## CHANGING PARADIGMS: A COMMUNITY STUDY OF SOCIO-AGRICULTURAL TRANSITION IN TATAMAGOUCHE, NOVA SCOTIA

by

#### Louise Hanavan

Submitted in partial fulfillment of the requirements for the degree of Master of Environmental Studies

at

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#### **DALHOUSIE UNIVERSITY**

#### SCHOOL FOR RESOURCE AND ENVIRONMENTAL STUDIES

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## **TABLE OF CONTENTS**

LIST OF TABLES	vi	
LIST OF FIGURES	vii	
ABSTRACT	viii	
LIST OF ABBREVIATIONS USED	ix	
ACKNOWLEDGEMENTS	x	
CHAPTER 1 INTRODUCTION	1	
1.1 PROBLEM STATEMENT		
1.2 DEFINING SOCIO-AGRICULTURAL TRANSITION		
1.2 DEFINING SOCIO-AGRICULTURAL TRANSITION		
1.4 Organization of Thesis		
CHAPTER 2 LITERATURE REVIEW	4	
2.1 ENERGY AND AGRICULTURAL SYSTEMS	4	
2.2 AGROECOLOGY		
2.3 FOOD SECURITY		
2.4 FOOD SOVEREIGNTY		
2.5 PROXIMITY AND DISTANCING		
2.7 LOCALISM AND LOCAL FOOD SYSTEMS		
2.8 CLUSTER ECONOMICS		
2.9 MARKET-ORIENTED INITIATIVES (MOIS)		
2.10 FOOD AND AGRICULTURE 'MOVEMENTS'	13	
2.11 Genuine Progress Indicators (GPI)	13	
2.12 TRANSITION THEORY		
2.13 Post-productivism		
2.14 MULTIFUNCTIONAL AGRICULTURE		
2.15 CIVIC AGRICULTURE	10	
CHAPTER 3 METHODS		
3.1 Research Design		
3.2 DATA COLLECTION		
3.3 KEY INFORMANT INTERVIEWS		
3.5 COMMUNITY FORUM		
	22	
CHAPTER 4 SOCIO-AGRICULTURAL TRANSITION AND CIVIC AGRICULTURE IN A CREAMERY-BASED COMMUNITY	24	
4.1 Abstract	24	
4.2 KEYWORDS		
4.3 Introduction		
4.4 BACKGROUND	27	
4.5. CONCEDIUM FRAMEWORK		

4.6 METHODS	31
4.7 RESULTS	
4.8 'CIVIC' INITIATIVE PROFILES	
4.8.1 LOCAL CURRENCY	
4.8.2 COMMUNITY LAND TRUST (CLT)	
4.8.3 FARMERS' MARKET	
4.8.4 COMMUNITY SUPPORTED AGRICULTURE (CSA)	
4.9 DISCUSSION	
4.10 LIMITATIONS	56
4.11 CONCLUSION	57
CHAPTER 5 POLICY'S ROLE IN SOCIOAGRICULTURAL TRANSITION:	
A COMMUNITY STUDY IN TATAMAGOUCHE, NOVA SCOTI	A62
5.1 Abstract	62
5.2 Introduction	64
5.3 BACKGROUND AND CONCEPTUAL FRAMEWORK	67
5.4 METHODS	70
5.5 FINDINGS	71
5.5.1 HISTORICAL NARRATIVE	
5.5.2 CHALLENGES AND OPPORTUNITIES AMONG 'CIVIC' INITIATIVES	
5.5.2.1 COMMUNITY SUPPORTED AGRICULTURE (CSA)	76
5.5.2.2 COMMUNITY LAND TRUST (CLT)	77
5.5.2.3 SCHOOL FOOD	
5.5.2.4 LOCAL CURRENCY SYSTEM	
5.5.2.5 ORGANIC / ECOLOGICAL FARMING PRACTICES	
5.6 IMPLICATIONS FOR POLICY	
5.6.1 MENTORSHIP AND SKILL SHARING	
5.6.2 AWARENESS CAMPAIGNS FOR FOOD AND FARMING	
5.6.3 CONSERVATION AND STEWARDSHIP OF AGRICULTURAL LAND	
5.6.4 SCALE-APPROPRIATE REGULATION	
5.6.5 FACILITATING COOPERATION AND NETWORKS	
5.6.6 REDEFINING 'FARM' AND 'FARMER'	
5.7 CHANGING POLICY PARADIGMS	
5.8 Conclusion	
CHAPTER 6 CONCLUSION	95
6.1 SUMMARY	
6.2 RESEARCH IMPLICATIONS	
6.3 RECOMMENDATIONS FOR FUTURE RESEARCH	
6.4 CONCLUDING COMMENTS	101
BIBLIOGRAPHY	
APPENDICES	116
APPENDIX A: INTERVIEW GUIDE (GROUP A)	116
APPENDIX B: INTERVIEW GUIDE (GROUP B)	118
APPENDIX C: CONSENT FORM (GROUP A)	
APPENDIX D: CONSENT FORM (GROUP B)	
APPENDIX E: CONSENT FORM (COMMUNITY FORUM)	
APPENDIX F: EDITORIAL, TATAMAGOUCHE LIGHT	137

## **LIST OF TABLES**

Table 1	Domestic Disappearance of Margarine & Creamery Butter, 1949-1971	35
Table 2	Consolidation of Dairy Farming in NS, 1976 - 2006	81

## **LIST OF FIGURES**

Figure 1	Agricultural Land in	Colchester County	7(	67
0				

#### **ABSTRACT**

This research examined changes in culture and agriculture in the rural community of Tatamagouche, Nova Scotia, with a specific interest in understanding and contextualizing (re)localization initiatives. The study employed key-informant interviews with 23 members of the agricultural community to develop a narrative of socio-agricultural transition, which was used to launch discussion on the role of agriculture during a public forum in Tatamagouche. The creamery was found to have played a central role in the community's history, and its gradual decline coincided with the growing disuse of farmland in the area. New communities of farmers moved onto available farmland in Tatamagouche. Today, current 'civic' agriculture initiatives include CSAs, a local currency system, a farmers market, and a community land trust. The challenges and opportunities in the revived local agriculture community are discussed, and policy recommendations to support community-scale sustainable food systems are offered based on findings in Tatamagouche.

#### LIST OF ABBREVIATIONS USED

AFN Alternative Food Network

AR Action Research

CAP Common Agricultural Policy
CLT Community Land Trust

CSA Community Supported Agriculture

E. coli Escherichia coli EU European Union

FAO Food and Agriculture Organization

GDP Gross Domestic Product

GMO Genetically Modified Organism

GPI Genuine Progress Index

LETS Local Exchange Trading System MOI Market-Oriented Initiative

NDP New Democratic Party (Canada)

NRCan Natural Resources Canada

NS Nova Scotia

NSA New Sociology of Agriculture NSAC Nova Scotia Agricultural College NSFSN Nova Scotia Food Security Network

PEI Prince Edward Island RRC Rural Research Centre SFSC Short Food Supply Chain

SPD Social Democratic Party (German)

UN United Nations

UNCED United Nations Conference on Environment and Development

TPQ Total Production Quota

TSFS Tatamagouche Summer Free School

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#### **CHAPTER 1 INTRODUCTION**

#### 1.1 PROBLEM STATEMENT

The increased globalization and corporatization of agriculture in the past decades has altered the social fabric of rural communities around the world. In the face of what the Canadian Senate called a "seemingly unstoppable trend of rural decline" (Senate Report, 2008), innovative rural citizens are exploring alternative models that move towards reclaiming and (re)localizing food systems.

The re-localization of food systems has been explored conceptually in the literature described in Chapter 2, and case studies examining these systems have been conducted in other parts of North America and the world. The Rural Research Centre (RRC) at the Nova Scotia Agricultural College (NSAC) has embarked on a study of socio-agricultural change in Atlantic Canada. The resulting research programme, "Changing Paradigms: Agricultural Production Models, Farm Health and Safety," has recognized the need for in-depth research on how this transition is grounded at the community level, particularly in Atlantic Canada. Although the concept of socio-agricultural transition has been examined theoretically in the fields of economic geography, political economy, political ecology, sociology, peasant studies, cultural ecology, and others(Wilson, 2007; Busch and Bain, 2004; Cameron, 2009; Clancy, 2003; Kneen, 1993; Lyson, 2004; McLaughlin, 1998; Shucksmith, 1993; Kautsky, [1899] 1988; Scott and Colman, 2008b; Strange, 2008 [1988]), there remains the need to explore this scholarly work in the Atlantic Canadian context.

This research has as its goal to generate new knowledge about the social, environmental and economic roles of local agriculture in Tatamagouche, Nova Scotia. It also intends to contribute to broader theoretical discussions of socio-agricultural transition in rural communities worldwide, such as those surrounding the impacts of globalization and movements to (re)localize food systems. Additionally, as an action-research project, this study aims to engage research participants in these discussions, and to generate policy recommendations based on its findings.

#### 1.2 DEFINING SOCIO-AGRICULTURAL TRANSITION

The term *socio-agricultural transition*, in the context of this study, refers to cultural, social, economic and political transitions, as they relate to food production and agricultural systems. These transitions have been examined in the fields of rural sociology, economic geography, political economy, political ecology, peasant studies, environmental science, cultural ecology, and other disciplines (Wilson, 2007; Busch and Bain, 2004; Cameron, 2009; Clancy, 2003; Kneen, 1993; Lyson, 2004; McLaughlin, 1998; Shucksmith, 1993; Kautsky, [1899] 1988; Scott and Colman, 2008b; Strange, 2008 [1988]).

Wilson (2009) defined transition theory as "a theoretical framework that attempts to understand and unravel socio-economic, political, cultural and environmental complexities of societal transitions (or sub-systems of society such as agriculture) from one state of organization to another." More specifically, according to Martens and Rotmans (2005), transitions in agriculture are inextricably linked to transitions in health,

ecology, biodiversity, economy, and society, and "the characteristics of these transitions are heavily determined by regional political, institutional, social and cultural conditions" (2005, p.1137).

#### 1.3 RESEARCH OBJECTIVES

This research has four primary objectives:

- To gain a comprehensive understanding of historical and present-day socioagricultural transition in Tatamagouche, Nova Scotia.
- 2. To gain a comprehensive understanding of factors that have influenced socioagricultural transition in Tatamagouche.
- 3. To identify efforts to (re)build local food systems in Tatamagouche.
- 4. To explore the role of policy in supporting or inhibiting those efforts.

#### 1.4 Organization of Thesis

The thesis is organized into six chapters. Following this chapter, Chapter 2 is a review of the pertinent literature. Chapter 3 outlines the methods employed in the research process. Chapters 4 and 5 are presented in journal-article format including their own abstracts, introductions, methods, results, discussion, and conclusions. Specifically, Chapter 4 examines socio-agricultural transition in Tatamagouche through the lens of civic agriculture. Chapter 5 explores the policy implications of the study. Finally, Chapter 6 provides conclusions based on Chapters 4 and 5 and suggests directions for future research.

#### **CHAPTER 2 LITERATURE REVIEW**

#### 2.1 ENERGY AND AGRICULTURAL SYSTEMS

In the face of depleting fossil fuel supplies, the globalized system of industrial agriculture is increasingly recognized as environmentally unsustainable (Heinberg and Bomford, 2009; Hopkins, 2008; Astyk and Newton 2009, etc.). While agriculture was once a net producer of energy, according to Heinberg and Bomford, "today the food system is a net user of energy in virtually every nation; this is especially so in industrial countries, where each calorie of food energy produced and brought to the table represents an average investment of about 7.3 calories of energy" (2009, p. 4)

The lengthy supply chain that characterizes the global industrial food system demands fossil fuel energy inputs at every stage of the process—from the production of seeds and fertilizer, to tractors in the field, to processing, packaging, transporting, selling and consuming. Rethinking agricultural systems, therefore, is important from the perspective of energy conservation and sustainability, not only in relation to energy inputs for transportation, but also to the reliance on fossil fuel that is at the foundation of the industrial agricultural production model. As critics note, locally-produced food is not always a more sustainable or energy efficient choice (Born and Purcell, 2007; Mariola, 2008; Pelltier et al., 2009 and 2011). Local and distant producers alike are capable of engaging in unsustainable farming practices. Polluting and energy-intensive practices are particularly likely in instances where the food, fibre, or fuel in question is ill-adapted to the locale or produced off-season. Scott and MacLeod (2010) give the example that it.

doesn't make sense to grow pineapple in Nova Scotia. Likewise, a fresh Nova Scotian tomato may represent less overall energy input than one from California in the summer, while the opposite may be true in the winter.

Evaluating the energy required to take food from farm to plate is a complex and difficult task that has been undertaken by a body of scholarship that spans from life cycle assessment to food miles research. However, because society's reliance on fossil fuel cannot continue unchanged into the future, it is necessary to work to establish and improve low-input local alternatives to the dominant paradigm of fossil-fuel-driven globalized agriculture.

#### 2.2 AGROECOLOGY

Agroecology as a discipline is defined as "the study of the interactions between plants, animals, humans and the environment within agricultural systems," (Dalgaard, Hutchings and Porter, 2003, p. 42) or the "ecology of food systems" (Francis et al., 2003). In addition to being a field of study, agroecology has come to be understood as a set of principles in the practice of sustainable agriculture, which include the "conservation and enhancement of local agricultural resources (germplasm, soil, beneficial fauna, plant biodiversity, etc.) by emphasizing a development methodology that encourages farmer participation, use of traditional knowledge, and adaptation of farm enterprises that fit local needs and socioeconomic and biophysical conditions" (Altieri, 2002).

Sustainable farming practices are gaining widespread recognition as necessary elements of future food systems on a global scale. A recent report to the United Nations (UN) Human Rights Council emphasized the importance of promoting agroecology in global policy regimes. The benefits of agroecology, according to the report, include increased productivity at the field level, rural poverty reduction, increased capacity for climate change adaptation, and contributions to improved nutrition (De Schutter, 2011).

#### 2.3 FOOD SECURITY

Food Security, according to the Nova Scotia Food Security Network (NSFSN), "means that all people, at all times, have access to sufficient, nutritious, safe, personally acceptable and culturally appropriate foods that are produced, procured and distributed in ways that are environmentally sound, socially just and sustainable" (2009).

The concept of food security emerged from the international development perspective in the 1970s in reference to access to food in the context of global food shortages and price increases (Maxwell, 1996; FAO, 2006). Today, concern over food security is increasing in both the Global North and the Global South, as global food prices fluctuate with the price of oil. The cost of food is already a real problem for Nova Scotians. As Patty Williams and the Participatory Food Costing Project at Mount Saint Vincent University reported, "14.6% of Nova Scotian households (approximately 132,400 households) reported either moderate or severe income-related food insecurity in 2004. Nova Scotia is the only province with significantly higher levels than the national average (9.2%)" (2008, p. 2, from Health Canada, 2007).

The vulnerability of global food systems to peak oil and climate change (Heinberg and Bomford, 2009) has caused an examination of how much of the North American diet consists of imported food. Scott and MacLeod (2010) reported that Nova Scotia currently spends 13 percent of its 'food dollar' on food produced within the Province. Although data on the amount of domestic versus imported food consumed (aside from the dollar value) is not available, the dollar value of imported food in the province signals a very heavy reliance on imports in the Nova Scotian diet.

#### 2.4 FOOD SOVEREIGNTY

In 1996, the international peasants' organization La Via Campesina asserted that the term 'food security' was not sufficient to describe the change that was required of globalized food systems dominated by multinational corporations. Food security had become a term used to justify food aid policies, or 'food dumping,' which furthered dependent relationships between the Global North and the Global South, and undermined the livelihoods of peasant farmers in the Global South.

La Via Campesina coined the phrase 'food sovereignty' in order to describe the goal of "not just guaranteed access to food, but democratic control over the food system—from production and processing, to distribution, marketing, and consumption. Whether applied to countries in the Global South working to re-establish national food production, to farmers protecting their seed systems from GMOs, or to rural-urban communities setting up their own direct marketing systems, food sovereignty aims to democratize and transform our food systems" (Holt-Giménez, 2009).

#### 2.5 Proximity and Distancing

Brewster Kneen, who was a small-scale homesteader and sheep farmer near Tatamagouche from 1971 to 1989 (Holland, 1994), defines "distancing" in the food system as "processes that are separating people from the sources of their food and replacing diversified and sustainable food systems with a global commodified food system" (1993, p. 24). Kneen also advocates for a transition to the opposite, which he calls "proximity." His work notes emerging "expressions of proximity," including farmers' markets, CSA programs, and local bakeries, which replace the large monoculture farms brought about by "distancing" with communities of small-scale farms that are more resilient because of their diversity.

## 2.6 ALTERNATIVE FOOD NETWORKS (AFNs) AND SHORT FOOD SUPPLY CHAINS (SFSCs)

Alternative Food Network (AFN) is a broad term used to describe agricultural initiatives that work together to offer an 'alternative' paradigm to the dominant globalized system of corporate industrial agriculture (Jarosz, 2008). The descriptor 'alternative' has been contested in the literature, as it creates a stark conceptual dichotomy between 'global' and 'local' and lacks a measure of 'alternativeness' (Hinrichs, 2007; Watts, Ilbery, and Maye, 2005). Watts et al. propose defining initiatives within AFNs as 'stronger' and 'weaker' alternatives according to their emphasis on developing food supply chains (FSCs) as opposed to influencing consumer behaviour within the dominant paradigm (2005, p. 23).

Marsden, Banks and Bristow (2000) characterize short food supply chains (SFSCs) in terms of the "type of relationship between the producer and the consumer in these supply chains, and the role of this relationship in constructing value and meaning, rather than solely the type of product itself." Marsden et al. identify three types of SFSCs, all of which focus on the way that end products convey the added value of the sense of connection to production: Face-to-face relationships between the producer and the consumer, 'spatial proximity' between point of production and point of purchase, and a 'spatially extended' sense of regionalism in which the consumer attributes value to a product because of where it was produced (i.e. Champagne from the Champagne region of France).

#### 2.7 LOCALISM AND LOCAL FOOD SYSTEMS

A local food system, economically speaking, is "one that circulates, to the extent possible, dollars regionally between locally owned and operated food producers, manufacturers, retailers, restauranteurs, eaters, and all other supporting businesses" (Ernst, 2005). Hess describes "localism" as a reform movement by those who are "concerned with achieving greater local ownership and more democratic steering of regional economies" (2009, p. 241). There has been considerable growth in public discourse around local food in recent years, which has arisen in response to food-safety-based fears of globalized agriculture, food security concerns, health and nutrition,

community economic development, and environmentalism (Pollan, 2006; Astyk and Newton, 2009; Pawlick, 2009; Schlosser, 2001; Nestle, 2002).

There has been some concern among scholars that subscribing to the 'local trap' can detract attention from distributive justice concerns by putting on blinders to both local and global inequities (Born and Purcell, 2007; Hinrichs and Allen, 2007; Dupuis and Goodman, 2005). Localism has also been criticized as being over-focused on consumer behaviour in the marketplace. Hess gave the example of middle class consumers driving hybrid cars to the farmers' market. He asked to what extent this 'localist' or 'environmentalist' action truly challenges the dominant consumerist paradigm. When socially responsible consumption is not accompanied by political action, Hess argues, it "involves a reproduction of two main tenets of neoliberalism: devolution and privatization." Contemporary popular literature on food and agriculture can easily fall prey to this phenomenon, emphasizing either individual consumerist actions or macrolevel policy change, but failing to offer solutions that successfully incorporate both political and individual action (Hanavan, Kennedy and Cameron, 2010).

McEntee (2010) describes the evolution of the concept of localism, noting that 'contemporary' local is

represented by current local food initiatives and corresponding aspirations to support local farmers and to promote sustainability through local purchasing behaviour. The traditional local, on the other hand, is similar in that it represents food growing activities that are in close geographical proximity to consumption, but lacks the motivation associated with the contemporary local's programmatic literature; instead, it is guided by a motivation to obtain fresh and affordable food (p. 785).

The concept of 'place' in food and agriculture discourse is multilayered, as it refers not only to a particular location in space, but also to geographies that are defined by nature, culture, economics, infrastructure, and sense of 'community.' (Harris, 2010; Feagan, 2007; DeLind, 2002 and 2006). 'Place' plays into how words such as 'local' and 'community' are defined. Harris (2010) demonstrates that different AFNs employ different frameworks for defining 'place.' The 100 mile diet for example (Smith and MacKinnon, 2007), conceptualizes 'local' using "an arbitrary physical area", while a CSA program uses a 'community' of members to define 'place' (Harris, 2010, p. 361).

#### 2.8 Cluster Economics

Current discourse on rural community development in sustainable agriculture systems often advocates the development of rural communities' identity around a specific agricultural product (Buller and Morris, 2004; Brasier, Goetz, Smith, Ames, Green, Kelsy, et al., 2007), citing success stories such as cheese from the Comté region in France (Buller and Morris). Small farm clusters around a certain agricultural industry (Brasier et al.) allow for an integrated community of knowledge sharing, increased local processing capacity, and a shared cultural identity, adding value to the end product by selling the regional identity. This model has been particularly successful in Europe (e.g. cheese from the Comté region of France, or sparkling wine from the Champagne region).

## 2.9 MARKET-ORIENTED INITIATIVES (MOIS)

Market -oriented initiatives (MOIs) for sustainable food production stand in conceptual contrast to state-subsidized environmental support for agriculture, particularly in the European Union (EU). The EU's Common Agricultural Policy (CAP) supports social,

aesthetic and ecological benefits of agriculture by compensating farms for public goods provided by sustainable agriculture practices that are presumed to be un-captured by market prices. Buller and Morris argue that such policies are becoming unnecessary as MOIs begin to attract consumer dollars to these 'embedded' values of agricultural products (Polyani, 1956; Hinrichs, 2000; Murdoch et al., 2000; Granovetter, 1985), reasoning:

... [MOIs] represent a considerable advance upon the classic separation within public policy between supporting agricultural production with one hand (or funding source) and compensating for environmental damage with the other (p.1069).

According to Buller and Morris, "...MOIs are positioned at an interface between shifting production and consumption demands (and the relation between these demands) and thus bring purported benefits to both 'ends' of the food chain." The model of marketplace-led socio-agricultural transition can be appealing in the European context, where the CAP might give scholars such as Buller and Morris a sense of excess policy intervention. However, North American scholars such as DeLind caution against relying on the marketplace to make deep and meaningful changes in the food system and society:

Farmers, on one hand, are being encouraged to develop value-added products, niche markets, and new arrangements for the direct marketing of 'green,' 'socially responsible,' 'fair trade,' or other such goods and services. Consumers, on the other hand, are being encouraged to want them. While the ensuing relationships may be personable and the supply chain shorter and more innovative, the critical bonds and concerns still remain largely econometric in nature. Success is measured (and rationalized) in terms of profit generation, customer retention, and capital efficiency. People are identified by and valued according to their ability (or inability) to take part in market transactions (e.g., consumer-producer; buyer-seller; farmer-customer) (DeLind, 2002, as reported by Delind, 2006, p. 124).

Likewise, Scott and Colman advocate for increased policy intervention in Atlantic Canada in order to create a fertile environment for sustainable food systems, calling for compensation to farmers for ecological goods and services (2008, p. 30), which reflects the model of 'multifunctionality' in agriculture (See Section 2.16 *Multifunctional Agriculture*).

#### 2.10 FOOD AND AGRICULTURE 'MOVEMENTS'

The food movement, 'buy local' movement, sustainable agriculture movement, slow food movement, and the organic movement are just some of the ways that societal changes in food systems have been conceptualized as (a) social movement(s) (Hassanein, 1999, Goodman and Dupuis, 2002; Allen and Kovach, 2000; Buttel, 1997; Coit, 2008, etc.). Current popular literature on food and agriculture also reflects the idea of social movements in food and agriculture, calling for 'radical' changes in either consumer behaviour, or policy regimes (Hanavan, Kennedy and Cameron, 2010). These grassroots movements are complex, with diverse groups bringing different perspectives to the table depending on an array of factors such as socio-economics, gender, occupation, rurality, etc. The common value, however, is a rejection of the corporatized industrial food system that 'distances' (Kneen, 1993) people from their food and prioritizes profit over social and environmental justice.

### 2.11 GENUINE PROGRESS INDICATORS (GPI)

The Genuine Progress Index (GPI) is a form of 'full-cost accounting' which consists of a set of indicators offering an alternative to the Gross Domestic Product (GDP). The premise is that the GDP, which simply measures monetary transactions, is insufficient in describing 'genuine progress.' The GPI attempts to measure societal goods that may not be accounted for in the GDP because they cannot be ascribed a monetary value. These

goods include living standards, population health, time use, community vitality, education and environmental quality (GPI Atlantic, 2007).

GPI Atlantic, an Atlantic Canadian think-tank dedicated to conducting research based on the GPI, produced a series of in-depth 'Soils and Agriculture' reports over the course of seven years that examined the state of Atlantic agriculture in terms of alternative indicators of 'progress' (Scott, 2001; Scott, 2002; Scott and Cooper, 2002; Scott, 2003; Scott, 2008; Scott and Colman, 2008a; Scott and Colman, 2008b). The reports addressed agriculture's role in the vitality of rural communities in Atlantic Canada. In response to findings that revealed an aging farm population, high levels of imported food, and increased costs on farms, the reports recommended future monitoring of new indicators of progress towards sustainable local food systems, such as the percentage of local food used by public institutions.

#### 2.12 Transition Theory

Wilson (2009) defined transition theory as,

a theoretical framework that attempts to understand and unravel socio-economic, political, cultural and environmental complexities of societal transitions (or subsystems of society such as agriculture) from one state of organization to another (p. 14).

More specifically, according to Martens and Rotmans, "[t]ransitions only occur when developments, policies and initiatives from multiple actors in the three different domains reinforce each other at different scale levels." Transitions in agriculture are inextricably linked to transitions in health, ecology, biodiversity, economy, and society, and "the

characteristics of these transitions are heavily determined by regional political, institutional, social and cultural conditions" (2005, p.1137).

#### 2.13 Post-productivism

The concept of post-productivism was first introduced in the early 1990s in order to describe a transition away from production-driven farm households to subsistence agriculture complemented by off-farm income (Shucksmith, 1993). There has been some debate over the usefulness and validity of post-productivist theory. Some studies have refuted the idea that a post-productivist transition is happening, citing a lack of evidence of any such transition. Wilson (2009) argues that the "post" in "post-productivism" fails to recognize that productivism and post-productivism are not mutually exclusive, but are actually occurring simultaneously. Therefore, describing a transition or phenomenon as "post-something-else" fails to capture its unique characteristics (i.e. 'post-productivism only conveys the fact that something is taking place after productivism).

#### 2.14 MULTIFUNCTIONAL AGRICULTURE

Multifunctionality, a concept which was first proposed at the Rio Earth Summit of 1992 (UNCED 1992 as cited in Waldhardt et al., 2010), supposes that agriculture serves purposes beyond the production of commodities. These non-market outputs of agriculture include the maintenance of agricultural heritage buildings and equipment, the landscape values, rural viability, environmental quality, and food security (Cahill, 2001). In the European context, the concept of multifunctionality is particularly relevant because of its adoption and application through the CAP. As Buller and Morris explain,

the European rural environment is essentially an agrarian one and, consequently, the aesthetics, priorities, social norms, and indeed ethics that nurture European environmentalism draw deeply from this basic cultural complicity (2004, p.1066).

Wilson (2007) explores the implications of multifunctionality for theories of postproductivism in agriculture, arguing that the term 'postproductivism' should be replaced with 'non-productivism,' and that the concept of multifunctionality "occupies the (conceptual and real) space between the extreme pathways of productivism and non-productivism" (p. 214).

#### 2.15 CIVIC AGRICULTURE

Lyson's (2004) theory of civic agriculture is based on the premise that small-scale locally-controlled agriculture is good for the social, economic, and environmental well-being of communities. The idea has its roots in Goldschmidt's 1946 report to the United States Congress, which found a positive correlation between the presence of small, locally-owned enterprises in an area and the overall health and wellbeing of its population. Actors in 'civic' agriculture networks direct their efforts to local markets, see themselves as integral to rural communities, value quality over quantity of yield, employ smaller-scale but more labour-intensive practices, rely on local knowledge, and strive for direct links between producers and consumers (Lyson, 2004, p. 85).

Other social scientists have also explored the phenomena of farmer and consumer behaviour that seems illogical from a pure free-market capitalist perspective, pointing to 'food citizenship' (Baker, 2005) and 'ecological citizenship' (Seyfang, 2006), and

examining the 'embeddedness' of agriculture in societal constructs (Polyani, 1956; Hinrichs, 2000; Murdoch et al., 2000; Granovetter, 1985).

Critics of civic agriculture argue that its focus on local production doesn't take social justice issues into account, including labour relations and the accessibility of local food by marginalized populations. These scholars also point out that civic agriculture does not constitute a paradigmatic shift in the neoliberal ago-industrial model when it manifests as business enterprises that reinforce consumerist solutions and devolves responsibilities from social government support systems to private and local-level actors (Constance, 2007; Allen and Guthman, 2006; Delind, 2002; Hinrichs and Kremer, 2002; Guthman, Morris, and Allen, 2006).

#### 2.16 MATCHING CONSUMPTION AND PRODUCTION

State-led planning for the matching of domestic production and consumption has been explored in a number of different contexts. Thomas (1974) addressed the challenges of such planning in socialist countries including Cuba, Tanzania and Eastern Europe, and made recommendations for the coordination of production for domestic need. His work emphasized the importance of planning for self-sufficiency in agricultural growth, providing for the nutritional and textile needs of the country and building inter-sectoral linkages between industry and agriculture.

Today Atlantic Canadian food activists, such as Scott and MacLeod, whose 2010 report found current levels of food imports in Nova Scotia to be the highest in history, call for

the revisiting of planning domestic production and consumption, pointing out that, in terms of food systems, "[w]e can do a much better job of matching supply with demand" (Scott and MacLeod, 2010).

#### **CHAPTER 3 METHODS**

#### 3.1 RESEARCH DESIGN

This study borrowed from the tradition of action-research (AR) in that it was undertaken with a "social change agenda" (Greenwood and Levin, 2007, p. 4) aiming to engage participants in reflecting on the state of agriculture in their community, with the concrete advocacy outcomes in the form of policy recommendations. The study's design followed from Banks and Mangan's 1999 "community action-research" study in rural Ontario, wherein, "by soliciting stories from [their] participants, by listening to stories told individually and in groups, [they] begin to perceive the community as it is seen by those who live there" (1999:22). The community forum, modeled on Banks and Mangan's "reflective feedback session," was particularly effective in engaging participants in the process of data analysis and reflection.

Although this study was characterized by a social change agenda and researchers valued genuine engagement and contribution by participants, Greenwood and Levin argue that "unless all three elements [action, research, and participation] are present, the process may be useful, but it is not AR" (2007, p. 5) In the case of this research, participants were not involved in the formulation of research questions, the collection of data, or the preliminary data analysis process. Additionally, although the project's outcomes included policy recommendations based on the findings, there is no direct 'action' solicited from participants. Therefore, this research borrowed elements of AR, but does not constitute pure AR.

#### 3.2 DATA COLLECTION

Data collection for this study was conducted jointly with Chloe Kennedy, a colleague at both the School for Resource and Environmental Studies at Dalhousie University and the Rural Research Centre at the Nova Scotia Agricultural College. Data collection consisted of a series of semi-structured key informant interviews, and a community forum.

#### 3.3 Key Informant Interviews

In order to collect narratives of both past and present socio-agricultural transition in Tatamagouche, two groups of key informants were recruited for the study.

Key informants for the first group (Group A) were selected for their knowledge of historical socio-agricultural transition in Tatamagouche. Participants in this group (n = 10) were chosen based on the following criteria:

- He or she must have been a long-term resident of the Tatamagouche area
- He or she must have been over the age of 50
- He or she must have had a significant history of involvement in the agricultural community in the area.
- He or she must have been available for an in-person interview between the dates of February 15<sup>th</sup>, 2010 and September 1<sup>st</sup> 2010.

During the approximately 1.5 hour interviews, Group A participants were asked to recall changes in the agricultural community as well as anecdotes and stories from their parents and grandparents, where appropriate. The interview guide for Group A is provided in Appendix A.

Key informants for the second group (Group B) were selected for their knowledge of **current transitions in socio-agricultural conditions** in Tatamagouche. These key informants (n = 13) were chosen based on the following selection criteria:

- S/he must have been involved in some aspect of present-day socio-agricultural
  transition in Tatamagouche. This was open to include new entrants to farming,
  small-scale production farmers, farmers' market representatives, local currency
  representatives, community garden representatives, and farmers employing
  alternative agriculture practices.
- S/he must be available for an in-person interview between the dates of February 15<sup>th</sup>, 2010 and September 1<sup>st</sup> 2010.

During interviews with Group B participants, which lasted approximately 1.5 hours, participants were asked to talk about alternative initiatives aimed at socio-agricultural transition, as well as factors that encouraged or inhibited such initiatives. The interview guide that was used for Group B is provided in Appendix B.

Participants were selected via snowball sampling (Neuman, 2004), beginning by asking two existing contacts in the community to refer other community members based on the screening measures for either Group A or Group B, as described above.

Most of the interviews took place in the participants' homes, except for two which took place in a local coffee shop. Prior to each interview, participants signed consent forms that indicated (1) their understanding of and willingness to participate in the study, (2)

their permission for the use of direct quotes, and (3) their consent to be audio recorded (Appendix C and D).

#### 3.4 Preliminary Analysis

Each of the recordings from the key informant interviews was transcribed and analysed using NVivo qualitative data analysis software. First, each transcript was thematically coded. The major themes from the interviews were then used to develop a narrative of transition in the community, which was analysed using socio-agricultural transition as a conceptual framework. The narrative was presented at the community forum, where participants were asked to verify the findings and engage in a discussion intended to contextualize and analyse the results (see below, Section 3.5).

#### 3.5 COMMUNITY FORUM

The narrative of socio-agricultural transition in the community, along with the preliminary analysis was presented to a group of approximately 50 interviewees and other interested community members during a community forum on January 11<sup>th</sup>, 2011 at the Tatamagouche Fire Hall. The event was advertised through participants' social networks, as well as a discussion piece that appeared in the local newspaper, the *Tatamagouche Light* in advance of the session (Appendix F).

The community forum began with a one-hour presentation of the narrative that had been assembled through key informant interviews. It included a reading from the preliminary analysis piece, which featured un-attributable direct quotes from the key informant interviews that were of particular interest to attendees. During the second hour of the

community forum, attendees were asked to participate in reflection on and analysis of the narrative compiled from the interview data.

# CHAPTER 4 Socio-agricultural Transition and Civic Agriculture in a Creamery-based Community

#### 4.1 ABSTRACT

Rural communities around the world are struggling to find social, economic and ecological justice within the globalized paradigm of industrial agriculture and international trade. Rural Atlantic Canada is particularly engaged in this struggle, as it suffers the loss of many of its traditionally smaller-scale farms, which have become increasingly unprofitable through forced competition with the cheap subsidized imports of food made possible by international trade agreements such as the WTO and NAFTA. To prevent the further unraveling of rural community fabric, there is growing support among Atlantic Canadians for the re-localization of food systems, as evidenced by provincial buy local campaigns, media attention to local food issues, and growth in alternative agriculture initiatives such as farmers' markets and Community Supported Agriculture (CSA).

Through a series of key informant interviews in Tatamagouche, Nova Scotia, Canada, this study investigated the nature of agricultural change in a rural community, as well as the opportunities for grounding local food systems at the community level. Through these interviews and a community forum, a narrative of socio-agricultural transition was established, which was analysed through a conceptual exploration of "socio-agricultural transition," with a particular focus on Lyson's (2004) civic agriculture model.

The Tatamagouche creamery, which reached its peak production in the 1940s, was

supplied by hundreds of small-scale mixed family-farms in the area, which typically relied on cream sales for a portion of their income and used the skim milk to support other farm enterprises. A number of factors contributed to the end of commercial dairy production on all but one Tatagouche farm, and the final closure of the creamery in 1992 (MacLennan, 2000; Brinkhurst, 2011). These changes presented opportunities for a diverse community of alternative-minded small-scale producers to access affordable farm land in the 1960s and 1970s and to lay the foundation for the development of a 'civic' local food system. This paper recounts these narratives of past and present socioagricultural transition in the community, and explores some of the factors that have contributed to the successes and failures of small-scale 'civic' alternatives in present-day agriculture in Tatamagouche.

This study is part of a larger research initiative at the Rural Research Centre of the Nova Scotia Agricultural College, "Changing Paradigms in Atlantic Agriculture." Funded initially by the Social Sciences and Humanities Research Council of Canada, the study described here encompasses research under Theme 1 of Changing Paradigms, "The Global Local Nexus of Agriculture."

#### 4.2 KEYWORDS

socio-agricultural transition, civic agriculture, creamery, Atlantic Canada, Tatamagouche, Nova Scotia

#### 4.3 Introduction

Atlantic Canada as a region has been particularly ill-served by agricultural policy oriented towards large-scale commodity production, as its rural communites are built on a

foundation of "occupational plurality" (Bitterman, 1994) and mutual support that are unrewarded within the paradigm of global neoliberal agricultural trade (Stiles and Cameron, 2009). In recent years, as the urgency to find alternatives to the global industrial food system has grown, academia and the popular literature alike have been exploring potential solutions (Pollan, 2006; Astyk and Newton, 2009; Pawlick, 2009; Schlosser, 2001; Nestle 2002). In order to truly understand how alternative local food systems can be sustainably (re)built, there is a need to examine community models of agricultural production and the social structures which support them at the ground level.

While studies have been conducted in other rural areas on place-specific factors in socio-agricultural transition (Ross 2006, DeLind and Bingen 2008, etc.), Atlantic Canada has received less scholarly attention than other regions of rural North America.

Tatamagouche was selected for this study because of its adoption of alternative food initiatives and is examined in this study as a case of engagement in working towards the establishment of a sustainable local food system.

This paper begins with a conceptual exploration of 'socio-agricultural transition,' defined herein as the relationship between changes in agriculture and changes in the social fabric of communities. Lyson's (2004) model of civic agriculture and DeLind's (2002) exploration of the values and motives therein are especially useful frameworks for exploring socio-agricultural transition, in that civic agriculture explicitly explores the relationships between society, civic engagement, and agriculture, while DeLind's work examines the extent to which alternative 'civic' initiatives constitute a true paradigmatic

shift. Next, a narrative of socio-agricultural transition in Tatamagouche is presented, beginning with participants' earliest memories of agriculture and continuing to present-day agricultural initiatives and the social structures that support them. Finally, the narrative up to the present day is analysed using the concept of socio-agricultural transition.

This research is part of Theme 1, "The Global Local Nexus of Agriculture," of the Rural Research Centre's "Changing Paradigms in Atlantic Agriculture" research programme. The Rural Research Centre at the Nova Scotia Agricultural College has, through "Changing Paradigms," broadly engaged the rural and agricultural community in Atlantic Canada, and, through a consultation process called the "Foundation Sessions," identified key areas for future research. The six priority areas identified through the Foundations Sessions were (1) producer-consumer "disconnect," (2) regulatory roadblocks, (3) the cost of production paradox, (4) succession policies, (5) import-export dilemmas, and (6) resource sector "modernization." This community-based study develops a more in-depth understanding of how some of these themes play out at the grassroots level in one Atlantic Canadian community.

### 4.4 BACKGROUND

Tatamagouche is a rural community of approximately 2600 people (Nova Scotia Community Counts, 2010) on the North Shore of Nova Scotia in eastern Canada. The community is situated on the Northumberland Strait across from Prince Edward Island. This small and relatively isolated community contains many creative alternatives to the

industrial food system, including practitioners of community supported agriculture (CSAs), a farmers' market, a local exchange trading system (LETS) (Beaudry, 2010), a Community Land Trust (CLT), a school food initiative (Kennedy, 2011), a community energy project (Ashworth, 2010), and a network of co-operative initiatives under the umbrella of the Sunrise Trail Community Development Co-operative (Beaudry, 2010). The number and success of these community-oriented initiatives in Tatamagouche prompted the authors to ask (1) which factors in the community's past and present had influenced its capacity to support these initiatives, and (2) to what extent these initiatives were able to challenge the dominant paradigm of globalized industrial agriculture.

Because both researchers were familiar with the community prior to the study, it is necessary to acknowledge the positionality of this work. In social research, *positionality* describes the point of view of the researcher by identifying social relationships, life experiences, etc. of researchers and participants alike, which serve to 'place' them.

Anthias (2002) recognized the effects of perceived positionality by recounting various ways in which she, as an interviewer and researcher, was being positioned by the participants in her study in regards to her motivations and the value of the research. Neal and Walters (2006) also identified the notions of urban/rural and insider/outsider as being key elements of positionality for researchers in rural communities, noting that researchers may be prone to using these concepts to 'de-stranger' themselves.

Hanavan had a few acquaintances in the community but self-identified as an outsider. Kennedy was more of an insider, having grown up in a smaller community about 35 Kennedy or her family. The authors' insider and outsider perspectives on the community combined an understanding of and recognition within the community with the relative objectivity as a 'come-from-away.' As food activists, both investigators have a vested interest in alternative food and agriculture systems, requiring an additional awareness of positionality during the study. Although it seems likely that research participants felt more comfortable in the interviews due to Kennedy's rapport as an insider to the community, the substance of the interviews was informational in nature, and is not likely to have been significantly affected by the positionality of the interviewers.

# 4.5 CONCEPTUAL FRAMEWORK

The term *socio-agricultural transition* is coined in this study to describe the growing body of thought examining cultural, social, economic and political transitions, and transitions in relation to food production and agricultural systems. These transitions have been examined in the fields of rural sociology, economic geography, political economy, political ecology, peasant studies, environmental science, cultural ecology, and other disciplines (Wilson, 2007; Busch and Bain, 2004; Cameron, 2009; Clancy, 2003; Kneen, 1993; Lyson, 2004; McLaughlin, 1998; Shucksmith, 1993; Kautsky, [1899] 1988; Scott and Colman, 2008b; Strange, 2008 [1988]).

Wilson (2009) defined transition theory as "a theoretical framework that attempts to understand and unravel socio-economic, political, cultural and environmental

complexities of societal transitions (or sub-systems of society such as agriculture) from one state of organization to another." More specifically, according to Martens and Rotmans (2005), transitions in agriculture are inextricably linked to transitions in health, ecology, biodiversity, economy, and society, and "the characteristics of these transitions are heavily determined by regional political, institutional, social and cultural conditions" (2005, p.1137).

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.

DeLind (2002) cautioned that discourse on civic agriculture frequently focuses on private enterprise, noting that "there is a danger in equating production and consumption, responsible or otherwise, with citizenship" (p.218). True civic agriculture, according to DeLind, may appear illogical in a capitalist marketplace, and is almost necessarily

inconvenient, requiring some sacrifice for the greater civic good on the part of engaged agriculturalists: "[W]e cannot leave out the collective spirit, the non-voluntary responsibility and grace, the hospitality and sacredness of the enterprise," she asserted (2002, p.223). That is to say, even agricultural enterprises described as 'civic' by some scholars must be closely examined as to the extent that they break out of the capitalist paradigm into 'civic-ness.'

Preliminary data collected through the Rural Research Centre's first three "Foundation Sessions" were used by Stiles and Cameron (2009) to evaluate the state of agriculture in Atlantic Canada through the lens of civic agriculture. Their discussion proposed that Atlantic Canada's deep historical roots in rurality, mutuality, and localism are key strengths in forging a civic agriculture, although the politics and economics of globalism in the past century mean that "actualization of a civic model, and potential pathways to such a model, are by no means evident" in Atlantic Canada (p. 344).

## 4.6 METHODS

This study employed in-person interviews with 23 key informants and a community forum with approximately 50 participants to construct a narrative of socio-agricultural transition in Tatamagouche, Nova Scotia. The aim of the key informant interviews was to piece together a narrative of past and present transitions in the agricultural community in Tatamagouche. This method follows in the footsteps of Banks and Mangan's 1999 community action-research study in rural Ontario, wherein, "by soliciting stories from [their] participants, by listening to stories told individually and in groups, [they] begin to

perceive the community as it is seen by those who live there" (1999:22). Action-research, according to McNiff and Whitehead (2002) relates less to a prescribed methodology than to the reflective attitude with which the research is undertaken:

What [action researchers] do...is a set of practices which demonstrates...beliefs, commitments and hopes in practice. They undertake research to help them learn how to create social hope (Rorty, 1999) and to take action to try to realise the hope in terms of social evolution (p. 16).

This study incorporated ideas from action research to the extent that the presence of the research in the community, particularly the community forum, engaged the participants in reflecting on the state of agriculture in Tatamagouche, 'civic' motivations for participating in (re)localization initiatives, and Tatamagouche's place among rural communities around the world engaged in similar struggles.

Because the study sought to investigate both past and present socio-agricultural transition, two distinct populations were recruited. The first group consisted of farmers over the age of 50 who grew up on farms in Tatamagouche and were knowledgeable about the role of agriculture in the community's past. The second group consisted of community members who were involved in alternative agriculture in Tatamagouche (i.e. the farmers market, Community Supported Agriculture (CSA), organics, the local currency system, etc.). Participants were recruited through snowball sampling (Neuman, 2004), beginning with two of the researchers' pre-existing contacts in Tatamagouche who were known to be familiar with the agricultural community. Interviews were conducted in-person, mostly in participants' homes. Although the sampling method generated a list of individual farmers, researchers acknowledged the role of the entire family in farming

and felt it was important to include the perspectives of spouses/partners and children in the interviews. Therefore, the majority of the interviews were in fact group interviews with multiple family members. In total, 16 interviews were conducted, which drew on the knowledge and expertise of 23 participants.

Data collected via key informant interviews were analyzed using a grounded theory approach, marked with a series of codes extracted from the transcriptions using NVivo qualitative data analysis software. The codes were then grouped together into similar concepts in order to form concept categories (Bryman & Teevan, 2007). These recurring concepts were pieced together to complete the narrative.

The narrative compiled from the interviews, after undergoing a preliminary analysis, was presented to the community commentary group for feedback during a public gathering of approximately 50 people in January 2011 at the Tatamagouche Fire Hall. This "reflective feedback session" (Banks and Mangan, 1999) aimed to provide the community with an opportunity to hear their own narrative from a new perspective and to participate in reflection on the researchers' work and further analysis. Banks and Marshall justify this methodology by citing Carr and Kemmis' (1986) recommendation that action-research employ interviews to record participants' stories, then engage participants in reflecting on their own knowledge in order to facilitate social change.

#### 4.7 RESULTS

The oldest memories of agriculture in Tatamagouche are of the fox farming industry,

which experienced a boom in the early 1900s, followed by a bust in the 1930s (Forbes and Muise, 1993, p.240). "A lot of people had fox ranches, but then the price of fur went down and that ended," one elderly participant recalls of his childhood in Tatamagouche. The implication is that nobody can remember a time in Tatamagouche when farmers were not subject to booms and busts due to fluctuating commodity prices in agriculture. However, this vulnerability was mitigated through diversification of income sources (i.e. working in the woods, odd jobs, etc.), an "occupational plurality" with a long history in the region (Bitterman, 1994); sufficiency production (kitchen gardens, and storage crops); and informal economies (help with haying and harvesting) (Maynard, 1994).

When the Tatamagouche Creamery opened in the village around 1925, many family farms in the area began to produce cream. One older farmer recalls, "There's a man in Tatamagouche who drove a cream truck, and he told me, when things were going full force, there was over 1200 [farms that] shipped into Tatamagouche creamery." The North Shore Archives' local history corroborates this number: "The cream was supplied by some 1,200 small dairy farms along the North Shore and its hinterland: from Pugwash in the west to River John in the east" (Brinkhurst, 2011). Butter from the Tatamagouche Creamery, called the 'best butter in the world,' had a 'terroir' appeal (Barham, 2003), evidenced by the fact that Scotsburn, the dairy which eventually bought the Tatamagouche creamery, continues to market a line of "Tatamagouche" butter in the distinctive shape and packaging that Atlantic Canadians still fondly associate with the old creamery almost 20 years after its closure.

Most of the small- and medium-sized family farms that supplied the creamery milked fewer than 30 dairy cows and stored the separated cream in cans in a cool place (usually in a cellar or well) until the cream truck came to pick them up and deliver them to the creamery. Aside from the income from cream sales, participation in cream production fed into a degree of self-sufficiency and diversification on farms. Like cream producers around the world, farmers used the skim milk that remained after separating the cream to support other aspects of their farms (Johnson, 1971; MacKay, 1968; Jenkins, 1996). The milk would raise hogs or supplement chicken feed. At times, cream also constituted an important part of the farm diet. One participant remembers being sent down to the cellar as a child to fetch some cream for use in the family's kitchen:

We did ever so many things with that cream. It wasn't all sold. That's what made my grandmother's sugar cookies and biscuits so special. She used cream in things like that. Like when you have vegetable medley in the summer, all your garden vegetables—potatoes, carrots, peas, beans—cooked in the same dish. She would ask me, "Would you go down to the cellar and bring up just a little bit of cream?" Not often did she use milk, it was the cream. And it tasted so much better. It may not be good for the waistline, but it's so good.

Older participants recalled the later shift in their diets from cream to milk, and from butter to margarine. After the introduction of margarine to Canadian markets in 1949, butter consumption began to decrease Canada-wide as margarine grew in popularity (see Table 1). Competition with margarine and vegetable shortening due to concern over dietary cholesterol were recognized as contributing to dietary shift away from butter consumption (Goddard and Amuah, 1989). The trend of mechanization which has accompanied industrialization has meant that people had generally become more sedentary. Lower levels of physical activity required fewer dietary calories. The

imbalance between caloric intake and energy expenditure led to concerns over obesity (Lanningham-Foster, Nysse, L. and Levine, J. A., 2003) and may have contributed to the declining popularity of butterfat.

Table 1. Domestic Disappearance\* of Margarine and Creamery Butter, 1949 - 1971

Year	Margarine per capita (lbs.)	Butter per capita (lbs.)
1949	5.5	19.6
1956	7.7	19.5
1960	9.4	16.2
1961	10.1	15.8
1964	8.93	18.49
1965	8.7	18.1
1966	8.9	17.35
1967	9.1	16.49
1968	9.4	16.04
1969	9.65	15.3
1970	9.28	15.3
1971	9.26	15.2

(Dominion Bureau of Statistics, 1960-1971). \*The term "domestic disappearance" was used to describe the amount sold (and presumably consumed) within Canada.

During the community forum, participants correlated the increasing popularity of margarine in their community to the declining production volumes at the Tatamagouche Creamery.

During the time the creamery was in operation, many farms grew their own grain to feed their herds. Since about 1790, there had been water-powered mills on various rivers and brooks in the Tatamagouche area (Patterson, 1973, p.54), but at the height of the creamery's activity a newer feed mill was also in operation at the creamery site. Farms could buy feed from the mill, bring in their own grain to be milled, and have the mill add vitamins and minerals to the feed made from their own grains.

Production of hay and grain were labour-intensive processes, which older farmers tended to remember fondly. Haying and threshing were community-building activities, which participants cited as part of the informal economy (Lapp, 2008; Maynard, 1994; Neth, 1995). A typical farm might have relied on a neighbouring teamster and his horses, or in later years somebody with a tractor, to work the fields, and a large crew of family and friends to harvest grain or make hay. One older retired farmer recalled the cooperation involved:

When threshing time came, every area seemingly had a thresher. Everybody would cooperate and people would work. I know that I used to drive a team of horses and build the loads of grain and bring them into the mill to be threshed.

Most of the older study participants in Tatamagouche can remember a time when most of what they are came from the farm. Farm families grew gardens and kept chickens, pigs, horses and cows. Most also grew some grain for animal feed and human consumption.

According to an older interviewee:

A lot of people at that time were pretty much trying to be self-sufficient. I can remember my mother's sister, who lived in Malagash, going to Balmoral with some grain. I presume it would primarily have been some oatmeal for porridge and whatever cooking you may want to do with it, and also I suspect a certain amount of wheat going to be ground. As time goes along, there was a gradual trend away from that. A little bit more, but as time goes, it did get a little more down to what you would have like today, but that's taken years.

As this participant notes, residents of the area were slow to give up their traditional connections to producing what they are and eating what they produced.

As farmers grew older, and less capable of meeting the physical demands of their work, they started considering retirement. Very few of their children were interested in taking over the farms. Many of the younger generation were moving away from the area, and those who stayed in Tatamagouche tended to choose off-farm jobs rather than continuing farming. The older generation was left without adult children to take over the farm, and a decreasing ability to keep up with farm chores. One farmer describes what happened to a neighbouring farm family:

The fellow that was in the first farm we took over, he was doing a lot of carpentry work anyway and his son was pretty well working part-time and he really wasn't interested in farming . . . Then as that was the case, somebody not having somebody take over—somebody who was interested in working somewhere else.

PI: So that happened on a few different farms?

Well, that happened on a lot of farms! Actually the Mennonites, when they first came, they were really, well, some of them were quite interested in farming. Well, I know there's a couple of them we used to talk back and forth all the time about different things in farming.

Most cream producers began when there was no dairy quota system in place. In the early 1970s, the quota system was first developed for whole milk producers (categorized as fluid and industrial milk), and later expanded to apply to cream producers (NRCan, 2009). While quota regulations did not explicitly aim to end the creamery industry, legislation was structured in such a way that it was almost inevitable. One interviewee remembers becoming a dairy farmer and selling cream to the creamery. He was allotted a cream quota at no cost when he began. Then as dairy and industrial milk grew, the price of quota for dairy farmers in those industries grew. After the Tatamagouche Creamery was purchased by Scotsburn in 1968, and as cream was being phased out, one cream producer recalls, "you could take cream quota, use it with fluid milk or industrial milk, but they wouldn't let you do that the other way around." The transition in the dairy industry from cream to milk was facilitated by the policy that quota could be sold to industrial or fluid milk producers, but couldn't be purchased, except from another cream

producer (TPQ Reg., 2001). Political tensions arose in the community between those who saw the policy as an opportunity for cream producers to receive compensation equal to other dairy producers when they sold their quota, and those who saw the lack of newissue cream quota as the intentional extermination of the creamery industry and the way of life that it provided to farmers in the area.

During the last few years of the creamery, the price of quota increased dramatically.

Dairy farmers were aware that the market for cream was in decline and were faced with the option of either changing over to whole milk production or leaving the dairy business.

For some farmers, selling their cream quota could provide a retirement fund. For others, it meant a new piece of equipment as they traded their dairy herd in for beef cattle.

The shift to selling whole milk rather than cream was accompanied by other changes on the farm, such as new infrastructure requirements for dairy farms, stricter regulations for handling milk, and an increase in the amount of paperwork required for farmers.

Although farmers who wanted to transition from cream to milk production were able to do so with the advantage of already owning quota, the new infrastructure required was too expensive for some, and too technologically challenging for others. Older farmers who might have been able to continue producing cream were deterred from switching over by the implications for their lifestyle. Some interviewees felt that the transition from cream to whole milk production facilitated the demise of the family farm in Tatamagouche. According to one participant:

They take the basis away from having a family farm. A family farm means having a variety of things. Because they want the whole product, you don't have the

byproduct. There are two kinds of people. One type thinks 'great, this is more professionalized, I want to go big and be a professional'. But all the people who love the lifestyle, who like the animals-- all these people are left behind.

Some former cream producers continued seeking a living from agriculture, either by replacing their herds of Jersey, Guernsey, or other breeds of dairy cows prized for high fat content (and therefore the best cream producers), with Holsteins (which produce larger volumes of high-protein, lower-fat milk that became more valuable), or beef cattle. Others tried their hands at commodity crop production. Many farm families, however, were confronted with retiring farmers whose adult children had either moved away or begun off-farm careers. Land that wasn't being farmed began being developed residentially, especially along the waterfront:

Farms looked different. Sometimes, grandma and grandpa would retire and build a bungalow on the front of the farm, maybe in front of the old farmhouse, off to one side, or next to it. The younger people would take over the big old farmhouse. With that came other problems. People from towns and cities wanting the ideal country life would move to the country area. Farmers started selling lots for income. Down along the shore, the beachfront properties all got sold as lots.

Farmland in the area, especially away from the shore, began to fall out of use as farms shifted away from creamery production. At the same time diverse new groups of people were attracted to the area, bringing different sets of skills, spiritual beliefs, and culture. One native Tatamagouche resident remembers that older farmers felt grateful to see renewed energy for farming in the newcomers:

Some people knew that they were getting along in years, and they were very glad to have someone come and buy the land. Because it hurt to see the land grow up in alders. Because their grandfathers or great-grandfathers cleared that land, as my great grandfather did. He bought the farm.

Corbett's (2007) study of the community of Digby Neck, Nova Scotia investigated the values instilled by the education system around leaving or staying in the community. He

found that the rural schools were geared to equate success with leaving, and offered little incentive for youth to stay in the community. Tatamagouche, like rural communities across Atlantic Canada, was similarly affected, but by longstanding patterns of youth outmigration and farmland abandonment (Forbes and Muise, 1993).

Like other locales in Atlantic Canada, the available farmland attracted small groups of idealistic newcomers. MacEachern and O'Connor (2009) describe the back-to-the-land movement in Prince Edward Island, noting that cheap farmland was a draw:

The Island had a long tradition not only of small farming, but also of rural exodus. The population had shrunk every decade of the previous century (the 1970s would reverse that trend, thanks in part to the back-to-the-landers). There was land to be had. 'We bought fifty acres for \$2500,' says John Rousseau, 'and we moved into a community that had a lot of old farming couples and no young people. They had all left. We passed them on the boat.'

Similarly attracted by cheap land in a community where young people weren't farming, Tatamagouche's 'back-to-the-landers' included Buddhists, Mennonites, American immigrants, artists, and others. Despite their differences, these groups arrived with a shared idealism of a rural lifestyle in Tatamagouche where they could live close to nature, be free to experiment and express themselves, live their values, and work towards a degree of self-sufficiency by producing some of their own food. Although some of these newcomers only stayed for a short time, and new farms came and went over the years, the wave of new farms between 1960 and 1980 created fertile ground for the subsequent immigration of creative, environmentally-minded newcomers in years to come.

These farmers and gardeners, who sometimes arrived with little or no financial resources

with which to begin their new lives, brought diverse skills from non-farming and alternative agriculture backgrounds that tended to make them creative and open to experimentation in the way they live and farm. They innovated and made do with what they had. One participant said of the community of new farmers in Tatamagouche, "I think the greatest strength is the diversity in mindset, and everyone decides to do something a bit different. They're not saying, 'Okay, where's the recipe for the farm?' and following the recipe. They're creating their own recipes. Some of it works, some of it doesn't." One of these new farmers described his motivation for growing food in Tatamagouche, emphasizing the way that agriculture allows him to live his values and make a positive impact in the community:

I knew enough about agriculture to know that the farmers are in difficult straits. A figure I heard the other day is that in Nova Scotia, we only grow 16 percent of our own food—the rest is all imported. So for me, why I have come to this is the combination of really gardening and trying to get into mixed market gardening and a commitment to environment and to rural community development.

The 'new' (some of them have been at it for forty years by now, but still see themselves as part of a movement for a new agriculture) farmers and gardeners tend to have an environmental ethic that makes them look for alternatives to large-scale industrial farming practices. Members of the community employ varying degrees and standards of sustainable, organic, and biodynamic techniques, which tend to be less land-intensive, more labour-intensive and more diversified than industrial agricultural models.

Production tends to serve more than one purpose, as food produced on the farm is consumed in the farm household, as well as sold and traded, primarily through direct marketing schemes in the community.

Some of these farmers have given up lifestyles elsewhere that include financially lucrative careers, closeness to family, and proximity to large cultural and commercial centres. All participants who have come from elsewhere to Tatamagouche emphasize lifestyle as the most important factor in their decision to move. They value living simply, stewarding the land and soil, being close to the sea, and being part of a community.

Newcomers to Tatamagouche recount being met with curiosity at first. According to one participant, "What they do is when you first move here, they eventually come and visit you on Sundays. They drive up your driveway, they talk about the weather, they look around . . . ." Residents want to get an idea of who their new neighbours are, and what they have in mind for the land. Witnessing the closures of all but one dairy farm in the area, and watching farmland grow up in brush, many of the older generation of Tatamagouche farmers were supportive and thankful to see new farmers move into the area. The same participant said, "There are so few farmers left. All of the farmers checked us out. I think we've been received really, really, really well just because they were so glad that somebody was farming. They saw that we weren't any rich arrogant people."

By the time of this study, any older lifelong resident of Tatamagouche has seen it all. In the past fifty years, they've watched multiple waves of new and idealistic farmers and gardeners move to the community with the whole spectrum of alternative ideas, met with wildly varying levels of success. Now, it's difficult to surprise the older generation of farmers.

## 4.8 'CIVIC' INITIATIVE PROFILES

This section profiles the 'civic' initiatives that were examined within this study: the Local Economic Trading System (LETS), Community Land Trust (CLT), farmers' market, Community Supported Agriculture (CSA) initiatives, and Community Development Cooperative.

#### 4.8.1 LOCAL CURRENCY

Tatamagouche's local currency system (North Shore LETS) began in 2005 as an initiative of the Sunrise Trail Community Development Co-operative. LETS, an acronym for 'Local Exchange Trading System,' provides an alternative currency that formalizes and accounts for the bartering of goods and services at the local level. Myriam Beaudry's 2010 master's thesis examined LETS in Tatamagouche, finding that the initiative had a relatively small economic impact (under \$100,000 in the three and a half years leading up to her data collection), but a strong social impact. In addition to facilitating trades among its 60 members, North Shore LETS also hosts movie nights and potlucks that encourage knowledge exchange, civic engagement, and discussion of values. An interviewee involved with organizing LETS agreed that LETS, in its current state, is primarily effective in providing its members with a sense of community empowerment:

For me LETS exists somewhat as an idea—keeping the idea alive that we can understand money as community members, and we can make money, and money is a medium of exchange. And we can own and manage this as a community. So for me, the idea is very important. . . . We kind of see LETS as a space for having a conversation and looking at alternatives. We kind of support that—the movie nights are usually movies around these issues, then there are dialogues afterwards. And the potlucks are places where these kinds of conversations and happen and projects can spin off.

According to Beaudry, LETS members concurred with the conclusion that LETS is primarily a vehicle for building social capacity and strengthening shared values:

Many participants expressed how meaningful it is for them to be able to meet and share with people with whom they share values, especially regarding environmental and community (self-) sustainability, local buying, and the importance of community involvement. (Beaudry, 2010)

Beaudry's (2010) study found that LETS membership reflected social divisions in the broader community, both between 'locals' and immigrants, and among cultural sub-communities. Although the LETS organizer we spoke to acknowledged that LETS began with, and immediately appealed to, early adopters within a sub-community of immigrants who share similar values, she pointed out that LETS has been successful in diversifying its membership in recent years. Farmers and gardeners in Tatamagouche are major participants in LETS, and an important part of the localized economy that has been engaged through the system. According to the key informant, "a large number of our members are offering food products, seasonally, or just as part of their offering." One barrier for farmers' participation is that some of their farm inputs are incurred outside of LETS currency, in federal dollars. North Shore LETS accommodates this situation by allowing members to accept payment for their produce in a combination of LETS and federal dollars:

We do have farmers that are offering LETS, but then they have federal costs, too. So often they're taking 50% LETS and 50% cash, which helps them cover their federal costs, and stay connected in the LETS system.

Although LETS is limited in both the size of the community that participates and the dollar value of the trades that it facilitates, it promotes and strengthens direct relationships between farmers and consumers and enables sales by small-scale gardeners

who might not produce enough to sell at the farmers' market or establish a CSA to participate in trading locally-produced goods and services.

# 4.8.2 COMMUNITY LAND TRUST (CLT)

The Tatamagouche Community Land Trust Cooperative is a 100-acre agricultural Community Land Trust (CLT). The land, which was purchased by ten young activists in 2002, is currently home to five families and a variety of barnyard animals. The space accommodates a 40-share community supported agriculture (CSA) program and an annual 'Free School,' a weekend learning exchange with "an important role in community development" (Graham, 2007).

Members see the CLT as a way to "hold the land in trusteeship and to ensure that the land is used sustainably for generations to come" (TSFS, 2006). The CLT model, which was popularized in the United States beginning in the 1960s (Hubbard, 2009, p.20), is "a legal entity, a quasi-public body chartered to hold land in stewardship for all mankind present and future while protecting the legitimate use-rights of its residents" (Swan, Gottschalk, Hansch, & Webster, 2007[1972], p. 1). The Tatamagouche CLT Cooperative aims to "provide low-cost access to land" (TSFS, 2006) through long-term, affordable leases to its residents and to enterprises that fit the group's values, like the Waldegrave Farm Organic CSA.

Although the land has been informally managed through group decision-making for nearly 10 years, the Tatamagouche CLT Cooperative as an organization is too new to be able to evaluate its long-term effects on the community. However, scholarly analysis of

other CLTs suggests that they have the capacity to empower and engage communities in civic activity and long-term planning for sustainability (Brushett, 2004; Hubbard, 2009).

# 4.8.3 FARMERS' MARKET

The Tatamagouche Farmers' Market is organized as a 20-member cooperative that operates 11 months of the year out of Creamery Square, the community-owned site of the old Tatamagouche creamery. The facility itself is seen to have contributed to recent increased capacity of the farmers' market, which according to an interviewee involved with the farmers' market, has "helped a lot. It's provided water and space to accommodate some of the special needs that the vendors have."

The market has grown in the recent years to up to 35 vendors according to a market organizer, and over 25,000 visitors in 2009 (Creamery Square, 2010). One interviewee, who has seen the market evolve over time, attributes the market's growth to two factors. First, the market has seen an increase in the number of farmer-vendors, who are both new entrants to agriculture and established farms expanding their direct marketing venues.

What I've seen at the Tatamagouche Farmers' Market is sort of a swing from a market that was dominated by bakers and crafts people to much more of a balance between that sector, which is very important too, and agricultural-based operations, which are doing fruit and vegetables.

Although there has been produce at the market for over ten years, this participant notes that the major growth in fruit and vegetable vendors has taken place over the past five to seven years.

Secondly, the increase in public awareness of food issues and demand for local food has contributed to the growth of the Tatamagouche Farmers' Market:

I think farmers' markets have really benefitted 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 benefitted from that.

# 4.8.4 COMMUNITY SUPPORTED AGRICULTURE (CSA)

Community Supported Agriculture (CSA) "is a growing social movement that endeavors to make direct connections between the producers of food and those who consume it" (Cone & Myhre, 2000, p.187). In a typical CSA, customers pay a lump sum at the beginning of the growing season in exchange for weekly 'shares' or 'boxes' of seasonal farm produce as it is available. According to Cone & Myhre, CSA members tend to subscribe because they value eating healthy food, supporting local farmers, stewarding the land, and participating in their communities (2000, p.193).

At the time of this study, there were three different farms in the Tatamagouche area operating Community Supported Agriculture (CSA) initiatives, two of which were certified organic. One farm operates a CSA with 30 members, who pick up their weekly boxes in Tatamagouche and Truro, a larger town about 50 kilometres away. The farm is in its fourth year, with the CSA in operation for the past two years. The farm grows a diverse range of vegetables, and is expanding into some orchard fruit, raspberries and strawberries. In addition to their CSA program, the farm also runs a stand at the Tatamagouche Farmers' Market.

The second CSA offers 40 weekly shares of organic produce from June to October, with distribution sites in Tatamagouche and Truro. Although they value their local customers, they have found it necessary to expand the CSA to Truro customers in order to get enough members. According to the farmer:

I'm finding, this year, I don't think I can get enough CSA shares just in Tatamagouche, so I think I'm also going to offer a distribution site in Truro. I want to have a presence in this community and I want people to see me, but I have to go elsewhere too.

The third farm offers a variation on the CSA model. Their customers place veggie box orders from week to week, so that food doesn't go to waste if customers miss a week's pickup due to travel or illness. Other than that, one of the farmers said,

It's basically the same system as a CSA. It's just a little more flexible in terms of payment. The idea in a CSA that's the most important is that people get a share. If there is excess, they get a share, and if there is scarcity, they get whatever scarcity there is. We basically share the same thing. For us, they haven't officially bought a share, but we want to know how many people we're producing for, so we have some regularity.

Although their members don't pay in advance for the whole season, they have a verbal or written commitment from their customers, who are expected to purchase a veggie box every week unless they are not able to be at the market. The farmers emphasized that the traditional CSA model (paying at the beginning of the season) is an important way for customers to support farms. Their model simply aims to accommodate those who cannot afford to pay up front or are not quite ready to join a full CSA.

The presence of these three CSAs in the Tatamagouche area demonstrates that some farmers are looking for ways to establish closer and more equitable relationships with

consumers, and that there is some consumer willingness to engage in initiatives like CSAs, which benefit local farmers and strengthen the local food system.

## 4.9 DISCUSSION

The following section analyses Tatamagouche's agricultural community using Lyson's six characteristics of civic agriculture (2004, p.85) and discusses DeLind's (2002) critique of characterizations of civic agriculture.

First, according to Lyson, civic agriculture is "oriented toward local markets that serve local consumers rather than national or international mass markets." In Tatamagouche, as in the rest of the Nova Scotia, both locally-focused and commodity agriculture have been present historically (Conrad, 1985). However, new farmers in the area tend to be smaller scale and focused on direct sales to local markets. Lyson makes the point that post-World War II economic policy encouraged the concentration and corporatization of agriculture. The climate of industrialization and globalization has not been dissimilar in Canada to the United States, where Lyson's work is based. According to Stiles and Cameron (2009, p.343), "internal domestic disparities" within Canada have meant that economic 'reforms' have had particularly negative impacts in the Atlantic Provinces. They point out that most farms in Atlantic Canada, which have tended to be smaller-scale and less capital intensive, have been ill-served by "provincial and federal policy responses to the effects of globally focused trading regimes." While Nova Scotia's Department of Agriculture recognizes that "[c]ommodity-based agri-food production in the province is not generally competitive due to the economics of size, market power, and high input

costs" (Devanney, 2007), preliminary findings from the RRC's Foundations Sessions revealed that both federal and provincial policy reform is urgent in order to support the communities of smaller and medium-scale farms that have historically characterized the Atlantic provinces (Stiles and Cameron, 2009).

Like its surrounding area, Tatamagouche never did become a hub of agricultural production for the global market. Farmland was abandoned rather than put into large-scale production, which allowed small-scale, civic-minded producers an affordable opportunity to grow food for themselves and their communities.

Most farmers were quick to acknowledge that production for national and international markets is increasingly difficult. One farmer who moved to the area with the Mennonite community recounts the obstacles encountered by another community member:

Our friends that came here and wanted to, in a way, start over...but the market was so far away. They tried and they got some good crops but it cost so much to get them! They could raise some good crops, but they were more costly to produce than to sell, and they had to be shipped a long ways, and that was another extra cost.

Farmers also choose to prioritize local markets because they feel a responsibility to the environment and to local food security in the face of the looming possibility of peak oil. One farm spoke about an ideological struggle over whether or not to sell their produce in Truro, a town of 23,000 located 55 kilometres away from Tatamagouche:

We are still contemplating whether we want to do that, because we really want to emphasize the local market. We really wanted to be local. If we look 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.

Second, civic agriculture means perceiving agriculture "as an integral part of rural communities, not merely as production of commodities" (Lyson, 2004). While perceptions of the non-agricultural community were beyond the scope of this study, those who are involved in agriculture do see the role of farmers and agriculture as integral to the community. One farmer said he started farming in Tatamagouche because he "had a real interest in doing something that would contribute in some small way to environmental and social sustainability in the area."

The integration of agriculture in the community is a long-held value in Tatamagouche, and was so even in the days of larger-scale production. For example, when farmers were shipping cream to the creamery, the cream truck served more than one purpose for residents, making other deliveries, or picking up school children. The creamery played an interesting role in Tatamagouche, because on the one hand, it grew beyond the scale of the community, with distribution across Nova Scotia and to Prince Edward Island (PEI). At its peak production, "the creamery produced one million pounds of 'the best butter in the world," supplementing seasonal discrepancies in local cream availability by importing and re-churning butter from New Zealand and Australia (Brinkhurst, 2011). On the other hand, selling cream was one among several small sources of income for most farmers, and the practice of separating the cream to sell left the farmer with the by-product of skim milk, which was often used to support a diversified family farm.

Third, farmers in civic agriculture "are concerned more with high quality and valueadded products and less with quantity yield and least-cost production practices" (Lyson, 2004, p. 85). Farmers in Tatamagouche are working hard to move away from the model of high-yield low-cost industrial agriculture. One interviewee said that if local farmers want to "make all their money from the farm, they're going to use their other skill sets and put more of their emphasis on marketing or value-adding." However, the same participant notes that it continues to be a struggle for farmers to find the balance between their values in high-quality production practices and making ends meet financially:

The food sells itself because of the quality of it and the fact that we have a lot of food interested people here supporting it. I still don't think all of our farmers are being able to charge cost of production. There are several products which they lose money on, which is somewhat compensated through products they can charge a little bit more on. But they're at the point, even our small-scale farmers are at the point where they need to continue to cut corners a bit to make sure that ends meet

Some farmers interviewed also expressed frustration with consumer unwillingness to pay for premium, high-quality products, including lack of recognition of organic certification, lack of appreciation for fresh produce, lack of knowledge around how to prepare or consume products, and customers who only seem to care about the lowest price.

Next, Lyson characterizes "production at the farm level" in civic agriculture as "often more labor-intensive and land-intensive and less capital-intensive and land-extensive. Farm enterprises tend to be considerably smaller in scale and scope than industrial producers." Agriculture in Tatamagouche has always been diminutive when compared to current global examples of industrial producers, and nearly every interviewee, from retired farmers who were born and raised in Tatamagouche, to the youngest members of the agricultural community, emphasized the fact that farming is truly a labour of love, and always has been.

The new generation of farmers in Tatamagouche emphasized the amount of labour involved in their small-scale operations. One farm couple said:

We do about one acre by hand, which is the absolute max you can do with two people. . . . The work is very intense and the season is very long. . . It took us ten years to figure out what you can actually do with your hands—what is it worth in terms of this time money-wise?

Another small-scale farmer said that the hard work was worthwhile in terms of the lifestyle benefits:

[I]f you want to just sit back and do the easy life, it's not going to go down. But there are a lot of blessings in working the land and doing the physical work, and it's good for you. But it's tough, and there's not enough people willing to do that.

Even the older generation remembered how much work went into running a small-scale family farm:

You were so busy in the summer—there was always work to do. Anything from whitewashing fences, raising your calf for 4H, training it to walk and all these other things. Stooking grain, that was another job.

Well the farms are an awful lot bigger now, and have bigger incomes, I guess. You see, we did a lot of work with horses. We didn't get much work done, but [farming] was cheaper.

Producers in Tatamagouche also fit Lyson's description of civic agriculture producers, who "more often rely on local, site-specific knowledge and less on a uniform set of "best management practices" (2004, p. 85). Small scale farmers expressed frustration with regulations geared towards large-scale commodity producers, and emphasized the importance of local mentorship and knowledge sharing. One farm couple recounted the value of a relationship they developed with a retired local farmer, who was able to pass along site-specific knowledge about their land, down to the characteristics of individual

fields: "The first year we saw him every day. I guess a couple years pretty much every day."

Finally, in civic agriculture, "producers forge direct market links to consumers rather than indirect links through middlemen (wholesalers, brokers, processors, etc.)" (Lyson, 2004, p.85). Newer small-scale producers in Tatamagouche rely almost entirely on direct marketing, both because they value the relationships with their customers and because they are able to capture more of the food dollar. Direct marketing also makes the producers somewhat less vulnerable to the fluctuating prices in non-supply-managed commodity markets. The new generation of farms in Tatamagouche sells food through the weekly farmers' market, through CSA or box programs, and directly to shops, restaurants, and institutions. The popularity of direct marketing is evidenced in the recent growth of the Tatamagouche farmer's market, especially among vegetable producers. A key informant on the topic of the market told the researchers:

The market is open almost all year round. It's only closed for six weeks of the year, for January and two weeks in December. So, we would go from a low of this year 18 vendors, and that's way up from the average low in the past, to 35 vendors in the summertime. . . .

The interviewee also noted that with the exception of one vegetable vendor at the market,

all of the other veggie producers are within the last five to seven years. They're all new entrants. Some of them are not so young...but there are two young farmers outside of Scotsburn who are at the market as well. A number of vendors do CSAs in addition to the market, [which] serves as a place for people to pick up their food boxes.

DeLind's (2002) warning that civic agriculture is in danger of being co-opted by private enterprise was also a concern held by some community members in Tatamagouche.

DeLind notes that 'civic' agricultural enterprises, even co-operatives, are "still framed by

the economic or commercial transaction," rather than a sense of civic responsibility. While 'civic' agriculturalists in Tatamagouche tend to see agriculture as a lifestyle choice rather than a lucrative business venture, models such as CSAs and direct marketing at the farmers' market are indeed modeled as businesses. Interestingly, though, these 'civic' agricultural businesses, along with others in the community, participate in two local initiatives that appear to break out of the entrepreneurial model that DeLind critiques: the LETS, and the CLT. Both of these organizations are more purely 'civic' in their purposes, and allow for others, such as a market vendor who accepts LETS currency or a CSA that operates on the CLT, to engage in potentially paradigm-challenging alternatives to neoliberalism

The prevalence of co-operative projects, especially through the Sunrise Trail Community Development Co-operative, in Tatamagouche means that community leaders have had some time to reflect on cooperative values. One participant emphasizes that there's a "difference between jumping into the cooperative to save capitalism and jumping into the cooperative because you believe in cooperation." In other words, although the characteristics of civic agriculture are present in Tatamagouche, the motivation for these 'civic' initiatives is important, and at least a few community leaders have an awareness of the complexity of issues inherent in wanting farmers to make a living and consumers to afford food, while also wanting to live in a community where people give freely of themselves, engaging in the creation of a more selflessly 'civic' agriculture.

#### 4.10 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 the ones 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 socioeconomic classes, or just different geographic areas

Because this research took the form of a case study, it has been 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. The community was selected for this study because of its capacity and relative success in developing alternative agriculture initiatives.

# 4.11 CONCLUSION

DeLind (2002) points out that true 'civic' agriculture is much deeper than the low-hanging fruits of feel-good private enterprise. While the farmers' market, the CSAs, and the other farms in Tatamagouche continue to operate within the dominant model of private enterprise, the farmers interviewed indicated that they were motivated by their values, rather than by profit. In fact, most of them acknowledged that they could make more money at almost any other occupation. Many farms have purposefully scaled their initiatives to the community level, for both social and environmental reasons. LETS and the Tatamagouche Community Land Trust Cooperative seem to break out of the dominant paradigm by moving beyond profit-driven individual ownership, making them a better fit with DeLind's description of 'civic-ness' in agriculture.

There remain a number of die-hard farmers in the Tatamagouche area who grew up farming, love the lifestyle, love the animals, and are pained to lose the farmland that their families worked hard to clear. Interviewees admiringly told stories of farmers who clung to the last threads of the life they knew in the height of the creamery's operations: One farmer drove his cream cans up to Scotsburn even after the Tatamagouche Creamery had been shut down, and cream quota wasn't being issued anymore. Others have continued beef farming well into their old age just because they enjoy having the animals around. In all of these cases, the motivation for practicing agriculture is a connection to the land and animals, and a desire to preserve the traditions of their families and the community.

The newer generation of farmers, all of whom have chosen farming as a lifestyle, share common values with the older generation of farmers in Tatamagouche. Just as

MacEachern and O'Connor found in their 2009 study of back-to-the-landers in PEI, young immigrants to Tatamagouche in the 1960s and 1970s found a community of aging farmers, most of whose children had moved away or found off-farm work. The two very different populations interviewed in this study forged connections through common values. Nearly all the participants in this study—young and old, local and immigrant—emphasized the importance of living simply, keeping input costs low, and avoiding 'putting all your eggs in one basket' by diversifying income sources both on- and off-farm. The community of retired dairy farmers and the community of immigrant agriculturalists engaged in knowledge-sharing, ranging from basic skills for rural living to very site-specific approaches to working the land, to mentoring of and encouragement of a community of new farmers.

Motivations among members of Tatamagouche's agricultural community, in both the past and the present, could be described as 'civic' in that participants valued local markets, saw agriculture as integral to the community, prioritized quality over quantity, practiced labor-intensive and land-intensive farming methods, and valued local place-based knowledge. Characteristics that have supported and encouraged the growth and development of present-day alternative models include affordability of farmland, the presence of a variety of cultural and community-building activities, a supportive network of knowledge exchange, creativity and an attitude of experimentation among farmers and gardeners, and an old culture of mutual support.

Tatamagouche has a small but motivated network of citizens who are working hard to shape a viable local food system that embodies their shared environmental and social values. Civic engagement in agriculture, and in other aspects of life in Tatamagouche, has not come about by coincidence. Dedicated community development practioners have volunteered countless hours to fostering a 'civic' culture, farmers said that they see attending events and participating in activities (tending to the community's social fabric) as an important part of their work.

In summary, the conditions for 'civic' agriculture in Tatamagouche included access to farm land, shared values and mentorship relationships between the older generation of farmers and new immigrants, and a core group of community organizers who work to foster civic engagement.

Although global industrial agriculture continues as the dominant paradigm in Tatamagouche, as it does throughout Nova Scotia, and indeed most of the world, the community is successful in nurturing a wide variety of alternative initiatives.

While none of the study's participants were prepared to let policy alone shape their lifestyle or values, it was clear that policy regimes geared toward global commodity production agriculture are unlikely to serve or promote alternative and 'civic' models. As Atlantic Canada experiences the decline of commodity agriculture (Stiles and Cameron, 2009), policy frameworks that support the development of alternative models for (re)building local food systems become increasingly important. This paper has offered a

ground-level perspective on the historical conditions that have encouraged the emergence of such models, and on the challenges and opportunities faced by present-day 'civic' initiatives.

# CHAPTER 5 POLICY'S ROLE IN SOCIOAGRICULTURAL TRANSITION: A COMMUNITY STUDY IN TATAMAGOUCHE, NOVA SCOTIA

## **5.1** 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 appears to be growing support among Atlantic Canadians for the (re)localization of food systems. This in-depth community case study examined the nature of (re)localization efforts at the local level with the following key objectives:

- 1. To reveal the historical factors that have led to the emergence of alternative food networks (AFNs) in Tatamagouche by exploring narratives of socio-agricultural transition in the community;
- 2. To examine the challenges and opportunities in the present-day success of these initiatives in Tatamagouche;
- 3. To use these ground-level insights to recommend policy change that supports the (re)localization of food systems in Tatamagouche and other rural communities.

Lyson's (2004) theory of civic agriculture and Scott and Colman's (2008b) assessment of the human and social aspects of agriculture in Atlantic Canada were particularly useful in understanding the non-financial motivations within Tatamagouche's agricultural community. Using civic agriculture as a conceptual framework, the study found that

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.

Major challenges encountered among civic initiatives included a perceived lack of local consumer base; lack of a provincial process for farmland protection; lack of distribution and marketing capacity among small-scale producers; regulatory frameworks geared more toward larger-scale operations; and a lack of public awareness of organic and ecological farming practices. Factors in the success of civic agriculture initiatives in Tatamagouche included growth in public awareness of food and agriculture initiatives attributed in part to government 'buy local' campaigns; a desire among community members to steward and protect agricultural land; a formalized network for local exchange of goods and services; social and environmental values among residents; and informal mentorship connections in the community.

Specific policy recommendations based on this study's findings include the integration of local mentorship and experiential learning into agricultural education; strategic planning 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; start-up aid for community-scale agricultural cooperatives; and the broad redefining of 'farm' and 'farmer' to recognize and support the historically-

shaped "occupational plurality" (Bitterman, 1994) of farmers, including those who lease or rent land. Current opportunities for implementing these recommendations include Nova Scotia Agricultural College's (NSAC's) transition out of government (NSAC, 2011), recent success of the 'Select Nova Scotia' consumer education campaign (NS Department of Agriculture, Fisheries and Aquaculture, 2007), past governmental support for direct marketing initiatives (NSDA, 2010a), and increased provincial attention to small- and medium-scale new entrants in agriculture through the 'Think Farm' program (NSDA, 2010b).

Additionally, this paper calls for a broader shift in the philosophies that shape current policy choices. In recognition of public goods provided by sustainable local food systems (Scott and Colman, 2008; Lyson, 2004; Cahill, 2001), this paper recommends (1) reframing the mandate of governmental departments like Health and Environment to address small-scale community-based agriculture, and (2) redefining farmers as public servants.

#### **5.2 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 (Samson, 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 and Cameron, 2009).

This work explored the quest for agriculture's survival in Atlantic Canada at the ground 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 AFNs and a prevalence of civic agriculture initiatives. There seems to have 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 to and opportunities for the (re)localization of the community's food system were identified and examined in terms of their relationship to the policy frameworks that shape the context in which the agricultural community operates.

'Civic' agriculture initiatives were of particular interest, as they 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 'civic-ness' 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.

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).

## **5.3 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 and Colman, 2008). In the past few years, the collapse of Nova Scotia's beef and pork industries also intensified the urgency with which 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 can't afford to take risks in global markets where prices don't 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 (Stiles and Cameron, 2009; Sacouman, 1979). This study employs Tatamagouche as a case study because of the presence of alternative models in the community that can 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 2) and a relatively warm climate because of its proximity to the warm 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.



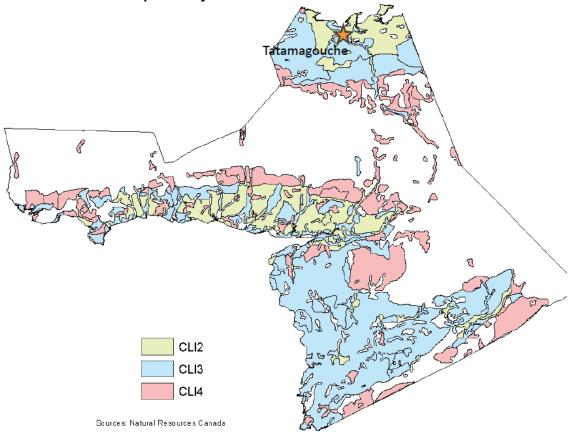


Figure 1 (NS Land Review Committee, 2010)

Tatamagouche was selected for this study because it appeared to have a wide variety of agricultural innovators and early adopters of re-localizing food systems. In the community of 2600 (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 school garden, 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.

The study's contextual framework has its foundation in Lyson's (2004) 'civic' agriculture, which proposes that independent smaller-scale agricultural initiatives engage with communities on a 'civic' basis that promotes healthy, prosperous, and sustainable rural communities. In Atlantic Canada, these qualities and others have been studied indepth 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, 2001; Scott, 2002; Scott and Cooper, 2002; Scott, 2003; Scott, 2008; Scott and Colman, 2008a; Scott and Colman, 2008b) outlines indicators of ecological wellbeing, human capital, social capital, and farm community viability in the context of Atlantic Canadian agriculture.

#### 5.4 METHODS

18 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 socioagricultural transition in Tatamagouche. The narrative and the themes were presented to the community during a two-hour community forum 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* (see Appendix F), and publicized through social networks. During the first hour of the presentation, researchers presented the narrative and read aloud from the preliminary analysis. The second hour of the event was dedicated to facilitated discussion and reflection by participants.

## 5.5 FINDINGS

From data collected in key informant interviews and the community forum, 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 and Kennedy, 2011), and (2) discusses present-day civic initiatives and the impacts of policy on their successes and challenges.

## **5.5.1 HISTORICAL NARRATIVE**

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 skimmilk-based 'subsidiary enterprises' were common among cream producers worldwide (Johnson, 1971; MacKay, 1968; Jenkins, 1996). 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 2) 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 (MacLennan, 2000; Brinkhurst, 2011).

Table 2. 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

(Scott and Colman, 2008)

Nova Scotia-wide, farmers were growing older and their adult children "followed the trend of North America, moving to cities and towns" (Forbes and 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, p.346). 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 and 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.

# 5.5.2 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.

# 5.5.2.1 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 (Sharp, Imerman and Peters, 2002; Cone and Myhre, 2000).

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 and Bristow, 2000).

# 5.5.2.2 COMMUNITY LAND TRUST (CLT)

The Tatamagouche Community Land Trust Cooperative is a community organization that stewards a 100 acre farm including 60 acres of agricultural land and 40 acres of forest.

Multiple families have leases with homes on the CLT, and a CSA enterprise holds a 20-year lease on nine acres of the land, which are used for greenhouses, field crops, and other infrastructure. According to *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." 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).

## **5.5.2.3 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.

## 5.5.2.4 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.

## 5.5.2.5 Organic / Ecological Farming Practices

Tatamagouche area farmers who employ organic and ecological farming practices tend to do so because of their 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.

## **5.6 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, and the community infrastructure that supports it.

#### 5.6.1 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, there are a number of government support mechanisms that 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 arise this year, as the Nova Scotia Agricultural College (NSAC) shifts away from being an entity of the Department of Agriculture, and Agrapoint, the province's extension and agricultural consulting firm, develops 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 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.

#### 5.6.2 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 its own 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 percent of food consumed in Nova Scotia is produced within the Province. Scott and MacLeod (2010) recommend that Nova

Scotia set a specific goal (they give 20 percent local food by 2020 as an example) in order to strategically work towards a more food self-sufficient province.

## 5.6.3 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.

#### 5.6.4 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 the local market. 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 and Cameron 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, locallyoriented, and diversified family farms, it is necessary to change the lens through which the development of regulatory regimes is viewed. DeLind and Howard (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." 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 and Howard, 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), explains 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.

#### 5.6.5 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. These 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 emphasizes 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 whole year.

The second farmer points 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, 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 and Colman's 2008 study

(p. 105), "helps both to increase farm viability and to weave effective and productive social fabric in the community."

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 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.

# 5.6.6 REDEFINING 'FARM' AND 'FARMER'

In Tatamagouche, small-scale food producers and gardeners sometimes struggle to be identified as farmers. Retirees who grow small market gardens, teachers and nurses who also grow food, and young farmers who lease or rent land, struggle for rights, opportunities, and equity in program access within a policy framework that uses a narrow, commodity-oriented conceptualization of 'farm' and 'farmer.' One interviewee called for the 'reclaiming' of the word, saying, "I think it's reclaiming that definition of a farmer to say a farmer is somebody producing food, but they have other skill sets."

While some initiatives, like the Nova Scotia Department of Agriculture's *Think Farm* program, are beginning to recognize the needs of "those who have little or no background in agriculture but are interested in starting a farm," (NSDA, 2010b), new farmers who don't fit the traditional mould continue to lack recognition in the policy realm, especially in their ability to access government financing through the Farm Loan Board. For example, one young farmer in Tatamagouche has a 99- year lease but doesn't own land, and recounted difficulties in securing farm loans due to lack of status as a landowner.

Another interviewee in Tatamagouche predicted that new farmers will continue to challenge current conceptualizations of 'farming':

We're going to get all these young people who are choosing a different lifestyle. Still they're going to come out with their history degrees and they're going to write for grants, and they're going to write books and so on. But they're also going to produce food that they'll sell at a farmers' market or hopefully a marketing co-op.

In other words, given the current trend towards diversified skills and income sources among successful new 'farmers' evidenced in the Tatamagouche area, it is increasingly important to broaden the population that agricultural policy supports by including new conceptualizations of who 'farms,' potentially moving policy frameworks towards the 'new rural paradigm' called for by the OECD and a 2008 Senate Report (Senate Report, 2008, p. 18).

Conversely, this trend towards a renewed "occupational plurality" (Bitterman, 1994) is seen by some as a cause for concern. According to Scott, "some argue that increased non-farm paid work undertaken by farmers not only detracts from the farm but also signifies a

decline in farm economic viability and potentially leads to the excess work hours and stress often associated with moonlighting." This paper proposes that it is possible to reconcile these perspectives by acknowledging that the community of 'farmers' must expand beyond the contemporary concept of a full-time operator of a monoculture enterprise (Astyk and Newton, 2009), while advocating for the viability of farms and the validity of farming as a career choice that advances the public good.

#### 5.7 CHANGING POLICY PARADIGMS

Lyson's (2004) model of 'civic' agriculture and Scott and Colman'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 (1) the role of government entities that may not have a specific agricultural mandate in contributing to the development of healthy local food systems; and (2) the status of farmers as capitalist entrepreneurs as opposed to public servants.

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, the concept of sustainable local food systems as a public good allows for a different perspective on the vocation of farmers. Under current policy frameworks, the work of a farmer tends to be treated as simple entrepreneurship, focusing on management and skills acquisition. If society is truly committed to transforming 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 Unions Common Agricultural Policy (CAP), which compensates farmers for non-market values of agriculture. As the 2008 Senate Report points out, Canada always seems to be walking a fine line between "providing much needed income and support to farmers and recognizing that agriculture support can invite harmful trade action" (p. 47).

#### 5.8 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. Newer farmers in the area have found common ground with the older generation of farmers in the area 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 endeayours.

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 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 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.

The recently-released People's Food Policy (2011) and the outcomes NDP agriculture critic Alex Atamanenko's national 'Food for Thought' consultation both call for policy actions similar to those proposed in this paper, and prompted the major political parties to

release explicit food policy platforms for the first time during the 2011 federal election campaign (Leeder, 2011). Although the national 'Food for Thought' consultation concluded that

supporting local initiatives such as farmers' markets and cooperatives, and creating regulations adapted to the realities of small scale farmers, are just some of the solutions that would ensure our food security and sovereignty (NDP, 2010), comprehensive government strategy for sustainable food and agriculture systems

While the actions recommended in this paper 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 measures such as expanding the agricultural mandate beyond departments of agriculture and re-conceptualizing farmers as public servants.

continues to be lacking at both the federal and provincial levels.

## **CHAPTER 6 CONCLUSION**

## 6.1 SUMMARY

This work has examined (re)localization initiatives and alternative food networks (AFNs) in Tatamagouche, exploring the historical context from which they emerged, the challenges and opportunities they face today, and policy frameworks that could support their future success.

Historically, Tatamagouche was characterized by small family farms that practiced "occupational plurality" (Bitterman, 1994), producing a variety of food for the household and deriving income from a variety of sources, including odd jobs, forestry, and farming. Specifically, the Tatamagouche Creamery, during its years of operation, was influential in supporting these mixed farms, as selling the cream provided a reliable source of income, while leaving skim milk behind for farm use, often as animal feed. The slowing and end of the creamery's operations as they were once known was attributable to economic, cultural, social, political, and demographic factors, including an aging farm population, outmigration of rural youth, consolidation and regulation in the dairy industry, the structure of supply management, a shift in dietary preference away from milk fat, an increased cost of living, and a decline in the profitability of farming.

By the 1970s, abandoned farmland in Tatamagouche began attracting diverse groups of immigrants who saw Tatamagouche as the perfect place to live close to the land by growing some of their own food. Some newcomers stayed and some left, and although it

was hard work for all of them, the generation of aging and retired farmers in the area helped out where they could, providing the local knowledge necessary to farm on Nova Scotia's North Shore.

In 2011, there were found to be three CSA initiatives, a local currency group, a farmers' market, organic and ecological agriculture practitioners, a CLT, a community garden, and efforts to incorporate local food at the elementary school. These initiatives were analysed in terms of Lyson's (2004) 'civic' agriculture, and were found to be oriented toward local markets, integral to the community, labour- and land-intensive, and reliant on local, site-specific knowledge. The initiatives are loosely connected and rely on a somewhat limited community of civically-engaged practitioners. While the models are all 'civically' motivated, and are successful in offering small-scale locally-based alternatives to the agro-industrial model, only LETS and the Tatamagouche CLT Co-operative are found to deeply challenge the capitalist neoliberal paradigm on a community level.

Factors that have contributed to the success of the AFN in Tatamagouche include mutual support, affordability and availability of farm land, increasing awareness of food and agriculture issues, creativity and innovation among alternative agriculture practitioners, common values among community members, a diversity of skills in the community, and diverse sources of on- and off-farm income opportunities. 'Civic' initiatives in Tatamagouche also attribute their success to the supportive community around them. Challenges encountered by 'civic' initiatives in Tatamagouche include a continuing lack of public awareness of food and agriculture issues, especially around sustainable

production; limited capacity among practitioners to achieve the levels of cooperation and organization that they see as necessary to create a true 'system' or 'network;' regulatory regimes that fail to accommodate small-scale or diversified producers; pricing and competition with the global market; lack of a clear process for protecting farmland; insufficient distribution capacity among small farms; and a need for recognition of the importance of mentorship and local knowledge.

These challenges and opportunities in Tatamagouche constitute what Wilson (2007, p. 273) terms 'enabling factors,' which when combined with 'civic' motivations (or what Wilson calls 'non-productivist' thought and action), can result in resilient AFNS that are multifunctional in nature. In Tatamagouche, a community of agriculturalists with strong 'civic' values combined with key 'enabling factors' such as affordable arable land, and a strong base of local mentors to create a vibrant set of moderately multifunctional alternative agricultural models that require additional 'enabling factors' in order to reach their full potential.

Potential policy actions recommended in order to support and enhance the work of 'civic' initiatives, as derived from the Tatamagouche case, included locally-relevant mentorship and incubation programs for new small-scale farmers; increased planning and strategy to develop domestic consumption and production; accommodations for small-scale operations in regulatory frameworks for agriculture; resources and capacity building for the development of community-based producer cooperatives; and the redefining of 'farm' and 'farmer' to include participants from diverse backgrounds, those doing a diversity of

production an processing activities related to food, fibre, and fuel, and those who do not own land, but who are likewise engaged in these multiplicities of agriculturally-oriented endeavours.

If future policy aims to build the capacity of small rural communities to engage in localized sustainable food systems, broader conceptual shifts may also be required. This work has concluded that such transitions include the reconceptualization of agriculture as a public good, the integration of an agricultural mandate into nontraditional government departments, and the redefining of parts of farmers' work as public service.

## **6.2 RESEARCH IMPLICATIONS**

This study has provided community-level insight on efforts to (re)localize food systems in the Atlantic Canadian context. The historical element to the community study grounds current AFNs in the antecedents that shaped their development, and reveals how dramatic changes in agricultural communities and landscapes can occur over a very short period of time (in this case, in the living memory of research participants). Because scholarly activity on relocalizing food systems has been most heavily concentrated (1) in the United States; and (2) in rural communities that are close to large urban centres, this study makes a significant contribution to the body of knowledge on the (re)localization of food systems in Atlantic Canada.

The policy discussion and recommendations outlined in Chapter 5 provide concrete actions that can be taken in the political realm in order to advance community-based food systems in the Atlantic Provinces, potentially increasing food security and sovereignty,

bringing health, social and economic benefits to rural communities, and encouraging the sustainable stewardship of agricultural land.

This study engaged residents of the Tatamagouche area in thinking about the historical and present-day role of agriculture in their community and considering the connections between existing 'civic' initiatives.

Finally, this work has engaged with the broader mandate of, Theme 1, "The Global Local Nexus of Agriculture" of the RRC's research initiative "Changing Paradigms in Atlantic Agriculture."

#### **6.3 Recommendations for Future Research**

This study has examined socio-agricultural transition in one rural Nova Scotian community. While the results offer valuable community-level insights into the changing role of agriculture in Tatamagouche, it has also been a vehicle for discovering gaps in data and scholarly activity on socio-agricultural transition in Atlantic Canada. Potential areas for further research include:

• The role of cooperatives in facilitating communities of small-scale and diversified farms in Atlantic Canada. What are the challenges and opportunities in mounting cooperative initiatives? Can cooperatives make small-scale farming more viable and effective?

- The concept of multifunctionality in the context of Atlantic Canadian agriculture.
  To what extent does agricultural policy in Atlantic Canada reflect the values of multifunctionality? What challenges and opportunities would arise from incorporating multifunctionality into Atlantic Canada's policy frameworks?
- Comparative studies of other rural communities in Atlantic Canada. How do other communities compare to Tatamagouche in terms of socio-agricultural transition? What can be learned from examining place-specific factors in socio-agricultural transition across the region? Scott and Colman's (2008) study offered an analysis of 'farm community viability' in a number of rural communities in Nova Scotia and PEI. However, there is an opportunity to expand conceptual frameworks to include socio-agricultural transition and community history. There is also a need for further academic attention in the Atlantic Provinces of New Brunswick and Newfoundland and Labrador.
- Exploring creative solutions for transportation and distribution of agricultural goods by small-scale producers. Is there a third option-- somewhere between selling to a big distributor and direct marketing and distribution by each individual farmer?
- Conducting feasibility studies on the policy recommendations outlined in this document. There is a need for the gathering and collation of existing policy

documents, and for consultations with relevant policy-makers in order to determine the logistics and efficacy of implementing these recommendations.

#### **6.4 CONCLUDING COMMENTS**

Over the past 50 years, culture and agriculture in Tatamagouche, as in rural communities around the world, have gone through unprecedented changes. Globalization and consolidation in agriculture have taken place alongside small-scale local efforts to feed steward the land and feed communities. As awareness of global issues such as climate change, peak oil, and deteriorating rural communities grows, the search for community-level alternative models becomes more pressing. This research has aimed to offer a community perspective on the challenges and opportunities in the work of developing ground-level solutions to these global dilemmas. The in-depth profiling of Tatamagouche's alternative models in agriculture, along with the social infrastructure that supports them, offers valuable insights not only to policymakers who want to support communities' capacity for growing sustainable local food systems, but also for other Atlantic Canadian communities in search of alternative models and innovative local solutions.

Paradoxically, although civic actors within Tatamagouche's AFN are motivated more by values than by financial rewards, their work takes place within in a neoliberal policy context that cannot justify support for a model that continues to lack economic critical mass. Precisely because the work of civic agriculturalists is 'multifunctional' in nature, its benefits must be assessed beyond their contribution to the economy. GPI Atlantic's indicators are useful tools in beginning to account for the 'multifunctional' social and

environmental benefits of civic agriculture in Nova Scotia. Potential problems with a pursuing narrow focus on the civic model, such as labour relations, social justice, and the devolution of responsibilities to private enterprise and local level government (Constance, 2007; Allen and Guthman, 2006; Delind, 2002; Hinrichs and Kremer, 2002; Guthman, Morris, and Allen, 2006) must be carefully weighed and monitored, using indicators and tools such as those offered by Williams' (2008) participatory food costing model and models such as domestic fair trade.

Civic agriculture initiatives in Tatamagouche did not come about by accident, but have been the strategic work of committed, values-driven citizens drawing on the resources of community development practitioners and the place-specific knowledge of an older generation of farmers. The fact that globalized industrial agriculture has had limited success in Atlantic Canada provides opportunities in the form of available farmland and the survival of some small-scale models, which were both helpful in the development of the AFN in Tatamagouche. The work of local practitioners of 'civic' agriculture is invaluable in the development of alternative models for future food security and sovereignty, sustainability, and healthy rural communities. However, in order to make a broader transition to new paradigms in the way food, fibre, and fuel are produced, these models must be supported by both short-term policy actions that advance their development, and longer-term reconceptualizations of agriculture within the policy realm.

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#### **APPENDICES**

## APPENDIX A: INTERVIEW GUIDE (GROUP A)

Script: The first part of the interview will ask about Tatamagouche in the "old days," from the 1940s to the 1970s. The second part of the interview will ask about industrialization in Tatamagouche. If you're able to remember dates, that's great, but it's okay to just talk about the changes. If you're uncomfortable, or can't answer questions, you're free to stop this interview at any time.

#### Part 1

- 1. What was Tatamagouche like in the 1940s? (50's, 60's, 70's)
- 2. What were the main industries?
- 3. How did people make a living?
- 4. Where did people gather?
- 5. What were farms like? (Big or small? How many crops? Were there animals?)
- 6. What did they grow?
- 7. Where did they sell food?
- 8. Historically, what characterized Tatamagouche?
- 9. Where did you buy your food?
- 10. Was food affordable?

#### Part 2

- 1. Did changes in the agriculture industry affect the farming community in Tatamagouche? (If so,how? What were the changes? How did farms change?) When did the change(s) happen?
- 2. Did other aspects of the community change with the industrialization of agriculture? For example, did you change where and how you bought your food? Did your diet change?
- 3. Do you know more or fewer farmers than you knew before industrialization?

- 4. Was there a change in the number of farms in Tatamagouche? (if so, more or less? Are farms bigger or smaller now?)
- 5. Were there cooperatives in Tatamagouche? (What kind? What were they like?)
- 6. Do most people you used to know still live in Tatamagouche? (if not, why did they move?)

# APPENDIX B: INTERVIEW GUIDE (GROUP B)

- 1. What is Tatamagouche like as a community today?
- 2. Is it possible to make a living as a farmer?
- 3. Do you see evidence of a shift towards local agriculture? (is there renewed interest in farmers marekts? Local currency? Co-ops? Alternative agriculture? Small mixed farms? Community gardens? The buy-local/local food movement? What are people doing? Anything else?)
- 4. Do you see yourself or your organization as part of a larger community change?
- 5. What do you envision for the future of the agricultural community in Tatamagouche?
- 6. Does your project / organization collaborate with other projects / organizations in the area? If so, which? What challenges and opportunities are present in working with other groups?

# APPENDIX C: CONSENT FORM (GROUP A)



## Title of the study

Changing Paradigms: A Community Study of Socio-Agricultural Transition in

Tatamagouche, Nova Scotia

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#### Introduction

We invite you to take part in a research study being conducted by Louise Hanavan and Chloe Kennedy, who are graduate students at Dalhousie University, as part of their Master's of Environmental Studies degrees. Your participation in this study is voluntary and you may withdraw from the study at any time. The study is described below. This description tells you about any risks, inconvenience, or discomfort which you might experience. Participating in the study might not benefit you, but we might learn things that will benefit others. You should discuss any questions you have about this study with Louise Hanavan or Chloe Kennedy.

#### Purpose of the study

The purpose of this study is to gather information about transitions in the agricultural community in the Tatamagouche area of Nova Scotia. This study aims to

examine these transitions in their global and local contexts, and explore current initiatives in Tatamagouche that are representative of change in the agricultural community.

## Study design

This research will involve an examination of historical and present day changes in agriculture in Tatamagouche. At least sixteen interviews will take place with members of the agricultural community in Tatamagouche who can provide information about changes in agriculture in the area. With permission from the study participants, interviews will be digitally recorded and transcribed. The transcripts of these interviews will be analyzed by Chloe Kennedy and Louise Hanavan to find common themes among the responses, and compare agricultural changes in Tatamagouche to those observed in other rural communities around the world. Preliminary analysis will be presented to participants and other community members in a community commentary session that will be announced in the *Tatamagouche Light*. Final results will be presented in an academic thesis, and may be communicated in academic articles, at academic conferences, and at other community events. A short summary of study results may also be sent by email to study participants upon request.

## Who can participate in the study

You may be asked to participate in key informant interiews if you are:

- a long-term resident of the Tatamagouche area (you have lived in Tatamagouche for 30 years or more)
- you are over the age of 50
- you have a significant history of involvement in the agricultural community in the Tatamagouche area (you are a farmer or retired farmer)
- you areavailable for an in person interview between the dates of February 15<sup>th</sup>, 2010 and September 1<sup>st</sup> 2010.

#### Who will be conducting the research

Louise Hanavan and Chloe Kennedy are the co-investigators for this project. They will conduct the interviews and community commentary session, transcribe the audio files, and analyze the transcripts. No other researcher will have access to the audio files or transcripts.

#### What you will be asked to do

If you are a member of the agricultural community in the Tatamagouche area, you will be asked to participate in one (1) in-person semi-structured interview with one or

both of the co-investigators. This interview will be conducted at a time and place agreed upon between you and the co-investigators. The interview is expected to take between an hour and an hour and a half to complete.

You and other interested community members will also be invited to participate voluntarily in a community commentary session that aims to collect feedback on the preliminary analysis of the information collected during the interviews. The time and place of this session will be announced in the *Tatamagouche Light*.

#### Possible risks and discomforts

This study is expected to involve minimal risk. However, if you feel discomfort at any time, you may decline to answer questions and you may withdraw from the study at any time. The information you give during your interview will not be used by any party or organization other than the two co-investigators.

#### Possible benefits

Although no direct benefits are anticipated for this study, we hope that your participation will provide an opportunity to reflect on agricultural changes in Tatamagouche and to work towards a community vision for the future of agriculture in your community.

### Confidentiality and anonymity

The co-investigators will take measures to protect the anonymity of all interviewees throughout their participation in this study. With your permission, anonymous direct quotations will be included in the presentation of final results. We will not use your name in the reporting of results. However, beccause of the size of the community and the nature of the study, direct quotations included in the final results may contain information that may indirectly identify you as the speaker.

Only the co-investigators will hear the recordings of the interviews and community commentary session. Audio files will be destroyed once they are transcribed. Only the co-investigators will have access to electronic files containing transcribed interviews and community commentary sessions. Your name will not be associated with the audio files or transcripts of the interviews.

The written transcripts of the interviews from this study will be kept in a locked filing cabinet at the School for Resource and Environmental Studies at Dalhousie

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University for at least five years post-publication before being destroyed as required by the Dalhousie University Policy on Research Integrity.

## Questions

If you have any questions about this study, please contact Chloe Kennedy or Louise Hanavan by phone at 902-429-7102 / 902-475-1058 or by email at <a href="mailto:chloe.kennedy@dal.ca">chloe.kennedy@dal.ca</a> / louise@dal.ca .

#### Problems or concerns

If you have any difficulties with, or wish to voice concern about, any aspect of your participation in this study, you may contact Patricia Lindley, Director of Dalhousie University's Office of Human Research Ethics Administration, for assistance at (902) 494-1462, patricia.lindley@dal.ca.



#### SIGNATURE PAGE 1 OF 2

### Title of the study

Changing Paradigms: A Community Study of Socio-Agricultural Transition in

Tatamagouche, Nova Scotia

# Consent to participate in the study

I have read the explanation about this study. I have been given the opportunity to discuss it and my questions have been answered to my satisfaction. I hereby consent to take part in this study. However I realize that my participation is voluntary and that I am free to withdraw from the study at any time.

Signature of research participant	Date
Signature of researcher obtaining consent	Date
Consent For Audio Recording I hereby consent to allow this session to be aud	lio recorded.
Signature of research participant	Date
Signature of researcher obtaining consent	Date  DALHOUSIE UNIVERSITY
	Inspiring Minds

### SIGNATURE PAGE 2 OF 2

#### Consent for use of direct quotations

I hereby consent to allow the researchers to use direct quotations from this session in writing and presenting study results. I understand that these quotations will not refer to my name, but may contain information that will allow some readers to indirectly identify me.

Signature of research participant	Date	
Signature of researcher obtaining consent		

# APPENDIX D: CONSENT FORM (GROUP B)



## Title of the study

Changing Paradigms: A Community Study of Socio-Agricultural Transition in

Tatamagouche, Nova Scotia

## Principal Investigators

Louise Hanavan and Chloe Kennedy Masters of Environmental Studies Candidates School for Resource and Environmental Studies Dalhousie University

Email: louise@dal.ca / chloe.kennedy@dal.ca

Phone: 902-475-1058

## **Academic Supervisors**

Dr. Greg Cameron, Nova Scotia Agricultural College / Adjunct faculty Dalhousie University

Dr. Deborah Stiles, Nova Scotia Agricultural College / Adjunct faculty Dalhousie University

#### Introduction

We invite you to take part in a research study being conducted by Louise Hanavan and Chloe Kennedy, who are graduate students at Dalhousie University, as part of their Master's of Environmental Studies degrees. Your participation in this study is voluntary and you may withdraw from the study at any time. The study is described below. This description tells you about any risks, inconvenience, or discomfort which you might experience. Participating in the study might not benefit you, but we might learn things that will benefit others. You should discuss any questions you have about this study with Louise Hanavan or Chloe Kennedy.

#### Purpose of the study

The purpose of this study is to gather information about transitions in the agricultural community in the Tatamagouche area of Nova Scotia. This study aims to

examine these transitions in their global and local contexts, and explore current initiatives in Tatamagouche that are representative of change in the agricultural community.

## Study design

This research will involve an examination of historical and present day changes in agriculture in Tatamagouche. At least sixteen interviews will take place with members of the agricultural community in Tatamagouche who can provide information about changes in agriculture in the area. With permission from the study participants, interviews will be digitally recorded and transcribed. The transcripts of these interviews will be analyzed by Chloe Kennedy and Louise Hanavan to find common themes among the responses, and compare agricultural changes in Tatamagouche to those observed in other rural communities around the world. Preliminary analysis will be presented to participants and other community members in a community commentary session that will be announced in the *Tatamagouche Light*. Final results will be presented in an academic thesis, and may be communicated in academic articles, at academic conferences, and at other community events. A short summary of study results may also be sent by email to study participants upon request.

## Who can participate in the study

You may be asked to participate in key informant interiews if you are:

- You are involved in some aspect of present-day socio-agricultural transition in Tatamagouche. This may include new entrants to farming, non-production or small-scale production farmers, farmers market representatives, local currency representatives, community garden representatives, and farmers employing alternative agriculture practices.
- You are available for an in-person interview between the dates of February 15<sup>th</sup>, 2010 and September 1<sup>st</sup> 2010.

#### Who will be conducting the research

Louise Hanavan and Chloe Kennedy are the co-investigators for this project. They will conduct the interviews and community commentary session, transcribe the audio files, and analyze the transcripts. No other researcher will have access to the audio files or transcripts.

#### What you will be asked to do

If you are a member of the agricultural community in the Tatamagouche area, you will be asked to participate in one (1) in-person semi-structured interview with one or

both of the co-investigators. This interview will be conducted at a time and place agreed upon between you and the co-investigators. The interview is expected to take between an hour and an hour and a half to complete.

You and other interested community members will also be invited to participate voluntarily in a community commentary session that aims to collect feedback on the preliminary analysis of the information collected during the interviews. The time and place of this session will be announced in the *Tatamagouche Light*.

#### Possible risks and discomforts

This study is expected to involve minimal risk. However, if you feel discomfort at any time, you may decline to answer questions and you may withdraw from the study at any time. The information you give during your interview will not be used by any party or organization other than the two co-investigators.

#### Possible benefits

Although no direct benefits are anticipated for this study, we hope that your participation will provide an opportunity to reflect on agricultural changes in Tatamagouche and to work towards a community vision for the future of agriculture in your community.

## Confidentiality and anonymity

The co-investigators will take measures to protect the anonymity of all interviewees throughout their participation in this study. With your permission, anonymous direct quotations will be included in the presentation of final results. We will not use your name in the reporting of results. However, beccause of the size of the community and the nature of the study, direct quotations included in the final results may contain information that may indirectly identify you as the speaker.

Only the co-investigators will hear the recordings of the interviews and community commentary session. Audio files will be destroyed once they are transcribed. Only the co-investigators will have access to electronic files containing transcribed interviews and community commentary sessions. Your name will not be associated with the audio files or transcripts of the interviews.

The written transcripts of the interviews from this study will be kept in a locked filing cabinet at the School for Resource and Environmental Studies at Dalhousie

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University for at least five years post-publication before being destroyed as required by the Dalhousie University Policy on Research Integrity.

## Questions

If you have any questions about this study, please contact Chloe Kennedy or Louise Hanavan by phone at 902-429-7102 / 902-475-1058 or by email at <a href="mailto:chloe.kennedy@dal.ca">chloe.kennedy@dal.ca</a> / louise@dal.ca .

#### Problems or concerns

If you have any difficulties with, or wish to voice concern about, any aspect of your participation in this study, you may contact Patricia Lindley, Director of Dalhousie University's Office of Human Research Ethics Administration, for assistance at (902) 494-1462, patricia.lindley@dal.ca.



#### SIGNATURE PAGE 1 OF 2

# Title of the study

Changing Paradigms: A Community Study of Socio-Agricultural Transition in Tatamagouche, Nova Scotia

# Consent to participate in the study

I have read the explanation about this study. I have been given the opportunity to discuss it and my questions have been answered to my satisfaction. I hereby consent to take part in this study. However I realize that my participation is voluntary and that I am free to withdraw from the study at any time.

Signature of research participant	Date	
Signature of researcher obtaining consent	Date	
Consent For Audio Recording		
I hereby consent to allow this session to be audi	o recorded.	
Signature of research participant	Date	
Signature of researcher obtaining consent	Date	



#### SIGNATURE PAGE 2 OF 2

# Consent for use of direct quotations

I hereby consent to allow the researchers to use direct quotations from this session in writing and presenting study results. I understand that these quotations will not refer to my name, but may contain information that will allow some readers to indirectly identify me.

Signature of research participant	Date	
Signature of researcher obtaining consent	Date	

# **APPENDIX E: CONSENT FORM (COMMUNITY FORUM)**



## Title of the study

Changing Paradigms: A Community Study of Socio-Agricultural Transition in

Tatamagouche, Nova Scotia

#### **Principal Investigators**

Louise Hanavan and Chloe Kennedy Masters of Environmental Studies Candidates School for Resource and Environmental Studies Dalhousie University

Email: louise@dal.ca / chloe.kennedy@dal.ca

Phone: 902-475-1058

#### Academic Supervisors

Dr. Greg Cameron, Nova Scotia Agricultural College / Adjunct faculty Dalhousie University

Dr. Deborah Stiles, Nova Scotia Agricultural College / Adjunct faculty Dalhousie University

#### Introduction

We invite you to take part in a research study being conducted by Louise Hanavan and Chloe Kennedy, who are graduate students at Dalhousie University, as part of their Master's of Environmental Studies degrees. Your participation in this study is voluntary and you may withdraw from the study at any time. The study is described below. This description tells you about any risks, inconvenience, or discomfort which you might experience. Participating in the study might not benefit you, but we might learn things that will benefit others. You should discuss any questions you have about this study with Louise Hanavan or Chloe Kennedy.

## Purpose of the study

The purpose of this study is to gather information about transitions in the agricultural community in the Tatamagouche area of Nova Scotia. This study aims to

examine these transitions in their global and local contexts, and explore current initiatives in Tatamagouche that are representative of change in the agricultural community.

## Study design

This research will involve an examination of historical and present day changes in agriculture in Tatamagouche. At least sixteen interviews will take place with members of the agricultural community in Tatamagouche who can provide information about changes in agriculture in the area. With permission from the study participants, interviews will be digitally recorded and transcribed. The transcripts of these interviews will be analyzed by Chloe Kennedy and Louise Hanavan to find common themes among the responses, and compare agricultural changes in Tatamagouche to those observed in other rural communities around the world. Preliminary analysis will be presented to participants and other community members in a community commentary session that will be announced in the *Tatamagouche Light*. Final results will be presented in an academic thesis, and may be communicated in academic articles, at academic conferences, and at other community events. A short summary of study results may also be sent by email to study participants upon request.

## Who can participate in the study

The community commentary session is open to all residents of the Tatamagouche area.

#### Who will be conducting the research

Louise Hanavan and Chloe Kennedy are the co-investigators for this project. They will conduct the interviews and community commentary session, transcribe the audio files, and analyze the transcripts. No other researcher will have access to the audio files or transcripts.

#### What you will be asked to do

You and other interested community members will also be invited to participate voluntarily in a community commentary session that aims to collect feedback on the preliminary analysis of the information collected during the interviews. This session will take approximately three hours.

#### Possible risks and discomforts

This study is expected to involve minimal risk. However, if you feel discomfort at any time, you may decline to answer questions and you may withdraw from the study at any time. The information you give during your interview will not be used by any party or organization other than the two co-investigators.

#### Possible benefits

Although no direct benefits are anticipated for this study, we hope that your participation will provide an opportunity to reflect on agricultural changes in Tatamagouche and to work towards a community vision for the future of agriculture in your community.

## Confidentiality and anonymity

The co-investigators will take measures to protect the anonymity of all interviewees throughout their participation in this study. With your permission, anonymous direct quotations will be included in the presentation of final results. We will not use your name in the reporting of results. However, beccause of the size of the community and the nature of the study, direct quotations included in the final results may contain information that may indirectly identify you as the speaker.

Only the co-investigators will hear the recordings of the interviews and community commentary session. Audio files will be destroyed once they are transcribed. Only the co-investigators will have access to electronic files containing transcribed interviews and community commentary sessions. Your name will not be associated with the audio files or transcripts of the interviews.

The written transcripts of the interviews from this study will be kept in a locked filing cabinet at the School for Resource and Environmental Studies at Dalhousie University for at least five years post-publication before being destroyed as required by the Dalhousie University Policy on Research Integrity.

#### Questions

If you have any questions about this study, please contact Chloe Kennedy or Louise Hanavan by phone at 902-429-7102 / 902-475-1058 or by email at <a href="mailto:chloe.kennedy@dal.ca">chloe.kennedy@dal.ca</a> / louise@dal.ca .

#### Problems or concerns

If you have any difficulties with, or wish to voice concern about, any aspect of your

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participation in this study, you may contact Patricia Lindley, Director of Dalhousie University's Office of Human Research Ethics Administration, for assistance at (902) 494-1462, patricia.lindley@dal.ca.



#### SIGNATURE PAGE 1 OF 2

# Title of the study

Changing Paradigms: A Community Study of Socio-Agricultural Transition in Tatamagouche, Nova Scotia

# Consent to participate in the study

I have read the explanation about this study. I have been given the opportunity to discuss it and my questions have been answered to my satisfaction. I hereby consent to take part in this study. However I realize that my participation is voluntary and that I am free to withdraw from the study at any time.

Signature of research participant	Date	
Signature of researcher obtaining consent	Date	
Consent For Audio Recording I hereby consent to allow this session to be au	dio recorded.	
Signature of research participant	Date	
Signature of researcher obtaining consent	Date	



#### SIGNATURE PAGE 2 OF 2

## Consent for use of direct quotations

I hereby consent to allow the researchers to use direct quotations from this session in writing and presenting study results. I understand that these quotations will not refer to my name, but may contain information that will allow some readers to indirectly identify me. I understand that anonimity during the community commentary session is not possible, as it is a public forum.

Signature of research participant	Date	
Signature of researcher obtaining consent	Date	

## APPENDIX F: EDITORIAL, TATAMAGOUCHE LIGHT



# Changing Agriculture in Tatamagouche

Chloe Kennedy and Louise Hanavan



Agriculture in the Maritimes has changed significantly in the past century.

have impacted These changes our communities in many ways. Family farm closures, for instance, have led to a loss of employment and rural infrastructure, and as many sectors become more regulated and concentrated, it becomes increasingly difficult for rural youth to enter into farming.

To gain a better understanding of how changes in agriculture have affected rural Atlantic Canadian communities, Louise Hanavan and Chloe Kennedy Interviewed farmers and Interested community members in Tatamagouche to discover the role agriculture has played in shaping the community, from the heyday of the Tatamagouche Creamery to its close, and to the present-day

revitalization of the Farmers' Market.

Hanavan and Kennedy's community-based research in Tatamagouche is part of a larger research Initiative entitled "Changing Paradigms" at the Nova Scotia Agricultural College's (NSAC) Rural Research Center.

This NSAC research initiative seeks to not only understand how changes in agriculture affect rural communities, but also what the opportunities are for grounding food systems at the community level.

Tatamagouche is an excellent case study for this project, as there are many flourishing agricultural initiatives, including Community Supported Agriculture (CSA), a vibrant farmer's market and a number of organic vegetable producers.

Although the community of Tatamagouche has lost hundreds of small mixed family farms since the Second World War, there have been many recent upstart initiatives which help to rebuild the community's food system.

During the spring and summer of 2010, Hanavan and Kennedy interviewed a combination of more than 28 young and old farmers, as well as other community members either from farming families in the community or who are involved in Tatamagouche-based food initiatives such as the Tatamagouche Farmers' Market.

From these interviews, Hanavan and Kennedy have uncovered a narrative of drastic agricultural changes in a community rich with spirit and vitality.

Kennedy is from the community of West Branch, 20 kilometres outside of Tatamagouche and has known the area all her life. Hanavan is a resident of Halifax, an aspiring farmer and a recent lover of Tatamagouche. With their insider-outsider perspectives on the community, Hanavan and Kennedy hope to accurately represent Tatamagouche in the academic paper which will come from this research.

Hanavan and Kennedy are hosting a community commentary session at the Tatamagouche Fire Hall on January 11 from 7 to 9 p.m. At this session, they will share the narrative of agriculture transition which they pieced together from their interviews.

The purpose of the session will be to gain community feedback on their project, and to generate a positive discussion of the role of agriculture in the community and the opportunities for building a stronger food system.

All community members are welcome and encouraged to attend.

For additional information, visit the Rural Research Centre's website at http://nsac.ca/rrc, or contact Hanavan at louise@dal.ca / (902) 475-1058 or Kennedy at chloe.kennedy@dal.ca.