The Role of Local Food in Rural Economic Development: A Case Study of Frontenac County

by

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In Eastern Ontario, many communities have developed local food initiatives to strengthen their local economies. This thesis examines the planning and economic development implications of local food activities for rural communities. To gain insight into the role of local food in rural economic development, this thesis examines the local food economy of Frontenac County, investigating the needs of those involved in the local food supply chain, with an emphasis on the gaps that a potential food hub could fill. The challenges of geography, topography, and lack of access to markets currently limits the growth of the local food economy in Frontenac. It was found that the demand for local food in the region requires further development before a food hub could help ‘scale up’ local food production. This thesis concludes with recommendations for the further development of the local food economy of Frontenac County and considerations for future research.
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LIST OF ABBREVIATIONS

BR+E: Business Retention and Expansion

CFDC: Community Future Development Corporation

KFL&A: Kingston, Frontenac, Lennox & Addington

MPAC: Municipal Property Assessment Corporation

NFU: National Farmers Union

OMAFRA: Ontario Ministry of Agriculture, Food and Rural Affairs
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Appendix A: Semi-Structured Interview Guide for Producers & Processors

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1 INTRODUCTION

Many rural communities across the province are facing similar issues: an ageing population, deteriorating infrastructure, unemployment, youth out-migration, and difficulties attracting skilled workers (Fearne et al., 2013). Recognizing that rural areas are diverse and difficult to describe in general terms, for the purpose of this research, “rural” is defined as having the following characteristics: “1- a low population density; 2- loose networks of infrastructure and services; 3- tight networks of personal contacts and a strong identity with home localities; 4- below average manufacturing and office-based employment; and 5- a landscape dominated by farmland and forestry.” (Hoggart, 1998, p.35; Miller, 2013). Noting that this is only one definition of rural, and that rural areas are distinct in their own rights, it is not the intent of this research to generalize rural areas and to suggest that a “one-size-fits-all” approach to rural economic development is appropriate.

With the challenges that rural areas are facing, there has been a move towards economic diversification among several of Ontario’s rural regions where they have embraced an economic development strategy with regard to the local food movement. As consumer awareness of and demand for local food increases, some rural areas are looking to ‘scale-up’ their local food production to meet these demands and to reinvigorate their rural economies (Clark & Inwood, 2016). In response to this demand, successful local food businesses appear to be characterized by entrepreneurship, innovation and enhanced cooperation (Fearne et al., 2013). A community that has exemplified this
movement is Prince Edward County, which has experienced significant growth in local food and agritourism development.

In an attempt to ‘scale-up’, food hubs have emerged as a means for rural communities to increase their local food capacity as an economic development strategy. However, the definition of a food hub is vague and contested. Barnham et al. (2012) define food hubs as “a business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand” (p.4). Food hubs differ in their specific purpose and capacity and successful food hubs must be tailored to local needs, for both producers and consumers (Barham et al., 2012).

In Eastern Ontario, several counties and cities have developed local food initiatives to strengthen their local food economies (Andrée, Ballamingie, & Sinclair-Waters, 2015). In keeping with this trend, Frontenac County, located approximately halfway between Toronto and Ottawa, has recently experienced significant growth in local food businesses (Frontenac CFDC, 2018). In 2012, an Eastern Ontario regional local food business retention and expansion (BR+E) study was completed, where local food businesses were engaged across Eastern Ontario (including Frontenac County) to determine how to build local food capacity in the region. One of the findings of this study was that producers in Frontenac County identified that additional local food processing facilities would increase participation in the local food supply chain. The study also indicated that participants ranked the development of a commercial kitchen as a top priority for increasing
participation in the local food supply chain in the County (Northumberland County, 2012). Although the 2012 BR+E study previously identified these needs to grow local food capacity in Frontenac County, further research into the extent and nature of this need has not been conducted.

In 2014/2015, Eastern Ontario saw the development of two regional food hubs, the Two Rivers Food Hub in Smiths Falls and the Ontario Agri-Food Venture Centre (OAFVC) located in Colborne (TRFH, 2017; OAFVC, 2018). These regional food hubs are located approximately 100 kilometres east and west of Frontenac County. These facilities contain commercial kitchens, cold, frozen and dry storage, processing (washing, cutting, quick chill, flash freeze, labelling, packaging), training and business incubation (OAFVC, 2018). The Two Rivers Food Hub also offered distribution services but has since discontinued this service, citing one reason as having “limited access to conventional financing” (TRFH, 2018, para 6).

This research is an extension of the 2012 BR+E study to further examine the needs of those involved in the local food supply chain from producer, to processor, to retailers and restauranteurs in Frontenac County to grow the local food economy. One facet of this research focuses on the notion of a potential food hub development in Frontenac County. Further investigating the gaps it could fill and whether those involved in the local food economy of the County feel that it would be an appropriate development to further grow local food capacity in the area. This research also looks to investigate on a broader scale, the rural economic implications of local food activities in terms of job creation, multiplier effects, and retaining wealth within rural communities.
1.1 Research Purpose

The purpose of this research is to investigate the role of local food activities in rural economic development, using Frontenac County as a case study. Frontenac County was chosen as the researcher is originally from the area, has a deep connection to the farming community and had anecdotally noticed a rise in local food initiatives and wanted to investigate their economic implications. The initial focus of this research was food hubs; however, in the early stages of research consultation, it was identified that this scope was too narrow and would not fully capture what was happening with respect to local food in Frontenac County. Therefore, the initial research question was amended to focus on the local food economy itself, while still exploring the notion of a potential Frontenac County food hub. The aim of this research is to contribute knowledge to the growing body of literature on the relationship between local food initiatives and rural economic development.

1.2 Research Objective

The research objectives are to:

1- Evaluate the planning and economic development implications of local food activities.
2- Identify and assess the challenges and opportunities for local governments and the province in supporting local food economies.
3- Investigate food hubs to determine the challenges and opportunities they encounter and their rural economic implications.
4- Evaluate the role of local food activities as a contributor to rural economic development using Frontenac County as a case study.

1.3 Relevance of the Research

This research will provide insight for the development of rural economic development and planning strategies that will help address the needs of those involved in the local food supply chain in Frontenac County and other similar rural municipalities. This research is intended to inform the manager of economic development for the County of Frontenac, and other economic development agencies, of the challenges and opportunities that exist for the further development of Frontenac’s local food economy. This research will complement and elaborate on earlier studies that recognized the challenges that local food businesses in the County identified. Additionally, the Ontario Ministry of Agriculture, Food and Rural Affairs has expressed interest in case study research that delves into the opportunities and the barriers that local food entrepreneurs face. This study is in line with their research priorities and, upon completion the research findings will be available to aid in further provincial local food policy development.

1.4 Overview of Thesis

The study begins by reviewing the methodological approach taken for this research. It includes an overview of the mixed methods approach used, elaborating on the exploratory case study utilizing both participant observation and key informant interviews. The participant groups are described and the limitations and validity of the qualitative data is briefly discussed.
Chapter 3 includes an extensive review of the literature beginning with the evolution of the local food system, planning for local food, exploring the definitions of local food and food hubs and concluding with an examination of local food systems and rural economic development.

Chapter 4 is structured to provide an introduction to the case study area of Frontenac County including its physical, economic and demographic characteristics. The topic of agriculture and local food in Frontenac County is discussed and the relevant local food studies and initiatives that have been completed are reviewed.

Chapter 5 includes an analysis of the qualitative data directed by the research objectives. Questions developed for each of the participant groups guide the responses which are organized by coded themes. Data is presented in graphs and word clouds.

Chapter 6 includes a discussion of the researcher’s observations and a summary of the findings organized by the major themes identified in the data.

Chapter 7 states the conclusions of this research and offers the researcher’s reflection on the study as a whole. Recommendations for the further development of the local food economy of Frontenac County and considerations for future research on local food and rural economic development are provided.
2 METHODOLOGY

2.1 Methods

The following methods were identified as the best means to achieve the stated research objectives. The choice of a case study approach allowed the researcher to immerse herself in the community to garner increased participation from local stakeholders to gain a thorough understanding of local conditions. According to Yin (1994), “In general, case studies are the preferred strategy when “how” or “why” questions are being posed, when the investigator has little control over events, and when the focus is on a contemporary phenomenon with some real-life context” (p.1). The advantage of case studies is that a diversity of data collection methods can be utilized to achieve research objectives (Blumberg, Donald & Schindler, 2005; Hardwick, 2009). Hardwick (2009) states “Case studies are most appropriate when a researcher wishes to utilize a set of mixed methods of data collection and analysis in order to bring out the viewpoints of multiple participants in the study” (p.441). This research utilized a mixed-methods approach drawing upon both primary and secondary sources of information. Yin (1994) notes that “the use of multiple sources of evidence in case studies allows an investigator to address a broader range of historical, attitudinal, and behavioural issues” (p.92). Figure 1 illustrates the data collection methods and how they were utilized in achieving the research objectives. Secondary sources of data collection, in the form of a literature review and the collection of secondary data, which included the 2016 Census of Agriculture and Frontenac County demographic and agricultural statistics were initially collected to build a knowledge base of local food issues and to provide further context for the state of local food and agriculture in Frontenac County. Primary data was then
collected through participant observation and key informant interviews in the context of an exploratory case study to garner location-specific evidence.

Yin (1994) emphasizes the importance of utilizing various sources of evidence in a case study approach. In Table 1 below, four of the six sources of case study evidence identified by Yin (1994) that were utilized in this research are outlined and evaluated in terms of their strengths and weaknesses.
Table 1: Yin’s (1994) Sources of Case Study Evidence: Strengths and Weaknesses (pg. 80)

<table>
<thead>
<tr>
<th>Source of Evidence</th>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
</table>
| Documentation            | • Stable- can be reviewed repeatedly  
                          • Unobtrusive- not created because of the case study  
                          • Exact- contains exact names, references, and details of an event  
                          • Broad coverage- long span of time, many events, and many settings  | • Retrievability- can be low  
                          • Biased selectivity, if collection is incomplete  
                          • Reporting bias- reflects (unknown) bias of author  
                          • Access- may be deliberatively blocked |
| Interviews               | • Targeted- focuses directly on case study topic  
                          • Insightful- provides perceived causal inferences  | • Bias due to poorly constructed questions  
                          • Response bias  
                          • Inaccurate due to poor recall  
                          • Reflexivity- interviewee gives what interviewer wants to hear |
| Direct Observations      | • Reality- covers events in real time  
                          • Contextual- covers context of event  | • Time-consuming  
                          • Selectivity- unless broad coverage  
                          • Reflexivity-event may proceed differently because it is being observed  
                          • Cost- hours needed by human observers |
| Participant – Observation| • [Same as above for direct observations]  
                          • Insightful into interpersonal behavior and motives  | • [Same as above for direct observations]  
                          • Bias due to investigator’s manipulation of events |

2.1.1 Literature Review

Data collection began with a literature review of peer-reviewed academic journals, investigating various topics related to local food, planning and rural economic development including food systems, defining local, planning for local food, food hubs, challenges and opportunities for local food producers and the economic implications of local food activities. Secondary data examined for this research includes previously-
published information including census information, government reports and existing community documents. As Yin (1994) states, documentation is relevant to all case studies as it provides supporting evidence of the phenomenon being studied. Secondary data also provided information about the changing structure and function of the rural community and identified why the development of local food initiatives had been explored within the case study community.

2.1.2 Exploratory Case Study

Hardwick (2009) states “exploratory case studies are conducted to gather and analyze foundational data to be used for more expanded work and a set of larger questions to be pursued and carried out after these preliminary pilot data have been assessed” (p.441-442). A case study approach takes an in-depth look at a situation over a specific time-period or duration of an event (Creswell, 2003; Yin, 1994). A case study approach is appropriate for this research because the goal is to determine how to better plan for local food initiatives to better support rural economies and to understand why some local food initiatives are successful and others fail.

2.1.2.1 Participant Observation

Participant observation is a method where the researcher is not merely a passive observer, but one who assumes a variety of roles within the case study situation (Yin, 1994). Although the researcher originated from Frontenac County and has ties to the farming community, she was able to garner further insight by immersing herself in the local food community by working on a local food project with the local economic development agency, volunteering and becoming a vendor at one of the County's
Farmers’ Markets and attending several local farming organization meetings and events.

Blumberg, Donald & Schindler (2005) note that “The major advantage of participant observation is that it often offers access to information that is not available to other researchers” (p.379). Participant observation also offers the distinct opportunity to perceive the research from someone on the “inside” rather than being external to it, argued to produce a more “accurate” depiction of the case study phenomenon (Yin, 1994).

There are also several disadvantages to utilizing a participant observation approach to research. Yin (1994) notes that the most prevalent problem related to participant-observation is regarding the development of researcher bias, which can threaten the credibility of the case study. By becoming deeply involved, the researcher runs the risk of losing their neutral, objective view. Blumberg, Donald & Schindler (2005) recommend that a “more-casual” approach be used, elaborating that “more casual means that your collection of observational information is a by-product of being involved in the organization...” (p.379). The researcher remained cognizant of the risk of developing biases, and actively worked to validate her research findings through the previously mentioned mixed-methods approach, while also seeking out a diversity of stakeholders for key informant interviews.

2.1.2.2 Key Informant Interviews

It has been argued that the most important source of case study information is the interview (Yin, 1994). Interviews are particularly useful when the research problem is broad, and the researcher needs to identify location-specific issues relevant to the
problem (Blumberg, Donald & Schindler, 2005). In-depth, semi-structured interviews were the chosen method for this research due to the nature of the topic, to allow participants to remain comfortable and to explore any issues that may not have been previously identified by the researcher. In-depth, semi-structured interviews occur when a researcher has created a predetermined list of questions, but the interview unfolds in more of a conversational manner (Longhurst, 2009). Blumberg, Donald & Schindler (2005) created Table 2 below to compare structured and semi-structured or unstructured interviews to illustrate their differing approaches to data collection.

Table 2: Blumberg, Donald & Schindler’s (2005) Comparison of Structured and Unstructured Interviews (p.836)

<table>
<thead>
<tr>
<th></th>
<th>Structured</th>
<th>Semi-structured or Unstructured</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type of study</strong></td>
<td>Explanatory or descriptive</td>
<td>Exploratory and explanatory (semi-structured)</td>
</tr>
<tr>
<td><strong>Purpose</strong></td>
<td>Providing valid and reliable measurements of theoretical concepts</td>
<td>Learning the respondent’s viewpoint regarding situations relevant to the broader research problem</td>
</tr>
<tr>
<td><strong>Instrument</strong></td>
<td>Questionnaire (i.e. specified set of predefined questions)</td>
<td>Memory list Interview guide</td>
</tr>
<tr>
<td><strong>Format</strong></td>
<td>Fixed to the initial questionnaire</td>
<td>Flexible depending on the course of the conversation, follow-up and new questions raised</td>
</tr>
</tbody>
</table>

Semi-structured interviews are utilized for two main reasons, the first being that the researcher wants to confirm information that they have already gathered and, secondly, to know the participants perspective on the issue (Blumberg, Donald & Schindler, 2005; Longhurst, 2009). A key strength of semi-structured interviews is that they allow the researcher to attempt to understand complex behaviours, experiences and
An additional strength of the semi-structured interview is that it shows respect for the participants by allowing them to tell their stories and opinions in a way in which they are comfortable while allowing for the collection of a diverse range of opinions on a topic (Blumberg, Donald & Schindler, 2005; Longhurst, 2009). Longhurst (2009) notes that “the method does not offer researchers a route to ‘the truth’ but it does offer a route to partial insights into what people do and think” (p.583).

A weakness of conducting semi-structured interviews is that it is time consuming. Longhurst (2009) notes, “formulating a schedule of questions, recruiting participants, organizing times and spaces in which to conduct interviews, and transcribing and analyzing interviews all add up to many hours of labour” (p.582). There are also ethical and power relation considerations that a researcher must be cognizant of when conducting key informant interviews to ensure that they are not influencing the responses and that accurate data collection occurs (Longhurst, 2009). It is especially important in a small community to address confidentiality with participants when conducting key informant interviews (Longhurst, 2009).

Qualitative data was collected in the form of 29 semi-structured interviews from October 2017 to March 2018. Interviews were conducted until data saturation was reached. Participants for the research were identified using a snowball sampling technique and included those involved in the local food value chain in Frontenac County and Kingston in a producer, processor, retailer, restauranteur or advocate capacity. For producers, geographic representation from all four lower tier municipalities was important as both the conditions of the land and access to markets varies across the County. Key
questions asked were with respect to motivations, challenges and opportunities for local food and agriculture in Frontenac County. Within these questions, sub questions regarding the notions of collaboration and networking were also asked. Initially the research was focused on food hubs and the role that they play in rural economic development. However, early in the research process, it was identified that focusing on food hubs in the context of Frontenac County was too narrow, and therefore the research direction was amended to investigate the local food economy and how it contributes to rural economic development. The key informant interview question guides can be found in Appendix A-C.

2.2 Limitations and Validity of Data

Case study research has been criticized for its unscientific nature and reliance on over generalized findings (Hardwick, 2009). Hardwick (2009) states, “particular attention must be paid to considering how best to test for reliability and validity when assembling the methods used to conduct case study research” (p.442). Utilizing a mixed-method approach was one tactic to ensuring the validity of the research findings of this research (Hardwick, 2009; Yin, 1994).

While the necessary steps have been taken to ensure the reliability and validity of this research, Table 1 above illustrates the inherent weaknesses and limitations associated with the chosen sources of evidence. Researchers conducting case study research need to be mindful not to generalize results from their findings to broader populations (Blumberg, Donald & Schindler, 2005). Accordingly, this research is not intended to be generalized or expanded beyond the scope of this case study.
3 LITERATURE REVIEW

3.1 Introduction

As of 2016, 54% of the world’s population resided in urban areas, with this number estimated to grow by 1.84% each year between 2015 and 2020 (WHO, 2017). The consequences of this gradual mass migration from rural to urban areas has implications for both the remaining rural communities and the agricultural systems that service them. As populations have become more urbanised they have both physically and metaphorically distanced themselves from their food sources (Feenstra, 2002). With respect to Canadian rural agricultural populations, the 2016 Canadian census found that the average farmer in Canada is 55 years of age, and that the largest cohort of existing farmers belongs to the 55 and over age group, with only 9.1% of farmers under the age of 35 (Statistics Canada, 2017). With an ageing farm population and a small number of younger people entering the farming profession, the future of agriculture, food and rural areas remains unclear.

Interestingly, as more people migrate to urban areas the local food movement has simultaneously developed and is gaining momentum. This movement is thought to be driven mainly by youth from various political, cultural, socio-economic and geographical backgrounds (Elton, 2015). These individuals, driven by a common goal, have come together to improve the current food system in light of increasing environmental and social challenges (Elton, 2015). What started as a grassroots movement in the early 2000’s has influenced the development of provincial and national policies for local food with Ontario
enacting *The Local Food Act* in 2013, and the Canadian federal government is currently consulting with the public on a national food policy.

With increasing attention being paid to the further development and support of local food systems, many have posited that the local food movement is a viable means for rural revitalization (Feenstra, 2002; Phillips & Wharton, 2015; Sadler, Arku & Gilliland, 2015). The re-emerging popularity of farmers’ markets, coupled with the development of various direct marketing endeavours including community supported agriculture (CSA), farm-to-table establishments and food hubs provide opportunities for increased farm profitability, which in turn can create more vibrant and self-sustaining rural economies (AMO, 2013; Mount et. al, 2013; OMAFRA, 2016; Lee, Wall & Kovacs, 2015; Sadler, Arku & Gilliland, 2015; Smithers, Lamarche & Joseph, 2008; Tovey, 2009). However, several challenges have been identified for local food systems and their long-term economic feasibility (AMO, 2013; Dunne, Chambers, Giombolini, & Schlegel, 2010; Feenstra, 1997; Mount, 2012; O’Hara & Pirog, 2013). These challenges must be further examined when considering the viability of local food systems and their implications for the future of rural areas.

### 3.2 Evolving Food Systems

For the developed world, the globalised food system has provided an abundant variety of food but at significant costs to the environment, smaller producers, the health of consumers and rural areas (Berti & Mulligan, 2016; Kneen, 1995; La Trobe & Acott, 2000; O’Kane, 2016; Phillips & Wharton, 2015). The current food system, as O’Kane states, “disconnects consumers from where, how and by whom food is grown” (p.218). In order to meet global food demands, agricultural systems have progressively grown more
mechanized, industrialized, globalized and reliant on unsustainable transportation systems, which in turn has negatively influenced smaller farm businesses (Berti & Mulligan, 2016; La Trobe & Acott, 2000). In the current globalised system, smaller family farms are increasingly unable to compete as they cannot reach the economies of scale of their agri-business competitors (La Trobe & Acott, 2000). These agri-businesses are also often recipients of commodity subsidies, furthering their competitive advantage and the inequalities that smaller producers encounter (Berti & Mulligan, 2016; Sadler, Arku & Gilliland, 2015). Cheap food imports and the existing disconnect between consumers and producers has created a culture and expectation of cheap food in North America (Mount, 2012). La Trobe & Acott (2000) report that farmers now receive “a share of only 10 to 20% of the product value, compared with half a century ago when at least 50% was returned to the farmer and rural community” (p.311). As such, one of the major criticisms of the current food system is that agricultural profits are concentrated in multi-national corporations instead of rural communities (Andrée, Ballamingie & Sinclair-Waters, 2015; Mount et al., 2013; Phillips & Wharton, 2015). Ironically, the globalized food system which was designed to provide abundant inexpensive food to North Americans has contributed to an obesity epidemic, food insecurity, food safety concerns and the advent of food deserts (Marsden & Franklin, 2013; Pothukucchi, Joseph, Burton & Fisher, 2002; Sitaker, Kolodinsky, Pitts & Sequin, 2014).

In response to the growing concerns regarding the globalised food system, many are working to create decentralized, sustainable and fair alternatives (Andrée, Ballamingie & Sinclair-Waters, 2015; Feenstra, 2002; Franklin, Louden & MacRae, 2010; Newton and McEntee, 2011; Mount, 2012; Selfa & Qazi, 2005; Sumner, McMurty &
Renglich, 2014). They are typified as being more environmentally sustainable and economically viable (Feenstra, 2002; Sumner, McMurty & Renglich, 2014). These alternative local food systems emphasize the importance of place, by encouraging transparent interactions to build trust and understanding, while also fostering dialogue to reconnect consumers to those who grow and raise their food (Feensta, 2002; Mount, 2012). Those advocating for alternative food systems share an understanding that local food is central to healthy ecosystems, communities, economies and lives (Food Secure Canada, 2011). Mount (2012) notes that “the fundamental principles of local food systems must surely include the (a) reconnection of producer to consumer; (b) the direct exchange through which this occurs, and (c) the shared goals and values that underlie the system” (p.110). As a growing number of North American consumers continue to place more emphasis on the freshness, taste and experience of food, this provides growing opportunities for smaller producers which, in turn, can revitalize rural economies (Feldmann & Hamm, 2015; Friedmann, 2007; Louden & MacRae, 2010; Miller, 2010). To ensure that alternative food systems are successful, it is vital that the social relations entrenched in the local area are nurtured (Selfa & Qazi, 2005).

3.2.1 The Local Food Movement

The local food movement has gained support across North America and Europe, with Ontario’s movement having its origins tied to early 20th century farming practices (Elton, 2015; Franklin, Newton & McEntee, 2011). However, this grassroots movement began to gain real momentum in the early 21st century. It has been likened to the ‘back to the land’ movement of the 1960’s and the health food movement of the 1970’s and 1980’s. These were also times when concerned citizens began questioning the role of
corporations in the North American food system (Elton, 2015). The movement was perpetuated by the timely publishing of a few key books such as *The Omnivore’s Dilemma* and *The 100-Mile Diet* (Elton, 2015). The term ‘locavore’ was defined by the Oxford dictionary in 2007, which seemed to bring mainstream awareness to the local food movement (Hayes, 2013). The movement can be defined by its diverse advocates such as locavore groups, farm-to-school programs, chefs and restaurants that promote seasonal eating and provide farm-to-table dining experiences (Dunne, Chambers, Giombolini & Schlegel, 2010; Elton, 2015; Hayes, 2013). The movement does have its critics who claim that low-income consumers are unable to participate; however, several community cooperatives and programs have been developed to provide better access to local food for these marginalized groups (Franklin, Newton & McEntee, 2011). The local food movement in Ontario will continue to grow as: more consumers place importance on knowing the origins of their food; access to fresher and more regionally authentic food is readily available; and consumers become more aware of the benefits of supporting local producers and retaining their food dollars in the local economy (Friedman, 2007; Smithers, Lamarche & Joseph, 2008).

### 3.2.2 New Ways to Access Food

Within the globalised food system, the motivations for supermarket usage by consumers rests with the notions of efficiency, convenience, cost and speed of attaining food (O’Kane, 2016; Smithers, Lamarche & Joseph, 2008). Consumers have become so disassociated with their food that they rarely contemplate the origins of the products that they are purchasing and consuming (Smithers, Lamarche & Joseph, 2008). However, with the advent of the local food movement, the slow food movement has also developed
in response to changing consumer behaviours. Similarly, the slow food movement aims to support smaller producers and protect the environment, while also placing an emphasis on the joy of cooking, eating and sharing meals (Phillips & Wharton, 2015). Through these movements, consumers are gaining an appreciation for producers and the quality food that they grow, while also establishing productive relationships (Smithers, Lamarche & Joseph, 2008).

Several alternative avenues by which consumers can access local food have been developed in response to the growing recognition of the benefits of consuming local food (La Trobe & Acott, 2000; Mount et al, 2013; Phillips & Wharton, 2015). Feenstra (1997) states that “a logical and appropriate way to revitalize a community is by the development of a local food economy” (p.99). Therefore, the notion of place is at the root of local food activities (Feenstra, 1997; La Trobe & Acott, 2000). The variety of local food networks currently utilized by consumers include community gardens, Community Supported Agriculture (CSA), farmers’ markets, roadside stands, farm-to-table restaurants, pick-your-own operations, online delivery systems and food hubs (O’Kane, 2016). These avenues are increasing access to nutritious food, while also educating the public on their ‘foodsheds’. Perhaps more importantly, these avenues are creating a trust and understanding between consumers and producers (O’Kane, 2016; Smithers, Lamarche & Joseph, 2008). The growth of the local food movement can also be attributed to attracting new farmers to the profession as demand for local food increases (Mount et al., 2013).
Of the local food initiatives, the farmers’ market is the most established, with food hubs being the least (Berti & Mulligan, 2016; Phillips & Wharton, 2015; Smithers, Lamarche & Joseph, 2008). When consumers were asked about their motivations for attending farmers’ markets, the most frequent response was that they wanted to support their local farming community (La Trobe & Acott, 2000; Smithers, Lamarche & Joseph, 2008). Other motivations included: consumers felt that food purchased at the farmers’ market was of higher quality and freshness than that in the grocery store; consumers value the social interaction with the producers; and these interactions allow them to make informed food purchase decisions (Smithers, Lamarche & Joseph, 2008).

Community Supported Agriculture (CSA) originated in Japan in the late 1960s and is another local food initiative that directly links consumers to producers (Starr & Adams, 2003). CSAs allow consumers to directly support growers by paying for a share in the farm at the beginning of the growing season and in return they receive a basket of farm products each week. By paying for a share at the beginning of the growing season, the consumer accepts the risks and reaps the rewards of the harvest, while also securing income for the farmers (Cone & Myhre, 2000; La Trobe & Acott, 2000; Starr & Adams, 2003).

Online local food aggregators and distributors are a recent development in the local food movement. FreshSpoke is one such wholesale service in Ontario that advertises that they sell authentically local products that are quickly and easily delivered. The long-term viability of such online services has yet to be evaluated. Figure 2 below illustrates how the FreshSpoke model works.
3.3 Planning for Local Food Systems

It is estimated that by 2050, more than 66% of the world’s population will live in urban areas (Whittaker et al., 2017). Increasing urbanization impacts community food systems and deliberative food-systems planning is required to mitigate these impacts (ibid). Local food systems generate numerous environmental, social and economic benefits for communities (Feenstra, 2002; Mount et al., 2013; Phillips & Wharton, 2015; Sadler, Arku & Gilliland, 2015). As such, there is growing recognition of the vital role that government policy can play to promote local food systems (Feenstra, 1997; Sharp, Jackson-Smith & Smith, 2016). Planning for local food is central to improving public health and strengthening local economic development in both rural and urban communities. (Feenstra, 2002; Mount et al., 2013; Phillips & Wharton, 2015; Sadler, Arku & Gilliland, 2015).
Food-systems planning is a new practice within urban and regional planning and Whittaker et al. (2017), define it as:

a set of future-oriented, place-based, and dynamic activities that strengthen a community’s food system through the creation and implementation of community plans and policies, which are often but not always recognized or led by local and regional governments (p.8).

The role of planners in food systems planning is new; however, it is recognized that planners have much to contribute to strengthening local food systems and food system planning (Pothukuchi & Kaufman, 2000; Raja et al., 2017; Whittaker et al., 2017). Sustainability and “healthy cities” movements within urban planning have emerged that emphasize goals related to the consumption of healthy food and regional local food self-reliance (Pothukuchi & Kaufman, 2000). Food policy objectives are evolving from the emphasis on low-cost and abundant food to including priorities associated with sustainable agriculture, small and mid-size farm viability, increasing healthy food access, community building and the development of local and regional food systems (Clancy, 2004; Clark, Sharp & Dugan, 2015; Whittaker et al., 2017). The challenge of developing local food plans and policies is that “food concerns compare poorly within the dominant public policy discourse of economic growth and development” (Raja et al., 2014, p.184).

To ensure the development of a successful local food system, planners must consider a diversity of issues including farmland loss, location of distribution centers, urban and rural food access, and agricultural land use pollution issues (Pothukuchi & Kaufman, 2000). Born & Purcell (2006) caution that planners must also avoid the ‘local trap’ which is the assumption that local is innately beneficial. To do so, planners must consider strategies and policies for local food at all scales, as national and regional
strategies can also generate a more integrated, collaborative food system (Born & Purcell, 2006). Despite the importance of a top-down approach to local food system development, many have recognized that communities and individuals play a vital role in promoting the consumption of local food (Clancy, 2004; Sadler, Arku & Gilliland, 2015).

### 3.3.1 The Municipal Role

There is growing recognition amongst lower-tier governments of the important role they can play in addressing food insecurity and public health issues in their jurisdictions by supporting local, sustainable agriculture (Feenstra, 1997). One common approach that has emerged is the development of food policy councils (FPC). Successful FPC’s typically have a supportive mayor, engaged municipal staff and a representative public presence (Feenstra, 1997; Sharp, Jackson-Smith & Smith, 2016). Municipalities and regions that have well organized FPC’s typically have programs and policies in place to support local food systems, which translates to more local food and agricultural activities occurring in their areas (AMO, 2013; Sharp, Jackson-Smith & Smith, 2016). Collaborative efforts between various stakeholders and municipal policy-makers is vital to the creation of successful local food networks (AMO, 2013; Sadler, Arku & Gilliland, 2015). It is through the FPCs that improvements to community health can be made by increasing access to local, healthy foods via the development of initiatives such as community gardens and farmers’ markets. To assist in the promotion of local food systems, the Association of Municipalities Ontario (AMO) created a guide to local food for municipalities. The guide outlines best practices that aligns with provincial priorities and legislation (AMO, 2013). AMO suggests that to best support the development and long-term viability of local food networks, municipalities should develop a food policy council, a food charter, and amend
their Official Plans to generate land use planning goals and zoning by-laws that promote local food networks (AMO, 2013).

As lower-tier municipalities typically have limited resources available to dedicate to new programming, the collaborative efforts of FPCs are vital to the development of local food networks (Sadler, Arku & Gilliland, 2015). However, it has also been noted that due to this lack of resources and human capital, many FPCs have narrow objectives and tend to focus on singular issues such as the development of a food charter or a county-level food systems plan (Sadler, Arku & Gilliland, 2015). Given the democratic structure of FPCs, the implementation of municipal-level food policy can also be significantly influenced by the political motivations of certain stakeholders. However, the advocacy role of FPCs is still crucial to the development of local food systems, regardless of scope (Sadler, Arku & Gilliland, 2015).

The Ontario Federation of Agriculture (OFA) recently released A Guide to Support Agricultural Growth in Your Municipality. The guide offers a set of best practices that municipalities can implement to support their agri-food sector. To promote agricultural economic development, municipalities should examine their agricultural community by conducting a SWOT analysis, asset mapping exercise or partaking in the province’s Business Retention and Expansion (BR+E) study (OFA, 2016b). Municipalities can promote their agricultural community by creating a local food map, a culinary/agri-tourism strategy, local food education/awareness projects, buy local campaigns, and farm-gate signage projects (ibid). Municipalities can support their agricultural community through Community Improvement Plans (CIP), supportive land use policies, investing in
agricultural infrastructure to strengthen the local food value chain and encourage linkages across municipalities (ibid). The guide outlines that:

Municipalities can support agricultural economic development through: 1- land use planning; 2- property assessment and taxation; 3- financial incentives and reduced costs; 4- community and regional food planning; and 5- consultation with the farming community (OFA, 2016b, p.1).

The guide also emphasizes the importance of the development of an agricultural advisory committee and food policy councils as they are a means for collaboration and cooperation among those involved in local food and encourages ongoing discussion of local food issues (OFA, 2016a).

3.3.2 The Provincial Role

Ontario is the most diverse food-producing region in Canada, producing over 200 different agricultural crops on 52,000 farms, accounting for 1 in 9 jobs in the province (Wales, 2012). In 2013, Ontario’s Premier announced the enactment of the provincial Local Food Act. This legislation is intended to create more jobs and boost the agri-food industry by increasing the demand for Ontario grown food (OMAFRA, 2015). The Local Food Act serves many purposes including: educating Ontarians about the interconnections between health, food and Ontario agriculture; encouraging healthy eating habits; increasing public awareness of food and farming in Ontario; increasing demand for local food through government purchasing; improving the economic viability of farming, processing and distribution of food; promoting local food network development by connecting various stakeholders in Ontario’s agri-food industry; and improving local food availability for all Ontarian’s, especially the food insecure (Castrilli, Dunne & Bell-Pasht, 2013). This legislation recognizes the importance of collaboration between public
and private sectors in order to continue to grow Ontario’s local food systems (Local Food Act, 2013). As a result of this collaboration with farmers, processors, consumers, retailers, foodservice providers and not-for-profit organizations, the province developed a local food strategy aimed at increasing the availability of local food for Ontario consumers (OMAFRA, 2016).

In the 2015/2016 fiscal year alone, the province invested over $21 million in 150 projects to promote local food in Ontario (OMAFRA, 2016). To increase food literacy, the Local Food Act also deemed the first week of June each year as Local Food Week (OMAFRA, 2016). An annual local food report is also published by the Minister of Agriculture which details the goals set and met in the year and also highlights Ontario local food champions (Local Food Act, 2013). Foodland Ontario, which is the provincial consumer promotion program established in 1977, continues to promote Ontario local food by educating families about seasonal vegetables and connecting them to eating seasonally with delicious recipes (OMAFRA, 2015). Through the work of Foodland Ontario, it is reported that 81% of shoppers can identify Ontario-grown fruit and vegetables in grocery stores (OMAFRA, 2016). The Local Food Fund was established in 2013 as a three-year initiative with available funding of $10 million a year to support job creation and attract investment in Ontario’s agri-food industry (OMAFRA, 2016). In that three-year period, over 130 grants were distributed, which significantly boosted the growth of local food economies across the province (OMAFRA, 2016). Although the Local Food Fund is complete, the province continues to promote local food initiatives through funding programs such as Growing Forward 2, the Greenbelt Fund, and the Ontario Trillium Foundation (OMAFRA, 2016).
3.3.3 The Federal Role

Elton (2015) suggests that there is a saying within the local food movement that “you can vote with your fork” (para. 18). However, organizations such as the Canadian Federation of Agriculture (CFA) and Food Secure Canada indicate that a successful local food system is more a creation of federal policy (Elton, 2015; Wales, 2012). Given the growing success of the local food movement, both of these organizations have created national food policies and strategies. The CFA created the *National Food Strategy* that details how the agri-food industry and the federal government can collaborate to continue to increase the health of Canadians by growing Canadian agriculture (Wales, 2012). Food Secure Canada spent three years creating the *People’s Food Policy*, an extensive document created by 3,500 local food stakeholders from a diversity of backgrounds (Food Secure Canada, 2011). The policy was developed to guide the federal government to create a national food system that is equitable and sustainable (Elton, 2015). The root of the policy identified seven pillars for Canadian food sovereignty: 1- focuses on food for people; 2- values food providers; 3-localizes food systems; 4-put control locally; 5- builds knowledge and skills; 6- works with nature; and 7- recognizes that food is sacred (Food Secure Canada, 2011). The vision of the *People’s Food Policy* is to create a food system where every Canadian can access affordable, healthy food and that Canadian producers are fairly compensated for growing safe and nutritious food (Food Secure Canada, 2011).

In early 2017, the Canadian federal government announced that it is in the process of developing a national food policy (Government of Canada, 2017). The government is currently asking Canadians for their input regarding the development of this national policy, specifically relating to four identified themes: 1- increasing access to affordable
food; 2-improving health and food safety; 3-conserving our soil, water and air; and 4-growing more high-quality food (ibid). The Canadian Food Policy “will set a long-term vision for the health, environmental, social, and economic goals related to food, while identifying actions we can take in the short-term” (ibid, para. 1). Emerging leadership at the federal level illustrates the promise of continued growth for the local food movement.

3.4 Defining Local

The concept of ‘local’ is evolving with no consensus on a clear meaning as various stakeholders (producers, retailers and consumers) attempt to generate their own definitions (CFIA, 2014; Dunne, Chambers, Giombolini & Schlegel, 2010; Feldmann & Hamm, 2015; Selfa & Qazi, 2005; Smithers, Lamarche & Joseph, 2008; Trivette, 2015). As Selfa & Qazi (2005) ask, “Is the choice to engage in a local food system a matter of proximity (place), a matter of food quality (taste), or a matter of reconnecting with farmers (face-to-face)?” (p.452). A variety of definitions have been suggested in the literature, most of which are influenced by geographical or political boundaries (CFIA, 2014; Dunne, Chambers, Giombolini & Schlegel, 2010; Feldmann & Hamm, 2015). However, more holistic approaches to the definition have been proposed that focus on the importance of personal connections and the relational aspects of participating in local food systems (Dunne, Chambers, Giombolini & Schlegel, 2010; Feldmann & Hamm, 2015; Trivette, 2015).

3.4.1 Regulatory Definitions

From a regulatory standpoint, distance would appear to be at the root of the definition of ‘local’. Federally, the Canadian Food Inspection Agency (CFIA) recently
adopted an interim policy that recognizes ‘local’ as: “food produced in the province or territory in which it is sold, or food sold across provincial borders within 50 km of the originating province or territory” (CFIA, 2014, para 1). Under their previous policy, ‘local’ was recognized as: “food that originated within a 50-km radius of the place where it was sold or, food sold that originated within the same local government unit or adjacent government unit” (CFIA, 2014, para 1). In Ontario, the Local Food Act defines ‘local food’ as “(a) food produced or harvested in Ontario, including forest or freshwater food, and (b) subject to any limitations in the regulations, food and beverages made in Ontario if they include ingredients produced or harvested in Ontario” (Local Food Act, 2013, pg. 2). In Canada, labelling products as ‘local’ is voluntary and the CFIA encourages that products labelled as such include further distinguishing information such as the product place of origin (CFIA, 2014). These regulatory definitions have been criticised as being too general and broad (Dunne, Chambers, Giombolini & Schlegel, 2010; Hinrichs, 2003; Tovey, 2009; Trivette, 2015). Conversely, there has been expressed concern over a definition that may be too narrow in scope, such as a bioregional definition. When utilizing this definition, if the producer or consumer is located near the border of a bioregion with limited local availability of products, this creates a level of difficulty of supporting ‘local’ if the closest market is located in an adjacent bioregion (Dunne, Chambers, Giombolini & Schlegel, 2010).

3.4.2 The Diversity of “Local”

Dunne, Chambers, Giombolini & Schlegel (2010), note that utilizing ‘food miles’ alone for a definition of local is insufficient if notions of transparency, social justice and sustainability are to be incorporated. They suggest that a more comprehensive definition
should include the interpersonal connections of all participants in the local food system. When examining the definition of local, it is imperative to consider that the definition varies depending on the role of the participant in the local food system (Trivette, 2015). Several studies have been conducted on the consumer definition of local; however, there have been only a few that report from the retailers’ perspective (Dunne, Chambers, Giombolini & Schlegel, 2010; Trivette, 2015). Dunne, Chambers, Giombolini & Schlegel (2010) found significant disparities in how retailers generate their definitions of local. Some retailers stated that availability of local products and customer values influence their definition, whereas others noted that their definition is one that is easiest for them to use (Dunne, Chambers, Giombolini & Schlegel, 2010). Interestingly, some retailers consider that food processed in the area, but not grown in the area, is local due to the economic implications (job creation) for the local community (Dunne, Chambers, Giombolini & Schlegel, 2010).

Trivette (2015) divides the definition of local into two categories: local by proximity and local by relationship. Similar to the regulatory definition of local, local by proximity uses distance measures to define local whether it is a numerical distance (100 miles) or a political boundary (Trivette, 2015). Factors that are considered in the proximity definition include seasonality impacts on local production and access to markets. The local by relationship definition relies on the personal connections that retailers have with producers, which is more difficult to quantify (Tovey, 2009; Trivette, 2015). Factors that are considered in the relationship definition are the size of the sourced farming operations and the number of relationships that a retailer has with local producers. The more connections to local producers a retailer has, the more ‘local’ they are thought to be (Trivette, 2015). Consumers tend to incorporate freshness, taste and quality of products
in their definition of local compared to producers and retailers (Trivette, 2015). Selfa & Qazi (2005) investigated the producer definition of local and found that ‘bartering between farmers’ was considered local, even if the farmer in which they were bartering was from a distant area, hence placing more emphasis on relationship over distance. However, generally producers defined local in terms of proximate distances and the direct connections to their consumers (Selfa & Qazi, 2005). The work of Foodland Ontario in branding Ontario-grown products was noted to potentially weaken the definition of local as consumers identified with the province-wide brand over their potentially more-regionalized definitions (Smithers, Lamarche & Joseph, 2008).

3.4.3 Certifying “Local”

Local Food Plus (LFP) is a non-profit organization that was established in 2006 to assist producers who were struggling to market their locally-produced goods (Campbell & MacRae, 2013). LFP serves many purposes, one of which is to provide an area for buyers and sellers of local food to meet and to create new markets for local goods. LFP has created a set of standards to certify local, sustainable producers and processors while simultaneously developing partnerships with institutions, restaurants and retailers looking to source local products (Campbell & MacRae, 2013). LFP recognizes the contentious nature of the definition of ‘local’; however, aligning with provincial regulations, LFP currently defines local as “lying within provincial boundaries” (Louden & MacRae, 2010, p.180). LFP notes:

sustainably produced food is not truly sustainable unless it is also local (with some exceptions for products that we cannot grow here, but are embedded in our culture, such as coffee). Local ensures that the food has not traveled great distances, thus reducing greenhouse gas
emissions associated with long distance transportation (Louden & MacRae, 2010, p. 181).

LFP believes that local food can build urban and rural connections, while also providing an avenue for rural revitalization where farmers are able to make a living. Regardless of the scale or interpretation of local, the benefits and underlying values of the term are seemingly consistent.

3.5 What is a “Food Hub”? 

Similar to the definition of local, there is no widespread consensus on a singular definition of what constitutes a ‘food hub’ (Berti & Mulligan, 2016; Franklin, Newton & McEntee, 2011; Phillips & Wharton, 2015). The structure and functions of food hubs are highly variable and thus no singular definition can capture the variety of purposes they serve (Berti & Mulligan, 2016; Franklin, Newton & McEntee, 2011; Horst et al., 2016). As Rich Pirog of Michigan State University’s Center for Regional Food Systems has stated “if you have seen one food hub, you have seen one food hub!” (Phillips & Wharton, 2015, p.136). However, the National Food Hub Collaboration provides a definition that appears to be accepted among many scholars. It defines a food hub as “a business or organisation that actively manages the aggregation, distribution, and marketing of source identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand” (Phillips & Wharton, 2015, p.134-135). From a social and ecological perspective, food hubs are also defined as providing easier access to local, healthy food for all consumers, while allowing producers to grow sustainable crops for a fair wage (Horst et al., 2016; Franklin, Newton & McEntee, 2011). Similarly, Blay-Palmer et al. (2013), define a food hub as “a network of grassroots,
community-based organisations and individuals that work together to build increasingly socially just, economically robust and ecologically sound food systems that connect farmers with consumers as directly as possible” (p. 524). Berti & Mulligan (2016) examined the literature and classified the existing definitions of food hubs into two categories: a values-based agri-food supply chain typology and a sustainable food community development typology. As this literature review is concerned with the rural economic development implications of local food, the definitions in the values-based agri-food supply chain typology, as shown in Table 3, were explored.

Table 3: Berti & Mulligan’s (2016) Assemblage of Food Hub Definitions

<table>
<thead>
<tr>
<th>Values-Based Agri-Food Supply Chain Food Hub Definitions</th>
</tr>
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<tbody>
<tr>
<td>Morely et al. (2008)</td>
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<tr>
<td>FH is a mechanism by which small producers can collectively access a middleman facility that enables them to trade with large customers – be they supermarkets, food service vendors or public procurement consortia – that none of them would be able to trade with by acting alone.</td>
</tr>
<tr>
<td>FH is a business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand.</td>
</tr>
<tr>
<td>Matson and Thayer (2013)</td>
</tr>
<tr>
<td>FH is a way to connect multiple producers to mid- and large-scale wholesale purchasers as well as individual customers more efficiently. The food hub concept has blossomed and has emerged as a logistical vehicle that facilitates a local food supply chain.</td>
</tr>
<tr>
<td>Fischer et al. (2015)</td>
</tr>
<tr>
<td>FHs are, or intend to be, financially viable businesses that demonstrate a significant commitment to place through aggregation and marketing of regional food.</td>
</tr>
<tr>
<td>Cleveland et al. (2014)</td>
</tr>
<tr>
<td>Local FHs are a means of aggregating and distributing food by pooling food products from a number of smaller farms and delivering them to grocery stores, schools, hospitals and restaurants.</td>
</tr>
<tr>
<td>Reynolds-Allie et al. (2013)</td>
</tr>
<tr>
<td>A food hub is a business or organization that actively coordinates aggregation, storage, distribution, and marketing of locally or regionally produced food to strengthen small producers’ abilities to satisfy wholesale, retail, and institutional demands. By aggregating the products of many individual farmers and providing economies of scale, food hubs help small producers reach a wider range of markets, including regional buyers.</td>
</tr>
</tbody>
</table>
Food hubs exist as non-profit organizations, privately-held food hubs, cooperatives and publicly-held food hubs (Berti & Mulligan, 2016; Rogoff, 2014). Regardless of the legal business structure, it is essential that a food hub adapts to the needs of its community to ensure its long-term viability (Phillips & Wharton, 2015). Food Hubs typically work with 40 producers or less and mainly distribute their aggregated products to restaurants, small grocery stores and institutional food services (Franklin, Newton & McEntee, 2011; Phillips & Wharton, 2015; Sitaker, Kolodinsky, Pitts & Seguin, 2014). As food hubs are a newly-developed concept, little has been concluded about their tangible social and economic impacts (Phillips & Wharton, 2015).

3.5.1 Benefits

Although farmers’ markets are a well-established means of marketing locally produced goods, they are not the most economically viable option for producers as sales are somewhat dependent on the weather and competing community events. Producers also often have to pay a market membership fee and a wage for an individual to vend (Barnham et al., 2012). CSA’s are less risky than selling at a farmers’ market; however, they have a limited scope and have high turnover rates (Barnham et al., 2012). Food Hubs exist as non-profit or for-profit organizations that have the ability to amass locally- and regionally-grown food from a network of several different producers simultaneously (Phillips & Wharton, 2015). Food hubs have the infrastructure in place to store and transport locally-grown goods, which allows producers to work together to meet the demands of restaurants and grocery stores that they would not be able to meet individually (Phillips & Wharton, 2015). Through this network of producers, food hubs can distribute larger volumes of locally-grown food than farmers’ markets or CSA programs.
Food hubs are multi-functional and work on both the demand and supply side of local food. Food hubs work with producers regarding sustainable growing practices, production planning, season extension, packaging, branding, certification and food safety (Barnham et al., 2012; Fischer, Pirog & Hamm, 2015). By providing access to year-round markets, aggregated processing and networking opportunities, food hubs have the potential to improve the economic viability of smaller farming operations (Barnham et al., 2012; Hardesty & Leff, 2010; Phillips & Wharton, 2015). Food hubs also create conditions for more local food procurement that can generate business taxes and create jobs associated with the food hub, but also along the supply chain as well (Fischer, Pirog & Hamm, 2015). A recent food hub feasibility study estimated that a food hub operating at capacity could create 400 jobs and add an additional $60 million into the local economy of southern Wisconsin (Fisher, Pirog & Hamm, 2015). Producers involved in food hubs have reported that their farm sales have increased by 25%, which has influenced 60% of those existing food hub producers to expand their operations (Fisher, Pirog & Hamm, 2015).

### 3.5.2 Challenges

Food hub operators cite several challenges including: difficulties in balancing supply and demand, meeting buyer specifications, maintaining farm identity along the supply chain, price sensitivity, access to capital, seasonal fluctuations, and managing growth (AMO, 2013; Fisher, Pirog & Hamm, 2015). Fisher, Pirog & Hamm (2015) note that the median economically-viable age of a food hub is 9.5 years. Food hubs that have been in operation for 5 years cited that they were not yet economically viable as they
needed to continually invest in additional infrastructure (trucks, cold storage) in the early stages of their operations to manage their growth (Fischer, Pirog & Hamm, 2015). Food hubs struggle with their long-term economic viability as access to capital in their formative years is limited for both the operating costs of the food hub, but also for their producers (Centre for Sustainable Food Systems, 2017; Fischer, Pirog & Hamm, 2015). Food hubs also rely heavily on volunteer labour and in-kind support, and struggle with finding reliable seasonal and part-time staff which does not bode well for their long-term financial stability (Fischer, Pirog & Hamm, 2015). To combat these challenges, food hubs would benefit from additional avenues in which to access capital, business development and strategies tailored to the food hub model, and wider stakeholder engagement (AMO, 2013; Barnham et al., 2012; Fischer, Pirog & Hamm, 2015).

3.5.3 Governance

Berti & Mulligan (2016) note that unlike cooperatives, food hubs exemplify:

a different business model based on the principle of strategic co-opetition and it corresponds to a different hybrid organisational arrangement, namely the strategic network or strategic alliance because they are inherently profit-driven and not driven by the principle of solidarity and mutual aid that are at the core of the cooperative (p. 629).

In their guide to evaluating food hubs, Nelson & Landman (2015) stress the importance of clearly establishing the goals of the community food hub with all stakeholders involved. Figure 3 illustrates common themes in which community food hub goals may be categorized. Mount (2012) notes that at the core of local food governance is reconnection, direct exchange and shared goals and values. Given the diversity of local
food hub operations, it is important to note that governance among food hubs will also vary depending on their legal business structure.

![Diagram of Community Food Hub Goals]

Figure 3: Nelson & Landman’s (2015) Common themes for organizing CFH goals

Mount (2012), states that given the inherent collaborative nature of food hubs, there is potential for transparent and receptive governance while also maintaining the advantages of having direct relationships in the scaling up of production. The dissemination of economic power among food hub stakeholders is unique. Food hub producers who are often in the ‘price taker’ position in commodity markets, are given more power in food hubs as they are often in a ‘price setter’ or ‘price negotiator’ position (Berti & Mulligan, 2016). Aside from aggregation and distribution, at the core of food hubs is the development of transparent and cooperative relationships along the value chain (Berti & Mulligan, 2016; Sumner, McMurtry & Renglich, 2014). It is through clear communication and trust that the success of food hubs continues to grow.
3.6 Food Systems and Rural Economic Development

As consumer demand for local food continues to grow, the economic opportunities for rural areas are becoming increasingly recognized (AMO, 2013; Caldwell & Marr, 2013; Dougherty, Brown & Green, 2013; Hardesty & Leff, 2010; Phillips & Wharton, 2015). The existence of small family farms is vital to maintaining the economic and social viability of rural communities (Berti & Mulligan, 2016; Breustedt & Glauben, 2007). The local food movement is offering rural areas a way of diversifying their economies through a variety of emerging ‘farm-to-fork’ initiatives including: CSAs, farmers’ markets, box schemes, food hubs, u-pick operations, farm gate sales, farmer collectives and agritourism (Berti & Mulligan, 2016). These initiatives are not only economically beneficial to farmers, but others who participate in the local food network including restaurants, retailers and tourism operators (Dougherty, Brown & Green, 2013). The Waterloo Region conducted an agricultural economic impact study that found that “..for every job in the region’s agriculture sector, four additional jobs are supported in the economy” (AMO, 2013, p.5). The multiplier effect is also especially strong in supporting local food given that “when a consumer purchases a local food item from a farmers’ market, the farmer retains a greater share of the food dollar and is more likely to spend the money on local employees who in turn spend their earnings locally” (AMO, 2013, p.5).

It has been suggested that rural communities that have diversified economies and well-established networks among community stakeholders are more resilient (Caldwell & Marr, 2013; Lee, Wall & Kovacs, 2015; Murdoch, 2000). Municipalities and private enterprises have also acknowledged the potential of local food for rural economic
development and are progressively promoting the development of local food initiatives (AMO, 2013; Jablonski, Schmit & Kay, 2016).

The emergence of ‘creative food clusters’ that are typified by culinary and agri-tourism ventures is another avenue in which rural communities are diversifying their economies through local food (Berti & Mulligan, 2016; Lee, Wall & Kovacs, 2015; Phillips & Wharton, 2015). Rural communities are beginning to use the localization of food as a branding tool for place-based rural development (Lee, Wall & Kovacs, 2015; Phillips & Wharton, 2015). As food is directly linked to culture, many rural areas are rediscovering and sharing their distinct food cultures with tourists through food tours, festivals and farm visits (Feenstra, 1997; Lee, Wall & Kovacs, 2015; Phillips & Wharton, 2015). In response to concerns regarding the globalised food system, consumers are demanding more information regarding “who feeds us and how the food is processed” (Phillips & Wharton, 2015, p.54). Not only do consumers want to support local through their purchasing habits, there is also an increasing demand for a reconnection to food through experiential forms of tourism (Lee, Wall & Kovacs, 2015; Phillips & Wharton, 2015). Given the diversity of local food initiatives being utilized by rural communities, the potential for rural revitalization seems promising.

3.6.1 Evaluating Local Food Economic Impacts

As local food systems continue to develop, the desire to understand the economic impacts of such systems increases (Phillips-Goldenberg & Colasanti, 2017). Motivations to develop and grow local food systems often involve increasing access to healthy food, preserving farmland and creating opportunities for entrepreneurship (ibid). The economic
implications of local food systems in terms of an increase in jobs or sales is a narrower measure and has yet to be extensively studied. Phillips-Goldenberg & Colasanti (2017) note that conducting an economic impact assessment (EIA) is one way in which a municipality or organization can quantify the impact of local food initiatives on the local economy in terms of jobs and sales. Although, they go on to note that EIAs have a limited scope as they are “simply a snapshot estimation of economic growth at a single point in time after a shock is applied to the initial model” (p.5). Additionally, to undertake an EIA, baseline data needs to be collected, which is a large undertaking. As local food systems develop and evolve, the economic impacts of such systems need to be extensively evaluated.

### 3.6.2 Economic Implications of Direct Marketing of Local Food

It has been argued that direct marketing plays a significant role in rural economic development as it encourages “a climate of entrepreneurship and innovation, attracting agricultural tourists, and promoting alternative forms of agriculture” (Gale, 1997, p.19). For rural communities, direct marketing has the 'local advantage' where transactions between farmers and their customers are built on personal relationships and trust (Alfonso, Nickelson & Cohen, 2012; Gale, 1997; Gray, 2005; Thomas-Lane et al., 2016). By buying directly from the farmer, consumers can become more knowledgeable about the farming process, while farmers can gain a reputation as a reliable seller, and therefore can increase their customer base and their profits (Alfonso, Nickelson & Cohen, 2012).

In rural economies, direct marketing is a necessary form of diversification for farmers who must find innovative ways of identifying alternate sources of income (Gale,
Direct marketing occurs in various forms including farmgate sales, agricultural tourism, community supported agriculture, farmers’ markets and food hubs. The economic implications of these forms of direct marketing vary; however, they presumably benefit local economies through enhanced retention of local dollars (Alfonso, Nickelson & Cohen, 2012; Gray, 2005; Hughes et al., 2008). Rural communities often use buy-local campaigns to increase consumption of local products in an attempt to retain economic returns in the local community (Gray, 2005). Direct marketing helps in preserving small farms which in turn has numerous benefits for rural communities (Gray, 2005). Through the preservation of small farms, it has been argued that they help to retain the population necessary to maintain rural services, provide jobs and purchase products and services from local businesses and have a “high economic multiplier effect by recirculating dollars in the local economies” (Gale, 1997; Gray, 2005, p.4).

Agricultural tourism or “agri-tourism” is another form of direct marketing that is proving to be economically beneficial for rural communities (Gale, 1997). The pairing of food consumption with on-farm recreation has proven to be a draw for urban residents who in turn may shop at local stores and eat at local restaurants, thereby supporting the rural economy (Gale, 1997). Farmers’ markets and agri-tourism establishments located within and near urban fringe areas tend to fare better at attracting urban customers than more remote rural areas (Gale, 1997). For more rural communities, a strategy that has been employed to attract urban residents has been through branding campaigns (Gale, 1997; Ohe & Kurihara, 2013). By creating an identity with a locally-grown product or experience, consumers are more likely to travel for a specialized product (Gale, 1997;
Ohe & Kurihara, 2013). Ohe & Kurihara (2013) state that “a local partnership between agricultural and accommodation/restaurant sector are much more likely to achieve the two primary economic goals of income and employment generation” (p.278). As transparency and consumer awareness with respect to food consumption increases, direct marketing is playing a larger role in agricultural activities in rural communities (Gale, 1997; Grey, 2005, Ohe & Kurihara, 2013).

3.6.3 Challenges of Local Food

Despite the burgeoning support for local food, numerous challenges with respect to the long-term economic viability of local food systems have been identified by all local food stakeholders. Given the inherent nature of rural areas, the lack of human capital, distances to urban markets and lack of local processing and distribution infrastructure have been identified as significant barriers to sustaining local food systems (AMO, 2013; Berti & Mulligan, 2016; Dunne, Chambers, Giombolini & Schlegel, 2010; Feenstra, 1997; Miller, 2010; Mount et al., 2013). Despite the ongoing efforts by Foodland Ontario, significant challenges still exist with regard to lack of consumer education and awareness around food issues (Feldmann & Hamm, 2015; Mount et al., 2013). As was previously discussed, the absence of a commonly recognized definition of ‘local’ and labelling of such products is also a barrier for consumers in identifying local products (Feldmann & Hamm, 2015).

Municipalities have identified several obstacles for the long-term viability of local food systems, which are summarized in Figure 4 below. Municipal land use planners are often faced with planning policies created to protect rural lands from fragmentation that
inadvertently discourages the creation of smaller farms (AMO, 2013; Miller, 2010). Producers looking to vertically integrate by creating on-farm processing are also often discouraged by municipal zoning, as property taxes significantly increase with land use changes (AMO, 2013; Miller, 2010). Municipalities also identified a shortage of available funding and resources to support local food initiatives as a significant challenge (AMO, 2013, Miller, 2010).

Figure 4: AMO’s (2013) Key Barriers & Challenges facing Municipalities

The absence of stable, long-term funding is a commonly identified challenge for local food initiatives, as they are often operated by contract positions that are heavily dependent on federal and provincial grants (AMO, 2013; Berti & Mulligan, 2016, Miller, 2010). Another commonly identified challenge was the lack of collaboration and innate
competition between various local food initiatives (Berti & Mulligan, 2016; Dougherty, Brown & Green, 2013; Mount et al., 2013; Phillips & Wharton, 2015). It appears that many local food initiatives operate in ‘silos’ given that they are in direct competition for limited provincial and federal funding (Berti & Mulligan, 2016; Mount et al., 2013; Phillips & Wharton, 2015). As one local food stakeholder remarked “I would like to see an opportunity for us to integrate…I see lots of duplication of services that we could probably do better and more effectively if we worked together” (in Mount et al., 2013, p.598). It was also noted that local food initiatives operating in rural areas are heavily reliant on volunteers and that volunteer ‘burnout’ is common (Berti & Mulligan, 2016; Dougherty, Brown & Green, 2013; Mount et al., 2013; Phillips & Wharton, 2015).

Restaurants and smaller retailers have also identified challenges of sourcing from local producers (Dougherty, Brown & Green, 2013; Mount et al., 2013; Phillips & Wharton, 2015). The logistics of working with a variety of farmers to attain the consistency, quantity and quality of products required to meet consumer needs was identified as a significant challenge, as well as negotiating a fair price (Dougherty, Brown & Green, 2013; Mount et al., 2013; Phillips & Wharton, 2015). Retailers note that the prices set by the commodity market make it difficult to fairly price locally-produced goods (Dougherty, Brown & Green, 2013). Consumer preferences were also noted as a challenge as it was observed that urban customers were more willing to pay a premium for local food than local, rural customers (Mount et al., 2013).

Many challenges exist for producers of local food. The subsidization of the commodity market has been a detriment to the livelihoods of smaller producers, who live
with ongoing price volatility and are unable to reach the economies of scale to compete (Sadler, Arku & Gilliland, 2015; Mount et al., 2013). As was previously identified, the lack of options to access capital and the lack of existing infrastructure for processing and distribution are also barriers for local food producers (AMO, 2013; Berti & Mulligan, 2016; Dunne, Chambers, Giombolini & Schlegel, 2010; Feenstra, 1997; Miller, 2010; Mount, 2012; Mount et al., 2013). Producers looking to scale-up their operations to meet the growing demand for local food face the challenges of balancing supply and demand and accessing appropriate markets to distribute their goods (Berti & Mulligan, 2016; Selfa, & Qazi, 2005).

3.6.4 Opportunities in Local Food

Support for local food is growing (Andrée, Ballamigie & Sinclair-Waters, 2015; Elton, 2015; Feenstra, 2002; Franklin, Louden & MacRae, 2010; Newton & McEntee, 2011; Mount, 2012; Rikkonen et al., 2013; Selfa & Qazi, 2005; Sumner, McMurtry & Renglich, 2014). As consumers continually seek ways to reconnect with their food, local food initiatives will have support (Rikkonen et al., 2013). At the community level, local food champions and food entrepreneurs are emerging with creative ways in which to meet the demand for local food (Berti & Mulligan, 2016; Phillips & Wharton, 2015). The work of organizations, such as Foodland Ontario, to educate consumers on food issues will further generate support for local food (Mount et al., 2013; Rikkonen et al., 2013). Feenstra (1997) notes that public participation is vital for the viability of local food systems, and that an educated public will better serve the local food movement. A survey conducted by Rikkonen et al. (2013) found that consumers would prefer to directly purchase goods from producers rather than large grocery outlets. Therefore, farmers’
markets and other direct marketing local food initiatives in rural areas have a substantial competitive advantage (Rikkonen et al., 2013).

Although several challenges have been identified for local food systems, several initiatives are evolving to overcome them (Jablonski, Schmit & Kay, 2016). As was previously discussed, food hubs have been identified as a means to alleviate many of these challenges (Jablonski, Schmit & Kay, 2016; Morley, Morgan & Morgan, 2008; Phillips & Wharton, 2015). A consumer survey conducted by Jablonski, Schmit & Kay (2016), identified several opportunities for food hub expansion by improving the logistics of allowing smaller order sizes and offering a wider variety of products. The collaborative nature of food hubs allows for the creation of networks between urban consumers and rural producers which creates opportunities for transparent transactions that can further strengthen local food systems (Feenstra, 1997).

Leadership from the federal and provincial governments in the form of policy development is promising for the growth of local food. Since the enactment of the Local Food Act in 2013, access to local food has substantially increased (OMAFRA, 2016). In 2015, the Ontario government committed $6 million dollars over three years to support local food projects (ibid). In 2015, Farmers’ Markets Ontario, an OMAFRA funded organization, witnessed the development of 11 new markets across the province, increasing farmers’ market shopping by 242 days (ibid). The current development of a national food policy for Canada further demonstrates the commitment of the federal government to the growth of local food (Canada, 2017). As interest in local food at all
levels continues to grow, additional funding and programming will be made available to further develop local food systems.

3.7 Local Food in Eastern Ontario

Eastern Ontario is experiencing growth in its local food production and distribution systems (Andree, Knezevic & Jarosiewicz, 2015; Nelson & Stroink, 2011). It appears that a shift towards a more localized food system is occurring throughout the region, closer resembling Eastern Ontario’s food system of the early 20th century (Andree, Knezevic & Jarosiewicz, 2015). At that time, Eastern Ontario was relatively self-sufficient, producing much of its own food; however, there was a shift to specialization in the late 20th century which resulted in consumers becoming increasingly disassociated with producers (Andree, Knezevic & Jarosiewicz, 2015). Eastern Ontario became specialized in dairy, cow-calf operations, egg production and cash crops that supported those livestock industries (Andree, Knezevic & Jarosiewicz, 2015). Small amounts of horticulture remained; however, with food processing industries becoming centralized in Southwestern Ontario, eventually they disappeared in Eastern Ontario.

The early 21st century has been met with a resurgence of local food production and markets in Eastern Ontario (Andree, Knezevic & Jarosiewicz, 2015). There is visible growth in the number of farmers’ markets and other means of direct sales, local food non-profit organizations and the development of local food infrastructure and awareness campaigns (Andree, Knezevic & Jarosiewicz, 2015; Nelson & Stroink, 2011). Increased consumer demand for locally-grown products in Eastern Ontario has generally been in vegetables, berries, beef, free-range pork and chickens, halal products, organic foods,
and wine production with little demand in local grains (Andree, Knezevic & Jarosiewicz, 2015). There has also been a visible resurgence in Eastern Ontario’s local food processing and distribution infrastructure. Andree, Knezevic & Jarosiewicz (2015) identified several distributors that now carry Eastern-Ontario-grown food including: multinational and national food distributors, Sysco and Gordon Food Services; regional distributors, Findlay Foods and Tannis Food Distributors; and a local distribution service, Wendy’s Mobile Market. The recent development of two regional non-profit food hubs, The Ontario Agri-Food Venture Centre (OAFVC) and the Two Rivers Food Hub, mainly offering processing, retail and storage services, have also increased the capacity for local food processing in the region (Andree, Knezevic & Jarosiewicz, 2015; Nelson & Stroink, 2011).

On a more localized level, Nelson & Stroink (2011) identified the development of farmer-based local food distribution cooperatives that have appeared within the last ten years. They note that “these cooperatives are mostly based in peri-urban settings that have access to a large urban market (Ottawa, Toronto, Kingston, Peterborough)” (Nelson & Stroink, 2011, p.8). They note that those involved in these distribution cooperatives also participate in other direct marketing endeavours such as farmers’ markets, and that the distribution cooperative is viewed as a means to expand their market and diversify their incomes (Nelson & Stroink, 2011).

The development of retail establishments specializing in local food has also increased in Eastern Ontario. One such retail outlet is located in the Village of Westport in the Township of Rideau Lakes. Kudrinko’s is an independent, traditional grocery store
that offers catering services and specializes in local food and products (Ballamingie & Jarosiewicz, 2017). Kudrinko’s goes beyond selling locally-produced goods, and actively engages their consumers by educating them about the benefits of buying locally-produced food (Ballamingie & Jarosiewicz, 2017). An issue that was raised in the study on Kudrinko’s was the issue of franchise protection. It was noted that this is an area that could be improved to increase sales of local food by allowing franchise owners to source products from local producers rather than large wholesalers (Ballamingie & Jarosiewicz, 2017). Additionally, it was identified that a local “food hub would not only create new suppliers, but also encourage current small suppliers to grow their business and offer a more diverse set of products” (Ballamingie & Jarosiewicz, 2017, p.19). Kudrinko’s is an excellent example of how a retail establishment is overcoming the challenges of sourcing local food, while also advocating for the local food movement.

Beyond the development of regional and local infrastructure to support local food processing and distribution in Eastern Ontario, there has also been a rise in local food promotion, support and consumer education initiatives (Nelson & Stroink, 2011). Programs have been developed to support local farmers, increase culinary tourism and to increase the use of local food in institutions, restaurants and grocery stores. Farms at Work is a project that promotes healthy and active farmland in east central Ontario (Jarosiewicz, 2015). Farms at Work has an online Find Local Food tool which connects farmers with wholesale markets in east central Ontario (Jarosiewicz, 2015). Organizations involved in promoting and supporting local food initiatives, such as Farms at Work often work in tandem with municipal or county economic development departments to fully utilize their staffing and business expertise (Nelson & Stroink, 2011). Other initiatives that
have been developed involve the creation of events, such as field-to-fork dinners and festivals that pair farmers with chefs, and others that involve the creation of workshops and newsletters that inform both consumers and farmers about existing local food initiatives (Nelson & Stroink, 2011). Despite the development of several provincial, regional and local initiatives, the importance of consumer education is still the number one priority among local food stakeholders (Nelson & Stroink, 2011).

Several eastern Ontario municipalities have also begun to evaluate the potential of the food systems within their rural economies. In Stormont, Dundas and Glengarry (SDG), a regional food assessment was conducted in 2013 to better understand SDG’s food system and to evaluate the region’s demand for and supply of local and sustainable food (Kittle & Stevens, 2013). In Lanark and North Leeds, a food hub implementation study was conducted to determine how a food hub could build local food capacity in the region (EcoPerth, 2014). It was determined that the area’s farmers showed significant interest in the development of a food hub, as they felt it could help them overcome some of the significant regulatory barriers that currently limit their businesses (EcoPerth, 2014).
4 CASE STUDY- PROFILE OF FRONTEMAC COUNTY

Frontenac County was selected as the case study location to evaluate the planning and economic development implications of local food activities. Frontenac County was chosen as the researcher is originally from the area, has a deep connection to the farming community and had anecdotally noticed a rise in local food initiatives and wanted to investigate their economic implications.

4.1 Physical, Economic and Demographic Characteristics

Frontenac County spans nearly 4,000 square kilometres surrounding the City of Kingston. The County is comprised of four lower-tier municipalities: Frontenac Islands, South Frontenac, Central Frontenac and North Frontenac (see Figure 5).

Frontenac County’s southern municipalities can be accessed via Highway 401, being located 250 km east of Toronto (Frontenac Economic Development, 2017). Frontenac’s central and northern municipalities can be accessed by Highway 38 from Kingston, Highway 7 from Ottawa or Peterborough and Highway 41 from the Trans-Canada Highway at Pembroke (ibid).
According to the 2016 Census, Frontenac County has a permanent population of 26,677 with a population density of 8.0 persons per square kilometre (ibid). Given the abundance of lakes, rivers and rocky terrain, Frontenac County is known for its recreational attributes and has a large tourism and cottage industry (ibid). Due to its diverse recreational features, Frontenac County has a significant seasonal resident population who are not captured in the census data. However, it is estimated that at least
20% of the total assessed value of residential, recreational, and vacant land properties in the County are seasonally occupied (ibid).

The County of Frontenac and the City of Kingston are merged into the same Census Division by Statistics Canada. Given the concentrated population of the City of Kingston and its associated employment opportunities, this data set does not represent the realities of the rural population of the County of Frontenac. Therefore, each of the census subdivision data sets for the lower tier municipalities were examined to better understand the socioeconomic conditions in the County. Table 4 below compares the income and employment statistics for the four lower-tier municipalities in Frontenac County. According to Statistics Canada (2017b), in 2015, the median income of households in Canada was $70,336. Both North and Central Frontenac have median incomes well below the national average, with South Frontenac and the Islands having incomes above the national average.

Table 4: Frontenac County Income and Employment Statistics (StatsCan, 2017b)

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<tbody>
<tr>
<td>North Frontenac</td>
<td>$51,942</td>
<td>19.7%</td>
<td>10.8%</td>
<td>53.4%</td>
<td>36.5 min</td>
</tr>
<tr>
<td>Central Frontenac</td>
<td>$56,550</td>
<td>19.1%</td>
<td>9.1%</td>
<td>61.4%</td>
<td>37.3 min</td>
</tr>
<tr>
<td>South Frontenac</td>
<td>$89,457</td>
<td>7.7%</td>
<td>4.4%</td>
<td>66.2%</td>
<td>28.3 min</td>
</tr>
<tr>
<td>Frontenac Islands</td>
<td>$80,512</td>
<td>10.2%</td>
<td>2.7%</td>
<td>58.2%</td>
<td>46.4 min</td>
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When analyzing the differences in this data several causal factors can be considered, proximity to the City of Kingston being one. The City of Kingston is the regional hub for healthcare, education and correctional facilities, with two hospitals, two universities, one college and four prisons. It could be extrapolated that a significant proportion of those who reside in neighbouring South Frontenac and Frontenac Islands are employed in Kingston which would account for higher median incomes and lower unemployment rates. Table 5 below compares the distribution of the labour force by industry for each of the lower-tier municipalities, providing additional context for the composition of the labour force that resides in Frontenac County. When evaluating the percentage of the labour force that reported they were employed in the agriculture, forestry, fishing and hunting sector in 2015, the Frontenac Islands had the highest with 8.7% of its population employed in this sector with Central Frontenac reporting 4.4%, South Frontenac reporting 2.0% and North Frontenac Reporting 1.6% (StatsCan, 2017b).

Table 5: Distribution of Labour Force (Top 3 Industries) (StatsCan, 2017b)

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<th>1st</th>
<th>2nd</th>
<th>3rd</th>
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<tbody>
<tr>
<td>North Frontenac</td>
<td>Retail trade (14.5%)</td>
<td>Health care and social assistance (12.1%)</td>
<td>Construction (10.5%)</td>
</tr>
<tr>
<td>Central Frontenac</td>
<td>Health care and social assistance (14.5%)</td>
<td>Construction (12.1%)</td>
<td>Retail trade (11.2%)</td>
</tr>
<tr>
<td>South Frontenac</td>
<td>Health care and social assistance (15.3%)</td>
<td>Construction (11.6%)</td>
<td>Public administration (11.2%)</td>
</tr>
<tr>
<td>Frontenac Islands</td>
<td>Public administration (13.1%)</td>
<td>Health care and social assistance (12.0%)</td>
<td>Educational services (10.9%)</td>
</tr>
</tbody>
</table>

The disparity between the lower tier municipality employment opportunities and income are important factors to consider when discussing local food and rural economic
development as these factors impact consumer priorities and buying patterns. Additionally, education is another factor to consider when analysing the potential consumer base as education can also impact consumer behaviour (Petroman et al., 2015). When analysing the data presented in Table 6 below, the Frontenac Islands appear to have a higher population of university and college graduates. The dispersion of education attainment varies between the other lower tier municipalities with North Frontenac having the highest proportion of its population who have completed an apprenticeship or trades certificate, and South Frontenac having the highest percentage of individuals who have attained a college, CEGEP or other non-university certificate or diploma.

Table 6: Highest Level of Education Attained (StatsCan, 2017b)

<table>
<thead>
<tr>
<th>Municipality</th>
<th>High School Diploma or equivalency</th>
<th>Bachelor's Degree or higher</th>
<th>College, CEGEP or other non-university certificate or diploma</th>
<th>Apprenticeship or trades certificate or diploma</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Frontenac</td>
<td>81.6%</td>
<td>8.6%</td>
<td>29.2%</td>
<td>10.8%</td>
</tr>
<tr>
<td>Central Frontenac</td>
<td>80.6%</td>
<td>15.2%</td>
<td>25.9%</td>
<td>10.6%</td>
</tr>
<tr>
<td>South Frontenac</td>
<td>90.9%</td>
<td>19.2%</td>
<td>33.4%</td>
<td>6.8%</td>
</tr>
<tr>
<td>Frontenac Islands</td>
<td>93.1%</td>
<td>25.1%</td>
<td>28.6%</td>
<td>9.1%</td>
</tr>
</tbody>
</table>

To best evaluate the role of local food in rural economic development, it is imperative to have an understanding of the socioeconomic conditions of the consumer base of the rural community in question.

4.2 Agriculture and Local Food in Frontenac County

Agriculture is a vital component of Frontenac County’s heritage. The first European settlers to the area initially grew wheat; however, given the area’s minimal amounts of Class 1 soils, farming quickly shifted to pasturing beef cattle and dairy farming (Frontenac
County, 2009). More recently, “farming and farm jobs have led growth in Frontenac over the past 10 years” (Frontenac Economic Development, 2017c, para 1). The County has experienced growth in artisanal cheese and sausage, craft beer, and horticulture (Frontenac Economic Development, 2017c). Frontenac County is a member of Ontario’s Artisan Food and Beverage Region (FAB). FAB is a regional economic development partnership led by the eastern Ontario Community Future Development Corporations of Hastings, Prince Edward, Lennox & Addington and Frontenac (Frontenac Economic Development, 2017c). FAB is an initiative that profiles local food entrepreneurs and provides support to existing and burgeoning local food entrepreneurs. Although Frontenac is not known for its agricultural potential, it does contain pockets of nutrient-rich soils and microclimates that allows for the growth of a diversity of fruits and vegetables (Frontenac Economic Development, 2017c).

According to the 2016 Census of Agriculture, Frontenac County has 286.57 km² (70,814 acres) of land in crops, 82,621 square feet of greenhouse area and 538 farms (OMAFRA, 2018). Between 2006 to 2016 Frontenac County has experienced growth in the production of oilseed & grains, soybeans, vegetables, poultry and egg production (OMAFRA, 2018). In terms of gross farm receipts, 61.5% of Frontenac County’s farms make $24,999 or less (Frontenac Economic Development, 2017b). Frontenac County’s agricultural profile is defined by small to mid-sized farms, as Figure 6 below illustrates (Frontenac Economic Development, 2017b).
In 2017, OMAFRA created Agriculture, Food and Business data sets for each County across Ontario to estimate regional local food supply and demand. It was estimated that in 2016 an average household in the City of Kingston & Frontenac County spent $8,631 (11% of total income) on food (OMAFRA, 2018). Of that amount, $6,190 was spent in stores and farmers markets and $2,441 in restaurants (ibid). The data sets also estimate by crop type where production could be increased locally to satisfy local demand (ibid). For example, it is estimated that the residents of the City of Kingston and Frontenac County consume 372,656 kilograms of asparagus in a 3-month summer period (ibid). To meet this demand, 35 acres of asparagus need to be grown, where, currently in Frontenac County, only 8 acres of asparagus is being grown (ibid). Although the data set provides rough estimates, it is an effective tool to better understand how to grow the local food economy by analysing in which crops substantial growth can occur.
4.2.1 Regional Local Food BR+E

In 2012, a regional local food business retention and expansion (BR+E) study identified eastern Ontario’s (including Frontenac County) needs with respect to growing local food businesses in the region. The regional project engaged businesses involved in the local food sector to identify challenges and opportunities to build local food capacity in the region (Northumberland County, 2012). In Frontenac County, 24 businesses participate in the study (ibid). These businesses were asked to identify the needs of local food businesses in the area to increase the local food capacity of Frontenac County. Participating businesses identified the following as being the top requirements to increase participation in local food: poultry slaughter, abattoir, cooperative marketing, cooperative cold storage/ additional local food processing facilities, certification programs offered locally, community kitchen and a distribution service/system (ibid). The BR+E survey discovered that in 2012, Frontenac’s local food economy employed 65 permanent full-time workers, 50 permanent part-time workers, 43 seasonal temporary, and 2 single-season temporary (ibid).

When asked what factors need to be considered to ensure that their businesses remain competitive over the next three years, respondents identified the following: local market development (96%), strategic alliances (83%) and strategic marketing (79%) (ibid). Survey participants were also asked to identify the advantages of being a local food business owner in Frontenac County. Participants ranked location as the number one advantage, secondly that the area is a tourist spot and lastly for its beautiful scenery (ibid). Conversely, participants were asked to identify the disadvantages of being a local food business owner in Frontenac County. Participants identified the following as being the top
disadvantages to doing business in the County: low population density, lack of food processing and lack of community support and awareness (ibid).

The BR+E study concluded with recommendations that are applicable for local food businesses across eastern Ontario. The recommendations are organized into four categories: 1- growth and viability; 2- facilities and infrastructure; 3- supportive policies; and 4- marketing and public awareness (ibid). In terms of growth and viability, it is recommended that businesses “build on existing momentum to increase local food capacity” (Northumberland County, 2012, p.8). To increase processing capacity, it is recommended that regional infrastructure be developed to process and distribute local food (ibid). To increase awareness of local food, it is recommended that supportive policies be developed within government agencies and the public. Lastly, increasing consumer demand through marketing and public awareness campaigns is necessary (ibid).

4.2.2 The National Farmers Union (NFU) Local 316

Within Frontenac County, the National Farmers Union (NFU) Local 316 has been one of the most prominent advocates for sustainable agriculture and local food initiatives for over a decade (NFU, 2018). Some of their initiatives include the creation of a local food directory map, programming to support young farmers, organizing field-to-fork events and, more recently, the creation of the report titled: Plan to Grow: Scaling Up Local Food in Kingston & Countryside (NFU, 2018). The comprehensive report examined local food production occurring in Kingston and its surrounding “countryside” (Stevens, Cleary & Ivens, 2012). The report investigated the supply and demand of local food in the region,
offering insights on how to increase local food capacity. The report is intended to function as a foundational report that guides the next steps for growing the local food system in the area (Stevens, Cleary & Ivens, 2012). Opportunities identified in the report recognize Kingston as having a growing consumer base with its multiple institutions and vibrant tourist industry which is contributing to the growing number of restaurants, retail outlets and distributors who are looking to source locally-grown products (Stevens, Cleary & Ivens, 2012). The report recommends that “a coordinated, integrated and comprehensive approach is vital to planning and development throughout our local food economy” (Stevens, Cleary & Ivens, 2012, p.3). The report makes several recommendations and highlights opportunities to grow the local food system in the area. Based on participant responses, two main key action areas were identified: 1- system wide coordination and planning (having a central body coordinate the fragmented components of the local food system) and 2- improved policy development (local food procurement policies) (Stevens, Cleary & Ivens, 2012). Participants also suggested four additional key areas for action: 1-improved awareness; 2- need for aggregation; 3- local food centre development; and 4-local food processing and packaging (Stevens, Cleary & Ivens, 2012). The report concludes by highlighting the benefits of being a producer in eastern Ontario including:

living in a region with diverse farms, committed local food supporters, various food security and community capacity-building initiatives, and a growing middle that includes supportive, commercial consumers, together with innovative businesses which move out local food from field to plate (Stevens, Cleary & Ivens, 2012, p.31).

4.2.3 KFL&A Food Policy Council

The KFL&A Food Policy Council is an evolution of the KFL&A Healthy Eating Working Group which was established in 2011 (KFL&A, 2015a). The Healthy Eating
Working Group initially worked to develop a regional food charter through community and stakeholder engagement and then later establish the Food Policy Council (ibid). The Healthy Eating Working Group was created in response to the findings of the 2011-2012 Canadian Community Health Survey which indicated “that approximately 8.3% of the population of KFL&A is food insecure at the moderate or severe levels” (KFL&A, 2015a, p.5). The vision of the Food Charter states that:

Kingston, Frontenac and Lennox & Addington are healthy, food secure communities where:

- food is recognized as a basic human right
- a just food system ensures all members of our community have access to adequate, healthy, safe, affordable and culturally appropriate food
- an ecologically and economically sustainable food system thrives
- a strong relationship exists between our rural and urban communities which supports and advocates for our regional food system”

(KFL&A, 2015b, para 1)

The Food Policy Council was formed in 2013 with the addition of seven new members to the former Healthy Eating Working Group (KFL&A, 2015a). The Food Charter was recognized by community organizations and two municipalities being the City of Kingston and the County of Frontenac (ibid). The Food Policy Council is comprised of a diverse group of individuals passionate about local food and healthy eating (Link, 2015). The Council's vision stems from the food charter and also works to advocate for healthy communities through the promotion of the consumption of locally produced food (Sustainable Kingston, 2010).
4.2.4 Frontenac County Economic Development Charter

In 2015, Frontenac County created their economic development charter identifying three pillars on which the County would build to ensure a strong and viable economy for the future (Frontenac County, 2015a). One of the three economic pillars is local food and beverage as Figure 7 below illustrates. The County identifies the potential for local food and beverage to create local jobs and support its existing tourism sector while also building the character of the County (ibid). The local food and beverage sector was chosen as one of the economic pillars as the topography of the County provides opportunities for the growth and creation of a variety of products that can satiate the growing demand for healthy, local food (ibid). To ensure the success of the growing local food and beverage sector, the County is working to provide the proper support mechanisms to foster the successful growth of value-added agricultural opportunities, and the development of breweries, distilleries and wineries (ibid).
The Sustainable Actions: Frontenac County Guide to Sustainability 2014-2015 is a document that was created by the sustainability advisory committee that identifies 23 community-identified priorities (Frontenac County, 2015b). From this consultative process, the committee recommended the top six priorities to County Council for the 2015 budget process (ibid). One of these priorities was to support local food processing, production and distribution chain development (ibid). The County Council at the time committed to helping the small market farmer overcome capacity limitations by supporting this recommendation and by going further to support the local farmers markets (ibid).
4.2.5 Kingston Economic Development Agri-hood Study

In 2015, The Kingston Economic Development agency conducted a business case for the development of commercial kitchen(s) to foster entrepreneurship with food entrepreneurs in Kingston and Frontenac while also creating conditions to allow them to scale up their businesses and retain them in the area (Kingston Economic Development, 2015). It was identified that food entrepreneurs:

rapidly create part-time positions as well as positively affect food and distribution supply chains…the commercial kitchen allows for growth in food entrepreneurship without the capital-intensive costs and risk associated with self-financing a commercial kitchen (Kingston Economic Development, 2015, p.3).

It was determined that to better support the needs of local food entrepreneurs in the Kingston area, a decentralized network of smaller, themed kitchens across the city should be developed (Kingston Economic Development, 2015). This low-risk model would allow food entrepreneurs, from those just starting to those looking to scale up, to access the infrastructure and services required to do so (ibid). The creation of a network of specialized commercial kitchens, with a central point being the Memorial Centre Farmers’ Market, is what generated the concept of an agriculturally-focused neighbourhood or “Agri-hood” (ibid). The case argues that the agri-hood kitchen model has food hub implications, in that working with the other regional food hubs, “Kingston can be a part of the network, essentially connecting entrepreneurs to spaces and ensuring that there is a space every two hours travelling east to west for a food entrepreneur to work, test a product, and engage a market” (Kingston Economic Development, 2015, p.10). Kingston has the advantage of being located between Toronto and Ottawa with the largest population and direct access to a large market of consumers (ibid). Kingston also has the
advantage of having closer and direct access to farmers and farmland that larger urban centres do not (ibid). The report concludes by recommending that collaboration with the two regional food hubs, the Ontario Agri-Food Venture Centre and the Two Rivers Food Hub, is essential to increase capacity. The case also emphasized the importance of differentiating from the other regional food hubs to provide a diversity of services to food entrepreneurs in the region (ibid). However, as of 2018, the development of an Agri-Hood network of commercial kitchens has yet to occur.

### 4.2.6 Frontenac County Economic Development Initiatives

Frontenac County has progressively advocated for the further development of the local food economy. The County recently launched its Frontenac Ambassador program which highlights and promotes local businesses, including local food and farming businesses (Frontenac Economic Development, 2017c). The County also chooses five events each month, coined “The Frontenac Five”, to advertise on their various social media platforms (ibid). Although not specifically tailored to promote local food and farming businesses, these initiatives highlight the importance of local food and farming businesses within the County’s economy. The County’s economic development staff have also recently partnered with the City of Kingston to attract a fruit processing facility and a Chinese infant formula facility that will source locally produced goods (ibid). To better understand the needs of its farming community, Frontenac County also completed a feasibility study for a poultry abattoir in 2011 (ibid). The County is supportive of local food and farming businesses through its land use policies and by working closely with the community to promote and support the local farming community (ibid). Recently there has
been discussion of the creation of an agricultural advisory committee; however, its development has yet to come to fruition.

4.2.7 Frontenac CFDC Local Food Gap Analysis Study

In 2017, the Frontenac Community Futures Development Corporation (CFDC) received funding from the Township of South Frontenac and the County of Frontenac to conduct a study on how to best support food producers and processors in South Frontenac (Frontenac CFDC, 2018). Given the timing and nature of the CFDC study, the researcher became involved in the data collection and analysis of this study as there was significant overlap in the information being collected. With the researcher’s involvement, the study was broadened to include producers and processors from the entire County of Frontenac.

The rationale for this study stemmed from staff at the Frontenac CFDC, County of Frontenac and Kingston Economic Development receiving a growing number of inquiries from businesses seeking to access local produce, short-term commercial kitchen space, freezer/fridge space, distribution, and specialized technical support (ibid). Given that the regional food hubs are in their early stages of development in Smiths Falls (Two Rivers Food Hub) and Colborne (Ontario Agri-Food Venture Centre), the possible development of local food infrastructure in Frontenac County would be complementary to the existing food hubs in the region (ibid).

The study began by conducting an inventory of all the existing possibilities for commercial kitchen spaces by surveying the church and community halls with available rental kitchen facilities in the County. A total of 29 church and community halls were
surveyed to determine their capacity and willingness for local food processing (ibid). It was determined that many community kitchens in the County are underutilized and that they have the potential to be upgraded to commercial kitchen facilities, given enough financial support (ibid). The survey results found that 86.2% of respondents were interested in renting their kitchen facilities for commercial use, but only 20.7% would be likely to upgrade their facilities to accommodate commercial local food production if funding were made available (ibid). This lower percentage can be attributed to decisions having to be made by townships or church boards and that the survey respondents indicated that they could not answer on behalf of the facility regarding future developments (ibid).

The study continued by contacting all known local food processors in Frontenac County. A total of 20 food processors were contacted with 18 being surveyed (ibid). The survey aimed at determining what services and infrastructure local food processors require to support and grow their businesses. Given that participants in the 2012 BR+E study identified that a commercial kitchen was a key piece of infrastructure that was needed to grow local food processing in Frontenac County, the survey further investigated this need (ibid). Additionally, the survey also investigated the need for related services and infrastructure outside of food processing, such as cold storage and distribution (ibid).

To gauge the level of awareness and usage of the regional food hubs, processors were asked a question regarding the regional food hubs. Figure 8 and Figure 9 illustrate their responses. It was determined that processors are mainly aware of the regional food hubs, but few of them utilize their services as one processor stated, “The services of the
Two Rivers Food Hub and the Ontario Agri-Food Venture Centre seem beneficial, but they are located too far away, and it is not worth it financially for smaller producers” (ibid).

Figure 8: Awareness of Regional Food Hubs by Processors (Frontenac CFDC, 2018)

Have you used the services/facilities of these food hubs?

Figure 9: Usage of Regional Food Hubs by Processors (Frontenac CFDC, 2018)

Processors were asked if they were looking to expand their businesses, and the survey found that 85.7% were looking to expand their businesses, with 81.8% of respondents looking to expand within the next year (ibid). The survey went on to examine the challenges and opportunities of local food processing in Frontenac County, with
participants identifying the services and infrastructure they require to further grow their businesses. Figure 10 and Figure 11 below illustrate the common responses from participants regarding their needs for services and infrastructure.

Figure 10: Services Required by Local Food Processors (Frontenac CFDC, 2018)
Processors identified that 1- access to financing and 2- connecting with other local food entrepreneurs in the area are the top two required services to assist in the growth of their businesses (ibid). In terms of infrastructure, processors identified distribution as being the top necessity to the future growth of their businesses as well as processing facilities, co-operative storage and labelling services (ibid).

The study continued by contacting 20 local food producers in the County and surveying 16 (ibid). This survey was designed to determine what services and infrastructure local food producers (who are currently producing a value-added product or are thinking of producing a value-added product) need to support and grow their businesses (ibid). Producers were asked if they are planning on increasing production
and/or adding a new value-added product. The majority of producers indicated that they are looking to increase production, but not adding to the creation of any value-added products (ibid). When asked the timeframe in which they planned on expanding their businesses, the majority indicated that they would be increasing their production within the next year (ibid).

To further gauge the awareness and usage of the regional food hubs, producers were asked the same questions as the processors regarding their awareness and usage of the Two Rivers Food Hub in Smiths Falls and the Ontario Agri-Food Venture Centre in Colborne. The results are similar to the processor responses in that the majority of producers were aware of the Two Rivers Food Hub and only one producer used its services (distribution) (ibid). Distance to these facilities and lacking the economies of scale were the top two reasons stated by Frontenac County producers for not utilizing the services of the food hubs (ibid).

Producers were then asked to identify the challenges and opportunities of producing local food in Frontenac County as well as identify what services and infrastructure they require to further expand their businesses. Figure 12 and Figure 13 below illustrate the common responses from the producers surveyed.
Figure 12: Services Required by Local Food Producers (Frontenac CFDC, 2018)

Figure 13: Infrastructure Required by Local Food Producers (Frontenac CFDC, 2018)
The most commonly-stated service need by producers was marketing, followed by connecting with other local food entrepreneurs. With respect to infrastructure, a local abattoir was stated as the most common need by those producers surveyed. They mention that the local abattoir is over-capacity and the nearest poultry abattoir is over an hour away (ibid).

The study initially set out to engage the staff of the two regional food hubs as key stakeholders to understand their current reach, service gaps and potential regional collaborations. The Two Rivers Food Hub supplied a list of Frontenac users but was unable to discuss service gaps and a potential regional collaboration. Unfortunately, little input was received from the Ontario Agri-Food Venture Centre other than that they were still under capacity (ibid).

The results from the surveys were analyzed and the Frontenac CFDC hosted a local food networking event in February 2018 to share the results with all local food key stakeholders in Frontenac and Kingston. Figure 14 and 15 below are photographs of the event. Upon sharing the findings, the event attendees were invited to participate in a “conversation café” round table discussion on one of three identified themes discovered in the survey results. The themes were: 1- Creating consumer awareness; 2- Coordination for growth; and 3- Infrastructure (ibid). The notion behind the themed discussions was to allow participants to choose a topic they are passionate about and to network with fellow local food stakeholders to discuss the solutions to some commonly identified challenges. The results from this exercise produced a set of notes for further action that were emailed to all who attended. This networking event spawned two other
local food meetings where the development of a Frontenac “Open Farms” event was organized for the Fall of 2018 as a means to further engage consumers and market local food activity in the County.

Figure 14: Researcher Presenting Results at Local Food Networking Event (A. Vandervelde, 2018- used with permission)

Figure 15: Attendees at the Local Food Networking Event (A. Vandervelde, 2018- used with permission)
5 DATA ANALYSIS AND RESULTS

5.1 Key Informant Interview Participant Analysis

The case study analysis involved key informant interviews with 29 individuals involved in the local food economy in Frontenac County. As this research is focused on the relationship between local food initiatives and rural economic development, it was identified that having representation from the whole value chain was imperative. Unfortunately, due to the limited scope of this research, consumers were not interviewed. The participants for this research were divided into 4 categories being: 1- producer, 2- processor, 3- retailer / restauranteur, and 4- agency. It is rare that any one individual fits into only one category; however, for the purpose of this research each key informant was divided into the aforementioned categories for ease of response analysis. For some of the participants, questions from each of the interview guides (please refer to Appendices A, B, and C) were asked depending on the extent of the key informants’ involvement in the local food supply chain. The researcher was able to tailor the semi-structured interview questions to the individual based on her knowledge gained through participant observation. Key informants were selected based on the researcher’s direct knowledge of the local food system in Frontenac, as well as through snowball sampling.

A total of fifteen (15) producers were interviewed, ensuring there was representation from across the County. Figure 16 illustrates the geographic locations of the producer participants:
Frontenac County’s topography and distance to markets varies significantly; therefore, to garner a more comprehensive understanding of the challenges and opportunities that exist for County producers, it was important to have representation from each of the four lower-tier townships in the County. Two (2) additional producers were interviewed who are located within the municipal boundaries of the City of Kingston. Both producers are inherently connected to the local food economy of Frontenac as one is a vendor at the Frontenac Farmers market and the other has a CSA that has a customer base in Frontenac County. Among the 15 producers interviewed, farming experience in Frontenac County ranged from 2 years to over 70 years, and included producers who are full-time (10), part-time (4) and hobby (1) farmers.
One prominent local food processor, who was identified as a key local food networker and advocate in the County, was also interviewed. A total of eight (8) participants representing the retail and restaurant segment of the local food supply chain were interviewed. Five (5) of these participants operate businesses within Frontenac County, two (2) are in the City of Kingston and one (1) is in the Township of Leeds and the Thousand Islands which borders Frontenac County to the east. The participants from Kingston were chosen due to their connections to producers in Frontenac County from whom they sourced goods. The participant from Leeds and the Thousand Islands was chosen as she is a prominent local food distributor in the region servicing Frontenac County, who also has a retail outlet that sells locally-produced goods, some of which are sourced from Frontenac County.

The last group of key informants, labelled as ‘agency’ represent the municipal government, a farming organization, a local economic development agency and representatives from the two farmers’ markets in Frontenac County. A total of five (5) agencies were interviewed to garner a broader perspective on the local food economy of Frontenac and to gain a whole systems perspective with regard to the local food system.

5.2 Emergent Themes

Key informants were asked a variety of questions in a semi-structured interview format regarding the local food economy of Frontenac County. Questions delved into the motivations, challenges and opportunities for the local food economy of Frontenac County, with a specific focus on economic implications. Each participant was also asked a specific question regarding the notion of a Frontenac food hub, to gain an understanding
of what purpose it could serve. Interview questions were organized into categories
directed by the research objectives and responses were manually coded based on
emergent themes that appeared in the data.

5.2.1 Planning and Economic Development Implications of Local Food

Aligning with the research objectives, participants were asked several questions
to gauge the planning and economic development implications of local food in Frontenac
County. Participants were asked to describe the agricultural industry of Frontenac County,
specifying whether they felt it was growing or in decline. A common theme emerged
among participant responses that alluded to the notion that Frontenac is not known as a
‘farming area’ due to its topographical constraints. Producer 15 provided the following statement:

Fundamentally, we are in Frontenac County. We are not awash with Class
1, 2, and 3 farmland. People are making a living on lower-grades of
farmland. But there's not a lot of it. Realistically our topography will limit
the amount of food we can produce in this region. It's just by nature of our
beautiful topography. We are an area of lakes and Canadian Shield, the
amount of food we can grow can certainly expand, depending on what the
market is looking for, but we will never be a Huron County.

Participants also felt that there is a lack of agricultural activity in the area. One producer
noted that due to the lack of agricultural activity in the County, there is a struggle to keep
farm supply outlets open to support existing and new farms. Another argument that
emerged from participant responses was that they felt that consumers are not aware of
what products are available to them due to the lack of visible agricultural activities that
occur in Frontenac. Producer 3 noted, “People don’t know to go north of the 401 for food.”
Mirroring this sentiment, Retailer 3 stated “If you think food, you don’t think of Frontenac.”
One of the agencies mentioned that according to the recent census data, the farming occupation in Frontenac County was in decline, approximately in line with the provincial average. However, the local economic development agency noted that within their loan portfolio they have noticed a small increase in younger farmers coming to the area and starting niche, organic farms. They have also witnessed a generational shift with some of their agricultural clients. Figure 17 illustrates the common themes among participant responses describing Frontenac's agricultural industry.

Figure 17: Perception of Frontenac’s Agricultural Industry

Participants were asked if they felt that the local community supports agriculture and local food production. Producers, processors, retailers and restauranteurs were also asked a follow-up question on whether they have experienced an increase in demand for their locally grown/made products. The majority of participants (75%) felt that there was
local support for agriculture and local food production, as Figure 18 below illustrates. What is interesting to note is the definition of 'local'. Given the strong cottage industry in Frontenac County, a theme emerged in the participant responses regarding seasonal and permanent residents.

![Local Community Support for Agriculture / Local Food](image)

**Figure 18: Local Community Support for Agriculture / Local Food**

When asked about the composition of their customers, participants speculated that there was a specific type of customer who buys local food. Participants noted that their customers comprise individuals who can afford it and have a value system that prioritizes local food, whether its for the quality, the freshness or supporting the local economy. Several participants generalized their customers as being either retired, a professional/younger family that works in Kingston or a cottager/tourist. Many noted that the composition of the hyper local permanent population that supports local food is small; as Producer 10 stated, “People don’t move out to the country to buy vegetables from other people.” Another producer also noted that a large number of residents in Frontenac County are on fixed incomes and that buying locally grown food is likely not a priority for
them. Overall, 75% of participants felt that the local community, consisting of a mix of local businesses, seasonal and permanent residents support agriculture and local food activities in the County.

When participants were asked if they have experienced an increase in demand for their locally grown/made products, 13 participants indicated that they had, 10 indicated that they had not, and 1 indicated that “it is hard to tell” (see Figure 19 below).

![Increase in Demand for Locally Grown / Produced Goods](image)

**Figure 19: Increase in Demand for Locally Grown/ Produced Goods**

Of those who indicated that they had not experienced an increase in sales, the consensus was that their sales were stable, in that their supply was meeting demand. One producer mentioned that competition has increased in the production of vegetables, and another producer mentioned that they have reached their capacity as they received a number of new clients recently due to a local CSA closing. Restauranteur 5 stated that she felt that “demand for local food isn’t growing in the area, but it isn’t dying either.” A common theme that appeared among producer responses was that there was a hesitancy
to scale up due to market uncertainty. Several producers and processors mentioned that they did not want to grow beyond their capacity, (with capacity meaning producing at a level that does not warrant hiring additional help) and that they felt that there needed to be more buyers to justify scaling up to the next level of production. Producer 12, who recently scaled up their production, noted that perhaps local food interest had possibly peaked and that they have not experienced the growth that they were expecting. A statement that summarizes the responses regarding increased demand for local food in Frontenac County well was provided by Producer 15, who observes that “Frontenac is walking before it is running with respect to local food.”

Fearne et al. (2013) state that successful local food businesses appear to be characterized by entrepreneurship, innovation and enhanced cooperation. On the notion of enhanced cooperation, participants were asked “How would a local food network that links producers, processors, retailers and restauranteurs impact the local food economy in Frontenac?” The type of network was left for interpretation by the participants, which garnered a variety of responses with regard to local food networking in Frontenac. Figure 20 below illustrates the common participant responses gathered with respect to local food networking in Frontenac County.
The consensus among participants was that no formal local-food network currently exists in Frontenac County. However, the participants mentioned examples of informal networks or collaborative relationships that they are currently a part of. Several producers mentioned the work of the National Farmers Union Local 316 in creating a strong network among producers. Frontenac County’s recent Brand Ambassador Campaign, which is a municipal initiative that promotes all local businesses in Frontenac County, was also touted by several participants as having a positive contribution to networking between local food businesses. With respect to a network in the form of a local food directory, several participants noted that a directory had been previously created and it was unsuccessful/unsustainable as they felt it required an organization or paid position to
maintain it. Several retailers and restaurants did state that they would value an updated local food directory, as it would increase their knowledge and access to local food producers and processors.

With respect to a formal network, Processor 1 stated “What network do we need? We have a telephone. That’s all the network we need if you pick up the phone. There is not a lot of us. We know who we all are.” Echoing this sentiment, another producer felt that a formal network was unnecessary, but that the local food economy in general would benefit from more events and promotions. Conversely, several participants mentioned that there is a large gap in the connections along the local food supply chain in Frontenac County, as Producer 9 stated, “There needs to be a stronger local food network. There needs to be something outside of the producers that can promote local food in the area, that ensures that we aren’t competing, but working to promote each other.” Several participants felt that a network, whether it was in the form of an agricultural advisory committee or a local food business council, would greatly improve the local food economy through collaborative promotion, coordinating to create economies of scale, and to increase consumer education regarding local food in Frontenac County. With respect to the role that a local food network can play in consumer education, Producer 8 stated, “The distances are large, and time is an issue. If we, as a group, can get stronger at those communications, it would impact our ability to be more efficient and effective educators of those we want to feed.” An overarching theme amongst the participants was that they felt that increased networking among those in the local food supply chain would be beneficial; however, there was no consensus on whether this network would be in a formal or informal format.
In attempting to evaluate the economic implications of local food in Frontenac County, the question “What impact does local food have on the local economy of Frontenac?” was posed to all participants. Several participants abstained from answering as they felt they did not have enough information and therefore did not want to make assumptions. Agency 3 asserted that local food currently plays a small role in the local economy. They expressed that “It’s viewed as an important role. I think our rural communities see farming and food as valuable as it is tied to our heritage.” The agency goes on to explain that Frontenac’s economy is largely tied to neighbouring economies, as they stated that 70% of Frontenac’s workforce is employed in Kingston. From an economic standpoint, local food has been identified as a priority, and there are many opportunities especially with local food tourism, but currently, local food does not play a large role in the local economy. Agency 5 elaborated on potential opportunities by mentioning that movement towards a decentralized food system could address the issue of dwindling rural communities, as it would create more job opportunities and community development.

Continuing with opportunities, all participants were asked “What opportunities exist for local food entrepreneurs in Frontenac County?” Participant responses were coded and the perceived opportunities for local food in Frontenac are illustrated in Figure 21 below.
Participants felt that there were opportunities in creating value-added products as well as creating niche/specialty products. When asked about the opportunities in Local Food in Frontenac, Processor 1 stated: “Everyone eats every single day of their lives, it’s a good business to be in.” Several participants mentioned that they felt supported by the municipality and that the local economic development agency was also supportive of agricultural businesses. What was echoed among a few participants was the importance of diversification, as Producer 13 noted “Biodiversity gives a farm strength. If you have everything in one basket, that is not sustainable.” Two participants indicated that they felt there were no opportunities for local food entrepreneurs in Frontenac, stating that there needed to be more consumers buying local to warrant the growth of local food businesses in the area.

In attempting to evaluate the impact of policies and planning on local food activities in Frontenac County, participants were asked “Have you encountered any issues with
municipal planning policies? Provincial planning policies?” Participants were also asked “What changes, if any, would you recommend to existing policies to support the local food sector?” With respect to municipal planning policies, the consensus among all participants is that the lower tier municipalities and the County are very receptive and supportive of agricultural businesses and that they have not encountered any issues with municipal planning policies. However, Agency 5 noted that the Municipal Property Assessment Corporation (MPAC) assessment on the area’s farmland has significantly increased since 2012. They stated that the increasing land values are beneficial for the areas retiring farmers but are prohibitive for new farmers. The agency went on to suggest that the County should create policies that ensure that farmland remains farmland, as some of the County’s best agricultural land is in the urban fringe of Kingston and has the largest development pressures in the County.

When asked about provincial planning policies, an emergent theme that “one size fits all” policies are detrimental to smaller, more diversified farms was prevalent. Agency 5 added that “policies are created in southwestern Ontario without knowing what’s going on in eastern Ontario. Eastern Ontario is perceived as more of a recreational area than a farming area, but we need the same policies to protect farmland.” Participant responses were grouped together based on common wording and thoughts, coded and the common themes are illustrated in Figure 22 below.
Several participants mentioned that they felt that provincial and federal policies focus on exports and commodity farming and have little consideration for smaller farming operations. These same participants noted that existing cheap food policies hurt all farms and that policies need to be updated to reflect the realities of small and medium scale producers. With respect to abattoirs, egg grading and on-farm processing, several producers stated that the existing provincial and federal regulations are the most significant barrier that they must overcome in their businesses. They note that for meat processing, the regulations are so restrictive that selling meat on a smaller scale is cost prohibitive. Participants also mentioned that regulations regarding labelling, packaging and getting their products to market are also prohibitive for smaller producers/processors. Producer 15 noted that the creation of the Local Food Act was a positive development but that it “needs teeth”. She went on to state that Kingston is a city of institutions and
that if the Local Food Act mandated that a certain percentage of institutional food procurement had to be “local”, it would make a significant difference for rural communities like Frontenac, while strengthening urban and rural relationships.

Another theme that emerged from participant responses was regarding farmland protection. Producer 5 mentioned that it took over 2 years to secure their existing farm as they had to compete with young professionals from Kingston who were buying the “country idyll” and that they know of several other younger farmers looking to buy farms in Frontenac County but are facing a similar challenge. Agency 5 noted that additional provincial policies for farmland preservation should be developed that go beyond the Provincial Policy Statement (PPS), as she noted that aggregate extraction and road construction take precedence over agricultural preservation and that these policies are not sustainable.

5.2.2 Supporting the Local Food Economy

Delving further into the issues of local food and economic development in Frontenac County, participants were asked about the challenges of supporting the local food economy. Producers were asked to identify specific challenges they face in Frontenac County aside from the inherent challenges associated with farming such as weather, insects, time, planning, physical challenges and the seasonal nature of the work. Figure 5.8 below illustrates the coded responses from the producer and processor participants. Participants from the retailer/restauranteur group were also asked to identify challenges of supporting the local food economy in Frontenac. The responses from this group aligned with findings found in the literature regarding challenges of supporting local
food such as consistency, availability, seasonality, pricing, consumer education, and regulations. As demonstrated in the literature, these challenges are not specific to Frontenac County, but challenges that retailers and restauranteurs generally encounter when sourcing locally grown products.

![Challenges of Local Food Producers/Processors in Frontenac](image)

Figure 23: Challenges of Local Food in Frontenac

As Figure 23 above illustrates, access to markets was the most prevalent challenge stated by the producer and processor participants interviewed. Producer 10 provided the following statement: “If you want to be successful, you need to take your products to where there are people. And there are not enough people in Frontenac County to make it work.” Several participants feel that in order to grow the local food economy in Frontenac, demand, whether in the form of individual customers, institutional procurement, or access to mainstream retailers, needs to grow. The second most common theme that emerged from participant responses was that distance to markets and processing facilities is a barrier. Frontenac County has a large geography and many
farms are smaller in size and do not have the economies of scale to cover the transportation costs associated with processing and delivering their goods to the marketplace. Similar to the most common challenge of access to markets, participants also mentioned that competition with mainstream markets is a large barrier. Participants feel that the culture of cheap food is perpetuated by the mainstream market, which hurts all farms. Another prominent theme that emerged from participant responses was that the bureaucracy of navigating policies was daunting, especially for food processing and sale, and that policies could be better communicated and that access to provincial funding opportunities could be streamlined.

When agencies were asked about the challenges of supporting the local food economy, Agency 3 noted that when municipalities are leading local food, they are confined by political boundaries that are not representative of their foodshed. Much like a watershed, a foodshed is a geographic region that produces food for a particular population (Foodshed Alliance, 2018). Additional challenges that were identified by Agency 1 and 2 were that the County’s Farmers’ Markets struggle to both attract vendors as well as local consumers and that participation with the local farmers’ markets tends to ebb and flow.

All participants were asked questions to gauge the gaps that need to be filled to support the local food economy of Frontenac County. Participants were asked two similar questions: 1- “How can agriculture and local food be expanded in Frontenac County?” and 2- “What needs to be done to support the local food economy of Frontenac County?”. Participant responses were coded, and the common themes are illustrated in Figure 24.
below. The most commonly identified theme was that branding and promotion of local food in Frontenac County was needed in order to create an agri-“culture” within the County. Participants perceive that more visible agricultural activities that occur in the County coupled with local food branding will increase demand for locally produced goods and open-up new markets. Aligning with branding and promotion, the second most common response was consumer education and increased consumer support. As was discussed earlier, participants feel that growth in demand for local food needs to increase in order to warrant scaling up their farming operations; therefore, it is not surprising that the top two responses identifying what is needed to support local food in Frontenac County relate to building demand for local food.

![Identified Gaps to Grow the Local Food Economy](image)

**Figure 24: Supporting the Local Food Economy**
The third most common response among participants was the need for increased collaboration and cooperation. As Producer 12 notes, “Improved Coordination is needed. We have the infrastructure, but there is little coordination among these existing parts (kitchen space, trucking etc.), you need a puppet master to put all the pieces together, I’m not sure what that would look like as a business model.” Aligning with the discussion of a Frontenac County network in Section 5.2.1, it is not surprising that participants identified increased collaboration and coordination as a requirement to grow the local food economy of Frontenac County.

5.2.3 Frontenac Local Food Hub

Aligning with the research objectives, participants were asked about the potential development of a food hub in Frontenac County, gauging their perspectives on the potential role it could play in increasing the capacity of local food in Frontenac County. Overall the notion of the development of a food hub was met with skepticism as participants felt that Frontenac County needs to build its local food culture to warrant the development of a food hub. As Producer 6 stated “It’s not a gap that’s urgently waiting to be filled. We would need someone to have a great grasp on what our demand and supply situation it.” Skepticism about the development of a food hub varied from the level of utilization, the financial viability, the task of coordinating participants and how it would be governed. Figure 25 below illustrates the common participant responses when asked about the potential development of a Frontenac County food hub.
As Figure 25 demonstrates, the notion of a key location was most commonly mentioned. As Producer 3 stated “Frontenac is such a stretched-out space, that you would almost need two [food hubs], for accessibility”. Several participants mentioned that focusing on on-farm processing would be more beneficial for the small-scale producers in the County as coordinating at one central location in such a vast geography as Frontenac’s would be difficult. Others posited that a possible model for a Frontenac food hub would resemble a more decentralized “nebula.” This decentralized web could consist
of several smaller operations spread geographically over the County working in conjunction to support the growth of local food capacity in the area, similar to the idea of “agri-hoods” as previously discussed. Several participants also mentioned that a food hub should be located in Kingston for several reasons including: a large consumer base; potential institutional procurement; well-developed transportation networks; and being a centralized location for producers and processors in South Frontenac and the Frontenac Islands.

Participants also mentioned that the coordination of local food producers and processors in the area would be difficult for a central food hub location given the geography of the County and the current levels of production by existing local food producers and processors. The financial viability of such a food hub was also discussed by producers, several noting that a they felt the structure of a cooperative model of operation would not work for a food hub and that it would have to be a private venture for it to be sustainable and economically feasible.

With respect to the potential role a Frontenac County food hub could play in increasing local food capacity, several participants mentioned that a role in marketing and consumer education would be essential. Producer 7 noted “Without the creation of a local food buzz and consumer education, a food hub in Sharbot Lake would fail”. When initially asked about food hubs, participants were left to formulate their own ideas of what a Frontenac food hub would entail, whether that was an actual bricks and mortar facility, an online network or other. When discussing the success of a possible food hub, Restauranteur 5 noted “What we’ve been doing can be defined as a food hub, and we’ve
been doing it for 20 years and haven’t been able to make it huge. That’s likely because we don’t have a big enough consumer base.” Overall, the notion of the development of a Food Hub in Frontenac County was met with resistance as the respondents felt that the local food economy of Frontenac County needed to be further established before such a coordinated initiative could be successfully developed.
6 DISCUSSION OF FINDINGS

6.1 Summary of Findings

The objectives of this research were to: 1- evaluate the planning and economic development implications of local food activities; 2- identify and assess the challenges and opportunities for local governments and the province in supporting local food economies; 3- investigate food hubs to determine the challenges and opportunities they encounter and their rural economic development implications; and 4- evaluate the role of local food activities as a contributor to rural economic development using Frontenac County as a case study. The following is a discussion of the results. Many of the challenges and opportunities acknowledged in this research align with previously identified findings in the literature. However, Frontenac County, like all rural areas, is unique and will address the issues facing its local food economy in a manner that is suitable to its current circumstances. The participants in this research, as well as previously conducted regional studies, have identified the following three themes that dominate the conversation about the local food economy in Frontenac County: 1- supply and demand; 2- branding, marketing and consumer awareness; and 3- processing and distribution.

6.1.1 Supply and Demand

The key informant interviews revealed that the respondents felt that the local food economy in Frontenac County had somewhat stagnated with the majority of producers having reached their capacity and not experiencing additional demand to warrant substantial growth in their businesses. Those who had scaled up had yet to experience
the demand for their products that they were anticipating. In the Frontenac CFDC Local Food Gap Analysis Study, the majority of producers and processors surveyed indicated that they were growing their businesses within the next year. The extent to which this growth is to occur was not measured. Several participants in the research indicated that they are going to diversify their products and/or create value-added products as a means of growing their businesses. It appears that the majority of producers and processors in Frontenac County are growing to the extent that they can still directly market and sell to their consumers and that scaling up to meet wholesale demand has yet to be justified. It is the consensus among the research participants that growth in demand for local food in Frontenac County needs to occur.

Several suggestions to grow demand for local food in Frontenac County were put forth during this research. A frequent suggestion was that institutional procurement policies at the municipal and provincial level be developed, mandating that a certain percentage of institutional food be sourced “locally”. Given the proximity and ties to the City of Kingston and its plethora of institutions, Frontenac County food producers and processors would substantially benefit from such policies.

To meet wholesale demand, food hubs have acted as means for small to mid-sized producers to collectively meet this demand. When participants were asked about the development of a food hub in Frontenac County, the consensus was that given the County’s large geography, a typical model of aggregation would be especially difficult to coordinate. Additionally, producers and processors indicated that through direct marketing, they remain connected to their consumers and accountable for their products
and that selling their products through a food hub would remove this key part of their businesses.

The research did reveal that there was a substantial desire for increased networking among those involved in the local food value chain in Frontenac County. It was suggested that the development of more informal networks to collaborate to increase capacity may be more beneficial for the area’s local food producers and processors.

6.1.2 Branding, Marketing and Consumer Awareness

Closely aligning with the previously discussed theme, branding, marketing and increasing consumer awareness were the key arguments made by research participants as requirements to support and grow the local food economy in Frontenac County. To increase local and regional demand for Frontenac County produced goods, several suggestions were made by the research participants. One prominent recommendation was to align with the Frontenac County rebranding campaign for a place-based, Frontenac-specific local food branding. The difficulty of branding local food with municipal borders is that a food shed often spans several municipalities. The NFU Local 316 had created a “Kingston & Countryside” local food branding campaign in 2014; however, it was unable to gain considerable recognition. At the time this research was being conducted, members of the NFU Local 316 were reevaluating the “Kingston & Countryside” local food branding in a revitalized attempt to create a more place-specific branding for local food grown in the area.

The research also revealed that beyond branding, marketing and creating “a buzz” around agriculture and local food in Frontenac County are required. Several participants
mentioned that the local food economy would benefit from more events, such as field-to-fork dinners, farm tours, food festivals, and profiling local food at the County’s only agricultural fair. At the time this research was being conducted, Frontenac County economic development staff were working with area farmers to organize an ‘Open Barns’ day as a way of profiling agriculture and local food producers in the County and to increase consumer awareness about what is grown locally and available to purchase.

Another way in which to increase consumer awareness that was mentioned several times by the research participants was the importance of schools and educating the area’s youth about local food and farming. Currently a few of the area’s schools have developed local food initiatives, including school and community gardens and farm to school programs offering a weekly “salad day”. By encouraging the youth of the area to become knowledgeable about the seasonality of food and how to cook locally-grown food, it will create a generation of local food eaters in Frontenac County who may also, in turn, educate their parents on the importance of buying locally-grown food.

To create a viable and sustainable branding and marketing campaign of the area’s local food it was recommended that a funded, central agency would best be suited to coordinate marketing efforts and branding campaigns, to hold local food businesses accountable to the branding conditions and to increase the overall visibility of the areas local food producers and processors.

6.1.3 Processing and Distribution

A lack of processing facilities and distribution services is not unique to Frontenac County; these deficiencies have been thoroughly identified in the literature. With respect
to small-scale meat processing in the area, the need for a local poultry abattoir has been an established need for some time. The County had a poultry abattoir feasibility study conducted in 2011, which provided a business case for a poultry abattoir to be located in Sharbot Lake. However, investment in such a facility has yet to occur. With respect to the area’s other abattoirs, several research participants expressed concern over the long-term viability of these businesses, as one local abattoir owner was nearing retirement with no visible succession plan and the other is operating at capacity. Additionally, for organic producers, both of the area’s abattoirs are not certified organic and therefore the producers lose their certification on these products that are processed at these abattoirs because they have no other option. Therefore, there is a crucial need for additional abattoirs in Frontenac County to grow the locally raised meat portion of the local food economy. The investment in a local abattoir would be greatly supported by both Frontenac County and the Frontenac CFDC.

At the provincial and federal level, it was also mentioned that policies and regulations concerning on-farm processing be revisited. The notion of mobile abattoirs was mentioned by a few producers as the scale at which they operate is not conducive to the distances they need to travel to have their livestock processed. Similarly, it was mentioned by several participants that the regulations regarding egg-grading and policies for the sale of eggs need to also be revisited, as the costs involved in creating an egg grading station are prohibitive for small-scale producers, and the difference between selling at a farm gate versus a farmers’ market needs to be better justified.
Distribution is an intrinsic challenge with local food, not unique to Frontenac County. It is essential to have the economies of scale and an established market to make distributing local food viable, especially in an area with a developing local food economy and less developed transportation and distribution networks. The area’s producers and processors conduct much of their own distribution, with a few utilizing the services of Wendy’s Mobile Market and the Two Rivers Food Hub. However, at the end of the data collection phase of this research, the Two Rivers Food Hub had ceased its distribution service. A few of the more established local food processors were utilizing regional distributors. For some of the smaller producers and processors, cost of a distribution service was a considerable factor as their economies of scale are quite small. As was identified in the literature, farmer-led informal distribution cooperatives have been developing and given the average size of producers in Frontenac County, perhaps developing an informal cooperative distribution model would best serve the areas producers and processors. Table 7 below provides a summary of the recommendations.

Table 7: Summary of Recommendations

<table>
<thead>
<tr>
<th>Supply &amp; Demand</th>
<th>Branding, Marketing &amp; Consumer Awareness</th>
<th>Processing and Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Develop institutional procurement policies at the Municipal and Provincial level</td>
<td>• Creation of a place-based, Frontenac-specific local food branding</td>
<td>• Attract investment in a local abattoir</td>
</tr>
<tr>
<td>• Increase networking among those along the local food value chain</td>
<td>• Create a “buzz” around agriculture &amp; local food in Frontenac County</td>
<td>• Revise provincial and federal policies regarding on-farm processing</td>
</tr>
<tr>
<td></td>
<td>• Partner with schools and youth programs</td>
<td>• Establish farmer-led informal distribution cooperatives.</td>
</tr>
<tr>
<td></td>
<td>• Creation of a funded, central agency to manage local food branding &amp; marketing in Frontenac County</td>
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</tbody>
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7 CONCLUSION

Aligning with the research objectives, this research evaluated the planning and economic development implications of local food. It was found that planning for food systems is an emerging trend and that planners and planning policy play a vital role in the viability of local food systems. In terms of evaluating the economic development implications of local food initiatives, further research is necessary to assess the tangible financial impacts that local food activities have in rural communities.

The challenges and opportunities for local governments and the province to support local food economies were identified and assessed. For local governments, it was found that supporting local food branding is difficult as local food initiatives span foodsheds rather than municipal boundaries. However, municipal governments can support local food economies through the development of supportive policies, agricultural advisory councils, and asset mapping exercises, among other initiatives. For the province, policy development tends to follow a “one size fits all” approach. For local food and agriculture, this tactic has proven to be detrimental to small and mid-sized farms. Policies regarding processing and the sale of local food need to be reevaluated. However, Foodland Ontario’s consumer education efforts are viewed as having a positive impact on local food consumption by local food producers, processors and retailers.

The focus of this research was initially on food hubs and their role in economic development. However, early in the research process the scope was expanded to evaluate the local food economy. As a part of the local food economy, food hubs were investigated to determine the challenges and opportunities they encounter and their rural
economic development implications. Both regional food hubs, the Two Rivers Food Hub in Smiths Falls and the Ontario Agri-Food Venture Centre in Colborne, were unresponsive to participating in this research. Information regarding the challenges and opportunities that they encounter was collected informally through conference attendance. It would appear that both facilities are currently underutilized and that they are still in their business development phases.

This research focused on evaluating the role of local food activities as a contributor to rural economic development using Frontenac County as a case study. Through the case study investigation, it was determined that local food activities currently play a small role in Frontenac County’s economy, but that growth in the local food economy is occurring. There has been a municipal focus to build local food capacity and significant opportunities exist for business development and growth in the sector. This research did not evaluate the tangible financial impacts of local food activities in Frontenac County; going forward, such an economic impact assessment of the local food economy would be beneficial for the County to determine how best to grow the sector.

7.1 Considerations for the Future of Local Food in Frontenac County

Within Frontenac County it was observed that there is a significant amount of optimism and a number of passionate local food stakeholders who are actively working to grow the local food economy. Since the data collection phase of this project, Frontenac County has hosted an “Open Farms” tour; looked to partner with the Local NFU 316 to revisit the idea of a local food branding campaign for “Kingston’s Countryside”; advocated for the development of an agricultural advisory committee; and the Frontenac County
Brand Ambassador program continues to promote local food businesses in their wider mandate. Additionally, the County’s only agricultural fair, the Parham Fair, is looking to develop a closer relationship with local food vendors to support the development of a local food culture. As Feenstra (1997) notes, a sense of place is integral to local food. Frontenac County can build upon its unique geography and topography to create its own local food culture to address its local food challenges.

The need for increased collaboration among local food stakeholders in the County was identified as a priority by the research participants. Going forward, informal networking events hosted by the County and local farming organizations, would be beneficial to garner closer relationships among local food stakeholders. There currently exists a slight disconnect amongst producers from the four lower-tier municipalities. Geography currently appears to fragment these potential relationships and a series of informal networking events may foster increased collaboration and cooperation. The further development of an agricultural advisory committee would also be beneficial in keeping issues affecting the agricultural community to the forefront and to allow various local food stakeholders to work together to overcome local challenges.

With respect to a local food branding, marketing and advocating organization, sustainable financial and in-person support is necessary for its long-term viability. As with most rural communities, initiatives operate on volunteers, and with local food and agricultural initiatives, they mainly operate on farming volunteers who are already short on time. The value of a local “champion”, someone who leads initiatives cannot be underestimated. Without a local “champion”, to maintain an ongoing presence in the
community, significant investment then needs to be made to an organization that works to promote and support the local food economy.

As has been previously addressed, “one-size fits all” provincial policy needs to be reevaluated to better reflect the diversity of farm types. Lack of policies regarding farmland protection, institutional procurement and small-scale processing, specifically, were identified by research participants as negatively impacting the viability of their farming and local food businesses. The province has identified the importance of farm viability in the agricultural system of the Greater Golden Horseshoe, and this recognition should be expanded to the rest of the province. If rural Ontario and agricultural activities are to be economically viable, policies need to better support this notion.

The development of a “bricks and mortar” food hub in Frontenac County is a premature notion, but online food hubs, like Freshspoke, may be beneficial to overcoming the challenges of geography with technology. Additionally, utilizing an online forum may also allow local food stakeholders in Frontenac County to connect and work towards common goals for the local food economy.
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APPENDIX A

Semi-Structured Interview Guide for Producers & Processors

1- How many years have you farmed at this site and can you tell me about your farm/ business (e.g. type of farming activities, number of acres farmed (owned and rented), number of livestock, crop patterns, crop types, etc.)?

2- Did you have a farming background/connection to this area? What was your motivation to farm/produce food? In eastern Ontario? What has been your experience with farming/producing in this area?

3- What challenges, if any, have you experienced as a farmer in eastern Ontario? What challenges exist with processing/distributing your goods?

4- Have you encountered any issues with municipal planning policies?
   Provincial planning policies?

5- What changes, if any, would you recommend to existing policy to support the existing/expanding local food sector?

6- In what ways do you think agriculture/ local food production could be expanded in Frontenac County?

7- What opportunities do you think exist for farmers in Frontenac County?

8- Do you feel the community supports agriculture and local food production? Has there been an increase in demand for your locally grown products?

9- How do you distribute your goods? Who are your consumers?

10- How would a local food network that links producers, processors and distributors impact the local food economy in Frontenac & Kingston? [Do you collaborate with other producers or processors in Kingston/Frontenac?]

11- What impacts do you think local food has on the local economy of Frontenac?

12- What needs to be done to support a local food economy in Frontenac?

13- The development of a ‘food hub’ has been identified as a means of promoting local food, what are your thoughts on the possible development of a food hub in Frontenac County? What would it look like?
APPENDIX B

Semi-Structured Interview Guide for Retailers & Restauranteurs

1- Please describe your business and how it was established.
2- Why focus on local food? Was it always the focus or has it evolved? What was the motivation behind using/sourcing/promoting locally grown food/products/ingredients?
3- How do you currently acquire locally grown goods?
4- How did the relationship between local producers and your establishment begin? Has it evolved?
5- What are some of the challenges you’ve encountered in sourcing locally produced ingredients/food?
6- What changes, if any, would you recommend to existing policy to support the existing/expanding local food sector?
7- Are there opportunities for growth in the local food economy in Frontenac County?
8- Do you feel there is a connection between those along the local food value chain (producers, processors, retailers, etc.) in Frontenac County?
9- Would a local food network that links producers, processors and distributors impact the local food economy in Frontenac County? [Do you collaborate with other producers or processors in Kingston/Frontenac County?]
10- Do you feel the community supports agriculture and local food production? Has there been an increase in demand for locally grown products?
11- What impacts does local food production have on the local economy of Frontenac County?
12- What needs to be done to support the local food economy in Frontenac County?
13- The development of a ‘food hub’ has been identified as a means of promoting local food, what are your thoughts on the possible development of a food hub in Frontenac County? What would it look like?
APPENDIX C
Semi-Structured Interview Guide for Organizations

1. Please describe your role and highlight the work you’ve done with respect to Local Food in Frontenac County.
2. Describe the agricultural industry in Frontenac County (e.g. growing, shrinking, etc.)
3. In what ways does your organization support local food growers?
4. Would you please describe your organization’s role in local food production, processing and/or distribution.
5. What considerations have been given to expand the farm industry in this community?
6. What has been the community’s reaction to local food production?
7. In what ways are local food producers promoted in this area?
8. In what ways do planning policies impact the expansion of the agricultural industry?
9. What changes would you recommend to existing policy to support the existing/expanding agriculture and local food sector?
10. What programs exist to link food producers to processors and distributors?
11. Would a local food network that links producers, processors and distributors impact the local food economy in Frontenac County?
12. In what ways do you think agriculture/local food production could be expanded in Frontenac County?
13. What opportunities do you think exist for farmers in Frontenac County?
14. What impacts does local food production have on the local economy of Frontenac County?
15. What needs to be done to support a local food economy in Frontenac County?
16. The development of a ‘food hub’ has been identified as a means of promoting local food, what are your thoughts on the possible development of a food hub in Frontenac County? What would it look like?