standards for quality and safety, create scale-appropriate regulations for formal and informal food-related activities: including licensing and certification costs for producing/harvesting, processing, distributing, and selling food, as well as serving and sharing food amongst individuals and community members.
- HONOUR treaty rights and engage in respectful relationships and dialogue with First Nations communities in decisions around land, sea and natural resources, so that economic opportunities are not in conflict with food sovereignty and treaty rights.
- TAKE ACTION on climate change as a key factor
 in current and future ecosystem health vital for
 maintaining food habitats, including both landbased and marine foods. This requires immediate,
 comprehensive and extensive public and private
 sector coordination, investment and accountability
 to reduce greenhouse gas emissions to mitigate
 climate change impacts and create short- and longterm plans for adaptation and resilience at community,
 regional, national, and international levels.
- PROTECT and restore our environment as a food resource, including: conserving and protecting marine habitats; policies and practices to conserve agricultural land; policies and practices to maintain healthy soils, seed supply and water; conserving and restoring forest lands, streams, and unique Nova Scotian ecosystems to enable individuals to grow, hunt, fish, forage, and harvest food.

Community and Social Supports

While we know we are not going to simply garden our way out of food insecurity, we cannot undermine the tremendous value of communityand social supports. Food is a common and unifying force socially, culturally and spiritually. It brings people together, creating meaningful relationships and breaks down barriers to participation within communities. Food is related to how we take care of each other, particularly with respect to those who are marginalized or vulnerable, and includes creating healthy and inclusive environments to improve access to healthy, affordable and sustainably produced food. There are many examples of successful efforts in Nova Scotia to create the community and social conditions needed through collaboration, innovation and transformational change.

GOAL: Create supportive and inclusive environments for people to live healthy lives by strenthening and connecting successful community and social supports and resources, building on existing momentum and readiness for change and generating social and community capital.

- STRENGTHEN and coordinate access to initiatives that
 develop social capital and inclusion, particularly those
 that: successfully enhance community connections;
 support community development; foster cooperation
 and collaboration; remove barriers and improve access
 for individuals to social supports; and ensure dignified
 access to food and services for all.
- Make healthy and sustainably produced food more accessible and affordable, including creating procurement policies and measurable goals for all public institutions using the lens of healthy, just and sustainable food systems; and investing in innovative initiatives (e.g., mobile fresh food markets; subsidies for convenience stores to install coolers for fresh, local, healthy foods; integrated food centres) to improve access.

- RECOGNIZE breastfeeding as a critical component of healthy, just and sustainable food systems and infant and family food security by encouraging communities and physical spaces that support breastfeeding.
 Foster positive public perceptions of breastfeeding to shift understanding, awareness and attitudes and strengthen supportive policies, programs, and practices (e.g., breastfeeding friendly workplaces; peer support networks).
- INVEST in foundational building blocks for health and food literacy for current and future generations by: adopting whole family approaches to programming and policy development around food and health; integrating food in school curricula for all ages (e.g., cooking, school gardens); and offering sustainable financial support for extracurricular, food-related programs to foster collaboration, engagement, and action.
- IMPROVE and create new opportunities for people
 of all ages to learn from each other and increase
 food-related knowledge and skills (e.g., cooking and
 preserving, gardening, hunting, farming, fishing,
 environmental stewardship, healthy eating).
- CREATE OPPORTUNITIES for individuals to critically explore the broader social, economic and political context which impacts the development of healthy, just and sustainable food systems and support increased agency to create change, through: explorations of personal and shared relationships with food; critically examining power relationships and the role of policy; and supporting the development of knowledge, skills and capacity for action and advocacy.





Food Sovereignty and the Right to Food

We need to respect and honour the rights of everyone now and for future generations to have access to healthy, just and sustainable food. This includes food as a basic human right for everyone, as well as labour rights for workers within the food system. These rights also extend to democratic rights for producers and citizens to civic engagement, dialogue, advocacy, action, and accountability within our food systems and civil society to build healthy, just and sustainable food systems, which is supported by the agroecology framework that preferences producer participation and participatory approaches. Associated with enhancing civic engagement is the need to remove barriers to participation and to foster individual and community capacity to critically examine power relations and advocate for change.

GOAL: Respect and honour the rights of everyone now and for future generations to have access to healthy, just and sustainable food. This includes food as a basic human right for everyone, but also democratic rights to civic engagement, dialogue, advocacy, action, and accountability within our food systems and civil society.

 ENSURE that citizens have access to accurate information relating to food products (e.g., presence of genetically modified ingredients or products and the province/country in which the food was produced/harvested and processed) to support food literacy in relation to the principles of healthy, just and sustainable through the creation, enforcement and monitoring of labelling regulations.

- ENSURE that the labour rights for safe working conditions, appropriate pay and benefits, and the right to self-management of workers across all aspects of our food systems (e.g., seasonal workers and food service workers) are upheld (e.g., through oversight and reforms to seasonal worker programs).
- CREATE community driven, democratic, participatory bodies
 for civic engagement on food-related issues (e.g., food policy
 councils) that are inclusive and diverse. Provide supports to
 remove barriers to full participation and create partnerships and
 coordination between these community driven opportunities
 with cross-departmental and inter-governmental bodies.
- BUILD individual community capacity and strengthen engagement and leadership in food-related issues through dialogues and inclusive and participatory processes, as well as fostering involvement in community-based food-related initiatives and supporting the development of knowledge, skills and capacity for action and advocacy.
- Provincial and federal governments should realize and implement their positive obligations to ensure every Canadian's right to food, including the urgent need to develop and implement a national Right to Food strategy⁶² in coordination with the Province of Nova Scotia (and zother provinces and territories).
- Provincial and federal governments must honour self-governance for Aboriginal people and all treaty rights, including those that protect Aboriginal communities' rights relating to food (e.g., right to fish for a moderate livelihood), in addition to the need for all Nova Scotians to engage in respectful relationships, dialogue and partnership with Aboriginal communities in decisions around land, sea and natural resources, so that economic opportunities are not in conflict with food sovereignty and treaty rights.







Call to Action: Timely Opportunities for Change

All of the above goals and strategies are important. However, five opportunities are emerging in Nova Scotia as timely for action with the potential to bridge more than one of the issues reflected in our research findings, offering improvements to both food access and strengthening local food systems.

1. USE HOLISTIC APPROACHES TO MAKING FOOD MATTER:

Many individuals, departments, governments, organizations, and sectors play a vital role in influencing community food security. It is equally vital that these groups work together through integrated and coordinated approaches to break down silos between sectors, geographies, and jurisdictions as well as address differences in perspectives to ensure long-lasting and sustainable solutions. Leadership within and from governments is essential. For example, Nova Scotia's Thrive!: A Plan for a Healthier Nova Scotia includes a goal to develop policy options on specific issues of food access and affordability, through a cross-government committee. Also essential is citizen and private sector engagement through democratic participation. The Make Food Matter framework offered here is one tool to support dialogues and action and could also inform accountability mechanisms to demonstrate progress.

2. ADEQUATE LIVEABLE INCOMES:

While reflecting a long-term vision, there is a need to shift from stop-gap income supports and minimum wage to creating a system to guarantee adequate liveable incomes for all Canadians. The need for this shift in thinking is supported by our research and is gaining media, public, private sector, and government attention as different sectors explore models for implementation and feasibility. A "think tank" or forum should be convened to research and explore options (e.g., Guaranteed Annual Income, Basic Income Guarantee, Living Wage), including identifying opportunities to pilot and evaluate models within communities (including impacts on other social programs and health outcomes). If successfully implemented, then this idea holds the potential to: address income inequity and many of the associated challenges, stimulate local economies, improve access to healthy foods, and improve the viability for food producers by addressing seasonal and precarious incomes. *Potential collaborators could include:* anti-poverty advocates, food producer associations, non-profit organizations, private sector organizations, academics, and relevant municipal, provincial and federal government departments.





3. MOBILE/POP-UP FRESH AND LOCAL FOOD OUTLETS:

Access to healthy foods is a challenge for many in Nova Scotia and producers encounter barriers in distributing their foods. The creation of mobile (a food van or truck) or pop-up retail (a market stand using existing, non-exclusive retail space) of fresh and local food holds strong potential for improving food access in rural communities and low-income neighbourhoods in which access to and affordability of transportation are barriers, as well as for anyone far from a grocery store. These mobile/pop-up outlets can also help small producers to distribute their foods, by aggregating products from small-scale fishers and farmers for direct sales to citizens. Pilot projects could explore several models and evaluate the impacts for both community members and producers. *Potential collaborators could include: municipalities, small-scale food producers, social entrepreneurs, and citizens.*

4. SCALE-APPROPRIATE FOOD REGULATIONS:

Regulations on licensing, quality assurance, labelling, food safety and handling, and distribution impact anyone wanting to grow, catch, harvest, produce, process, distribute, and sell or share food with others. Many current regulations are designed to address large-scale production, processing, and distribution. These same regulations, however, impede small-scale operations and informal activities and their capacity to concretely and positively impact community food security (and associated contributions to individual and community health, vibrancy and sustainability). Pilot projects could test strategies to create a spectrum of regulations for different scales of activity. *Potential collaborators could include: provincial and federal departments of agriculture, aquaculture and fisheries, and natural resources, Canadian Food Inspection Agency, food research institutions and universities, producer associations, small-scale producers, entrepreneurs, and voluntary sector organizations.*

5. INSTITUTIONAL PROCUREMENT:

Medium (and large) sized institutions currently rely on established, just-in-time food distribution systems that favour large-scale suppliers and distributors. If these same institutions were able to purchase from local, small-scale suppliers (e.g., fishers and farmers), then they could contribute to creating market predictability (e.g., relatively stable prices and quantities). These institutions also play an important role in creating healthy eating environments for citizens by offering more fresh and healthy foods. Institutional procurement policies that mandate a percentage of food be healthy, just and sustainable is the first step. However, alternative distribution systems are needed to address the infrastructure, supply management and distribution challenges experienced by many small-scale suppliers and the corresponding challenges of institutions in sourcing from multiple suppliers. This presents an opportunity to pilot the implementation of institutional procurement targets and create systems to support them. *Potential collaborators could include: public institutions (e.g., schools, hospitals, and universities), food producer associations, social entrepreneurs, distribution companies, municipalities, and economic development organizations.*









APPENDIX A: Summary of Methods and Participants By Indicator

This Appendix provides a high-level overview of each of the **10** selected indicators that were studied within each community, as well as one **unique indicator** per community that represented a particular area of interest, and a unique aspect of community food security in Nova Scotia. It also summarizes the methods of data collection and sources of information (including an overview of research participants).

In some cases, multiple methods of data collection were used for one indicator. For example, information on physical accessibility to food was gathered using a combination of qualitative data (Photovoice and focus groups), as well as quantitative data from spatial analysis and surveys. For the inventory data, data collection was often led by community partners, which allowed communities to define indicators in their own way. For example, community researchers included any organizations/programs in their community that they felt were relevant to the indicator programs that support food education and skills. Further details of the participatory research process within communities will be shared in a forthcoming companion document, including information on ethics protocols used, the training of community-based researchers, and qualitative and quantitative research tools. An evaluation report will also be made available in early 2015 documenting the anticipated and unanticipated outcomes of this community-university research process.

OPPORTUNITIES AND BARRIERS TO SELLING FOOD LOCALLY

Research activities: We conducted 58 qualitative interviews (Eastern Shelburne County 17, Northeastern Kings 14, Spryfield 12, Pictou County 15) across the four communities about opportunities and barriers to selling locally to determine supports, policies, and assets that were viewed as supportive of local food. Interviews were conducted from December 2012 – September 2013. Five interviews were with pairs involved in the same food initiative (e.g., a couple running a family farm). Recruitment strategies included: letters of information, word-of-mouth, posters, and advertising in the local newspapers.

Who participated? The interviewees (63 participants) represented a wide variety of perspectives and played a variety of roles in the local food system. Eastern Shelburne County had a diverse group of 17 participants representing farming, retail, and gardening perspectives, as well as fishers. The majority of interviewees from Northeastern Kings (17 participants total) and Pictou County (17 participants total) represented the production (i.e., meat and produce farmers) and processing sectors, as well as smaller number from the distribution and retail sectors and backyard/community gardeners. Spryfield's 12 participants largely represented the retail sector (i.e., local business owners and market coordinators), as well as backyard/community gardeners.



COMMUNITY PARTICIPATION IN FOOD-RELATED ACTIVITIES

Research activities: To identify and explore community members experience with food-related activities and organizations, we conducted five Storysharing focus groups (Eastern Shelburne County, Northeastern Kings County 1, 2 Spryfield 1, Pictou County 1) between April – June 2013. Storysharing is a process of sharing personal experiences in a small group setting to encourage discussion and uncover meaning and significance behind the story, in this case the role of food in community. Recruitment involved a combination of strategies including word-of-mouth, posters and displays, as well as telephone and email communication.

Who participated? There were 28 participants across the four communities, with 13 from Eastern Shelburne County, 5 from Northeastern Kings County, 4 from Spryfield, and 6 from Pictou County. Although participants were mostly female, a male perspective was represented in three of the four communities. Participants described a variety of experiences with different community food-related activities, including food coalitions, community gardens, community kitchens, community potlucks, and canning clubs.

PROGRAMS THAT SUPPORT FOOD EDUCATION AND SKILLS

Research activities: Four inventories (1 per community) of food education and skill programs (e.g., cooking, canning, gardening workshop etc.) were compiled to identify skill-building opportunities that support community food security. Data collection occurred between June 2012 – August 2012 (updated in August 2013) and was conducted by community research assistants. Data sources for Eastern Shelburne County included a large number of community informants, including partner organizations and service provider contacts, as well as phone calls or emails to additional community organizations and municipal/town websites. In Northeastern Kings County, data sources included the Nova Scotia Food Security Network, government websites, as well as the phonebook. Spryfield's inventory made use of personal knowledge from lead community partners, the Chebucto Connections Community Directory and internet searches. Lastly, Pictou County used a combination of personal knowledge from community partners and Pictou Food Security Coalition members, as well as phone calls to community organizations and the Kids First database of programs and businesses.

FORMAL FOOD PRODUCTION

Research activities: Four inventories (1 per community) of different types of local food production (e.g., farming, fishing, processing, etc.) and related resources were compiled to identify existing supports for local food. Data collection occurred between June – August 2012 (updated in August 2013) and was conducted by community research assistants. Eastern Shelburne County consulted with representatives from the federal Department of Fisheries and Oceans and Nova Scotia Department of Agriculture, accessed through regional offices, to access data sources. Data sources for Northeastern Kings County included Kings County websites (list of farms), phonebook directories, as well as personal knowledge of community members. Spryfield's inventory made use of personal knowledge from lead community partners, the Chebucto Connections Community Directory and internet searches. Pictou County's inventory was based on a Nova Scotia Department of Agriculture Report, accessed through regional offices.

AVAILABILITY AND RANGE OF FOOD OUTLETS

Research activities: Inventory and spatial analysis were used to describe the availability of food outlets in each community. Four inventories (1 per community) were used to generate a list of food outlets including: convenience, grocery, market, speciality stores, restaurants and fast food. Lists were compiled by community members in June 2012-September 2012 (updated in August 2013) and verified using telephone and online directories, as well as phone calls and site visits. Using this inventory data, spatial analysis (see Appendix B) was used to generate maps to investigate physical access to a subset of food outlets (convenience stores, grocery stores and market/speciality store locations), combining this information with socioeconomic data to identify the potential risk of food insecurity within each community.



PHYSICAL ACCESSIBILITY TO FOOD

Research activities: To determine physical accessibility to food, a combination of quantitative (inventory and spatial analysis) and qualitative (Photovoice) data was used. Inventory and spatial analysis data were complemented by qualitative data collected through Photovoice sessions (1 per community), conducted in May-June 2013, which provided examples of individual community members' experiences accessing food, particularly as they relate to transportation. This participatory research method involves participants taking photos to represent their everyday experiences and coming together in a small group to discuss and reflect on their stories. Recruitment strategies for Photovoice participants included word-of-mouth, posters, displays, and newspaper ads.

Who participated? In total, 20 participants took part in Photovoice focus groups: Eastern Shelburne County (5), Northeastern Kings (6), Spryfield (3), and Pictou County (6). Although most participants were female, Spryfield and Pictou County each had one male participant. In Eastern Shelburne County, Northeastern Kings County, and Spryfield, participants represented the perspectives of general community members. In Pictou, participants were recruited through an adult mental health program.

SUPPORTS FOR POPULATIONS VULNERABLE TO FOOD INSECURITY

Research activities: To identify services and supports for individuals vulnerable to food insecurity, a combination of quantitative methods (inventory and surveys) and one qualitative method (focus groups) was used. Survey respondents were primary staff from: food banks, community gardens and kitchens, as well as programs aimed at supporting other living expenses (such as subsidized housing, heating bill subsidies, etc.). In total, 73 surveys (Eastern Shelburne County 24, Northeastern Kings County 14, Spryfied 14, and Pictou County 21) were conducted between January 2012 – November 2013 were used to supplement inventory information on available programs, as well as gather experiences of service providers and their perspectives on gaps and unmet needs in their communities. Surveys were conducted either in person, by telephone, or using a secure online survey tool, and participants were recruited through letters of information and referral. Nine focus groups (Eastern Shelburne County 2, Northeastern Kings Count 2, Spryfield 2, and Pictou County 3) were conducted between December 2012 – June 2013 and were used to understand the experiences about supports to those vulnerable to food insecurity, as well as potential improvements to existing services. Recruitment strategies included: letters of information, verbal scripts, telephone scripts, posters, and advertising.

Who participated? Survey respondents included 73 service providers across the four communities, representing a wide variety of perspectives including food outlets, community organizations, faith based groups, health and community services organizations, schools, and municipal and provincial services. The majority of the 39 focus group participants across the four communities were women. In fact, Spryfield (10 participants: 8 women, 2 men) was the only community that recruited men vulnerable to food insecurity. In the remaining three communities, participants were all women (Eastern Shelburne County 8, Northeastern Kings 9, and Pictou County 12) with Pictou County participants being mostly young mothers or senior women.

SUPPORTS FOR COMMUNITY DEVELOPMENT AND COOPERATION

Research Activities: Four inventories (1 per community) of programs and policies that support development of community food initiatives, co-ops, community shared agriculture etc. were compiled to identify initiatives, policies, and programs that positively impact community food security. Data collection by community research assistants occurred between June – August 2012 for Eastern Shelburne County and Spryfield, and February – April 2013 for Pictou County. Northeastern Kings County completed their data collection during July 2012 – August 2012 and January 2013 – August 2013. Eastern Shelburne County made use of organizational websites and community contacts, including the Town of Shelburne's Parks and Recreation department. The Northeastern Kings County inventory was informed primarily by online sources and personal knowledge of the community. Spryfield's inventory made use of personal knowledge from lead community partners, the Chebucto Connections Community Directory and internet searches. Pictou County's inventory sourced the majority of information from the former Pictou Regional Development Authority.



CONDITIONS THAT SUPPORT BREASTFEEDING

Research Activities: Focus groups were conducted January 2013 – September 2013 across the four communities to better understand the conditions that support breastfeeding. Recruitment strategies included: letters of information, verbal scripts, telephone scripts, posters, advertising, and word-of-mouth through existing community programs. Separate focus groups were held with mothers who met (9 focus groups) and mothers who did not meet (4 focus groups and 6 one-on-one interviews) their breastfeeding goals.

Who participated? In total, 29 mothers who met their breastfeeding goals and 19 mothers who did not meet their breastfeeding goals participated across the four communities. While we did not collect demographic data about participants (e.g., income or experience of food insecurity), the recruitment methods used suggest that several women who were experiencing food insecurity likely participated, but in most cases, participants represented range of experiences with food security, as well as diversity in age. In Pictou County, 8 mothers participated in the goalsmet focus groups and 6 participated in the goals-not-met focus groups. In Spryfield, 8 mothers participated who met their goals and 7 mothers participated who did not meet their breastfeeding goals. In Eastern Shelburne County, 8 women participated in the goals-met groups, while 5 participated in Northeastern Kings County. However, due to recruitment challenges, only 1 mother who did not meet her breastfeeding goals participated in Eastern Shelburne County. Similarly, 5 mothers who did not meet their goals were available to participate in Northeastern Kings County, however they preferred to participate in one-on-one interviews due to privacy concerns.

UNIQUE INDICATOR (EASTERN SHELBURNE COUNTY): OUR LOBSTER, OUR COMMUNITIES

Research activities: In-depth interviews were conducted between June 2013-October 2013 to explore barriers and opportunities in the lobster industry in Eastern Shelburne County, related to distribution, regulations, pricing, and community support. In addition to audio transcripts, video footage was used in create a video – Our Lobster, Our Communities – providing an overall picture of what is happening in the lobster industry. Recruitment strategies for participants included letters, word of mouth, posters, and advertising. This information was also supplemented with inventory data from Fisheries and Oceans Canada and the Canadian Food Inspection Agency.

Who participated? Participants included 15 Eastern Shelburne community members who were directly involved in the lobster industry, including 3 women and 12 men. Perspectives included lobster fishers, distributors and processors, as well as representatives of lobster associations and councils.

UNIQUE INDICATOR (NORTHEASTERN KINGS COUNTY): CHANGES IN FARMING

Research activities:

To understand the current community infrastructure and support for local food production, processing and sales, as well as the economic realities of farming. 12 in-depth interviews were conducted between January and March 2014, with individuals directly involved in the Northeastern Kings County farming community. Recruitment strategies included posters/flyers, newspaper advertisements, email and in-person contacts led by community partners, with follow-up phone calls where appropriate.

Who participated? In total, there were 14 participants that took part in the interviews, including 5 males, 5 females and 2 couples. Participants were involved in farming in several different ways, including through organic farming, seed-saving, meat and dairy production, and u-pick operation. They also represented perspectives of small and large, new and long-established operations.



Research Activities: Community partners conducted interviews with Spryfield community members to better understand the kinds of challenges and barriers experienced in getting foods needed for special diets (e.g., foods that are culturally, religiously or ethnically important), foods needed for health reasons (e.g., to help manage diabetes or a gluten intolerance) and preferred foods for philosophical reasons (e.g., local foods, vegetarian foods, etc.). Initial recruitment contact was made by mail, email or in-person contact with a phone call follow-up, where appropriate.

Who participated? Twelve participants took part, including 2 males and 10 females. Recruitment strategies did not target particular groups, however, there were challenges recruiting community members who follow special diets for cultural reasons and this group is not equally represented. The services of a translator were required to accommodate three participants who did not speak English, and steps were taken to ensure the accuracy of the translation with those participants before being included in analysis.

UNIQUE INDICATOR (PICTOU): PICTOU LANDING FIRST NATION

For full details of research methods and participants please refer to the community report "Community Food Security in Pictou Landing First Nation" available on-line at:

http://foodarc.ca/project-activities/pictou-landing-cfs

Community research assistants from Pictou Landing First Nation engaged fellow community members in research on community food security through community events and research activities, including creating an inventory of resources, program, and gaps in their community that act as barriers or enablers of community food security. Three Storysharing sessions and three Photovoice sessions were also used to identify unique food security issues in this Mi'kmaq community. The project also involved collaboration with the Nova Scotia Participatory Food Costing project to determine economic accessibility to food through affordability scenarios relevant to the community. Data collection occurred from November – December 2013.

APPENDIX B: Summary of Spatial Analysis Methods

Spatial analysis was used to further analyze data collected in relation to two of the ten indicators of community food security in the Assessments: the availability and range of food outlets and physical accessibility to food. Data (household income, unemployment rate, education level, parental status, marital status, and family unit size) from the 2006 Canadian census were used to calculate socio-economic status scores for Dissemination Areas (census boundary representing a population of 400-700 people) within each case community. Surveys of food outlet locations (i.e., convenience, grocery, markets, and speciality stores) were provided by community members and verified using telephone and online directories, as well as phone calls and site visits. These food outlets locations were then mapped to their geographic locations within the community, and an accessibility score was calculated for each Dissemination Area based on its population-weighted centroid and network analysis to represent relative distance to the particular food outlet type. Socio-economic status scores and food outlet accessibility scores were combined to create a food insecurity risk score for every dissemination area. This analysis was conducted for each individual food outlet type (grocery store, convenience store, and specialty/market store) and all three combined. Please see the report "Activating Change Together for Community Food Security: Spatial Analysis of Food Insecurity Risk in Four Nova Scotian Communities" for further details and further information.

http://foodarc.ca/actforcfs/results-publications



APPENDIX C: Nova Scotia Participatory Food Costing Methods Used for Participatory Community Food Security Assessments

In conjunction with the most recent round of the NS Participatory Food Costing project in 2012, a food costing study was conducted in each of the four case communities to build an understanding of the affordability of a basic nutritious diet for different household types within each case community. The food costing data were collected using Health Canada's tool, the National Nutritious Food Basket (NNFB) which is a standard list of 67 basic foods that meet Canadian nutrition recommendations, reflect the average consumption patterns of Canadian households, and are palatable and economical.

As per the methods for the NS Participatory Food Costing project, a random sample of grocery stores was selected across the province for survey. This stratified random sample was examined to determine which stores were located within the ACT for CFS case communities. In cases where fewer than three stores were randomly selected within a case community, an oversampling of nearby stores was conducted to ensure enough statistical significance and to protect the identity of participating stores. In total, food costing data were collected in 13 grocery stores (Eastern Shelburne County 3, Northeastern Kings County 4, Spryfield/Halifax 3, and Pictou County 3) during the weeks of June 15-28, 2012. The food costing data collected in June 2012 was subsequently adjusted using the Canadian Price Index to dollar values for June 2013 to ensure consistency for analysis in relation to the other data collected within case communities.

Based on the food costing results (which generate an estimate of the cost of a nutritious food basket), affordability scenarios were created for different household types. The affordability scenarios were calculated based on an estimate of household income (i.e., average salary of full time or part-time worker receiving, minimum wage or income assistance) less the average costs of basic household expenses in that community (i.e., shelter, power, transportation, childcare, etc.). Community-specific expenses related to shelter, transportation and childcare were estimated with the help of community researchers and drawing upon secondary data as per the methods of the Nova Scotia Participatory Food Costing Project.

A reference scenario (household of four, with one male and one female 31-50 years old, one boy 13 years old and one girl 7 years old) was created for each of the four communities. In addition, each community went through a process of choosing one or two scenarios that represented potentially vulnerable households typical within their communities. These scenarios include:

- Eastern Shelburne County: Lone man (aged 65 years) household relying on Old Age Security and Canada Pension Plan;
- Northeastern Kings County: Household of five consisting of two adults between 31 and 50 years of age and three children (a girl aged 5 years, boy aged 9 years and another girl aged 13 years) relying on minimum wage;
- Spryfield: Lone mother (aged 31-50 years) household with two children (a girl aged 2 years and a boy aged 4 years) relying on Income Assistance;
- Pictou County: Household of four consisting of two older adults (grandparents) between the ages of 55 and 60 years and two children (a girl aged 8 and a boy aged 11 years) relying on a single income.

For more information on the NS Participatory Food Costing Project, please visit: foodarc.ca/food-costing/overview

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APPENDIX D: Policy Documents and Reports

The following list of documents and reports were used to inform the development of the goals and strategies under each field of influence, in addition to the direct input from ACT for CFS partners and stakeholders.

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Making Food Matter:

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A participatory research report on community food security in Nova Scotia.





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