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# **Policy's Role in Socioagricultural Transition: A Community Study in Tatamagouche, Nova Scotia**

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## **Abstract**

In Atlantic Canada, as in rural areas around the world, many citizens are engaged in ways to adapt innovative local level solutions to the challenges posed by globalized industrial agriculture. To prevent the further unraveling of community fabric and to promote rural resilience, there is a shift in some Atlantic Canadian communities towards what Thomas Lyson terms *civic* agriculture (2004). Using *civic* agriculture as a conceptual framework, this in-depth community case study found there is a strong community of Tatamagouche farmers who tend to operate on a small, labour-intensive scale, and who value direct links with consumers. This paper investigates *civic* agriculture initiatives using the narrative of past socio-agricultural transition to understand present-day challenges and opportunities in realizing a locally organized system of food production and distribution.

Specific policy recommendations based on this study's findings include: the integration of local mentorship and experiential learning into agricultural education; strategic planning by the province for domestic consumption increases through existing buy-local campaigns and consumer education programmes; a review of regulatory standards to accommodate small-scale and diversified family farms; and start-up aid for community-scale agricultural cooperatives. Additionally, this paper calls for a broader shift in the philosophies that shape current policy choices and recommends reframing the mandate of governmental departments like Health and Environment to address small-scale community-based agriculture, and advocating for the political recognition of the non-commodity benefits of agriculture.

Keywords: civic agriculture, agricultural education, family farms, agricultural cooperatives

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## **1.0 Introduction**

As Atlantic Canadians struggle with the local effects of globalized industrial agriculture—loss of farms, rural outmigration, and decline in the economic viability of farming—they are increasingly searching for local solutions that will

strengthen rural communities; provide food security and sovereignty in the face of peak oil and unpredictable global markets; and steward the soil, water, and air for future generations. Atlantic Canada has a long history of rurality (Sampson, 1994) and mutual support, which remain strong elements of its present-day identity and provide fertile ground for sowing the seeds of change in redesigning localized systems of agriculture that fit communities' values and provide for a sustainable future (Stiles & Cameron, 2009).

This work explored the quest for agriculture's survival in Atlantic Canada at the local level through a case study of Tatamagouche, a rural community on the North Shore of Nova Scotia. Tatamagouche is among a handful of communities in the province that appear to have strong community support for the development of alternative food networks (AFNs) and a prevalence of civic agriculture initiatives. There has been significant energy in Tatamagouche directed towards community development projects, small-scale agriculture, sustainable and organic farming practices, and alternative food system models that aim to support and encourage local farming.

The study sought to reveal a narrative of past and present socio-agricultural transition in Tatamagouche. Within the narrative, barriers and opportunities in the agricultural community were identified and examined in terms of their relationship to current policy frameworks.

*Civic* agriculture initiatives represent a transition away from the dominant paradigm of *corporate* agriculture (Lyson, 2004). Lyson's theory of *civic* agriculture followed from Goldschmidt's (1946) work that found a positive correlation between the presence of small-scale independently-owned enterprises and the well-being of the communities in which they operate, and from Polanyi's (1957) perspective on *economy* that included social and environmental interactions. *Civic* agriculture describes the "emergence and growth of community-based agriculture and food production activities that not only meet consumer demands for fresh, safe, and locally produced foods but create jobs, encourage entrepreneurship, and strengthen community identity" (Lyson, 2004, p. 2).

The idea of the *civic* in agriculture is useful in the analysis of Atlantic Canadian agriculture not only because it places local initiatives in the context of similarly-motivated initiatives across North America, but also because the sense of civicness resonates with the rural Atlantic Canadian culture of community-minded mutual support. While *civic* agriculture has yet to pose a threat to the dominant paradigm of globalized commodity agriculture, any future transition to regionally-appropriate practices and scale in agriculture necessitates careful examination of the alternatives. This paper asks how and why civic initiatives have been successful in Tatamagouche, and also identifies where policy could improve the viability of such alternative models, both in Tatamagouche and in other rural communities in the region.

This study is part of a broader research programme, "Changing Paradigms in Atlantic Agriculture," led by the Rural Research Centre at the Nova Scotia Agricultural College, which is examining the "global-local nexus of agriculture." After conducting a year-long consultation process with farmers, food security organizations, agricultural groups and others in Atlantic Canada, the urgency with which policy issues in agriculture must be addressed was articulated in an editorial in the *Charlottetown Guardian*: "unless greater policy attention is paid to those engaged in smaller-scale

agriculture, and the ways in which the local-global interact, the losers in the mix will be more than those smaller farmers forced out of business” (Stiles, 2009, p. A7).

## 2.0 Background and Conceptual Framework

Agriculture in Atlantic Canada is in a state of decline as we know it. In Nova Scotia, net income on the average farm dropped 91% between 1979 and 2008. The aging population of farmers in the province has raised questions about the future of agriculture, evidenced by the fact that only 7% of Nova Scotia farmers were under the age of 35 in 2008 (Scott & Colman, 2008). In the past few years, the collapse of Nova Scotia’s beef and pork industries also intensified the urgency with which many Nova Scotians are seeking alternatives to the dominant paradigm of globalized commodity agriculture. Nova Scotia’s rural landscape is dotted with the collapsing infrastructure of farming operations that ceased to be profitable. Farmers cannot afford to take risks in global markets where prices do not always cover the cost of production. Hog farming, for example, crashed in 2007 when farmers were losing \$40 for every hog they raised. Today, although the price for hogs has risen 65%, the infrastructure and farmer capacity for larger-scale hog production no longer exists (CBC, 2011).

In 2008, journalist Ralph Surette wrote in Nova Scotia’s *Chronicle Herald* regarding the agricultural climate in Nova Scotia, “Hard times often trigger new ways of doing things. The gathering gloom might be the right time to plant the seeds of an agrarian rebirth.” In planting these seeds, alternative models are crucial. The practice of large-scale industrial commodity farming has never really taken hold in Atlantic Canada and local food economies of small- and medium-sized family farms are still within the memories of the older generation of farmers in the region (Sacouman, 1979; Stiles et al., 2009;). This study employs Tatamagouche as a case study because of the presence of alternative models in the community that could provide important insights on place-specific approaches to rebuilding local food systems.

Tatamagouche is a small rural community in Colchester County, on the North Shore of Nova Scotia. Isolated to some degree from the rest of the province by Nuttby Mountain, the village was historically the “commercial centre for Northern Colchester,” (Colchester Historical Society, 2000) and continues to be a hub for grocery shopping and cultural activity for the rural North Shore. Although the area has some of the province’s richest agricultural land (Canadian Land Inventory (CLI) classes 2, 3 and 4 (see Figure 1) and a relatively warm climate because of its proximity to the Northumberland Strait, the province’s larger commodity producers have tended to establish farms either on the South side of Nuttby Mountain (closer to Truro), or the Annapolis Valley region of Nova Scotia. Because Nova Scotia has no CLI 1 (the highest rating) agricultural land, CLI 2-4 soils are the most desirable for agricultural production.

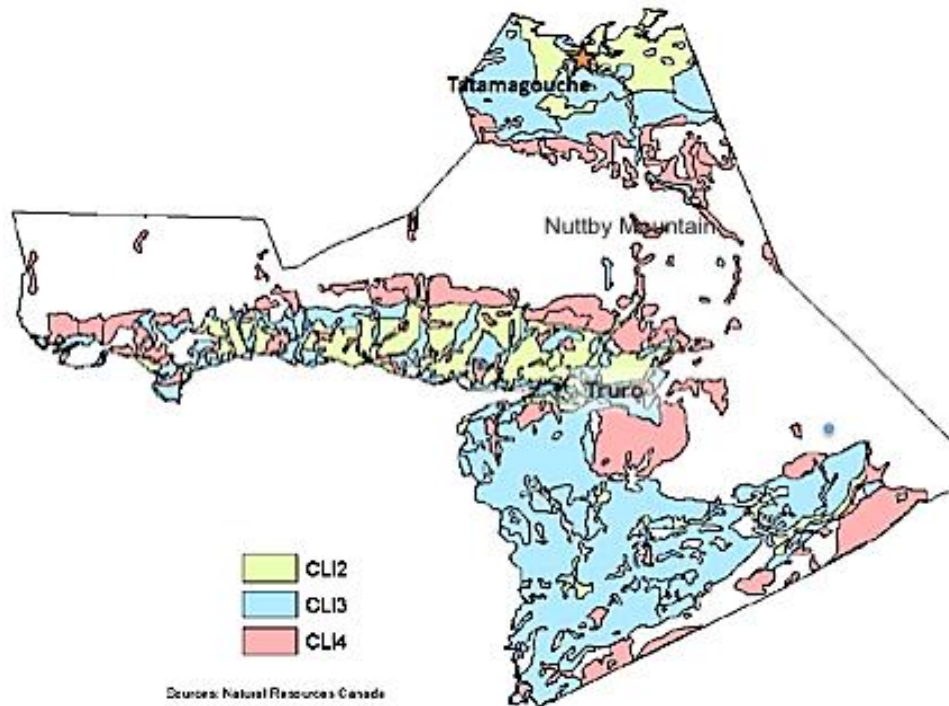


Figure 1. Agricultural Land in Colchester County (NS Land Review Committee, 2010)

Tatamagouche was selected for this study because it has a wide variety of agricultural innovators and early adopters of re-localizing food systems. In the community of 2600 residents (Nova Scotia Community Counts, 2010), there were three Community Supported Agriculture (CSA) initiatives, a growing farmers' market, a local currency system (LETS), a school garden project, a Community Land Trust (CLT), a community garden, and a community of farmers employing organic and sustainable farming techniques. According to Statistics Canada, there were thirteen farms in Colchester County Subdivision B (which includes the Tatamagouche area) that engaged in some organic production in 2006, three of which were certified organic (2011). At the time of this study, Tatamagouche also had one medium-size dairy farm producing for one of Nova Scotia's two major dairies, and a handful of small- and medium-sized meat producers.

For the purposes of understanding socio-agricultural transition in Tatamagouche, the researchers employed Lyson's (2004) theory of *civic* agriculture, which is based on Walter Goldschmidt's (1946) comparative community study that linked increased health, wealth, and civic engagement with the presence of small agricultural enterprises (p. 66- 68). Lyson characterized *civic* agriculture as a

locally-organized and -controlled food system that shifts away from corporate commodity agriculture, integrating farming into rural communities using place-specific knowledge. In civic agriculture, farmers and consumers design and participate in food systems out of a sense of civic responsibility more than the motivation to profit from the production of commodity crops for a global marketplace (p. 85).

Lyson used farmers' markets, community gardens and community-supported agriculture as examples of civic initiatives.

In Atlantic Canada, these qualities and others have been studied in-depth by the Genuine Progress Index (GPI) Atlantic, an organization that works to offer a "full-cost accounting" of progress as an alternative to the GDP. Their series of reports entitled *Soils and Agriculture Accounts* (Scott et al., 2008) outlines indicators of ecological wellbeing, human capital, social capital, and farm community viability in the context of Atlantic Canadian agriculture.

### **3.0 Methods**

Eighteen in-person key informant interviews were conducted in 2010 with 23 members of the agricultural community in Tatamagouche. Approximately half of the participants interviewed had grown up in the Tatamagouche area, and were selected for their ability to characterize and recount transitions that have occurred in the farming community over the past 50 years. The other half of the participants were recruited for the study because of their involvement in and willingness to speak about current civic agriculture initiatives in the community. Most interviewees were either farmers or retired farmers.

Participants for the key-informant interviews were recruited using snowball sampling (Neuman, 2004). Researchers began by consulting two existing contacts in the community, asking them to recommend potential interviewees who fit the description of one of the two categories defined above. During the data collection phase, interviewees continued to refer the researchers to other potential participants.

Themes were identified from the interview data using NVivo qualitative data analysis software, which were used to develop a historical to present-day narrative of socio-agricultural transition in Tatamagouche. The narrative and the themes were presented to the community during a two-hour community commentary session in January of 2011. Approximately 50 community members attended the session, including participants who had been interviewed as key informants, farmers who had not previously participated in the study, and interested community members. The event was announced in the local paper, the *Tatamagouche Light*, and publicized through social networks. During the first hour of the presentation, researchers presented the narrative and read aloud from the preliminary analysis. Sharing the narrative during the session was a way for participants to engage in thinking about their own story, as told by an outsider. Reflecting on how the agricultural community had evolved historically served a dual purpose. First, it created an inclusive atmosphere where equal value was given to historical knowledge as to present-day innovation. Secondly, reflecting on the past prompted participants to engage in critical analysis of what factors contributed to the variety of transitions within the memory of the agricultural community. The second hour of the event was dedicated to the facilitated discussion and reflection described above.

#### **3.1 Limitations**

A number of interviewees reported that they felt that the community of people in Tatamagouche who are involved in new agriculture initiatives are "repeat customers." That is to say, the same 50 or 60 people who have shares in CSAs are also those who go to the farmers market, participate in movie nights, are members

of LETS, are working for domestic fair-trade, etc. Peter Kenyon, an Australian consultant in rural resilience and transformation calls this phenomenon the “same old face mentality” (2010). However, there are some signs that the movement towards a sustainable, re-localized food system is moving beyond this limited demographic of community-minded “come-from-aways.” One participant noted this shift in the LETS system over the past few years, remembering that LETS members used to be

the crew of mostly folks who had moved to Tatamagouche in the past ten or fifteen years or more recently, who were doing what you might call alternative stuff, like organic agriculture. But now there’s local folks [participating in LETS] who’ve grown up in Tatamagouche. We’ve met and maintained friendships with people that we wouldn’t have met normally because we’re in different socio- economic classes, or just different geographic areas.

Because this research takes the form of a case study, it is able to achieve a community-level perspective of socio-agricultural transition. Although the resulting narrative and analysis may offer valuable wisdom to other rural communities, especially in Atlantic Canada, it is important to recognize that Tatamagouche is unique, and that this work is intended to enrich an existing body of scholarship on the topic.

#### **4.0 Findings**

From data collected in key informant interviews and the community commentary session, researchers assembled a narrative of socio-agricultural transition in Tatamagouche that included both historical and present-day socio-agricultural transition. This section (1) summarizes the historical narrative (Hanavan & Kennedy, 2011), and (2) discusses present-day civic initiatives and the impacts of policy on their successes and challenges.

##### **4.1. Historical Narrative**

Common to trends in family farming in the Atlantic region and beyond, northern Nova Scotia witnessed a decline in the number of farms and growing industry concentration. Emblematic of this trend in the case study area was the decline of the traditional dairy industry. The Tatamagouche Creamery, which opened its doors in 1925, bought cream from a large community of diversified family dairy farms in the area. In addition to dairy cows (Guernseys and Jerseys were especially popular for cream production), the small family farms in the community grew kitchen gardens and grain for both human and animal consumption. Most also kept some other animals, such as chickens and hogs.

Tatamagouche dairies separated the cream from the milk and stored it in cans in the cellars or wells of family farms until the creamery’s truck came to pick it up. After selling the cream, these farms were left with a significant amount of skim milk, which supported diverse farm activities: feeding hogs, supplementing chicken feed, or amending compost. Studies on creamery farms in other regions indicate that these skim-milk-based *subsidiary enterprises* were common among cream producers worldwide (Jenkins, 1996; Johnson, 1971; MacKay & Ontario,

1968). Interviewees also recalled that cream and milk were a large part of dairy farm families' diets.

By the 1970s, the market for cream was in decline across the province, and a trend of consolidation was taking place in the Nova Scotian dairy industry (see Table 1) that followed in the wake of post-WWII industry consolidation. This trend was in evidence in Tatamagouche by the loss of infrastructure for milling grain for feed and for transporting cream. Scotsburn Dairy, one of the two consolidated dairies that remain in operation in Nova Scotia in 2011, purchased the Tatamagouche creamery in 1968 and gradually removed services, decreasing production in the facility until it closed its Tatamagouche operations in 1992 (Brinkhurst, 2011; MacLennan, 2000).

Table 1. *Consolidation of Dairy Farming in NS, 1976-2006*

Year	Number of farms reporting dairy	Total number of dairy cows	Average number of dairy cows per farm reporting	Farms with dairy as a % of total NS farms
1976	1,999	38,582	19	36.8
1981	1,427	36,237	25	28.3
1986	1,031	34,122	33	24.1
1991	818	28,913	35	20.6
1996	619	26,623	43	13.9
2001	443	23,918	54	11.3
2006	346	21,791	63	10.9

Source. Adapted from Scott et al., 2008.

Nova Scotia-wide, farmers were growing older and their adult children “followed the trend of North America, moving to cities and towns” (Forbes & Muise, 1993, p. 445). A growing number of farmers who sold cream to the creamery were nearing retirement, and for many of them it made more sense to cash in their cream quota for retirement than to invest in the new infrastructure and paperwork required by the fluid and industrial milk industries. Trends of rural outmigration and urbanization among the younger generation across the province meant that there were fewer young farmers to work the land that had been used by creamery farms.

Policy frameworks that promoted industry consolidation were geared toward larger-scale models of agriculture that found little success in the Maritimes (Winson, 1985). Although some Tatamagouche farmers raised beef cattle or engaged in the production of commodity crops such as oil seeds, the North Shore was not a priority for industrial agricultural development, and much of the farmland fell out of use as the older generation retired. In the 1950s and 1960s, farmland was being lost at a rapid rate across Canada, though Nova Scotia and New Brunswick suffered the most drastic losses (Parson, 1999). While some agricultural land has since been put back into farming, The Nova Scotia Federation of Agriculture estimates that there are close to 70,000 acres of unused agricultural land on Nova Scotia's North Shore (Vissers, 2011).



The abundance of affordable farmland in the Tatamagouche area attracted diverse groups of new young homesteaders and farmers starting in the 1960s: back-to-the-landers, Mennonites, Buddhists, American immigrants, and other young families who saw living on the land as a way to achieve an honest lifestyle that reflected their values. Magocsi (1999) noted that the influx of American immigrants to Canada that began in the 1960s, who tended to be more rural than any demographic nation-wide, consisted of academics, ‘draft dodgers’ and deserters from the Vietnam war, and “a group that is difficult to analyse in any detail—immigrants who were not formally part of the military system, but were hostile to the current American climate of opinion” (p. 192). The *back-to-the-land* trend occurred in pockets across Atlantic Canada, typically in rural areas with cheap agricultural land, attractive landscapes, and relatively open-minded communities (MacEachern & O’Connor, 2009; Weaver, 2004).

Newcomers were met with genuine interest by the older generation that had grown up on Tatamagouche farms. Immigrants to Tatamagouche recall casual visits from neighbours that developed into long-term friendships and mentorships. The retired farmers generously offered their place-specific knowledge of farming in the North Shore’s unique growing conditions to the newcomers. On the whole, older interviewees said they were happy to see youngsters farming in the area.

#### ***4.2 Challenges and Opportunities among Civic Initiatives***

The communities of immigrants evolved over the years and attracted subsequent waves of alternative-minded residents, including community development practitioners, artists, intellectuals and professionals, who contributed to a wide range of civic initiatives in Tatamagouche that extended beyond the realm of agriculture. One interviewee described the culture of community engagement in Tatamagouche:

The difference between living in Tatamagouche and in another rural community in Nova Scotia, at least the sense that I get, is that Tatamagouche does have something going on. There is some movement towards community projects, people are invested, and there's a life in the community. And support for these projects and for new ideas. There are a lot of people in the community who are really supportive of new ideas and local things. So I think there's probably more support in this community than there might be in a lot of other communities.

Initiatives in the area tend to fit Lyson’s definition of *civic* in that they focus on local markets, are integral parts of the community, prioritize quality over quantity, employ labour- and land-intensive farming practices, use local knowledge, and value direct connections between producers and consumers (Lyson, 2004, p.85). However, they continue to lack the cohesion of a “locally-organized system,” and as subsequently explored in this paper, struggle within policy frameworks that cater to larger-scale corporate agriculture. Civic initiatives in Tatamagouche include CSAs, a farmers market, a Community Land Trust (CLT), a new school garden project, a local currency system, and a community of practitioners of organics and other sustainable farming methods.

#### **4.2.1 Community Supported Agriculture (CSA)**

At the time of this study there were three CSA-style initiatives in Tatamagouche. CSA is a marketing arrangement in which farmers sell shares of the season's harvest to customer members, typically by collecting the entire season's payment upfront. Members share in both the abundance and scarcity of the harvest, creating a more stable income for, and developing closer connections to, farmers and the realities of their vocations (Cone & Myhre, 2000; Sharp, Imerman, & Peters, 2002).

Key informants from these CSAs said that they chose the method of direct marketing as a way to connect with their customers. Two of the CSAs are share-based, meaning that customers pay for their farm share at the beginning of the season and receive a weekly box of the farm's produce. Each farm offers 30 to 40 shares. The other farm is subscription-based, meaning that customers make a commitment at the beginning of the season, but pay for their boxes on a weekly basis when they pick them up.

All three CSAs offer boxes in Tatamagouche. Two of them offer additional shares to customers in Truro, a larger town about half an hour's drive away from Tatamagouche. These farms are *civically* motivated in that they prioritize local markets (Lyson, 2004). CSA farmers said that, in an ideal world, all of their customers would be in Tatamagouche. One farmer explained that local markets are a priority for a sustainable future: "If we work towards peak oil, or if we think the future's going to change, it's no good to have markets too far away. Truro is too far away."

However, another CSA farmer expressed concern over the capacity of the customer base in Tatamagouche, saying, "I don't think I can get enough CSA shares just in Tatamagouche." This perceived lack of consumer base in Tatamagouche could be attributed to low consumer demand for local products in Tatamagouche; inconvenience of pick-up time or location; ineffective marketing to the local demographic; or inaccessible pricing. The supermarket in Tatamagouche, which is owned by one of the two corporate grocery chains in the province, continues to serve the primary food needs of most residents. Although it does carry a few local items seasonally, the supermarket continues to draw on the long food supply chains that characterize globalized corporate agriculture (Marsden, Banks, & Bristow, 2000).

#### **4.2.2 Community Land Trust (CLT)**

The Tatamagouche Community Land Trust Cooperative is an eight-member organization that stewards 100 acres of agricultural land. Multiple families have homes on the property, and a CSA enterprise holds a 99-year lease on nine acres of the land, which are used for greenhouses, field crops, and other infrastructure. According to the *Community Land Trust Handbook* (Institute for Community Economics, 1982), a CLT "is an organization created to hold land for the benefit of a community and of individuals within the community. It is a democratically structured nonprofit corporation, with an open membership and a board of trustees elected by the membership. The board typically includes residents of trust-owned lands, other community residents, and public-interest representatives" (p. 18). The Tatamagouche Community Land Trust was created in order to "hold the land in trusteeship and to ensure that the land is used sustainably for generations to come," with the rationale that "[c]ommunity land trusts provide low cost access to land while giving both the surrounding community and the residents a stake in its long-term governance" (TSFS, 2006).

Because there was no clear provincial process in place for establishing CLTs, founders of the Tatamagouche Community Land Trust Cooperative spent years researching potential models for realizing their vision of protecting their land for future generations. The Tatamagouche Community Land Trust Cooperative is currently one of only a handful of CLTs of its kind in Nova Scotia. In 2010, Nova Scotia's Department of Natural Resources conducted a public consultation process in order to gauge public interest in CLTs, but has yet to release the results (NS Department of Natural Resources, 2010).

#### **4.2.3 School Food**

The Cobequid Schools Catering Society has begun to procure some locally-produced meat for its school lunches, and participated in a recent research project examining the opportunities and barriers for establishing a farm-to-school program (Kennedy, 2011). Kennedy's study found that most components were in place for the Catering Society to develop a relationship with one or more area farms to supply school food programs. However, a lack of communication between relevant stakeholders, an absence of financial support for farm-to-school projects, and a lack of distribution capacity among producers posed barriers to implementing such a program.

#### **4.2.4 Local Currency System**

Tatamagouche's Local Exchange Trading System (LETS), called North Shore LETS, offers a formalized venue for local exchange outside of the federal currency system. Beaudry's (2010) study of North Shore LETS found that while the organization is a powerful social mechanism, its annual transactions in the tens of thousands of dollars per year among approximately 60 members are relatively insignificant in terms of the community's economy.

#### **4.2.5 Organic / Ecological Farming Practices**

Tatamagouche area farmers who employ organic and ecological farming practices tend to do so because of their personal values. Their choice to grow food is a way of taking action on an environmental and social ethic. One farmer observed:

I think seriously, and I don't mean this in any patronizing kind of way, there's more idealism here, and there's a desire to make a difference in the environment. So I think that's a factor, the heightened sensitivity to environmental issues. Farming is a very practical way to get involved in creating social change.

While this farmer saw organic and ecological growers as educators and drivers for social change, another farmer was frustrated at public apathy and misunderstanding of organic products:

Q: Have you been noticing in the past decade or so any renewed energy around farming or people becoming maybe more aware?

A: Yeah, but an extremely small percentage of the population. Most people don't care. They're just oblivious. You know, we're certified organic. At the market in Truro, only one in twenty customers even care. And the majority of the people that walk by my table don't even know what that means.

## 5.0 Implications for Policy

Past socio-agricultural transitions in Tatamagouche occurred in response to, and were reinforced by, policy frameworks that shaped the face of agriculture and the community. Likewise, it is reasonable to suppose that future policy developments will have the capacity to facilitate or hinder the viability and sustainability of ‘civic’ agriculture in Tatamagouche, and the community infrastructure that supports it. The recommendations for future policy attention outlined in the following section are preliminary thoughts based on the experience of Tatamagouche. Although further research would be necessary in order to make generalizations, it is hoped that Tatamagouche’s contribution will enrich and illustrate the body of scholarship in this area.

### 5.1 Mentorship and Skill Sharing

Interviewees who were involved in alternative agriculture initiatives emphasized the important role of mentorship and communities of knowledge exchange in their success. A number of immigrants who moved to Tatamagouche to start farming had little or no experience in agriculture. They acknowledged the importance of the older farmers and retired farmers who were so generous with their knowledge, especially when they were first starting out. Even those who had some experience farming required place-specific knowledge of Tatamagouche’s unique growing conditions and the culture of agriculture in the area. One interviewee said, “I think another thing that helps in getting farms going is having a mentor. Good mentors locally, too. Older farmers that have been working in this area—similar conditions, markets.”

Newer farmers in Tatamagouche have tended to bring diverse skills from different backgrounds ranging from advertising to bookkeeping to tourism. This means that the Tatamagouche area has a wealth of skills and knowledge to share. Local initiatives such as the Tatamagouche Summer Free School (Graham, 2007) and a kitchen-table learning series on agriculture provide spaces and opportunities for skills and knowledge exchange to take place.

While local mentorship is by nature a grassroots activity, a number of government support mechanisms could be employed in order to support this type of activity. Policy support for knowledge- and skill-sharing opportunities for farmers could take the form of funding for grassroots skill-sharing and mentorship initiatives, child/eldercare for those who wish to participate, or winter salaries for farmers to host/facilitate skill-sharing workshops.

One possible mentorship program model is Washington State’s *Food to Bank On* project. During a three-year incubation program, beginning farmers partner with local farmer mentors to develop the skills and knowledge needed to run a smaller-scale farm business. Beginner farmers who participate in the program have a guaranteed market for a portion of their produce during their participation, as *Food to Bank On* contracts the farms to grow food for area food banks and soup kitchens (Cole, 2011). Opportunities for expanding and innovating agricultural education arose in 2011. The Nova Scotia Agricultural College (NSAC) began its shift away from being an entity of the Department of Agriculture; Agrapoint, the province’s extension and agricultural consulting firm, also seeks to develop closer ties to both NSAC and the NS Department of Agriculture (Agrapoint, 2010; NSAC, 2011). In a time when extension services are spread thin, experiential learning, locally-based mentorship

programs, and incubator opportunities like *Food to Bank On* could play key roles in the department's and NSAC's future efforts to offer agricultural education that is grounded in local farming communities and conducive to small-scale local food systems as part of Dalhousie University.

### ***5.2 Awareness Campaigns for Food and Farming***

Participants in the study remarked on the increased consumer awareness of local food in recent years, noting that Tatamagouche's local food initiatives are beginning to benefit from heightened community interest in food and farming issues. Interviewees attributed this transition in societal attitude in part to buy-local campaigns and consumer education programs that have received varying levels of government funding. One informant who was involved with the Tatamagouche Farmers' market has noticed that such initiatives have contributed to the market's growth in recent years:

I think farmers' markets have really benefited from the hype, the good hype, the attention being paid to local and to food in general. In the politics of food, there's so much written and there's been so much in the popular press. I mean, it's on people's minds. Even government policy, there's things there that are really helping the local farmers, like the Select Nova Scotia campaign, that sort of thing. So I think our market and other markets have really benefited from that.

In Nova Scotia, the Department of Agriculture began a consumer education program called 'Select Nova Scotia' in 2007. According to the project's website, the goal of the campaign "is to increase awareness and consumption of Nova Scotia produced and processed agri-food products by Nova Scotians and visitors." (NS Department of Agriculture, Fisheries and Aquaculture, 2007). NSAC's Continuing and Distance Education program offers skills-based courses for home-scale farmers and consumers such as food preservation, and gardening workshops. Federal and provincial funding sources have also contributed to grassroots efforts aimed at fostering connections between consumers and producers, promoting the food storage and preparation skills necessary for Nova Scotians to adopt more regional diets and developing localized guides to farms, u-picks, and farm stands. Such initiatives not only develop markets for Nova Scotian farms, but can contribute to a *civic* culture among the provinces' producers and consumers alike. However, without an integrated policy approach, these initiatives will be restricted to the marketing of local alternatives within the unchanged paradigm of globalized corporate agriculture.

While consumer education campaigns like 'Select Nova Scotia' are making steps to building awareness and developing a supportive and educated community around local agriculture, provincial policy lacks goals for the changes in consumption that are intended through this work. According to the Ecology Action Centre's Food Miles Project (Scott & MacLeod, 2010, p. 9) approximately 13% of food consumed in Nova Scotia is produced within the province. Scott et al. (2010) recommend that Nova Scotia set a specific goal (they give 20% local food by 2020 as an example) in order to strategically work towards a more food self-sufficient province.

### **5.3 Conservation and Stewardship of Agricultural Land**

As founders of the Tatamagouche Community Land Trust Cooperative encountered, there is a lack of public information and policy infrastructure to support community groups with goals of conserving and stewarding agricultural land. Following the introduction of the Community Land Trusts Bill (No. 241) to the provincial Legislature, Nova Scotia's Department of Natural Resources undertook a series of community consultations to identify the most effective policy direction in order to support CLTs, community interest groups, a Community Lands Special Purpose Fund, or land use easements (including agricultural easements) (Community Lands Trust Act, 2009; NS Department of Natural Resources, n.d.). The report and any resulting policy will play major roles in determining the ease with which future community groups, like the Tatamagouche CLT Cooperative, will be able to reach the goals of ensuring future access to sustainably-managed agricultural land.

### **5.4 Scale-Appropriate Regulation**

New entrants in agriculture in Tatamagouche and elsewhere tend to be relatively small farms and gardens, most of which are geared towards local markets. Study participants reported that it can be difficult for smaller-scale producers to comply with regulatory standards that tend to be geared towards larger operations. For example, while it may be financially feasible for a farm with 100 dairy cows to install an inspected dairy facility for cheese-making, it might not make economic sense for a diversified farm with 15 goats. As one farmer said, "These small farms get controlled to an extent that they cannot survive anymore." Interviewees mentioned dairy and meat as posing the most difficult regulatory barriers for smaller producers.

Diversified farms experience these regulations especially acutely because they must comply with a different set of standards for each product they produce. This balancing act is somewhat inherent in a diversified production scheme, but one producer pointed out that although their diversified farm has one inspected meat processing facility, "We use it four weeks out of the year, which is really nothing. During the other eleven months we cannot process anything else [other animals] in there."

Through the Rural Research Centre's "Changing Paradigms in Agriculture" research initiative, Stiles et al. likewise found such regulation-related issues, which they term "'regulatory roadblocks:' barriers for small farmers in agricultural communities across Atlantic Canada" (2009, p. 349). DeLind and Howard broached the same concern in the US policy context, asking why the "solution to an industrially created problem," like the 2006 large-scale outbreak of E. coli in industrial-scale food system "is a policy that reinforces the industry while diminishing the viability of alternatives? Why are scaled solutions not considered and given legal and regulatory room to operate?" (2008, p. 302-303).

In order to create policy that can encourage and support communities of smaller, locally-oriented, and diversified family farms, it is necessary to change the lens through which the development of regulatory regimes is viewed. DeLind et al. (2008) call for scaled regulation "according to production volume and geographic scope—situating food safety practices within ecological contexts and market extent, and situating oversight and enforcement within differing levels of public jurisdiction. (p. 312)" In the Nova Scotian context, two levels of scaled regulation for meat exist in terms of *geographic scope*, as there are different sets of inspection

requirements for meat sold within the Province versus that sold beyond the province. However, there is little differentiation in the application of regulation across *ecological contexts*, and Tatamagouche farmers are left wondering, like DeLind et al., why the problems seemingly created by large-scale agriculture are addressed by regulations that are detrimental to the small family farm. One interviewee, referencing the 2008 Canadian listeriosis epidemic that originated in a Toronto Maple Leaf Foods facility (a large meat processor whose products are distributed across Canada) (Attaran et al., 2008), explained that accountability and food safety practices have dramatically different implications at different scales:

It doesn't make sense. Farmers used to raise beef and they'd sell it to people in the community. People would come in and say, "I want a side of beef." They'd buy the side of beef and you'd get it cut up. They'd take it and they'd never get food poisoning, or all this stuff that they got now. And they say you can't do that because it's not government inspected. Well, look what happened to Maple Leaf—look how many people they poisoned! And they're supposed to be all inspected.

### ***5.5 Facilitating Cooperation and Networks***

Farmers tend to be Jacks and Jills of all trades. In addition to the wide variety of tasks that they carry out in order to produce food, those who choose to operate on a smaller scale or prioritize local markets take on additional workloads that tend to be performed in industrial agriculture by other members in the value chain. These include tasks such as processing, packaging, distribution, marketing, and sales.

There is interest among a number of Tatamagouche farmers in combining forces in some of these efforts by forming a cooperative. Their hope is that a cooperative would allow them to spend more of their time producing food, while maintaining their social and environmental values and keeping their operations small-scale and locally-focused. Two interviewees who each do their own direct marketing on small independent farms said they would love to form a cooperative, but they lack the time and resources to organize it. The first farmer emphasized the role the cooperative could play in easing some of the burden on small farmers by making some tasks easier:

Our idea is to work together for a greater thing. We don't all have to do the same thing, but if we could pull our resources together and share certain infrastructure or if we could have a place where everybody could drop our produce and have one person distributing it to the schools, and do all the marketing. One extra job would be taken away from us—the whole marketing and distribution. . . . [but] just trying to get the initial things in place, we'd basically have to stop producing for a whole year.

The second farmer pointed out that working together could also be good for the community in terms of making local produce more accessible to consumers:

I think farmers' cooperatives [could help in] making local meats, eggs, and vegetables accessible. I know several other farmers in this area are interested in doing that. Then we could all supply food and market it here and in other communities. For us to all do that separately, it's like a little bit here, a little bit there, a little bit there. It's so inefficient time-wise, you have no time to

work on your farm. The challenge becomes when all of the farmers are interested in doing that, but none of us have the time to set it up.

The traditional culture of mutual support among rural communities in the region (Maynard, 1994), along with common needs among communities of small-scale producers, make cooperatives a promising element of sustainable local and regional food systems. “Co-operation among producers,” according to Scott et al.’s 2008 study, “helps both to increase farm viability and to weave effective and productive social fabric in the community. (p. 105)”

Government priorities can facilitate the development of community-based cooperative efforts in the agricultural community by facilitating start-ups at the community level by funding for administrative staff and consulting services for producers who are interested in forming cooperatives. The Direct Marketing Community Trust Fund and Agrapoint are two excellent potential resources, for example, that have provided funding and expertise, respectively, to community-based agriculture initiatives. While the Direct Marketing Community Trust Fund has concluded its three year pilot program, evaluation of its effectiveness could potentially inform similar funding programs geared towards community-based cooperative enterprises.

## 6.0 Re-thinking Policy Paradigms

Lyson’s (2004) model of *civic* agriculture and Scott et al.’s (2008) *whole cost accounting* of agriculture in Atlantic Canada both conceptualize agricultural actors as providing for the public good. According to Lyson, “[c]ommunities that nurture local systems of agricultural production and food distribution as one part of a broader plan of economic development may gain greater control over their economic destinies, enhance the level of social capital among their residents, and contribute to rising levels of civic welfare and socioeconomic well-being” (Lyson, 2004, p. 84-85). If agriculture, like health, is indeed viewed as a public good, it is necessary to re-examine in the policy realm the role of government entities that may not have a specific agricultural mandate in contributing to the development of healthy local food systems and the value of agriculture to the state.

First, *civic* agriculture proposes that communities of civic agriculturalists foster socially, environmentally, and economically healthier rural communities. It follows, then, that branches of government that are responsible for health, social engagement, economic development, or environmental sustainability should be concerned with supporting healthy local food systems. At the provincial level in Nova Scotia, these departments include but are not limited to the Departments of Communities, Culture and Heritage; Economic and Rural Development and Tourism; Environment; and Health and Wellness.

Second, an examination of the ecological and social benefits of *civic* agriculture initiatives in Tatamagouche reveals that there is much more to agricultural activity than the simple production of commodities. Political recognition of these benefits would require some systemic changes to the way agriculture is approached by policymakers. In order to foster sustainable agriculture and food systems, farmers must be recognized not only as food, fibre and fuel producers, but as stewards of the land, guardians of biodiversity, educators, and mentors to a new generation of agriculture. This *multifunctional* perspective on the role of farmers could be recognized through public compensation for ecological goods and services, or through more comprehensive government programmes such as the European



Union's Common Agricultural Policy (CAP), which compensates farmers for non-market values of agriculture (European Commission, 2012; see also Wilson, 2007). Although such government programmes have not been flawless, they represent tested models of re-imagining agriculture's role in society. From the Canadian perspective, a Senate Standing Committee Report (2008) also employs the language of *multifunctional* agriculture and the *new rurality*. However, given that Canadian federal-provincial policy in practice prioritizes business agriculture (i.e. *Growing Forward*), these steps towards multifunctional pathways are unlikely to be taken without significant political pressure from social action groups.

## 7.0 Conclusion

This study has employed a narrative of socio-agricultural transition in Tatamagouche in order to examine barriers and opportunities faced by communities working to advance a *civic* agriculture. These models offer alternatives to the globalized industrial food system that is increasingly failing Atlantic Canada and indeed, rural communities worldwide.

From a historical perspective, the decline of over one thousand mixed dairy farms in the area to only one today, due to the consolidation of the dairy industry, contributed to making cheap agricultural land accessible to a new generation of civic agriculturalists. In Tatamagouche, newer farmers have found common ground with the older generation of farmers in the value they place on simple living and closeness to nature.

While present-day civic initiatives have managed to engage a committed core of early adopters, their scope is limited by time, resources, and awareness. As Lyson was careful to emphasize, “[c]ivic agriculture does not currently represent an economic challenge to the conventional agriculture and food industry, and it is unlikely to pose a challenge anytime soon. However, it does include some innovative ways to produce, process, and distribute food. And it represents a sustainable alternative to the socially, economically, and environmentally destructive practices that have come to be associated with conventional agriculture” (2004, p. 1). A community of Tatamagouche agriculturalists has indeed been successful in developing a wide range of alternative models, and was able, through this study, to offer insights on the policy barriers and opportunities encountered in their endeavours.

In a policy climate that continues, on the whole, to advance the agenda of globalized corporate agriculture, the experiences of smaller-scale farmers working to reshape food systems at the ground level must inform policy-level actions in order to revitalize North America's rural communities and work towards food sovereignty. Building on current opportunities such as the transition of the Nova Scotia Agricultural College away from government control (NSAC, 2011), established projects such as the Department of Agriculture's Select *Nova Scotia* education campaign (NS Department of Agriculture, Fisheries and Aquaculture, 2007), transitions in the extension mandates of Agrapoint (Agrapoint, 2010), outcomes from Nova Scotia's Direct Marketing Community Trust Fund project (NSDA, 2010a), and new programming for smaller-scale farmers through the *Think Farm* program (NSDA, 2010b), a close examination of policy frameworks is necessary in order to facilitate steps towards developing the models that can (re)build sustainable local food systems throughout Nova Scotia.

Concrete policy actions that may begin to address the challenges, and build on the opportunities, encountered within the AFN in Tatamagouche include the reframing of agricultural education to emphasize local knowledge and experiential learning; increased strategizing in public awareness campaigns for sustainable local food and agriculture; the development of clear legislative pathways for the stewardship and conservation of farmland; a review of regulatory regimes in order to accommodate small-scale and diversified family farms; and a funding package for the facilitation of locally-based producer cooperative startups.

While these actions may support the further development of alternative models, civic initiatives such as those in Tatamagouche require broader paradigmatic shifts in policy frameworks in order to grow a true “agrarian rebirth” (Surette, 2008). Such shifts may require more radical systemic changes such as expanding the agricultural mandate beyond departments of agriculture, recognizing the non-commodity benefits of agriculture, and ultimately re-thinking free trade agreements and the cheap food import policies that weaken local producers and food production systems and, ultimately, rural communities in eastern Canada.

## 8.0 References

- Agrapoint. (2010). *2011 business plan*. Retrieved April 8, 2011, from <http://www.agrapoint.ca/eng/images/stories/web/agrapointbp2011.pdf>
- Astyk, S., & Newton, A. (2009). *A nation of farmers: Defeating the food crisis on American soil*. Gabriola Island, B.C.: New Society Publishers.
- Attaran, A., MacDonald, N., Stanbrook, M. B., Sibbald, B., Flegel, K., Kale, R., & Hébert, P. C. (2008). Listeriosis is the least of it. *Canadian Medical Association Journal/Journal De L'association Medicale Canadienne*, 179(8), 739-40.
- Beaudry, M. (2010). *Monnaies sociales et développement local en contexte rural : le cas de la Sunrise Trail Community Development Co-operative et du North Shore LETS à Tatamagouche en Nouvelle-écosse*. Unpublished master's thesis, Université du Québec à Montréal (UQÀM).
- Brinkhurst, S. (2011). *A Community at work: The Tatamagouche creamery and dairy industry*. Virtual Museum of Canada. Retrieved March 7, 2011, from [http://www.virtualmuseum.ca/pm\\_v2.php?id=exhibit\\_home&fl=0&lg=English&ex=00000678](http://www.virtualmuseum.ca/pm_v2.php?id=exhibit_home&fl=0&lg=English&ex=00000678)
- CBC. (2011). *Farmers already gone as hog prices rise*. Retrieved April 8, 2011, from <http://www.cbc.ca/news/canada/nova-scotia/story/2010/06/08/pei-hog-prices-up-584.html?ref=rss>
- Colchester Historical Society. (2000). *Historic Colchester: Towns & countryside*. Halifax, NS: Nimbus.
- Cole, B. (2011). Food to Bank On: Helping new farmers, helping others. *Grow Northwest Magazine*. Retrieved Dec. 2, 2012 from <http://www.grownorthwest.com/2011/01/food-to-bank-on-helping-new-farmers-helping-others/>
- Community Lands Trust Act (as introduced). (2009). Bill No. 241, 2nd Session, 60th General Assembly, Nova Scotia, 58 Elizabeth II.

- Cone, C.A. & Myhre, A. (2000). Community supported agriculture: A sustainable alternative to industrial agriculture? *Human Organization*, 59(2), 187-197.
- DeLind, L.B. & Howard, P.H. (2008). Safe at any scale? Food scares, food regulation, and scaled alternatives. *Agriculture and Human Values*, 25(3), 301-317.
- European Commission. (2012) *The Common Agricultural Policy: A partnership between Europe and Farmers*. Luxembourg: Publications Office of the European Union.
- Goldschmidt, W. (1946). *Small business and the community*. Report of the Smaller War Plants Corporation to the Special Committee to Study Problems of American Small Business. Washington, DC: U.S. Government Printing Office.
- Graham, J. (2007). Learning from each other: Summer free school workshops important to community development. *The Truro Daily News*, p. 1.
- Forbes, E. R., & Muise, D. A. (1993). *The Atlantic provinces in confederation*. Fredericton: Acadiensis Press.
- Hanavan, L. & Kennedy, C. (2011). Socio-agricultural transition and civic agriculture in a Nova Scotian creamery community. Unpublished Manuscript.
- Institute for Community Economics. (1982). *The Community land trust handbook*. Emmaus, PA: Rodale Press.
- Jenkins, W. (1996). Restructuring of Irish dairy co-operatives since 1950: An example from County Tipperary. *Irish Geography*, 29(1), 38-48.
- Johnson, K. (1971). Iowa dairying at the turn of the century: The new agriculture and progressivism. *Agricultural History*, 45(2), 95-110.
- Kennedy, C. (2011). *A comparative analysis of farm-to-school activity in Nova Scotia and Maine: An institutional perspective*. Unpublished master's thesis, Dalhousie University.
- Kenyon, P. (2010). *Rural resilience and transformation*. Presentation at November 24<sup>th</sup> Rural Policy Forum in Tatamagouche, Nova Scotia, hosted by the Coastal Communities Network.
- Lyson, T. A. (2004). *Civic agriculture: Reconnecting farm, food, and community*. Medford, Mass.; Lebanon, NH: Tufts University Press; University Press of New England.
- MacEachern, A. & O'Connor, R. (2009). *Back to the island: The back-to-the-land movement on PEI*. University of Western Ontario, Faculty of Social Science. Retrieved March 3, 2011, from <http://niche-canada.org/member-projects/backtotheisland/files/Back%20to%20the%20Island%20Narrative.pdf>
- MacKay, D. M., & Ontario. (1968). *The economics of the farm separated cream sector in the Ontario dairy industry*. Farm Economics, Co-operatives and Statistics Branch, Ontario Dept. of Agriculture and Food.
- MacLennan, J. (2000). *100 years of Scotsburn: A century of growth and innovation*. Pictou, NS: Advocate Printing and Publishing Company.
- Magocsi, P. R., & Multicultural History Society of Ontario. (1999). *Encyclopedia of Canada's peoples*. Toronto: Published for the Multicultural History Society of Ontario by University of Toronto Press.

- Marsden, T., Banks, J., & Bristow, G. (2000). Food Supply Chain Approaches: Exploring their Role in Rural Development. *Sociologia Ruralis*, 40(4), 424-438.
- Maynard, S. (1994). Between farm and factory: The productive household and the capitalist transformation of the Maritime countryside, Hopewell, Nova Scotia, 1869-1890. In D. Sampson (Ed.), *Contested countryside: Rural workers and modern society in Atlantic Canada, 1800-1950* (pp. 70-104). Fredericton, NB: Acadiensis Press for the Gorsebrook Research Institute for Atlantic Canada Studies.
- Neuman, L. (2004). *Basics of social research: qualitative and quantitative approaches*. Boston, MA: Allyn and Bacon.
- Nova Scotia Agricultural College (NSAC). (2011). *Benefits of NSAC's governance transition*. Retrieved April 8, 2011, from <http://nsac.ca/governance/benefits.asp>
- Nova Scotia Community Counts. (2010). *Community Counts homepage*. Retrieved January 18, 2011, from <http://www.gov.ns.ca/finance/communitycounts/profiles/community/defaultp.asp?gnum=com1013&gnum2=com1013&gname=&gview=1&glevel=pro&gtype=&ptype=&gsel=&acctype=>
- Nova Scotia Department of Agriculture (NSDA). (2010a). *Agri-Food Industry Development Fund 2010–11: Category D - Direct Marketing Community Development Trust Fund*. Retrieved April 1, 2011, from [http://www.gov.ns.ca/agri/prm/programs/AFID\\_CATD.pdf](http://www.gov.ns.ca/agri/prm/programs/AFID_CATD.pdf)
- Nova Scotia Department of Agriculture (NSDA). (2010b). *Think Farm Guide for Beginning Farmers in Nova Scotia*. Retrieved April 2, 2011, from <http://www.gov.ns.ca/agri/thinkfarm/guide.pdf>.
- Nova Scotia Department of Agriculture, Fisheries and Aquaculture. (2007). *Select Nova Scotia: About us*. Retrieved April 20, 2011, from <http://www.selectnovascotia.ca/index.php?cid=2>
- Nova Scotia Department of Natural Resources. (n.d.). *Nova Scotia community lands trust discussion paper*. Retrieved April 19, 2011, from <http://www.gov.ns.ca/natr/land/clt/pdf/Community-Lands-Trust-Discussion-Paper.pdf>
- Nova Scotia Department of Natural Resources. (2010). *Public consultation: Community lands trust*. Retrieved April 19, 2011, from <http://www.gov.ns.ca/natr/land/clt/>
- Nova Scotia Land Review Committee. (2010). *Preservation of agricultural land in Nova Scotia*. Retrieved April 8, 2011, from <http://www.gov.ns.ca/agri/elibrary/NSALRC-rpt.pdf>
- Parson, H. (1999). Regional trends of agricultural restructuring in Canada. *Canadian Journal of Regional Science*, 22(3), 343-356.
- Polanyi, K. (1957). The economy as instituted process. In K. Polanyi, C. M. Arensberg, & H. W. Pearson (Eds.), *Trade and Markets in the Early Empires* (pp. 243-270). Glencoe, IL: Free Press.
- Sacouman, R. J. (1979). The differing origins, organisation, and impact of Maritime and Prairie co-Operative movements to 1940. In R. J. Brym & R. J. Sacouman (Eds.), *Underdevelopment and social movements in Atlantic Canada* (pp. 37-58). Toronto: New Hogtown Press.

- Sampson, D. (Ed.). (1994). *Contested countryside: Rural workers and modern society in Atlantic Canada, 1800-1950*. Fredericton, NB: Acadiensis Press for the Gorsebrook Research Institute for Atlantic Canada Studies.
- Scott, J. & Colman, R. (2008). Towards a healthy farm and food sector: Indicators of genuine progress. Nova Scotia: GPI Atlantic.
- Scott, J. & MacLeod, M. (2010). *Is Nova Scotia Eating Local? And if not...Where is our food coming from?* Report, Ecology Action Centre and Nova Scotia Federation of Agriculture.
- Senate Standing Committee Report (2008). *Beyond freefall: Halting rural poverty*. Rural Secretariat, Ottawa, June.
- Sharp, J., Imerman, E., & Peters, G. (2002). Community Supported Agriculture (CSA): Building Community Among Farmers and Non-Farmers. *Journal of Extension*, 40(3), 1-6.
- Statistics Canada. (2011). *2006 Census of Agriculture*. Retrieved 20 April, 2011 from [http://www26.statcan.ca:8080/AgrProfiles/cp06/Table.action;jsessionid=DE00F64AC5524F30D26CB863F48EA1BE?prov=12&geog\\_id\\_amal=120310008&tab\\_id=14&search=search&offname=Tatamagouche&loccode=3737&placename=tatamagouche&placestart=0&geog\\_id=120310008](http://www26.statcan.ca:8080/AgrProfiles/cp06/Table.action;jsessionid=DE00F64AC5524F30D26CB863F48EA1BE?prov=12&geog_id_amal=120310008&tab_id=14&search=search&offname=Tatamagouche&loccode=3737&placename=tatamagouche&placestart=0&geog_id=120310008)
- Stiles, D. (2009). Agriculture transformed. *The Guardian*, December 8, p. A7.
- Stiles, D. & Cameron, G. (2009). "Changing paradigms?: Rural communities, agriculture, and corporate and civic models of development in Atlantic Canada", *Journal of Enterprising Communities: People and Places in the Global Economy*, 3(4), 341-354.
- Surette, R. (2008, November 29). Farming collapse and hopes for rebirth. *Chronicle Herald*.
- Tatamagouche Summer Free School (TSFS) (2006). *About Waldegrave Farm*. Retrieved February 10, 2011, from <http://freeschool.fairtrademedia.com/files/freeschool/2006/waldegrave.html>
- Vissers, H. (2011, March 12). *Agricultural production perspective on food security*. Public Seminar at the School for Resource and Environmental Studies, Dalhousie University.
- Weaver, S. (2004). *Coming from away: The back-to-the-land movement in Cape Breton in the 1970s*. Master's Thesis, University of New Brunswick.
- Wilson, G. A. (2007). *Multifunctional Agriculture A Transition Theory Perspective*. CABI International.
- Winson, A. (1985). The uneven development of Canadian agriculture: Farming in the Maritimes and Ontario. *Canadian Journal of Sociology/cahiers Canadiens De Sociologie*, 10(4), 411-438.