A COMMUNITY FOOD SECURITY ASSESSMENT OF THE BONNE BAY REGION

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Part I: Introduction

Project overview

This report presents the findings from a community food security assessment undertaken in the Bonne Bay Region from May-August 2009 as part of the CURRA. A community food security assessment is a powerful way to tell the story of what is happening with food in a community, and to mobilize efforts to improve the food system. It may be understood as, "a collaborative and participatory process that systematically examines a broad range of community food issues and assets, so as to inform actions to make the community more food secure" (Pothukuchi, 2002). In an effort to paint a picture of the community food system, I compiled a food resource inventory, undertook food costing in eight grocery stores throughout the region, and completed interviews with community members from different positions in the food system.

This assessment will also form the basis of my Interdisciplinary PhD research at Memorial University.[1] A community steering committee was established to guide the assessment and will continue to provide direction throughout future stages of the research.[2]

This report is organised into six sections. This first section introduces key concepts and frameworks and describes the assessment process. Parts II, III & IV present the findings from the food resource inventory, key informant interviews, and food costing. Part V integrates these findings to identify key strengths and weaknesses of the community food system. Lastly, Part VI presents innovative examples of community-based fisheries and food security projects from other communities in Newfoundland, the U.S. and Europe.

A changing food landscape

Recent years have seen a growing recognition of the problems associated with the industrial food system. One of the main challenges of this system is the distance over which food travels through rationally organized industrial chains (Marsden et al., 2000, p.425). These long food supply chains allow few consumers the chance to encounter the people or places associated with food production (Venn et al., 2006, p.248). At the same time, complex food supply chains decrease the proportion of value in food production captured by farmers and fishers (Marsden et al., 2000, p.425).

This greater distance over which food is traveling may also be a source of uncertainty for consumers, as they have more difficulty understanding how production occurs and what the final product contains (Nygard and Storstad, 1998, p.40) and are potentially more vulnerable to interruptions in supply and price fluctuations. Consumers are increasingly seeking 'quality'

[1] This PhD program is being guided by an interdisciplinary committee, including: Barb Neis, Sociology, Co-Supervisor; Charles Mather, Geography, Co-Supervisor; Sean Cadigan, History; Shirley Solberg, Nursing; Ralph Martin, Plant Science, Nova Scotia Agricultural College.

[2] To date, community steering committee members include: Joanie Cranston, Chair, Bonne Bay Cottage Hospital Heritage Corporation; Anne Marceau, local resident and gardener; Jacqui Hunter, Owner, Java Jacks Restaurant; and Paula Alexander, Community Garden Coordinator, Glenburnie.

food, which they are associating with more 'local' and 'natural' (such as organic) foods (Murdoch et al., 2000). Many producers have responded by attaching a local identity to their products (Murdoch et al., 2000, p.111). This linking of quality and locality may contribute to economic opportunities as the increased demand for products with an identifiable geographical origin may boost local economies by creating links between products and a region's landscape, culture and heritage (Ilberry and Kneafsey, 1998).

As part of this movement to more local food systems, a variety of alternative food networks have emerged, including farmers' markets, community-supported agriculture projects, producer cooperatives and community gardens. These networks are increasing in number to meet growing consumer demand for local and fresh foods, while reconnecting producers and consumers. These networks can also allow producers to capture a greater share of the consumer dollar by direct-marketing their products.

While attention so far has focused on different outlets for farmers to sell their products directly to consumers there are also some recent examples of alternative models from North America and Europe for marketing fish in local areas. Community Supported Fisheries are very similar in concept to Community Supported Agriculture projects.

Over the last few years, food issues have gained increasing attention in the popular media. 'Buy local' campaigns, the organic foods movement, and the 100-mile diet have all called attention to the health and environmental consequences of our food choices. One important approach that has emerged for developing more secure, sustainable food systems is community food security. Community food security is a movement, including diverse actors from community-based groups to policy makers to researchers, and a food security-promoting strategy (Winne, 2003).

Community food security and local food systems

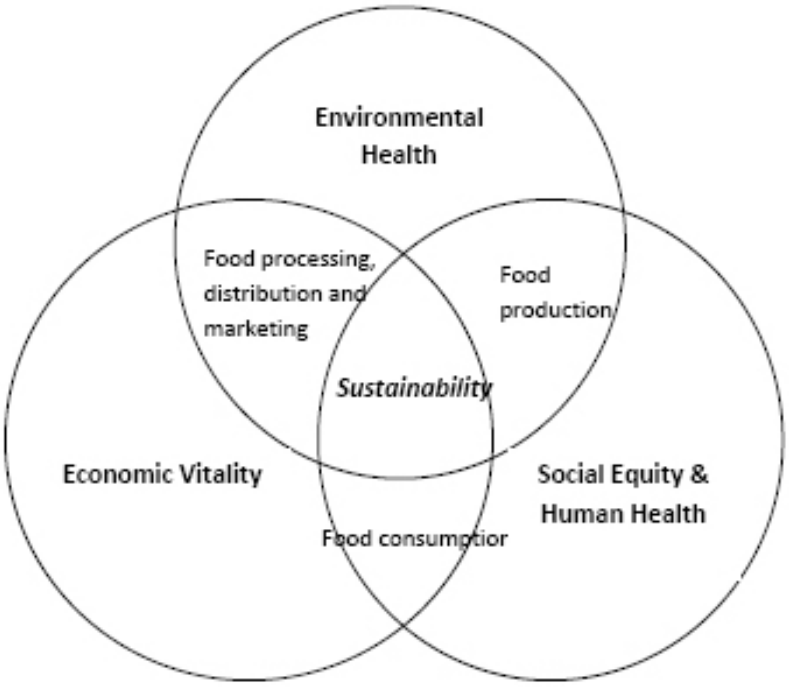
Community food security is a relatively recent concept and strategy. The generally accepted definition of community food security is, "a condition in which all community residents obtain a safe, personally acceptable, nutritionally adequate diet through a sustainable food system that maximizes health choices, community self-reliance, and equal access for everyone" (Hamm & Bellows, 2003, p.10). Community food security places issues of individual and household food security (concerned with hunger and access to food) directly in a community context thus recognizing the important role that the larger food system must play to ensure food security (Winne, 2003). Within a community, some people are more vulnerable to food insecurity than others. Recent surveys from Canada have shown that those at greatest risk of food insecurity include lone-parent families; those living on welfare, unemployment insurance or workers' compensation; those who rent their dwellings; and aboriginal Canadians (Power, 2004). Food insecurity can also have negative impacts on health, such as inadequate nutrient and an early onset of some chronic diseases (Desjardins, 2009).

For community food security, the unit of analysis is the community and the emphasis is placed on developing local community food systems and community-based food resources (Winne,

2003). A local food system may best be defined as, “a collaborative effort in a particular place to build more locally based, self-reliant food systems and economies” (Peters, 1997, p.955).

Community food security is concerned with three key, inter-related components that make up the local food system: social equity and human health, economic vitality, and environmental health. Economic vitality is concerned with producer control over production, marketing and labour decisions and community economic self-reliance; social equity and human health recognizes the injustice of food insecurity in affluent countries and the link between food insecurity and poor health; environmental health is concerned with the viability of the natural resource base that provides our food (Feenstra & Garrett, 1999). See Figure 1.

Figure 1: The local food system



The community food security movement has grown into an effort by a range of actors across all sectors and disciplines- from researchers, community activists, farmers, community development advocates and health professionals- to move toward sustainable, local food systems (McCullough, 1999).

There are a variety of potential benefits associated with the development of local food systems as shown in the table below (adapted from Blouin et al., 2009).

Table 1: Potential Benefits of Local (or Community) Food Systems

Environmental Impacts
Reduced CO2 emissions
Encourages sustainable agriculture and fishing practices
Reduced use of fertilizers, pesticides, and other agro and fisheries chemicals
Reduces packaging and waste
Economic Impacts
Control over prices and sharing of risks
Greater share of value added
Greater income for farmers and fishers
Better prices for consumers
Economic spill-over
Employment
Business skills development
Social Impacts
Creates social bonds between producers and consumers
Potentially greater food security for at risk populations
Improved nutrition and healthy eating
Market access for small farms and fishing enterprises

The Bonne Bay community food security assessment

Newfoundland is an interesting region within which to undertake community food security research. To begin, relatively little research has focused on issues of food security in the province, which has among the highest rates of food bank use and obesity in the country. At the same time, we face food production challenges such as the management of and access to fish stocks, a relatively under-developed agricultural sector and relatively high costs for purchased food. Being an island province provides obvious challenges in terms of ensuring a secure and reliable supply of food because so much of our food has to be flown, ferried, and trucked in. Only a very small amount of the food consumed in Newfoundland is actually produced locally.

In many coastal communities, including the towns around Bonne Bay where this assessment is focused, there have been significant social and economic changes in recent years related to the decline in and changes to the fishery. At the same time, the National Park exerts its own social and economic influences over the Bonne Bay region in terms of seasonal employment as well as over access to wild food sources. In a broader historical context, there have been significant changes in the food systems of coastal communities over the past two hundred years, with a general shift away from subsistence harvesting and consumption of local food to the commodification of food resources for sale in an increasingly global economy (Turner et al., 2007). This decline or removal of access to key food sources raises questions not only about

food security but also about the potential loss of important cultural practices and institutions associated with food production and consumption (Turner & Berkes, 2006).

The Bonne Bay area food security assessment addressed four main questions:

1. What are the existing food resources in the region?
2. Is food available and affordable to local residents?
3. How does the regional context (e.g. demographic, social and economic trends) impact community food security?
4. What are the main community assets/strengths and gaps related to food security?

The project used a mixed methods approach in a participatory action research framework to address these questions. The methods included: a literature and secondary data review; compiling an inventory of existing food resources; food costing to provide a preliminary assessment of food affordability and availability in the region; and key informant interviews with a range of food system stakeholders to better understand the strengths and weaknesses related to the community food system from their point of view.

Part II: Food resource inventory

A food resource inventory was undertaken to document the existing food resources in the region. See Appendix E for a complete listing of food resources identified in this study. Following is a description of some key elements of this inventory.

Community-based food initiatives

Historically, communities were involved in a wide-range of food subsistence activities, including fish harvesting and preparation, gardening, raising animals, hunting, and berry picking. Over the past number of decades, there has been more a shift towards buying imported foods from grocery stores. Recently, some new community-based food initiatives have emerged that are trying to again encourage greater food sufficiency. Many of these initiatives came out of a food security workshop hosted by the Gros Morne Institute for Sustainable Tourism in spring 2009. This includes a community garden funded by the Tree House Family Resource Centre in Trout River designed to improve gardening skills among families/children and facilitate access to fresh foods; proposed community garden and community kitchen at the former Bonne Bay Cottage Hospital in Norris Point lead by the Bonne Bay Cottage Hospital Heritage Corporation; community kitchens in the Trout River and River of Ponds areas funded by Western Health; and farmers' markets in Woody Point (operating in summer 2009 for a second season) and Norris Point (operating summer 2009 for a first season).

Fishing and farming

There are no large-scale commercial farms in the Bonne Bay region. There are a few small farms that sell some vegetables, eggs, or meat locally. There are, however, a number of larger farms in the Cormack area south of Bonne Bay. Some residents get local foods from these farms at roadside stands around Deer Lake and Corner Brook. As well, some farmers from the Cormack area come to the towns around Bonne Bay in the fall and directly sell their goods door to door.

The Bonne Bay Region has commercial and recreational fisheries, including a recreational cod fishery as well as salmon and trout fishing. Many households in the region participate in recreational fishing to obtain fish for their own consumption and households engaged in commercial harvesting can access some fish for food from their landings. However, the 2007 Survey of the Recreational Cod Fishery of Newfoundland and Labrador published by DFO shows that the West coast/Northern Peninsula area had the lowest rate of participation in the recreational cod fishery in 2007. Compared to other areas of the province, anglers in this region caught the fewest cod on average (about eight fish each) and had the lowest average number of days fished (Fisheries and Oceans Canada, 2008).

According to the Seafood Industry Year in Review Report, there have also been declines in the number of commercial fish harvesters and the number employed in fish processing in the province. There was a -5.1% decline in fish harvesters and a -2.3% decline in processing workers between 20007 and 2008 (Newfoundland and Labrador Fisheries and Aquaculture, 2009). As there are fewer commercial fisher harvesters, fewer families will be able to directly access fish for subsistence.

Hunting and Park regulations

Many land uses predate the establishment of Gros Morne National Park in 1973 including included animal grazing, domestic woodcutting, hunting and trapping. Prior to the establishment of the park numerous exotic species including moose and snowshoe hare were introduced as a food source (Parks Canada, 2009).

To help meet the needs of local residents, domestic harvest provisions for timber and showshoe hare were written into the Gros Morne National Park Management Plan (Parks Canada, 2009). The domestic timber harvest allows for harvesting of timber resources in designated areas of Gros Morne National Park for domestic purposes; likewise, snaring of snowshoe hare continues to be permitted in select management areas of the park (Parks Canada, 2009). However, only eligible residents may participate in these activities, considered as “residents of outlying communities who were adults (at least 19 years of age) living in the park area on or before 13 August 1973 when the Federal-Provincial Agreement for Gros Morne National Park was signed, or who are children born to those adults prior to or after August 13, 1973” (Parks Canada, 2009). The moose hunt is not permitted within the Park boundaries, but is allowed outside the perimeter of the park. Salmon and trout fishing are regulated by the province and not directly affected by Park regulations.

An interesting area of future research may be to look at the extent to which the Park and recent fisheries regulations and changes in the proportion of the population engaged in fishing (commercial and recreational) have affected local residents’ food-provisioning activities and access to wild food resources.

Part III: Key informant interviews

To gain a better understanding of some of the key strengths and weaknesses related to the local food system, eleven interviews were conducted with community members involved in the food system from production through consumption, including:

1. food and fish retailers, processors, and distributors
2. restaurant owners
3. commercial farmers/gardeners and fishers
4. community gardeners/fishers/hunters
5. consumers, with an emphasis on populations at greater risk of food insecurity

The interviews took place in Bonne Bay between August 17 and 28 2009. Key informants were purposively selected and contacted with the assistance of the community steering committee. In the interviews, informants were asked to describe their experiences with food in the local region as well as their ideas about strengths and weaknesses related to the local food system. Informants were asked to sign a consent form (see Appendix D).

A short description of people I interviewed is below, following by a discussion of key themes from the interviews and what these findings mean in light of other recent research that has been done.

<u>Who I spoke to</u>

Food and fish retailers
I spoke to a local food store owner in the region, who has been managing a grocery store for approximately fifteen years.

Restaurant owners
Pauline Earle is involved in operating Earle's Restaurant in Rocky Harbour. Earle's is a family owned and operated restaurant, in business for nearly 30 years. They specialize in home-cooked, traditional Newfoundland food, including a range of moose and fish dishes. They also operate a bakery and small grocery store attached to the restaurant.

Jacqui Hunter is the owner and operators of Java Jacks Restaurant and Café in Rocky Harbour. Java Jacks began as a café and organic garden in June 2000 and in 2003 expanded to include a restaurant and gallery. Jacqui has a degree in botany and maintains an organic garden from which she harvests food to serve in the restaurant.

Commercial farmers/gardeners and fishers
Ren Howell is a farmer in Norris Point, with a 57 acre farm. He used to raise beef cattle and keep dairy cows, selling his product locally. Currently, he sells some eggs to local residents, has 2-3 acres for potato production, and has plans with other family members to develop a larger vegetable and greenhouse operation.

Ren Howell's farm, Norris Point

Barbara Gillam has been farming in Woody Point for approximately 15 years. With help from her husband, they are currently growing approximately a ½ acre of vegetables including potatoes, carrots, beets, onions, corn, peas, lettuce, cucumber, beans, and garlic. Barb sells their produce at the local farmers' market in Glenburnie. They also keep some chickens for eggs, a pig, and a cow for their own family.

Frank Piercey is a commercial fisherman who has been fishing out of Rocky Harbour for 31 years.

Community gardeners, hunters, and recreational fishers

Mancel Halfyard has been gardening from a young age, and currently has approximately 2 acres of land under cultivation by his home in Woody Point, where he has been gardening for over 40 years. He grows a range of vegetables including cabbage, potatoes, turnips, beets, onions, as well as tomatoes in a greenhouse. Most of his vegetables are grown for himself and his family, but he also provides some vegetables to local residents.

Mancel Halfyard's garden, Woody Point

Myrna Hynes owns and operates a small grocery and the Chocolate Moose Café, now in its second season, in Glenburnie. She also maintains a plot along with her young daughter in the local community garden.

Zach Sacrey is a Norris Point resident who regularly hunts moose and fishes, including in the recreational fishery and salmon fishing, to provide food for his family. He has been involved in many of these food activities from a young age, growing up hunting and fishing with his father.

Cliff Butt maintains a large garden for his family in Rocky Harbour. He is currently growing zucchini, beets, potatoes, beans, carrots, and turnips, among other vegetables, as well as tomatoes and herbs in a greenhouse. He saves seeds to breed plants adapted to the Newfoundland climate. He also used to fish commercially out of Rocky Harbour.

Consumers

Steve and Jennie Mudge are senior residents in Norris Point, actively involved with the local Seniors' Club, churches, and Lion's Club. Steve grew up in Norris Point and Jennie is originally from England.

Key themes

Food subsistence activities

One of the most important themes that emerged from the key informant interviews was changes in food activities over time. There have been significant changes to the diets of coastal peoples with a shift to processed and imported foods in a global economy in Bonne Bay, as elsewhere (Turner et al., 2007). Older residents referred to growing up at a time when "if you

didn't grow it you didn't eat it." Growing a garden was a matter of necessity, as was keeping animals, hunting, making fish, and picking berries. These residents spoke to changes they have observed in people's diets and the way they obtain their food. Zack Sacrey, who grew up in Norris Point says, "What I miss most is the [food] self-sufficiency we had." Today, fewer people are gardening and there is a reliance on food from stores especially in the Deer Lake/Corner Brook area. This began particularly after the road was put through to Deer Lake in 1966. As local gardener Clifford Butt says, "people came out of the gardens and went to the stores." When electricity came to the area, it also became less necessary to bottle and preserve food. Despite these changes, many traditional food subsistence activities continue to persist. There are a number of gardeners in the region, many of which are older residents. Many residents also participate in the moose hunt and recreational fishing. These activities will now each be discussed.

Gardening and intergenerational knowledge

There are a number of residents who are continuing to garden, as they did growing up, or are beginning to get back into gardening to provide fresh food for their families. There are no large commercial farms around Bonne Bay. The Howell Farm in Norris Point and the Gillam Farm in Woody Point are the two largest farms that sell some foods locally. Most people who grow gardens are growing the food for their own consumption, often citing reasons of freshness and health for growing their own food. They also give some away to neighbours and family. While some residents have some well developed gardens and grow a diverse range of vegetables, there are others that just tend to small potato patches, which they harvest and store for the winter. Many homes have root cellars in which to store traditional vegetables throughout the winter. Many residents also continue to freeze berries, make preserve and jams, and pickle some vegetables.

Old root cellar, Norris Point

Many gardeners continue to use the traditional inputs of capelin, herring and kelp in their gardens, getting lobster and crab shells from the local fish plant or fishers and collecting their own kelp. In addition to getting fresh, healthy food, personal satisfaction was also an important

reason for gardening. As Mancel Halfyard, a gardener in Woody Point says, “I like to see stuff growing, then it makes me happy.” There is a well-established body of research that attests to the psychological and therapeutic benefits on people of gardening (Parr, 2007).

Clifford Butt’s garden, Rocky Harbour

Indicative of the community gardening movement that has spread across North America, community gardens are also beginning to emerge in the region. There is presently a community garden in Glenburnie funded by the Family Resource Centre and a proposed community garden at the Bonne Bay Cottage Hospital in Norris Point. Research shows that community gardens may be beneficial in creating a sense of community, economic opportunities, and an enhanced neighbourhood environment (Patel, 1991; Rees, 1997; Blair et al., 1991; Fitzgerald, 1996; Chavis, 1997; Nemore, 1998; Murphy, 1999; Armstrong, 2000; Hanna & Oh, 2000).

Myrna Hynes maintains a plot in the community garden in Glenburnie with her young daughter. She says the garden provides fresh vegetables they wouldn’t otherwise be able to obtain as easily. This is consistent with other recent studies about community gardens, which have found that community gardeners generally eat more fruits and vegetables than non-gardeners (Blair et al., 1991; Lackey & Associates, 1997; Giordano, 1998; Alaimo et al., 2008).

Myrna also says, “It’s great for her [daughter] to be able to learn, to grow her own things like I did as a kid that my grandmother taught me.”Involving youth in gardening and ensuring that gardening knowledge is passed on to younger generations was important to many of the gardeners. A strength of this region, as Raymond Cusson, resident and Councillor in the Town of Glenburnie, says, is “knowledge is not five generations away. It’s right there…these [seniors] are walking encyclopedias on gardens.” However, this knowledge, as local gardener Clifford Butt says, is “gradually fading away.” Jacqui Hunter, gardener and owner of Java Jacks Restaurant and Café says, “it’s [knowledge] dying with every old gardener that dies, and it’s not being passed on.”

Clifford Butt's greenhouse, Rocky Harbour

Other barriers to gardening that emerged include interest, time, and access to land especially for senior residents. As one informant says, "as far as vegetables are concerned, it's easier to go and buy it." Barb Gilliam, a farmer in Woody Point says, "a lot of people just don't want to be bothered with it." Accessing land emerged as a barrier, particularly for older residents wanting to garden, since some are in apartment or seniors' complexes or have very small yards. This is not unique to this region, as many communities wanting to start up community gardens often have difficulty finding available land that is easily accessible. In this region, employment trends may also be negatively impacting the time people have to spend tending gardens during the summer months. Since many jobs are based in tourism as well as fishing, many people work in the summer months and may have less time to maintain a garden.

The gardeners and farmers with whom I spoke also expressed the sentiment that there is land in some of the towns that could be put to better use for gardening. They also mentioned the potential for homeowners to use their lawns for growing food. Mancel Halfyard, a gardener in Woody Point, described having goats, sheep, and chickens and a large garden growing up, and says "now we're buying gasoline and mowing grass." There is a recent international grassroots movement 'Food Not Lawns' which is encouraging communities and neighbourhoods to reclaim their lawns for food production.[3]

[3] See http://www.foodnotlawns.net

Moose hunting

Moose is an important protein source in the local diet. Many households participate in the moose hunt. Others who do not participate in the moose hunt directly, are able to receive moose from friends or family members. As Zack Sacrey of Norris Point says, “I haven’t bought a beef roast in thirty years.” Many people freeze moose meat for the winter months, as well as bottle it. Some residents mentioned that the moose population has increased since the park was founded. This may make it easier to hunt moose outside the park since the park may act as a reservoir for moose. However, at the same time, as the moose population has increased, they have become one of the main challenges faced by local gardeners. Moose regularly get into people’s gardens and also eat fruit trees.

Fish and seafood in local diets

Fish is very important to people’s diet. Many households participate in the recreational fishery and are able to freeze enough fish for the winter. Others who do not participate directly in the recreational fishery, may obtain fish from other friends or family or buy it at the local fish plants. Everyone I spoke with attested to the importance of fish in their diets. Frank Piercey, a commercial fisherman says, “cod fishermen gotta eat fish, it’s cheaper than bologna…a fisherman always feeds himself first.” Jennie Mudge, resident of Norris Point, explains that she grew up in England eating fish and “would still eat fish seven days a week.” Jennie and her husband Steve go out every Saturday to a local restaurant for cod and fries, and also buy fish regularly from the Rocky Harbour fish plant. Many people like the retail store front of the plant in Rocky Harbour, a feature which other fish plants in the area do not have.

Commercial fishing

Frank Piercey has been fishing commercially out of Rocky Harbour for 31 years. Presently, there are only sixteen commercial fishing licenses in Rocky Harbour. He spoke to the economic challenges fishers are currently facing in the region since the price of fish is presently so low that most people can’t afford to fish. He explains this as a consequence of provincial regulations that prohibit outside buyers from entering the province, and the fish buying cartel- consisting of four large corporations- that own the provincial fish processing plants and set the fish prices. Provincial licensing regulations prevent the local direct-marketing of fish by fishers to local residents since all of their product must be sold to fish plants. Piercey says, “my great grandfather was lobster fishing over a hundred years ago…and he was selling to St John’s merchants. And he had just as much competition 120-130 years ago as I got today.”

When asked to explain the rationale for the government regulations, Piercey says outside buyers are prohibited from entering the province and commercial fishermen must sell all their product to fish plants in order to sustain jobs in the fish processing plants. However, as Piercey pointed out, there is a live, fresh market for species such as cod and halibut that do not require processing. Fish plants currently pay approximately 45cents/lb to fishers for cod, but are able to sell fresh cod fillets for $5/lb. As a result of the low prices fishers are receiving for their fish due to current regulations that minimize market competition, Piercey says “we’re just slaves to fish

merchants" and predicts that "unless the government changes the policies that are in place right now, I don't see a small inshore fishery in rural Newfoundland in ten to fifteen years."

State of the fish stocks

With regard to fish stocks, some people expressed concern about the state of the fish stocks in the bays. Clifford Butt, a gardener and former commercial fisherman, expressed concern about seiners in the bay catching capelin and destroying the spawning grounds. He says, "Seiners took our herring, and they wiped out cod fish, and now they're after the capelin…in our own bays, in our own coves." Barb Gillam, a farmer in Woody Point, also participates in the recreational fishery with her family. She says in regards to concern that the cod her family caught this year were very small, "far as I'm concerned it [fishery] should have been closed. Shouldn't have been open in this bay this summer." She says fishermen also caught fewer cod in Trout River. Frank Piercey mentioned uncertainty about the state of the cod stocks, but said that halibut catches were especially good this year. Presently, there is also a voluntary moratorium on crab set by local commercial fishers.

Tourism and the local food economy

Restaurant owners spoke to the importance of providing locally-sourced foods as well as traditional meals for tourists. The most readily and consistently available local foods to restaurant owners are fish and seafood from the local fish plants.

Pauline Earle is one of the family members who operates Earles restaurant. She says, "we all believed in sticking with the tradition. Lots of kids don't eat it." Earles is patronized by tourists as well as local residents who come to enjoy their fish and moose dishes. As Pauline says, "we're known for fish even among locals, all year long they come here for fish."

Jacqui Hunter, owner and operator of Java Jacks Restaurant and Café in Rocky Harbour grows an organic garden to provide local, seasonal produce to the restaurant. It has become a feature of her business. When asked what types of food tourists are looking for, Jacqui says "people are looking for local, seafood, fresh." She describes her menu as a "teachable moment" in eating locally and healthfully and describes her restaurant as "using local ingredients in world food." Jacqui spoke to the potential for local gardeners to become organised and meet the demand for fresh, local foods among tourism operators. Many local tourist operators want local foods but have difficulties sourcing it and getting a sufficient supply. Gros Morne Gatherings, a small collective of tourism operators, has considered the possibility of a buying club for local foods. This demand for local foods among tourists may help develop the local food economy.

Local food stores

There are food stores in each of the towns of Trout River, Glenburnie-Birchy Head-Shoal Brook, Woody Point, Norris Point, Rocky Harbour and St Pauls. However, food store owners expressed a number of challenges in operating a store in the region. In the summer months, tourists are very important to supporting local food stores. In the winter, food stores have to rely more on local shoppers which is increasingly difficult because many residents in the region are accustomed to making regular trips into Deer Lake and Corner Brook to obtain their groceries.

As one food store owner says, “one of the greatest problems is Deer Lake, Walmart. ” They explain that operating a local food store is getting more difficult with big stores in the city. As Jennie Mudge, resident of Norris Point says, “People tend to go to Deer Lake to get stuff and forget that we do have the locals and if you don’t support the locals you lose them.” Grocery store owners expressed appreciation for their regular local customers.

Food stores are generally unable to carry perishable items such as fresh meats because as one store owner explains, “Our place is too small, because it doesn’t keep very long. Couple of days and you’ve got to freeze it.” Stores don’t usually carry fresh fish because of the availability at the local fish plants. Myrna Hynes owns a small grocery store in Glenburnie. She explains that although they would like to stock more fresh produce and some customers want it, “on such a small scale, we can’t order this huge truck load of stuff. We don’t have enough people to buy it. It’s kind of a catch twenty-two.”

Food stores are served by several food distribution companies including Atlantic Grocers, Bugdens, and TRA. Colemans appears to no longer be serving food stores but will distribute to restaurants. Most stores get one delivery each week of fruits, vegetables, cheese and another for eggs and milk. Rumbolt’s store in Norris Point is able to get food deliveries twice a week during the summer months only. Some local residents mentioned having to know the delivery schedule of the food trucks to the grocery stores in order to get there and obtain the items they want.

Farmers’ markets

Over the past several decades, farmers’ markets have grown in number in many industrialised countries. In Canada, farmers’ markets have almost doubled in number since the late 1980’s to 425 in total (Feagan et al., 2004, p.235). A large body of research has shown that farmers’ markets are important venues for farmers to receive a fair price for their foods, while also helping to develop strong community relationships (Guthrie et al., 2006; Andreatta and Whitcliffe, 2002).

Currently, there are two farmers’ markets in the Bonne Bay region including a farmers’ market in its second season in Glenburnie and a new farmers’ market in Norris Point. Barb Gillam, who farms in Woody Point, expressed value in being able to sell at the farmers’ market in Glenburnie, which is held at the Birchy Head Recreation Centre. She says it’s a “chance to get vegetables out to more people…and then we get people coming to the garden.” She also says it’s, “more economical than just selling to locals and neighbours” because you can get a better price. During the summer, many tourists visit the market and buy the local produce.

Gardener Clifford Butt in Rocky Harbour expressed interest in a farmers’ market being established in Rocky Harbour. He says, it “definitely” needs a market for local growers, and “would give people more interest [in growing] if you could sell it here.”

Seniors and food accessibility

Within communities, certain groups of people may have more difficulty accessing food or may be at risk higher risk of food insecurity at an individual level. Steve and Jennie Mudge, senior residents in Norris Point, spoke to some of the potential challenges seniors face in accessing food, including fixed incomes and lack of access to transportation. As Steve says with regards to most seniors' income, "The thing is they just get paid once a month. It's not very much…they're just on a fixed income. And so I would say the beginning of the month or whenever pay day is for them, there's [food] accessibility. And they're learned to keep a little bit, but they're probably better off at the beginning of the month or when their pay day comes." Transportation may also be another barrier for seniors in accessing food. However, sometimes they are able to get rides into Deer Lake or Corner Brook or neighbours will pick up groceries for them. Research shows seniors are one of the groups at greater risk of food insecurity, because they often rely on fixed senior's benefits and pensions (Health Canada, 2007).

Social networks and reciprocal exchange

Historically, communities worked together to plant gardens, harvest food, make fish, and cut wood. As Steve Mudge says, "There was a lot of helping and community." Despite many changes in these communities over time, this sense of community connection and reciprocity continues. While certain groups of people, such as seniors, may have more difficulty in accessing food than others, other members of the community may step in and help out. As Steve and Jennie Mudge said, "there's always somebody there to help" seniors who can't do things for themselves so no one is ever left in need. These social networks can be important in ensuring food access. Many local gardeners provide food to their friends, family, and neighbours in the community at no cost. Exchange of goods also regularly takes place. For example gardeners may provide vegetables to a neighbour in exchange for fish they have caught. As Mancel Halfyard says, "Some of the neighbours, I give them something, but they share with me something else." One interesting recent study shows that reciprocal non-market exchanges of food may occur more frequently in rural compared to urban households and can contribute to how people access food (Morton et al., 2007).

Part IV: The cost of food in Bonne Bay stores

Food costing is a common tool that began in the 1970's by Agriculture Canada to monitor the changing costs in the prices of foods. The National Nutritious Food Basket (NNFB) is a standard food costing tool containing 66 food items that represent a nutritious diet. Across Canada, this information has been used to collect the price of food items and determine the cost of healthy eating. Food costing is important to helping better understand the affordability of foods in a region and the variety of foods available.

Food costing of items from the NNFB was undertaken at eight food stores in towns throughout the Bonne Bay region between August 17 and 28 2009, including: two stores in Trout River; two stores in Woody Point; one store in Norris Point; and three stores in Rocky Harbour. A food costing worksheet, adapted from the 2008 NNFB, and developed by the Participatory Food

Security Research Projects at Mount Saint Vincent University, Nova Scotia was used to collect information on food prices.[4] For a complete list of food items that were costed, see Appendix C.

The food costing was done to provide a preliminary assessment of food availability and affordability in the region. This is particularly important in this region since rural and remote areas in Canada have been found to have overall higher food prices and poorer availability for all types of food baskets (Travers et al., 1997; Lawn & Hill, 1998). For example, in a recent food costing survey in Nova Scotia, the mean monthly cost of a nutritious food basket for a reference family of four was five percent higher in rural compared to urban areas (Nova Scotia Nutrition Council & Atlantic Health Promotion Research Centre, 2004).

Food costing was completed once at each of the stores. Each store manager was provided with a letter outlining the project (see Appendix A), as well as a written consent form (see Appendix B). Ideally, the costing would be repeated to get a more complete picture of the availability and prices of food not only at different times of the year but also during different times of the week depending upon the food delivery schedule. Where possible, efforts were taken to find out and record the prices of items that are normally available even if they were not available at the time the costing was completed.

Following are some preliminary findings of the food costing, presented according to different food categories. Findings are not presented for any individual store, but for the region as a whole. The next stage of the food costing analysis will be to compare these food costing data for the Bonne Bay region with available data from other regions of Newfoundland and other provinces.

Fruits and vegetables:

- Overall, there was poor availability of fresh fruits and vegetables
- Bananas, grapes, and pears were only available in 12% of stores
- Apples were available in 75% of stores, making them the most commonly available type of fruit
- The four most available vegetables were: carrots, tomatoes, onions and green peppers, each available in 75% of stores
- Lettuce (including iceberg (37%) and romaine (12%)) and cucumber (25%) were the vegetables least available
- None of the fruit or vegetable items costed were available in all of the stores

[4] Participatory Food Security Projects: http://faculty.msvu.ca/foodsecurityprojects/

Milk:

- Milk was the only product at all stores that consistently came from within Atlantic Canada, either from Central Dairies in Newfoundland or Scotsburn Dairy in Nova Scotia
- The average price for a 2L carton of milk was $4.50. Prices ranged from $4.29-$4.59, with the cost for milk above $4.50 in only one store.

Meat products:

- No fresh meats or fresh fish were available in any stores
- Various frozen meats were available in stores
- Canned fish, including salmon and tuna, was available in all stores

Meat alternatives:

  - Peanut butter was available in all stores. The average price for a 500g jar of peanut butter was $3.95, with prices ranging from $3.69 - $4.50.

Grain products:

- The average price for a loaf of bread was $2.54. Prices for bread were fairly consistent across all stores, ranging from $2.50-$2.79/loaf.

Part V: Strengths and weaknesses of the community food system

This section integrates findings from the food resource inventory, food costing, and interviews to identify some of the key strengths and weaknesses related to the development of the community food system in the Bonne Bay region.

<u>Strengths</u>

- There is a strong informal economic network involving reciprocal exchange of goods which may help improve food access at the household level.
- There is a strong tradition in and knowledge of food subsistence including gardening, fishing, hunting, and storing/preserving food; many residents are still involved in these food-provisioning activities.
- Moose and fish are important and available sources of protein in local diets.
- Community gardens and kitchens are emerging across the region to help build food skills, knowledge and improve food access for some households.
- Farmers' markets in the region are helping develop a more local food economy and provide an outlet for small growers in the region to sell their produce.
- There is potential for local gardeners and farmers to supply local, fresh foods to restaurant operators.

<u>Weaknesses/barriers</u>

- The economics of commercial fishing is becoming less viable as fishers receive low prices for their fish; this results in lower incomes (a trend exacerbated by increasing costs) for fishers and potentially the amount of fish available for local consumption.
- There is concern about the state of the fish stocks and the future of the recreational fishery.
- Provincial licensing regulations do not allowing for direct-marketing of fish to local residents through, for example, local fresh fish markets or community supported fisheries.

- There are very few farms in the region.
- There is important local knowledge about gardening, fishing, fish processing and preparation of local foods among senior residents, but this is often not being passed on to younger generations.
- Local food stores are facing increasing competition from larger food stores in the city.
- Fresh produce and meats are not readily available in local grocery stores.

Part VI: What can we learn from other places

Other fishing communities have faced similar challenges to those experienced around Bonne Bay, such as declining fish landings and low fish prices. Some communities have responded in innovative ways to these challenges, coming up with new ways for simultaneously protecting their fish stocks and getting better prices for their fish. Three interesting examples of ways in which fishing communities have responded to these challenges are described below, including a community supported fishery from the eastern US, a Sea-Fresh Fish Market in the Netherlands, and a cot pot fishery in Fogo Island.

Community supported fishery, New England

Fishing has long been an important source of income for the small village of Port Clyde, Maine. The Muscongus and Penobscot bays meet at Port Clyde, providing the village with key access to many fishing grounds. Now, this village is home to the first community supported fishery in New England. Today, about a dozen groundfishing vessels make up Port Clyde's small fleet, fishing for shrimp as well as groundfish including haddock, flounder, cod, pollock, and hake.

In 2006, the Midcoast Fishermen's Association was formed as a nonprofit advocacy group for area fishermen committed to restoring groundfish populations and sustaining fisheries along the coast of Maine. In 2007, the Midcoast Fisherman's Cooperative was also founded to give local fishers more control over the marketing of their seafood and they created the first community supported fishery in New England marketing their fish under the 'Port Clyde Fresh Catch' brand.

The Cooperative requires members to use lighter gear and more sustainable methods (Frazer, 2009). Very similar to a community supported agriculture project, people sign up and pay in advance for a weekly share of wild-caught fish harvested by the Cooperative, with shares running for twelve weeks from June to September. In the winter months, subscriptions for shrimp are available. The Coop also offers several Port Clyde Fresh Catch seafood products to wholesalers such as restauranteurs, caterers, and food retailers.

Very recently, the Coop has also started selling their Port Clyde Fresh Catch at farmers' markets in Rockland and Washington (Frazer, 2009). By selling fish through the community supported fishery and farmers' markets, Port Clyde fishermen can afford to harvest fewer fish because they are paid more for their harvest, thus helping the recovery of fish stocks while consumers also get a high-quality product (Frazer, 2009). In addition to the Port Clyde community

supported fishery, some other CSFs have arisen in Maine as well as in New Hampshire and North Carolina. [5]

Fresh fish market, Netherlands

This short story is adapted from the papers 'Effort to revive the local economy: creating a local fresh fish market' (2008) and 'VinVis: The Women in Fisheries Network' (2008) by Cornelie Quist of the Women in Fisheries Network of the Netherlands. It chronicles the success of a small Netherlands fishing community in establishing a fresh fish market.

Wieringen is a fishing community in the Netherlands, with a long history of fishing. As a result of a variety of challenges- including decreasing fish stocks, limited fishing grounds, EU fishery management policies, and increasing investment costs combined with lower fish prices- the future of the local fishing community was uncertain. VinVis, the women in fisheries network made up of the wives of local fisherman, pioneered efforts to establish a local fresh fish market in which their best fresh fish could be sold for a fair price. The result was a pilot project of a Sea-Fresh Fish Market, launched in the summer of 2004 during the tourist season.

The market, run by the women volunteers, provided fish directly to customers. Various demonstrations such as how to peel shrimp, fillet and prepare fish, and mend nets were also held at the market. As Cornelie Quist says, "The visitor could experience the realities of fishing for a living."

The success of the pilot project resulted in the Sea-Fresh Fish Market operating every Saturday throughout the year, and offering different types of fresh fish depending on the season and with prices in line with weather conditions and the size of the catch. The market has developed a permanent group of customers including exclusive restaurants, fish shops and consumers. The market has also expanded to include other local food producers offering other kinds of salt-water produce, shrimp croquettes, organic and other regional branded products.

Cod pot fishery, Fogo Island

A baited cod pot fishery is taking place on Fogo Island. This fishery allows for the sustainable harvesting of cod while fishers receive a much higher price for their catch. The project began in 2008, pioneered by the Shorefast Foundation, in collaboration with the provincial government, the Marine Institute, Fogo Island Co-Op and the Canadian Centre for Fisheries Innovation. Shorefast is a charity that undertakes projects built on social entrepreneurship and is partnering with the people of Fogo Island & Change Islands to invest in the revitalization of the local economy. In this fishery, cod is caught using baited pots, considered a sustainable method of harvesting because it does not damage the ocean bottom and bycatch as well as small cod can be released alive from the pot. It also results in a better quality product since the fish are caught alive in the pots. The cod is then locally processed into skin-on fillets, because these fillets retain their flavor better after freezing, and is sold to restaurants by the Fogo Island Coop.

[5] See: Port Clyde Fresh Catch http://www.portclydefreshcatch.com/, Midcoast FIshermens' Association http://www.midcoastfishermen.org/index.html, Northwest Atlantic Marine Alliance http://namanet.org/csf/port-clyde-fresh-catch

Fish harvesters are receiving twice as much per pound for cod potted fish because the Co-Op can get a better price from restaurants.

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Appendix A: Food Costing Letter

Dear Manager, August 2009

In collaboration with community partners, I am beginning a participatory food security research project in the Bonne Bay region. This project is part of CURRA (Community-University Research for Recovery Alliance) and will also form the basis of my PhD program beginning in September. The overall aim of this research project is to explore the issue of food security, and sustainable food systems development, in coastal communities on the west coast.

As part of this research, I plan to undertake food costing at selected food retail outlets in towns throughout the Bonne Bay region. Food costing is a common tool that began in the 1970's by Agriculture Canada to monitor the changing costs in the prices of foods. The National Nutritious Food Basket (NNFB) is a standard food costing tool containing 66 food items that represent a nutritious diet. Across Canada, this information has been used to collect the price of food items and determine the cost of healthy eating. Food costing is important to helping better understand the affordability of foods in a region and the variety of foods available. In rural communities, this is particularly important since research shows that rural and remote areas of Canada have overall less access to healthy food and higher food prices.

With your permission, food costing of items from the National Nutritious Food Basket will be conducted by myself at your store. I will spend approximately one hour in your store doing the food costing at a date to be determined with you. Participating grocery stores will not be identified and the costs, either for specific foods or for the nutritious food basket, will never be released for any one store.

This project hopes to identify some key issues pertaining to food security in the region, and begin a dialogue with the community to ultimately put forward policy and social change recommendations to strengthen local food systems. Preliminary results of this project will be presented at a CURRA workshop in the fall, and will provide an opportunity for community members to have input into the issues raised. Later in the fall you will also be provided with a brief report highlighting some of the key findings.

I will keep in touch over the next week to discuss your participation. If you have any questions or concerns about this project, please contact me at klowitt@mun.ca or Barb Neis, Principal Investigator, CURRA at bneis@mun.ca
Sincerely,

Kristen Lowitt
Research Assistant,
Community-University Research for Recovery Alliance

Appendix B: Food Costing Consent Form

Study Title: Building capacity for local, sustainable food systems in Western Newfoundland

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Introduction
We are inviting you to take part in a research study being lead by Kristen Lowitt as part of the CURRA. Taking part in this study is completely voluntary; you may withdraw from the study at any time. The study is described below. The description tells you about the risks, inconvenience, or discomfort which you might experience. Participating in the study may or may not benefit your store directly; however, we might learn things that will benefit others. You should discuss any questions you have about this study with Kristen Lowitt, Research Assistant, CURRA or Barb Neis, Principal Investigator, CURRA
What is the study about?
The overall purpose of this study is to explore community food security issues in the Bonne Bay region and the need and capacity for socially just, economically vibrant, and environmentally sound food systems. The research study is part of the CURRA and will also form the basis of the researcher's PhD program at Memorial University beginning in September 2009.

How is the study done?
As part of this study, the researcher will undertake food costing at selected food retail outlets to help better understand issues of food affordability and availability. Your grocery has been asked to participate in food costing. The researcher will undertake the food costing at a date to be determined with you in advance. Food costing is a common tool that began in the 1970's by Agriculture Canada to monitor the changing costs in the prices of foods. The National Nutritious Food Basket (NNFB) is a standard food costing tool containing 66 food items that represent a nutritious diet. Across Canada, this information has been used to collect the price of food items and determine the cost of healthy eating.

Confidentiality and anonymity

Once the food costing has been completed, all records will be kept in a safe place for a minimum of five years post publication; your name will not appear on any paper materials. Electronic data is password protected. Access to the original data will be limited to the researcher and the PhD supervisory committee. Participating grocery stores will not be identified and the costs, either for specific foods or for the nutritious food basket, will never be released for any one store.

Risks and Benefits

There are no anticipated direct personal benefits, but the information you provide may help improve our understanding of the community food system. We believe any potential risks and discomforts from participating in the study are minimal.

What else?

Preliminary results of this project will be presented at a CURRA workshop in the fall, and will provide an opportunity for the community to have input into the issues raised. If you are interested, you will be provided with a brief report highlighting some of the key findings

Questions

You are welcome to ask questions at any time during your participation in this research. If you would like more information about this study, please contact Kristen Lowitt at klowitt@mun.ca /709-737-3065 or Barb Neis at bneis@mun.ca / 709-737-7244

The proposal for this research has been approved by the Interdisciplinary Committee on Ethics in Human Research at Memorial University. If you have ethical concerns about the research (such as the way you have been treated or your rights as a participant), you may contact the Chairperson of the ICEHR at icehr@mun.ca or by telephone at 737-8368.

Consent

- Your signature on this form means that:
- You have read the information about the research
- You have been able to ask questions about this study
- You are satisfied with the answers to all of your questions
- You understand what the study is about and what you will be doing
- You understand that you are free to withdraw from the study at any time, without having to give a reason, and that doing so will not affect you now or in the future.

If you sign this form, you do not give up your legal rights, and do not release the researchers from their professional responsibilities. The researcher will give you a copy of this form for your records.

Your Signature
I have read and understood the description provided; I have had an opportunity to ask questions and my questions have been answered. I consent to participate in the research project, understanding that I may withdraw my consent at any time. A copy of this Consent Form has been given to me for my records.

_____ _____
Signature of participant Date

Researcher's Signature
I have explained this study to the best of my ability. I invited questions and gave answers. I believe that the participant fully understands what is involved in being in the study, any potential risks of the study and that he or she has freely chosen to be in the study.

_____ _____
Signature of investigator Date
Telephone number: _____
E-mail address: _____

Appendix C: National Nutritious Food Basket

Following is a list of food items that were costed in this study, as adapted by the Participatory Food Security Projects at Mount Saint Vincent University from the 2008 National Nutritious Food Basket.

FOOD	PURCHASE SIZE
Milk products	3L
2% milk	500g
Yogurt	227g
Cheddar cheese, medium	227g
Process cheese slices	500g
Mozzarella cheese	227g
Vanilla ice cream	2L
Eggs	
Grade A Large	1 doz
Meat products	
Round steak	1 kg
Stewing beef	1kg
Ground beef, medium	1kg
Pork chops, loin	1kg
Chicken legs	1kg
Wieners, beef & pork	450g
Sliced ham (sandwich type)	175g
Frozen fish fillets	400g
Pink salmon, canned	213g
Flaked light tuna canned, water	170g
Meat alternatives	
Baked beans with tomato sauce	398ml
Dry navy beans/white pea beans	454g
Smooth peanut butter	500g
Grain products	
Bread, enriched white	570g
Bread, whole wheat	675g
Hot dog or hamburger rolls	480g
Flour, white, all-purpose	2.5kg
Flour, whole wheat	2.5kg
Macaroni or spaghetti	900g
Rice, long grain, white	900g
Macaroni & cheese dinner	225g
Oatmeal, regular	1kg
Corn flakes (can use no name substitute)	675g
Shreddies (can use no name substitute)	620g
Soda crackers, salted	620g

Social tea cookies	350g
Citrus Fruits	
Oranges	1kg
Apple juice, canned or tetrapak	1.36L
Orange juice, frozen, concentrate	355ml
Tomatoes	1kg
Whole tomatoes, canned	796ml
Tomato juice, canned	1.36L
Other fruits	
Apples	1kg
Bananas	1kg
Grapes	1kg
Pears	1kg
Raisins	750g
Fruit cocktail, canned, juice packed	398ml
Potatoes	
Potatoes, fresh	4.54kg bag
Frozen fresh fries	1kg
Other vegetables	
Broccoli	1kg
Cabbage	1kg
Carrots, fresh	1kg
Celery	1kg
Cucumber	1kg
Lettuce, iceberg	1kg
Lettuce, romaine	1kg
Onions	1kg
Green pepper	1kg
Turnips	1kg
Mixed vegetables, frozen	1kg
Whole kernel corn, canned	341ml
Green peas, canned	398ml
Fats and Oils	
Margarine, non-hydrogenated	454g
Butter	454g
Canola oil	1L
Mayonnaise-type salad dressing	500ml
Sugar and other sweets	
Sugar, white	2kg
Strawberry jam	500ml

Appendix D: Interview Consent Form

Study Title: Building capacity for local, sustainable food systems in Western Newfoundland

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Introduction
We are inviting you to take part in a research study being lead by Kristen Lowitt as part of the CURRA (Community-University Research for Recovery Alliance). Taking part in this study is completely voluntary; you may withdraw from the study at any time. The study is described below. The description tells you about the risks, inconvenience, or discomfort which you might experience. Participating in the study may or may not benefit you directly; however, we might learn things that will benefit others. You should discuss any questions you have about this study with Kristen Lowitt, Research Assistant, CURRA or Barb Neis, Principal Investigator, CURRA
What the study is about
The purpose of this study is to explore community food security issues in the Bonne Bay region and the need and capacity for socially just, economically vibrant, and environmentally sound food systems. The research study is part of the CURRA and will also form the basis of the researcher's PhD program at Memorial University beginning in September 2009.

How the study is done
You have been asked to participate in an individual interview in which you will be asked to share your thoughts and experiences about food, and the development of local food systems. The interview will last between 60 and 90 minutes and will take place at the most convenient location for both you and the interviewer. The interview will be audio taped but you do have

the option to opt out before the interview begins or at any point during the interview, in which case the interviewer will take detailed notes.

Confidentiality and anonymity
Once the interview has been completed, the audiotape and/or any written information related to the audiotape or the interview will be kept in a safe place for a minimum of five years post publication; your name will not appear on the tape or any paper material. Electronic data is password protected. Access to the original data will be limited to the researcher and the PhD supervisory committee. You will not be identified by name in any publication unless you provide consent.

Risks and Benefits
There are no anticipated direct personal benefits, but the information you provide may help improve our understanding of the community food system. We believe any potential risks and discomforts from participating in the study are minimal.

What else?
Preliminary results of this project will be presented at a CURRA workshop in the fall, and will provide an opportunity for the community to have input into the issues raised. If you are interested, you will be provided with a brief report highlighting some of the key findings.

Questions
You are welcome to ask questions at any time during your participation in this research. If you would like more information about this study, please contact Kristen Lowitt at klowitt@mun.ca /709-737-3065 or Barb Neis at bneis@mun.ca / 709-737-7244

The proposal for this research has been approved by the Interdisciplinary Committee on Ethics in Human Research at Memorial University. If you have ethical concerns about the research (such as the way you have been treated or your rights as a participant), you may contact the Chairperson of the ICEHR at icehr@mun.ca or by telephone at 737-8368.

Consent

- Your signature on this form means that:
- You have read the information about the research
- You have been able to ask questions about this study
- You are satisfied with the answers to all of your questions
- You understand what the study is about and what you will be doing
- You understand that you are free to withdraw from the study at any time, without having to give a reason, and that doing so will not affect you now or in the future.

If you sign this form, you do not give up your legal rights, and do not release the researchers from their professional responsibilities. The researcher will give you a copy of this form for your records.

Your Signature
I have read and understood the description provided; I have had an opportunity to ask questions and my questions have been answered. I consent to participate in the research project, understanding that I may withdraw my consent at any time. A copy of this Consent Form has been given to me for my records.

_____ _____
Signature of participant Date

I give permission for the interview to be audio-recorded.

_____ _____
Signature of participant Date

I give permission for my name to be used in publications and be attributed to any direct quotations.

_____ _____
Signature of participant Date

Researcher's Signature
I have explained this study to the best of my ability. I invited questions and gave answers. I believe that the participant fully understands what is involved in being in the study, any potential risks of the study and that he or she has freely chosen to be in the study.

_____ _____
Signature of investigator Date
Telephone number: _____
E-mail address: _____

Appendix E: Food Resources Inventory

BONNE BAY REGION: FOOD RESOURCES INVENTORY	
Food retail outlets: grocery and convenience stores	Location/Details
Hann's Confectionary	Trout River
Barnes' Confectionary	Trout River
Gallant's Store	Trout River
Butler's Confectionary	Trout River
James A. Crocker & Sons	Trout River
Convenience Plus	Rocky Harbour
C&J Rumbolt Rocky Harbour Groceteria	Rocky Harbour
Budgen's Convenience Plus	Rocky Harbour
Needs Convenience	Rocky Harbour
Endicott's FoodEx	Rocky Harbour
Earle's Video and Convenience	111 Main S, Rocky Harbour
C&J Rumbolt	Rte 431, Norris Point
Payless Superstore	205 Main St, Woody Point
3T's Limited Convenience	Cox's Lane, Woody Point
I & M Convenience	Cox's Lane, Woody Point
Pete's One Stop Convenience, Clover Farm	Water St, Woody Point
Chocolate Moose Café and Grocery Store	Glenburnie-Birchy Head-Shoal Brook
Clover Farm Variety	Rte 430, St Pauls
Fish retail outlets	
Harbour Seafoods	Rocky Harbour
3T's Limited fish plant	Woody Point
Fish plant	Trout River
Alternative food networks	
Farmers' market	Glenburnie- Birchy Head- Shoal Brook
Norris Point farmers' market	Lion's Club, Norris Point
Farm market stands	Deer Lake
Restaurants	
Earle's Restaurant	Rocky Harbour
Ocean View Hotel	38-42 Main St, Rocky Harbour
Java Jacks	Rocky Harbour
Treasure Box	72 Main St N, Rocky Harbour
Fisherman's Landing Restaurant	Rocky Harbour
Jackie's Restaurant	Rocky Harbour
Gros Morne Seafood Chalet	Rocky Harbour
Boathouse Restaurant	Rocky Harbour

Gros Morne RV Restaurant	Rocky Harbour
Old Loft Restaurant	Woody Point
Lighthouse Restaurant	Woody Point
Woody Point Motel	Main Road, Woody Point
Granite Coffee Shop	Cox's Lane, Woody Point
Pittman's Restaurant	Norris Point
Sugar Hill Inn	Norris Point
Neddies Harbour Inn	7 Beach Rd, Neddies Harbour, Norris Point
Seaside Restaurant	Trout River
Gros Morne Resort Restaurant	St Paul's
Community food resources	
Tree House Community Garden	Glenburnie-Birchy Head-Shoal Brook, funded by Tree House Family Resource Centre
Community kitchen	Trout River, funded by Western Health
Road side gardens	St. Paul's
The 'Green' community pasture	St. Paul's
Proposed community garden and kitchen at Bonne Bay Cottage Hospital	Norris Point
Food and fish production resources	
Moose hunting	Outside Park boundaries
Snowshoe hare hunt	Domestic provisions for hunting in the Park
Commercial fisheries- cod, halibut and other species	Bonne Bay
Recreational fishery- cod, salmon, trout	Bonne Bay and freshwater
Small-scale commercial farmers	Cormack area
Berry picking	Throughout Park
This inventory was compiled from the following sources:	
http://www.k12.nf.ca/jakeman/troutriver/community.htm	
http://www.rockyharbour.ca/businesses/services.htm	
http://www.rockyharbour.ca/businesses/dining.htm	
http://www.townofwoodypoint.ca/woodypoint.php?page=tourservices	
http://www.townofwoodypoint.ca/woodypoint.php?page=foodbeverages	
http://www.grosmorne.com/restaurants.htm	
http://www.grosmorne.ca/dining/index.html	
www.yellowpages.ca- searched under grocery-retail; fruit & vegetables- retail; convenience stores-retail; butchers-retail; restaurants	
Key informant discussions	