

Small Farms, Big Impacts: A Case Study in the Development of a Sustainable Farming Livelihood for
Direct-Marketing Farmers in Southwestern Ontario, Canada

by

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Abstract

Direct-marketing farms play an important role in fostering healthy communities in an era of rapid climate change and unsustainable global agro-industrial practices. Canadian cities intimately depend on foodstuffs imported from countries most affected by climate change events which may cause food shortages and an increase in future food costs. At the same time, the use of heavy machinery and harsh chemicals employed on industrialized farms prevent long-term use of the land by degrading its fertility. In an effort to combat these deficiencies of the global agriculture system, direct-marketing farms have become increasingly prevalent and popular in Canada. Direct-marketing farms offer social benefits such as a sense of community and food education, as well as environmental benefits through sustainable farming techniques. Unfortunately, direct-marketing farmers are typically earning an income less than minimum wage and are therefore not able to support themselves, their families, and their businesses for the long-term. Without a feasible business model to foster a more sustainable livelihood, direct-market farming will never become widely adopted – despite its many benefits.

In turn, this thesis seeks to explore the most useful business strategies to be employed by direct-marketing farmers to procure a more sustainable livelihood. First, a literature review was undertaken to ascertain the current opportunities and challenges of direct-market farming. Various ways of assessing wellbeing of direct-marketing farmers was then considered. Second, several farms in Southwestern Ontario were investigated in a case study approach using semi-structured interviews and participant observation to gain insight into the first-hand experiences of operating direct-marketing farms. The results of this thesis contribute to the literature by filling a gap pertaining to how one may generate a sustainable and economically viable livelihood as a direct-marketing farmer. Currently, the literature solely recognizes the significance of direct-marketing farms without detailed accounts of the ways in which such enterprises can be sustained. Also, by determining the requisite elements of a viable

business model, the findings may encourage more people to initiate direct-marketing farms and proliferate the widespread and beneficial impacts of direct-market farming.

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Dedication

To direct-marketing farmers. Your ambitions are inspiring and your accomplishments are remarkable.

May you use this study to help guide your journey.

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Chapter 1: Introduction

1.1 Problem Statement

Direct-marketing farms play an important role in fostering individual wellbeing and healthy communities in an era of rapid climate change and unsustainable global agro-industrial practices. Along with many, if not most, urbanized centres throughout the world, Canadian communities depend on imported foodstuffs. The agricultural developments of the industrial revolution allowed nations to produce large quantities of goods which lowered their market cost. Through capitalism and the availability of fossil fuels, goods were easily traded and transported throughout the world. As a result, the global food system emerged whereby societies and cultures became increasingly interconnected. Today, “fruit and vegetable producers are experiencing significant new market entry from countries south of the equator that have an opposite growing season to North America” (Edwards & Shultz, 2005, p. 61). Nevertheless, the trade between Northern and Southern countries is not equal in terms of the quality of crops being distributed since the North exports inexpensive staples to the South while the South exports expensive and exotic food to the North (Mayer, Schaffartzik, & Rojas-Sepúlveda, 2015). Consequentially, many developing countries are focused on producing cash crops for their export value rather than food for local consumption. “The consequence of this reorientation is that the countries become increasingly dependent on imports” (Mayer, Schaffartzik et al, 2015, p. 28). If the price of importing crops is to increase, countries may not be able to afford to purchase enough food to feed their entire populations. At the same time, although North Americans are gaining access to highly diverse diets, their dependence on food imported from developing countries is also dangerous since Southern regions are especially vulnerable to climate change (Edwards & Shultz, 2005).

Many academic studies suggest that the food system of every country will be affected by global climate change including Canada’s major trading partners (Frayssinet, 2013; IPCC, 2001; Parry,

Rosenzweig, Iglesias, Livermore, & Fischer, 2004). The International Panel on Climate Change's (2014) most recent report notes that agricultural land has decreased from 0.4 ha per capita in 1970 to 0.2 ha per capita in 2010. Moreover, the extraordinary industrialization of agribusiness has undermined the resilience of the global agriculture system. Large scale operations employ practices that diminish ecological integrity and community resourcefulness, preventing any productive long-term use of the land (Edwards & Shultz, 2005). Although conventional practices produce high yields at low costs, they compact and erode the soil depriving it of essential properties such as aeration and organic matter needed for productive longevity (Reganold, Papendick, & Parr, 1990). Furthermore, synthetic fertilizer is a major amendment utilized by industrial farms with its use rising by 233% from 32 Mt in 1970 to 106 Mt in 2015 (IPCC, 2015). Synthetic fertilizer is a large source of carbon dioxide emissions which is expected to worsen the effects of climate change (IPCC, 2014). In addition, the Millennium Ecosystem Assessment (2005) analyzed the state of the earth's resources to find that the demand of agriculture will grow by approximately 70-85% in the future, causing stress on water, biodiversity, and other ecosystem services. The report makes note of the \$2.6 billion cost to the United Kingdom in 1996 resulting from damage caused by poor agriculture practices such as water pollution and eutrophication, soil damage, and loss of biodiversity (Millennium Ecosystem Assessment, 2005). To help avoid such negative consequences, the authors recommend that decision-makers "...invest in agricultural science and technology aimed at increasing food production with minimal harmful trade-offs..." (Millennium Ecosystem Assessment, 2005, p.11). In light of the deficiencies of the global agriculture system, a number of alternative farming schemes are being promoted, notably in Canada, to promote sustainability.

As part of the broader 'relocalization' movement, direct-marketing farms have gained widespread popularity throughout Canada. This study defines direct-marketing farms as agricultural operations which are organic, small-scale (under 50 acres), local (selling products within the municipality

in which it operates), and sell directly to consumers without the use of intermediaries. While direct-marketing farms are not proven to reduce emissions associated with agricultural production and consumption. It does, however, offer a suite of other benefits. These include food security, self-governance, and climate change adaptation. However, despite its many advantages, direct-marketing farms will never be adopted widely unless they can be based on a feasible business model that will permit long-term viability. Models such as direct-market farming are worth exploring to investigate whether they offer a more sustainable way forward.

1.2 Research Question

The objective of this thesis is to provide an answer to the overarching inquiry: *What strategies could be employed by direct-marketing farmers to procure a Sustainable Farming Livelihood?* A Sustainable Farming Livelihood is a term developed in this study that combines the well-established Sustainable Livelihoods Approach with indicators of wellbeing as suggested by emergent wellbeing indices. From this inquiry, another question arises: *How do direct-marketing farmers currently define success?* This secondary question is an object of the investigation in itself but is also nested within the broader, overarching inquiry. The study is approached with, and written within, a Canadian context.

1.3 Overview of Methodology

The research methodology is informed by both secondary and primary research. First, a literature review was undertaken in order to ascertain the current opportunities for, and challenges posed by, direct-market farming. From this review, various ways of assessing wellbeing for direct-marketing farmers were considered to develop criteria that could be applied to a Sustainable Farming Livelihood. The possible strategies that direct-marketing farmers may employ to achieve a Sustainable Farming Livelihood were then addressed. Second, a series of direct-marketing farms in Southwestern Ontario were investigated in a case study approach in order to discover the best practices currently employed by

direct-marketing farmers to achieve a Sustainable Farming Livelihood. This well-known case study methodology is based on the works of Robert Yin (1994). Franklin and Blyton (2011) were also drawn upon since they focus specifically on methods based on sustainability. Semi-structured interviews and participant observation were used to gain insight into the farming operation and design. A more detailed description of the methods used for the case study is offered in Chapter 4.

1.4 Assumptions

This thesis has two major embedded assumptions. First, it assumes that direct-market farming is sustainable and that the implementation of direct-marketing farms should be encouraged to foster sustainability. Direct-market farming is presented as a more sustainable farming method compared to the current globalized system. Large-scale, industrial agriculture employs harsh chemicals and heavy machinery in order to mass produce farm products while risking the long-term health and productivity of arable land. In contrast, direct-marketing farm systems often use organic and traditional practices to protect soil health required for the continuous production of food. Also, direct-market farming is considered to be a climate change adaptation strategy for Canadian communities. The countries that Canada depends on for food exports have experienced climate-related crop loss in the past and such experiences are expected to continue, and possibly worsen, in the future. Thus, Canada can safeguard its food security by initiating domestic production of crops and meat. Although direct-market farming is not assumed to be a complete substitute for the global agriculture system; it is assumed to be a viable and essential insurance policy.

Second, it is assumed that direct-marketing farmers are suffering from a lack of income and would benefit from strategies aimed at raising their income or to help cope with their current income. A small wage is believed to discourage people from becoming direct-marketing farmers and to disallow current direct-marketing farmers to continue their career paths. However, by providing these farmers

access to the practices of similar farmers that have proven to result in beneficial outcomes, it is assumed they will be better able to construct a Sustainable Farming Livelihood. In turn, it is also assumed that although many direct-marketing farmers are not currently earning a living wage, they have enough experience to dictate which practices have resulted in positive, and possibly economically beneficial, outcomes. By investigating the best practices of multiple farmers, this thesis aims to develop a larger and more comprehensive inventory of many best practices will be formulated. The resulting document is expected to be of aid to direct-marketing farmers so they may construct a business and farm plan based on well-developed research.

1.5 Contributions

Academically, this study will fill a current gap in the literature pertaining to how one may generate a sustainable and economically viable livelihood as a direct-marketing farmer. Many studies recognize the environmental, and sometimes social, cultural, and economic, importance of direct-marketing farms but there is a lack of data suggesting ways in which to design a long-lasting, viable enterprise to support a transition toward such a system. At times, enterprises that seem to be accomplished in terms of economic sufficiency are noted in the literature but the basic elements of a successful model are not explained. As direct-marketing farms quickly gain popularity throughout Canada, it is important to understand how they can be sustained.

In terms of its wider applications, by investigating the requisite elements of a business model the findings may encourage more people to consider generating their own sustainable livelihood. This is essential if direct-market farming is to be made an attractive career option. Although much of the current literature cites direct-market farming as respected but unprofitable, there is a significant lack of research investigating the possible ways in which to address its economic downfalls. Ideally, the findings

of this research can be used to strengthen and broaden the local food hubs, specifically direct-marketing farms, emerging in the area.

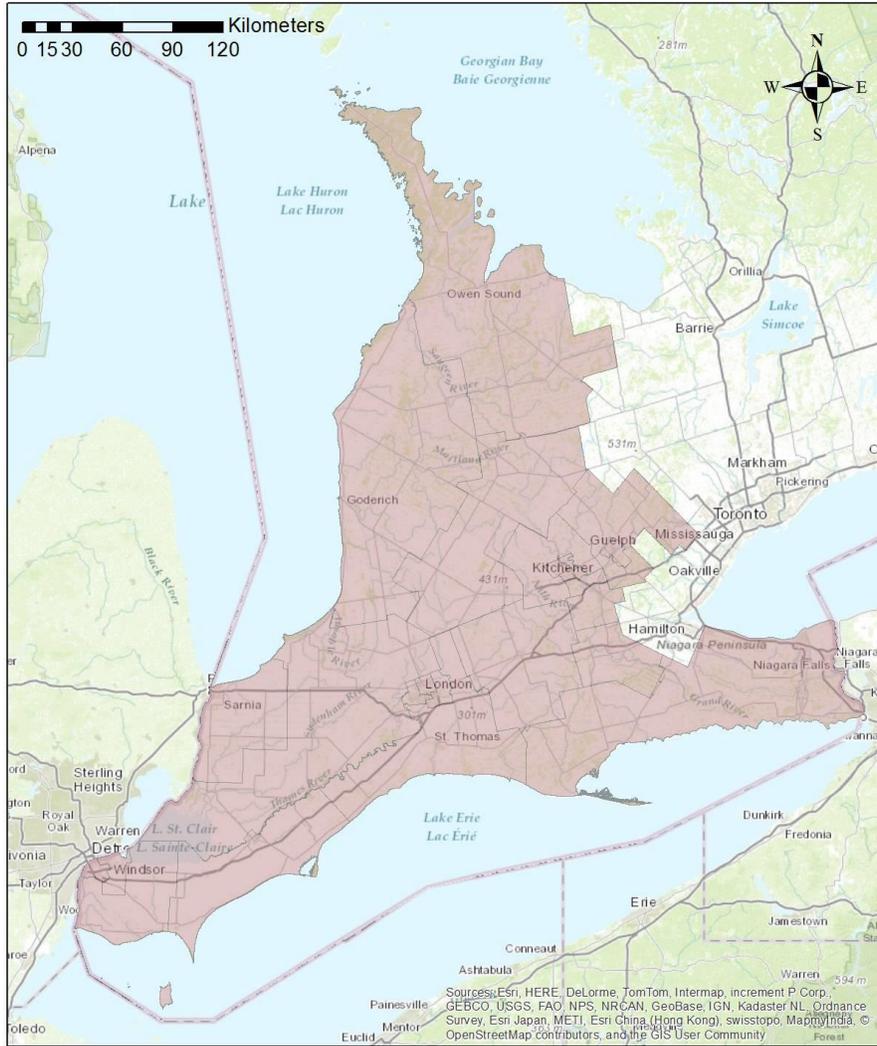
In a practical sense, current direct-marketing farmers can consider various strategies based on the findings from this research to enhance their enterprises. Others, who are not yet food producers may be encouraged to become involved in the direct-market farming movement by initiating their own enterprises. Additionally, the establishment of robust and sustainable direct-marketing farms will not only benefit farmers, but also the communities in which they operate since the surrounding area will be better equipped to withstand shocks to the global food system and provide sustenance to its population. As a more desirable food system becomes essential for health and wellbeing, the means in which to successfully establish such a system becomes equally important.

1.6 Boundaries

The logistical boundaries of the study focus on geography, time, and units of analysis. To begin, the systems boundary in a physical sense is Southwestern Ontario (see Figure 1.1). Canada as a whole will be explored in the literature review. However, a case study approach will then be taken to add to the validity and practicality of the study. The farmers included in the case study had to meet certain qualifications in order to be considered. They each sell their products or services directly to the consumer. This ensured that they could be considered 'direct-marketing farmers'. They also had to operate farms that were small in scale which, for the purposes of this study, was considered to be under 50 acres. There was also a time limit on the distribution and collection of data. The interviews and participant observation were completed within six months, between May 2014 and October 2014. This limited time frame may have limited the number of farmers involved in the research and, in turn, the reliability of the study's results. However, depth was chosen over breadth: eight direct-marketing farmers were interviewed with four of them involved in participant observation. Although only eight

farms were investigated closely, this is a relatively large sample size, in regards to the number of direct-marketing farms operating in Southwestern Ontario.

Figure 1.1: Map of Southwestern Ontario



Southwestern Ontario

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1.6.1 Limitations

A combination of semi-structured interviews and participant observation were used in the primary research portion of this study. The interviews are limited to the responses of the interviewees which

may be saturated in bias or discomfort caused by the pressure associated with answering questions (Bryman, Bell, & Teevan, 2012). Interviews are also time-consuming in nature and occupy a great deal of the researcher's time while only reflecting the information and perceptions provided by one person. To address this limitation, the interviews were paired with participant observation to help extend the amount and reliability of the information collected (Bryman, Bell, et al., 2012). However, since the observations are overt, reactive effects may have occurred in which the people under study modify their behaviour to be what is considered more acceptable in order to avoid negative judgements (Bryman, Bell, et al., 2012). Lastly, the use of a case study approach is also often criticized for its inability to be generalized since the results may only be applied to the people or location associated with the case study itself (Bryman, Bell, et al., 2012).

1.7 Thesis Organization

This thesis is organized into seven chapters.

Chapter 1 has introduced the reader to the purpose, significance, boundaries, and intended contributions of the study.

Chapter 2 discusses the instability of the global agriculture system and the ability of direct-market farming to make up for its deficiencies. The inadequacy of liberal capitalist measures of success are also discussed, and alternative views of success as identified by wellbeing indices and the Sustainable Livelihoods Approach are offered. The chapter concludes with the development of a new term, Sustainable Farming Livelihood, which includes criteria derived from wellbeing indices and the Sustainable Livelihoods Approach.

Chapter 3 reviews current movements that exist and operate outside of the liberal capitalist model and may be used by direct-marketing farmers to foster a Sustainable Farming Livelihood. The

strategies offered by the Maker Movement, Open Source Ecology, and the Creative Economy are summarized at the end of the chapter.

Chapter 4 describes the methodology of the study which includes a case study of eight farms in Southwestern Ontario in order to ascertain the best practices of direct-marketing farmers in terms of achieving a Sustainable Farming Livelihood.

Chapter 5 relays the findings from semi-structured interviews and participant observation with eight direct-marketing farmers in Southwestern Ontario. The ways in which the farmers define success and various strategies and practices are identified that the farmers employ to achieve such success

Chapter 6 investigates the relative ability of direct-marketing farmers to achieve a Sustainable Farming Livelihood in light of the strategies noted in Chapter 3 and the best practices identified in Chapter 5.

Chapter 7 concludes by providing an overview of the study and recommends considerations for future research.

Chapter 2: The Challenges and Opportunities for Direct-Marketing

Farmers

2.1 Introduction

Direct-market farms are gaining popularity throughout Canada as their characteristics are believed to make up for the deficiencies currently embodied by the global food system. For instance, direct-marketing farmers typically employ environmentally-benign farming methods; local farms foster a sense of community and greater socialization among neighbours; and the modular, small-scale model fosters food security within the agriculture system. Nevertheless, there are trade-offs involved for farmers who join the direct-market farming movement such as trading economic prosperity for achieving personal happiness. The existing literature lacks a comprehensive, well-researched, and detailed understanding of the ways one might design a direct-marketing farm in order to achieve a sufficient income as well as other goals of personal, community, and environmental wellbeing. This chapter examines conventional liberal-capitalist notions of success (which are largely equated with financial wealth) and compares them to emerging wellbeing indices and the Sustainable Livelihoods Approach which view success using a holistic lens. Criteria for a Sustainable Farming Livelihood are then presented, followed by an exploration of the ways in which direct-marketing farmers may meet said criteria. With this, an understanding of what best practices should be implemented into a business plan meant to achieve a Sustainable Farming Livelihood will be discovered.

2.2 The Unsustainable Global Food System

Traditional forms of agriculture underwent notable changes throughout the 20th century. By the 1950's, traditional agriculture had been replaced by what is now known as 'conventional agriculture' (Reganold, Papendick, & Parr, 1990). Major technological advancements such as agrichemicals and new crop

varieties, along with management practices that required less human labour, characterized the changeover (Reganold, Papendick et al., 1990). The rise of monocrop production came shortly after as inputs such as pesticides and fertilizers enabled farmers to grow a crop on the same field for sequential years without experiencing pest outbreaks or diminished nitrogen reserves (Reganold, Papendick, et al., 1990). Nevertheless, this system operates at the cost of long-term environmental and social welfare. Primarily, industrial agriculture practices have a significant impact on soil health by diminishing soil fertility (La Trobe & Acott, 2000). Declining soil productivity has been attributed to heavy dependence on chemical inputs such as pesticides, herbicides, and fertilizers since pests are able to build resistance to these inputs (La Trobe & Acott, 2000). Intensive tillage is also commonly employed on large-scale, industrial farms in which the soil is transferred and the topsoil is removed. As a result, tillage erosivity increases along with tillage depth, worsening the impact on soil productivity (Van Oost, Govers, De Alba, & Quine, 2006). Tillage ultimately deprives the soil of its essential properties, such as aeration and organic material, and diminishes nutrient levels. The short-term gains of industrial agriculture are valued but they significantly increase the possibility of an instable future in terms of food prosperity and security.

The social costs of industrial agriculture are also significant. Firstly, mechanized farm practices lead to a reduction in traditional agriculture knowledge as the number of people employed to work on farms has drastically dropped in recent years. Statistics Canada (2014) has reported a decline of 9,800 people employed in agriculture between 2008 and 2013. If the global food system is to experience a form of collapse, the vast majority of the global population would undergo a major disruption in food provisioning. Moreover, while communities lose familiarity with traditional farming techniques, they also lose a part of their cultural heritage. In *Agri-Culture: Reconnecting People, Land, and Nature*, Jules Pretty (2002) noted, "In the earliest surviving texts on European farming, agriculture was interpreted as two connected things: *agri* and *cultura*, and food was seen as a vital part of the cultures and

communities that produced it” (p.12). Pretty (2002) proclaims that when people no longer tend the earth themselves, they simply view agriculture as another thing to be consumed at any cost (Petty, 2002). There are also health implications as research has shown a link between industrial farmworkers (along with the consumers of the farmed products) and an elevated risk of cancer due to pesticide use (Horrigan, Lawrence, & Walker, 2002). Research into pesticide poisoning is also quite extensive with an estimated 2 million people affected each year globally, and about 10 000 casualties, with most occurring in developing nations (Horrigan, Lawrence, et al., 2002; Eyer, 2003). Besides the various deficiencies of industrial land use, yearly production of high food yields in many nations is dwindling in response to climate change events. According to Parry & Rosenzweig (2004), future interactions between temperature, precipitation, effects of CO₂ increase, and availability of adaptation measures create various changes in global crop yields under each Special Report on Emissions Scenarios.

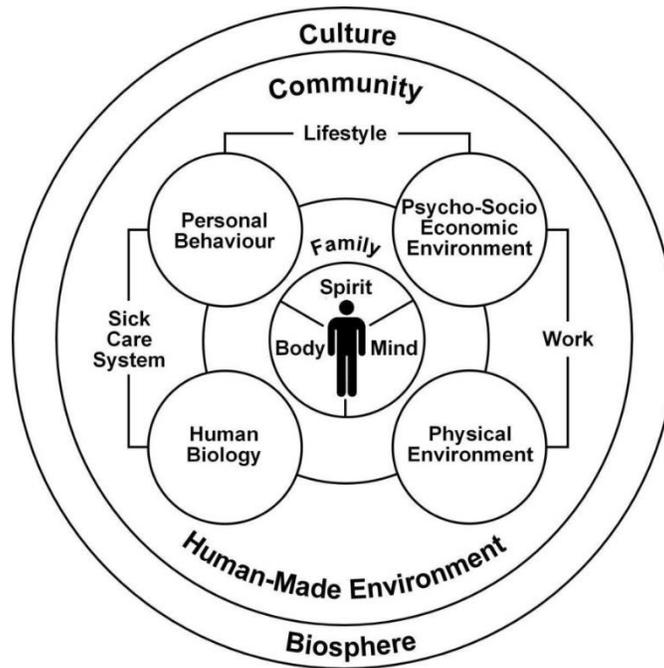
2.3 Direct-Market Farming as an Alternative Food System

Although the local food movement has emerged for a variety of reasons such as an increase in health concerns and food justice, an Ipsos North America (2006) survey found that the top two benefits of local food, in the form of direct-marketing, recognized by Canadians are its ability to help strengthen the local economy and its ability to support producers in their communities. Farmer’s markets in Canada have increased twofold since the late 1980’s (Irshad, 2010). Currently, there are about 500 farmer’s markets in Canada with Ontario farmer’s markets increasing from 60 in 1991 to 132 in 2007 (Irshad, 2010). Restaurants and related enterprises like ‘farm stays’ have also grasped onto direct-market farming by offering locally grown, in-season menu options to their customers (Irshad, 2010). To achieve even greater self-sufficiency, groups such as *Vancouver Island Heritage Food Service Co-operative* on Vancouver Island are attempting to create complete regional value chains in which the production, processing, packaging, and distribution of food occurs within a single region (Irshad, 2010).

2.3.1 Healthy Communities

Perhaps the popularity of direct-marketing farms can be attributed to its far-reaching and comprehensive benefits. These farms contribute to environmental, economic, and social welfare, on both an individual and societal scale. This notion is captured in the fact that direct-market farming contributes to what was famously laid out by Trevor Hancock in his Mandala of Health. The Mandala of Health is a "...biophysical socio-environmental model of health [which] incorporates the natural and social sciences, the individual, the family, the community and sociality in a holistic ecosystem..." (Hancock & Perkins, 1985, p.8). It was chiefly created as a teaching tool for health science students and the general public to ensure their adoption of a holistic approach to health care (Hancock & Perkins, 1985). The model is visually conceptualized as a sphere with the individual existing in the centre (see Figure 2.1.). The health of the individual is influenced by four factors: human biology, personal behaviour, psycho-social environment, and the physical environment (Hancock & Perkins, 1985). The lifestyle of the individual is next in the model. Lifestyle in this context does not refer to personal behaviour but, rather "...it is personal behaviour *as influenced and modified by, and constrained by, a* lifelong socialization process, and by the psycho-social environment..." (Hancock & Perkins, 1985, p.8). Both the individual and lifestyle exist within one's community. As the community influences and supports the individual, it has a major effect on his or her health (Hancock & Perkins, 1985). The human-made environment is shown next in the model which includes systems like energy and agriculture. Finally, the model recognizes that each of these components are positioned within a wider culture. The Mandala of Health is not a new concept. It has been used by academics and professionals as a model for health for decades. A system that promotes health within each dimension of the model can be said to be a desirable system. One such example might be that offered by direct-marketing farms.

Figure 2.1: The Mandala of Health (Hancock, 2007)



2.3.1.1 The Mandala of Health and Direct-Marketing Farms

The Mandala of Health model clearly demonstrates that any attempt to improve human wellbeing must take into account two factors: the lifestyle and personal behaviour of the individual, and the individual's physical and social environment (Hancock & Perkins, 1985). Similarly, *The Blue Zones* by Dan Buettner (2008) found that the longevity of one's life is intimately affected by their personal actions and external environment. For example, he found that individuals live happier and longer lives by eating nutrient rich food, creating a strong social network, and finding a purpose or career one finds personally satisfying. Direct-marketing farms possess a unique ability to beneficially contribute to both an individual's lifestyle and environment. Firstly, small scale, food-based enterprises often require a great deal of human labour to carry out organic, non-mechanized techniques. Those people who spend time tending the land of such enterprises reap multiple benefits that contribute to their individual wellbeing. For instance, a study by Rachel Kaplan (1973) on the psychological benefits of urban gardening found that gardeners primarily enjoy their work as it offers them relaxation and a sense of accomplishment. Those

who derived the most satisfaction from involvement in a garden were those who are innately content in natural environments (Kaplan, 1973). Thus, employment on a local farm offers a great opportunity to people who enjoy wilderness but find themselves in an urban environment. Additionally, the act of gardening is known to benefit people suffering from low self-esteem and poor social skills (Bellows, Brown, & Smit, 2004). Bodily health may also be protected through the rise of direct-marketing farms as possible food illness outbreaks such as E.coli are contained. Currently, food illness in a region's agricultural supply affects the local population and consumers in countries which import the affected food (Buzby and Roberts, 1997). However, rather than spreading an infected harvest throughout the world, local produce will only impact the local population. The source of the contamination may also be identified more quickly in a local context.

Furthermore, the availability of direct-marketing farms contributes to the health of the surrounding communities which unavoidably impacts the health of individuals. With direct-marketing farms, communities gain a controllable food source which is paramount in a time of global climate change and the widespread unsustainable use of land resources. If the global food system was to experience a disturbance, communities with local food sources will be better equipped to sustain themselves. Additionally, direct-market farming has been found to enhance socialization between community members through its mere existence. Academic studies show that people living in close proximity to urban green spaces are more likely to develop strong social ties with one another (Taylor, Wiley, Kuo, & Sullivan, 1998; Okvat & Zoutra, 2011). The relationship between farmers and customers is also improved as a result of direct-market farming. By communicating straight to the customer, farmers are able to foster a sense of responsibility and build personal relationships with the customers (Direct Marketing Association, 2015). High quality products are typically a by-product of direct-marketing since the farmers are selling their harvest to friends and neighbours (people who know who to hold accountable for the quality of their purchased goods). In turn, consumer interest and loyalty is

maintained. In modern society, personal relationships between producers and consumers are rare and yet, direct-market farming inherently nurtures their formation. As direct-market farming fosters a healthy, innovative, and convivial community, residents can enjoy a healthy lifestyle and engage in healthy behaviours.

Extensive academic research has also explored the ways in which direct-market farming is environmentally beneficial. First, the agricultural designs employed by such farmers include agronomic innovations that focus on maintaining the long-term wellbeing of the land. Permaculture, which refers to the practices of designing an agroecosystem to work with the earth's natural processes rather than against them, is one such innovation that has been highly acclaimed amongst urban gardeners and small-scale farmers (King, 2008). Though gaining much popularity in recent years, it was first introduced in Havana in 1993 (Viljoen, Bohn, & Howe, 2005). Various books such as *Principles & Pathways beyond Sustainability* by Holmgren, *The Permaculture Way: practical steps to create a self-sustaining world* by Bell, *Permaculture in a Nutshell* by Whitefield, and *The basics of permaculture design* by Mars have surfaced since the early 2000's, along with websites like *permacultureprinciples.com* and *permaculture.org*. The emergence of permaculture literature showcases the popularity of the design while also aiding in the accessibility of its principles and 'know how'. Accordingly, many groups throughout Canada are working to promote the use of permaculture designs in local homes, gardens, and urban spaces. Local farm businesses have also taken to permaculture methods such as Main Street Market in Kingston, Ontario, Everdale in Toronto, Ontario, and Our Ecovillage in Shawnigan Lake, British Columbia.

David Holmgren (Holmgren Permaculture Design for Sustainable Living, 2002), the co-originator of the permaculture design, defines permaculture as "...consciously designed landscapes which mimic the patterns and relationships found in nature, while yielding an abundance of food, fibre and energy for provision of local needs" (para. 3). Rather than working against nature by terminating pests with

pesticides or altering the composition of the soil with fertilizers, permaculture works with the earth's natural processes to create a stable system (King, 2008; McManus, 2010). As the ecological system evolves, the organisms within the system are able to navigate the changes and activities in order to survive and flourish (McManus, 2010). Thus, the system is able to demonstrate its own evolutionary tendencies to promote long-term prosperity and usefulness without producing waste (King, 2008). Further, the system is regarded for its many functions and interconnections rather than for a single output or operation, allowing the whole to become greater than the sum of its parts (King, 2008). Those who aspire to develop a permaculture design carefully analyse the configuration of the site such as its dimensions, microclimate levels, slopes and contours, marginal edges, and drainage patterns (McManus, 2010; Palmer, 2013). An agricultural layout is then designed based on the results of the analysis and the identified flows and connections (Palmer, 2013). Inputs are limited as organic gardening is a fundamental part of permaculture (Drylands Permaculture Farm, 2013). The crop diversity is an essential element of the design as it prevents possible disturbances from affecting the entire system. Nevertheless, permaculture is not the only design utilized by local agriculturalists. Small plot intensive farming, agroecology, companion planting, and square foot gardening are examples of other common techniques. These methods follow many of the same principles as permaculture in which relationships between organisms are key, diversity is valued, and the long-term fertility of the soil is sought after.

A number of academic studies have also concluded that direct-market farming produces less greenhouse gas emissions than large-scale, industrial farms. The Food Miles Report acknowledges the relationship between climate change gases and the production, packaging, and transportation of food (Paxton, 2011). While human labour is replaced with machinery on industrial farms, the operations become more energy-intensive (Paxton, 2011). Concerning transportation, the report cites a study from the German Wuppertal Institute that analyzed the environmental cost of transporting various food. One example was strawberry yogurt and the study found that, when considering production, transportation,

and packaging processes, a truckload of 150 grams of strawberry yogurt travels a total of 1005 kilometers and uses over 400 litres of diesel to reach a distribution outlet in southern Germany (Paxton, 2011). As a conclusion, the Food Miles Report suggests farmers re-examine the potential of local agriculture and diversified production (Paxton, 2011). Other studies have found similar results. Smith (2005) noted that many policies aimed to reduce the greenhouse gas emissions associated with agriculture advocate for locally produced and consumed food via consumer awareness, support for local initiatives, etc. Pirog, Van Pelt, Enshayan, and Cook (2001) also stated that shorter transportation distances from local food systems reduced the use of fuel and subsequent greenhouse gas emissions, compared to the global, conventional system. Nevertheless, these studies, and many others, also remark on the possibility of direct-market farming to have an adverse or neutral effect on greenhouse gas emissions. For instance, an article published in *Freakonomics* reported that the localization of agriculture, which is done through direct-marketing farms, requires more inputs and, in turn, more carbon emissions (Sexton, 2011). The debate concerning carbon emissions and direct-marketing farms versus industrial agriculture is discussed further in Chapter 2.4.

Direct-marketing farms are also prized for their ability to inspire culture. From gardening methods to culinary techniques, such farms promote the preservation of traditional food knowledge. Rather than relying on modern machinery, small-scale farmers revert back to time-honoured techniques like stomping on garlic greenery to encourage a larger bulb or planting symbiotic plants in close proximity to aid in their development. Local farmers will also typically engage in traditional practices like preserving, canning, and pickling their produce. The knowledge and skills needed to perform these activities are offered by local farmers as well. For example, Little City Farm (2014) in Kitchener, Ontario hosts yogurt making, preservation, and jam and jelly workshops. Promoting such practices has an impact on culture by redefining beliefs, goals, and customs of society. Little City Farm also opens its home for public events, encouraging the community to join the local food movement. This is not

atypical behaviour of local farmers. Fourfold Farm in Guelph, Ontario, hosts an annual music festival, plays agriculture themed movies in their barn, organizes strawberry socials, and offers pesto-making workshops (Sumner, Mair, and Nelson, 2010). A defining characteristic of local farmers is their desire to celebrate their harvest. This is particularly interesting since “celebration is one of the clearest expressions of culture...” (Sumner, Mair et al., 2010, p.59). Potluck dinners, festivals, farm tours, and food demonstrations are familiar events held by local farmers and enjoyed by the community. As direct-marketing farmers and advocates reshape the dominant culture, they also acclaim their values and principles in ways traditionally used to rejoice one’s heritage.

2.4 Challenges and Debates Surrounding the Direct-Marketing Farm Model

Despite their benefits, direct-market farms are not always deemed as the best alternative food system. As is true with all complex systems, there are trade-offs. One of these is the inability of small farms to achieve economies of scale. As farms increase in size and scale, the initial costs are spread more thinly throughout the production process. Thus, the outputs of larger operations effectively require fewer resources proportionately given economies of scale (Paul and Nehring, 2003). For this reason, the farm products can also be sold at lower prices (Paul and Nehring, 2003). Nevertheless, Norberg-Hodge, Merrifield and Gorelick (2002) argue that large operations still harbour hidden subsidies and great environmental costs. In many countries, larger farms receive billions of dollars in tax money which is spent on research into chemical and biotech agriculture, infrastructure, long distance transportation, and global communication facilities (Norberg-Hodge, Merrifield, et al., 2002). The subsidies undermine a localized food system which does not need global communication or transportation networks as they have no use for them. Norberg-Hodge, Merrifield et al (2002) report, “...if the direct subsidies now devoted to global food were shifted instead to locally produced foods, then consumers would quickly find that the least costly food on market shelves is local and organic” (p.74). Furthermore, the popularly-held idea that global food is less costly than direct-marketing agriculture is not a fact, but an

illusion (Norberg-Hodge, Merrifield, et al., 2002). Food that has been industrially produced and globally transported has enormous environmental costs paid by society as resources are deteriorated and species are lost. Accounting for these damages, large-scale agriculture can adversely affect more environmental goods and services than locally-produced food.

Currently, scepticism also surrounds the idea that local agriculture production results in fewer greenhouse gas emissions. Much of the scepticism can be attributed to the tomato example illustrated by AEA Technology and Environment for the Department for Environment, Food, and Rural Affairs in 2005. The well-known example that is often used to argue the case against local food production notes that growing tomatoes in the United Kingdom requires far more energy than importing tomatoes from Spain, by road, into the United Kingdom (Smith, Watkiss, Twedde, McKinnon, Browne, Hunt, Treleven, Nash, Cross, 2005). Nonetheless, the results of the tomato case study only suggest that there are situations in which importing non-native or out-of-season produce is more efficient, in energy terms, than growing it locally, in the UK (Smith, Watkiss, et al., 2005). The report also states that the example is not meant to suggest that purchasing tomatoes from Spain is more sustainable since a full life-cycle analysis would be required to accurately compare production systems (Smith, Watkiss, et al., 2005). Moreover, the study states that the results of the tomato example only apply to specific crops like salad and soft fruit which are produced with additional heating (Smith, Watkiss, et al., 2005).

Edwards-Jones, Canals, Hounsome, Truninger, Koerber, Hounsome, Cross, York, Hospido, Plassmann, Harris, Edwards, Graham, Day, Temos, Cowell, and Jones (2008) took a closer look at greenhouse gas emissions from local and global food production by including life cycle analyses in their study. They found that life cycle analyses often include different boundaries and phases of the food chain, even when analysing the same product. For example, while one study reports locally produced apples in Sweden to be more energy efficient than imported apples from New Zealand into Sweden, another study suggests the opposite to be true (Edwards-Jones, Canals, et al., 2008). The contradiction

lies in the system boundaries and phases of the food chain used in each analysis. Even further, life cycle analyses should be spatially explicit to realize unique localities. On-farm activities should also be taken into account as the biological and chemical processes from soil make a major contribution to greenhouse gas emissions (Edwards-Jones, Canals, et al., 2008). Given the many inconsistencies with the definition, scale, and assessment of 'local', Edwards-Jones, Canals, et al (2008) conclude, "... it is currently impossible to state categorically whether or not local food systems, where crops are produced and consumed locally, emit fewer greenhouse gases than non-local food systems" (p. 270). However, the many other profound benefits of local food and direct-marketing farms is something that has been amply demonstrated in the academic literature and in practice.

2.5 Assessing Success, Sustainability, and Human Wellbeing

2.5.1 Challenging Classical Economic Assumptions about Success

The number of local food initiatives is expanding in Canada although they are still present in only pockets of the country. In 2009, a study by The Canadian Co-operative Association (2009) identified 2,314 local food initiatives in Canada with the majority located in Ontario. However, these local food ventures are not generally seen as lucrative enterprises. In Canada, those who own, or are employed by, direct-marketing farms typically receive a small wage and work long hours. A Wisconsin study, for example, analyzing the ways in which to create a good quality livelihood on a market vegetable farm found that owners of a garden under three acres, known as a market garden, receive an hourly wage of approximately \$4.96 (Hendrickson, 2005). Human labour hours on the same gardens averaged around 2,000 per year while payroll amounted to between 0% and 42% of gross sales (Hendrickson, 2005). A recent report from 2010 found that eight urban farms in Vancouver collectively produced \$128,000 worth of produce (Schultzbank, 2012). This would result in each farmer earning \$16,000 a year or \$8.30 an hour in net sales. *The Tyree*, an online news hub in British Columbia deemed David Catzel as the

poster boy of urban agriculture. He earns \$12.00 an hour while new farmers employed at the same enterprise as Catzel receive \$10.00 an hour (Tracey, 2009). Financial institutions in Canada are also often reluctant to lend funds to direct-marketing farmers since they do not comprehend their financial models such as community supported agriculture programs (Edge, 2013). As direct-marketing farmers continue to receive such a meagre income, they will not be able to support themselves with a viable and sustainable livelihood.

That said, the use of conventional indicators of success, such as hourly income, salary, and GDP, have several environmental and socially adverse consequences. Liberal-capitalist societies are driven by profit generation and capital accumulation and, as such, cherish such activities at the expense of sustainability (Næss, 2006). As the economy continues to grow while the global ecosystem remains constant, society begins to face an ecological crisis. Resources are depleted and contaminated, compromising their productivity and quality for future generations. At the same time, this mainstream lifestyle of materialism has a negative impact on one's individual and community wellbeing. *The Overworked American: The Unexpected Decline of Leisure* by Juliet Shor is a popular book among Americans and Canadians alike as they experience a similar lifestyle. The book explains the tendency of North American people to work excessively long hours to purchase unnecessary goods. For instance,

The American home is more spacious and luxurious than the dwelling of any other nation... The typical family owns a fantastic array of household and consumer appliances: we have machines to wash our clothes and dishes, mow our lawns, and blow away our snow (Shor, 1991, p.3).

While elaborate possessions are collected, "...the market for free time hardly exists in America" (Shor, 1991, p.3). Success in the sense of economic prosperity has come at the cost of relaxation, time spent alone or with one's family and friends, proper child rearing, physical health, and adequate sleep (Shor, 1991). Consequently, Shor (1991) notes the rise of reported stress levels associated with employment

where 30% of adults report being stressed every day and even more admit to being highly stressed once or twice a week.

An academic study by Diener and Biswas-Diener titled *Will Money Increase Subjective Wellbeing?* found similar results. It established that, although an increase in income benefits the very poor, the desire for a great amount of money by the middle- or upper-class diminishes one's potential for high subjective wellbeing (Diener & Biswas-Diener, 2002). This is echoed by Tim Jackson (2009) in his book *Prosperity Without Growth*; he notes that further proliferation of consumer goods does not increase happiness once subsistence needs have been met. Further, economic growth in developed nations has not been accompanied by a similar rise in subjective wellbeing (Diener & Biswas-Diener, 2002; Cummins, Eckersley, Pallant, Vugt, & Misajon, 2002). In Canada, GDP grew by 28.9% from 1994 to 2010 but reported quality of life improved by only 5.7% with a dramatic 24% decrease between 2008 and 2010 (Canadian Index of Wellbeing, 2013). Diener & Biswas-Diener (2002) conclude their study by advising people in developed countries to focus on goals besides material wealth in order to bolster subjective wellbeing.

One community leader in Kawartha Lakes, Ontario who promotes sustainable living, Frank Smith, shares a similar understanding of material wealth. Smith is the president of Towards Balance, a non-profit organization consisting of various environmental projects. He initiated the creation of several community gardens in the area, as well as a local food charter and food coalition to begin a diverse conversation about a sustainable food system. Smith believes people place too great of an importance on money, and not enough on other values like fresh food, that are more likely to have a positive impact on their wellbeing (personal communication, Aug. 1 2014). To address this conundrum, Smith suggests developing a common understanding of 'money'. "It's all a language thing... I came to understand that we use the same words... but the same word means a different thing" (Smith, personal communication, Aug. 1 2014). While some view money as the only important thing in society, others attribute little

meaning to money. However, if people were to set aside the value of money and learn the value of fresh produce, community companionship and vibrancy, and environmental productivity, they may also learn that money does not define happiness. A shared language should be developed so society may share an understanding of what truly benefits them. Smith explains,

In our country, money has come to define *everything* and that's a huge mistake because you lose everything that's important if you do that. Once that language is in place, people will come to these markets and be ready to buy all the produce that we can put in (personal communication, Aug. 1 2014).

People might decide that local food from direct-marketing farms is worth their money once a mutual language and understanding is developed about the comprehensive benefits of locally produced food for local consumption. Nevertheless, although Smith speaks about money having little meaning, he recognizes that money has great meaning to those who are struggling to afford basic needs like housing and food. At that point, he advocates for communities to find innovative structures such as local dollars that permit people to purchase one dollar for 25-50 cents to be spent at the local market. Smith is very hopeful that such changes will arise in the near future. "We're moving in the area of food in the right direction... we're very close to critical mass [in Kawartha Lakes] where everything will suddenly flop and move to the local food stage. It will start to change everything" (Smith, personal communication, Aug. 1 2014).

2.5.2 Is it a Matter of Financial Success or Sustainability?

In *Nicomachean Ethics*, Aristotole (350BC/2006) mentions the works of Anaxagoras, a Greek philosopher, and his belief that the happy man may seem strange to most people since they judge his outward features, such as appearance and possessions, as those are all they perceive. Nevertheless, it is not

necessarily one's external appearance and possessions that evoke happiness. David Catzel, the urban gardener depicted earlier in Chapter 2.5.1 agrees with this notion as he claims,

It's more than a job, it's a great lifestyle. I get to watch my kids eat kale off the plant, and I can't put a price on that. It's a nice environment. There are good people around. We work from home so my commute is a walk out the door. The work is really rewarding and very diversified so there's not much chance of getting bored (Tracey, 2009, p.2).

Catzel reveals a happy attitude and contentment with his livelihood despite his meagre income. As academic and lay studies continue to identify deficiencies in the mainstream measures of success and wellbeing, society is witnessing the emergence of alternative indicators including the Human Development Index, Happy Planet Index, Organization for Economic Co-operation and Development's (OECD) Better Life Index, Gross National Happiness, and the Canadian Index of Wellbeing. The users of these alternatives still consider economic vitality in their assessment of success and wellbeing. However, they also include social, physical, and environmental health as indicators to construct a more holistic account of human welfare. This is a necessary step if there is to be long-term community health and sustainability as it is clear that people require fulfillment and vigor in multiple dimensions of their existence, beyond but still including economic sufficiency, to achieve a happy and healthy lifestyle. The aforementioned indices and their domains of wellbeing are listed in Table 2.1. Note that each dimension has various indicators that are not listed here. Furthermore, there is currently a variety of wellbeing indices being used globally and, thus, Table 2.1 is only meant to offer a sample of such indices.

Table 2.1: Wellbeing Indices and Associated Domains (United Nations Development Programme, 2014; The New Economics Foundation, 2014; OECD, 2014; Centre for Bhutan Studies & Gross National Happiness Research, 2014; Canadian Index of Wellbeing, 2014).

Wellbeing Index:	Domains:
Human Development Index	Life expectancy, education, income
Happy Planet Index	Experienced wellbeing, life expectancy, ecological footprint
OECD's Better Life Index	Housing, community, education, civic engagement, health, life satisfaction, safety, life-work balance, environment, jobs, income
Gross National Happiness	Living standards, time use, ecological diversity and resilience, community vitality, good governance, culture, education, health, psychological wellbeing
Canadian Index of Wellbeing	Community vitality, democratic engagement, education, environment, healthy populations, leisure and culture, living standards, time use

The insufficient income of direct-marketing farmers means that they do not have the necessities to support their social and environmental success into the future. Thus, the Sustainable Livelihoods Approach is another relevant tool for analyzing and assessing the wellbeing of farmers. Influenced by the ideas of Amartya Sen, the World Commission on Environment and Development defined the meaning and requirements of sustainable development in the Brundtland Commission report in 1987 (Solesbury, 2003). This announcement was later conceptualized by Robert Chambers at the Institute of Development Studies into what is now known as the Sustainable Livelihoods Approach (Solesbury, 2003). In 1992, Chambers and Conway (1992) published a working definition of a sustainable livelihood:

A livelihood comprises the capabilities, assets (stores, resources, claims and access) and activities required for a means of living; a livelihood is sustainable which can cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable livelihood opportunities for the next generation; and which contributes net benefits to other livelihoods at the local and global levels and in the short and long-term (p.7).

However, there is often debate in the literature concerning the clarity of the definitions of sustainable livelihoods, citing them as unclear and narrow (Scoones, 1998). In response, Ian Scoones (1998) and the Institute of Development Studies proposed an updated definition:

A livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks, maintain or enhance its capabilities and assets, while not undermining the natural resource base (p.11).

Traditionally, the Sustainable Livelihoods Approach is applied to rural communities in developing nations as a way to understand the livelihoods of very poor citizens (International Fund for Agricultural Development, 2014). To develop an understanding of the approach, a Sustainable Livelihoods Framework was designed which can be visually represented as a web-like shape, placing people in the center. Next to the people are the resources available to them such as their skills, health, social support, education, and natural resources. Potential vulnerabilities and challenges to resource access appear next and may include political shocks, natural disasters, and employment opportunities. The policies and institutions that affect people are also included in the framework, along with the outcomes people wish to achieve and the livelihood strategies they may employ to achieve them.

The Sustainable Livelihoods Framework can also be very easily applied to direct-marketing farmers in developed countries like Canada. Worldwide, small-scale farmers have similar assets and capital, and are inflicted with common vulnerabilities in which they are seeking to reduce in similar

ways. For instance, a farmer in the agricultural community of Guelph, Ontario with rented land, earning less than minimum wage, struggling with weather variability and supply management regulations, while trying to support his or her family should fit very well in the Sustainable Livelihoods Framework. As a result, the framework is no longer only fitting for developing nations. As mentioned, the Sustainable Livelihoods Framework is a component of a broader initiative known as the Sustainable Livelihoods *Approach* which considers what must be done in order to provide a durable livelihood to those in need. It focuses on seven flexible principles that should be adapted to the situation in which it is being applied. The principles of the Sustainable Livelihoods Approach include: maintaining focus on the people, understanding that many stakeholders are involved, understanding that livelihoods are dynamic, building on people's strengths rather than their problems, examining the link between policies and insights from local people, encouraging partnerships, and aiming for sustainability (International Fund for Agricultural Development, 2014). However, what is most notable about the Sustainable Livelihoods Approach is its goal of financial sufficiency, rather than wealth. Returning to the works in Aristotle (350BC/2006), the philosopher references Anaxagoras and his belief that a happy man is not a rich man; rather, he is a man that lives temperately, with moderate belongings, or non-necessities. The Sustainable Livelihoods Approach is similar to the philosophy of Anaxagoras as it seeks to aid people in attaining the essential requirements for health and contentment, and not more.

Defining success primarily through economic growth is no longer acceptable to many people and communities concerned with questions of health and sustainability. This is evident through the growing popularity and use of alternative wellbeing indices and the Sustainable Livelihoods Approach. Success is evolving to include greater wellbeing and, as such, a new matrix of human welfare must be developed. Recently emerging wellbeing indices would suggest the inclusion of three spheres besides economic fulfillment. They are as follows: a healthy biophysical environment, social capital, and physical health. These domains will be used in this thesis as criteria for a Sustainable Farming Livelihood. The

Sustainable Livelihoods Approach also takes economic fulfillment into account as it is designed to eradicate poverty and provide people with resilient employment. The Scoones definition of a sustainable livelihood suggests that such a livelihood would comprise the capabilities and assets required for a means of living while fostering innovation by being able to cope with and recover from stress and shocks and maintain one’s capabilities and assets. These dimensions of a sustainable livelihood will also contribute to the criteria of a Sustainable Farming Livelihood. A description of each Sustainable Farming Livelihood criterion is available in Table 2.2.

Table 2.2: Description of Sustainable Farming Livelihood Criteria Domains (United Nations Development Programme, 2014; The New Economics Foundation, 2014; OECD, 2014; Centre for Bhutan Studies & Gross National Happiness Research, 2014; Canadian Index of Wellbeing, 2014; Scoones, 1998).

Criteria:	Description:
Environmental health	A healthy biophysical environment contributes to the overall wellbeing of individuals and society. This includes the sustainable use and treatment of resources to ensure future health and productivity.
Social vitality	A healthy social environment contributes to the overall wellbeing of individuals and society. This includes kindly relationships and cooperation between people, building and celebrating culture, civic engagement, education, and time use.
Physical health	A Sustainable Farming Livelihood would promote, rather than deteriorate, the physical health of individuals.
Economic sufficiency	A Sustainable Farming Livelihood would provide the worker with the necessary funds to meet basic needs.

Innovation	A sustainable livelihood must be able to react to challenges and shocks to the system in a way that avoids further vulnerability and instability.
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2.6 Conclusion

The global, industrialized food system is currently vulnerable to failure. In response, communities globally, and noticeably throughout Canada, are demanding and creating alternative agriculture systems. Of these, direct-marketing farms have become impressively prominent. Direct-marketing farms offer comprehensive and far-reaching benefits that help to foster healthy communities. Nevertheless, farming in such a way is not currently a lucrative way-of-life as direct-marketing farmers typically receive an income less than minimum wage. If defined using criteria from the liberal capitalist model, direct-market farmers are not likely to ever achieve success. Nevertheless, direct-marketing farmers are not limited to the aspirations associated with liberal capitalism and may instead operate within an alternate framework. In recent years, alternative measures of success and wellbeing have emerged. Though these measures still consider economic fulfillment, they also consider social, physical, psychological, an environmental indicators of human welfare. Besides wellbeing indices, the Sustainable Livelihoods Approach offers another tool for analyzing the wellbeing of direct-marketing farmers. The approach is concerned with discovering ways to provide the poor with livelihoods that generate long-term, sufficient incomes based on innovation. By combining the domains of recently emerging wellbeing indices with the Sustainable Livelihoods Approach, this chapter offers a new set of criteria of which to assess the welfare of direct-marketing farmers. One who fulfills each of the criterion is said to have achieved a Sustainable Farming Livelihood. The criteria are listed and described in Table 2.2. The criteria for a Sustainable Farming Livelihood are more achievable than the requirements demanded by the liberal capitalist model as a Sustainable Farming Livelihood highlights economic sufficiency rather

than economic wealth. Thus, direct-marketing farmers should strive to achieve a Sustainable Farming Livelihood. The possible strategies that direct-marketing farmers may adopt in order to fulfill the criteria, specifically a sufficient income, are discussed in the next chapter.

Chapter 3: Achieving a Sustainable Farming Livelihood as a Direct-Marketing Farmer

3.1 Introduction

This chapter explores the ways in which society is redefining measures of success and economic sufficiency, specifically through the Maker Movement, Open Source Ecology, and Creative Economy. These alternative cultures and economies are operating outside of the current liberal capitalist model. Given that direct-market farming is not a viable livelihood option under the liberal capitalist model, the potential for it to flourish within alternative models must be examined. The key practices employed by the Maker Movement, Open Source Ecology, and Creative Economy will be reviewed in order to understand how they may apply to direct-marketing farmers seeking a more sustainable and economically viable livelihood. In Chapter 6, the results from this chapter will be linked to the case study results for the purpose of discovering best practices and strategies to be employed by direct-marketing farmers to achieve a Sustainable Farming Livelihood.

3.2 The Maker Movement

The Maker Movement has both technical and social origins. In part, the movement began as an inevitable companion of new technologies such as 3D-printing and the Arduino microcontroller which presented new opportunities in prototyping and fabrication tools (Dougherty, 2013). Quite rapidly, people with shared interests and skills formed, or joined, online communities in what Dale Dougherty (2013), creator of *Make* magazine, calls a 'hyper-local effort'. In some ways, the Maker Movement is a recreational outlet for those who wish to play with new technologies to create something of their own, possibly leading to innovative entrepreneurship (Dougherty, 2013). As a social phenomenon, the Maker Movement is closely connected to re-localization. People are understanding themselves as makers and

finding a deep connection to the lifestyle of past societies who grew the ingredients for the food they cooked themselves, built their tools and furniture, and created their own clothing (Dougherty, 2013). In this sense, the Maker Movement is a renewal of past history and culture which intrinsically embodies elements of self-sufficiency and the use of local talents and resources. Nevertheless, irrespective of one's reason for joining the Maker Movement, all makers share a common search for an alternative to the current economic system which labels people as consumers. Rather, makers find value in their creative abilities and willingness to learn and share new skills (Dougherty, 2013).

Like artists, they are motivated by internal goals, not extrinsic rewards. They are inspired by the work of others. Most importantly, they do not wait until the future to create and make. They feel an urgency to do something now— or lose the opportunity to do it at all (Dougherty, 2013, p.1).

One example, TechShop (2015), a business with several locations throughout the United States has emerged from the Maker Movement and defines itself as a “playground for creativity” (para.1). TechShop offers a space for makers to develop or improve their skills by providing fabrication and prototyping studios. A learning center is also available to foster a knowledge sharing environment. The Chief Executive Officer of TechShop, Mark Hatch, has written a book titled *The Maker Movement Manifesto* to share what he believes to be the top nine strategies for innovation amongst makers. All the same, Hatch (2014) advises his readers to make changes to the manifesto to make it more personal. The first strategy, and undoubtedly the most important, is: make something. Making allows people to express their uniqueness as humans as opposed to simple consumers of the global economic system (Hatch, 2014). Secondly, makers should share, give, and participate. This means that creative results, whether they are goods, ideas, or services, should be offered in some way to others. Hatch (2014) suggests that the act of making is not complete without the act of sharing. Learning is also key to the Maker Movement; makers should continually learn more about their makings and share their

understandings (Hatch, 2014). Lifelong learning will aid in the growth and longevity of the Maker Movement. The other strategies in the manifesto include being playful with your making, gaining access to tools, supporting others in the movement, and accepting change in the maker journey.

The Do-It-Yourself spirit of the Maker Movement is expressed and celebrated in 'Maker Faire' festivals. In *Innovations* journal, Maker Faire is described as a "...joyous gathering of tinkerers, hobbyists, garage inventors, and others" (Stangler & Maxwell, 2012, p.6). In recent years, Maker Faires held in American cities such as Detroit, Michigan and New York, New York have attracted about 100 000 attendees (Dougherty, 2012). Due to the popular demand of Maker Faires, Mini-Maker Faire events are now held in cities throughout North America. For instance, the Southern Ontario cities of Waterloo, Ottawa, and Toronto are planning Mini-Maker Faires for this year, 2015. Fostering a more widespread acknowledgement of the Maker Movement is valuable for broadening the scope of the initiative. Rather than just reaching individual makers in their workshops, Maker Faires, and Mini-Maker Faires alike, encourage entire communities to recognize their creative potential. Community self-sufficiency and relocalization becomes much more attainable as involvement in the Maker Movement increases. Rather than depending on external institutions for sources of information, resources, and services, community members are able to rely on the skills and aptitudes of one another. The sharing of knowledge and tools that occurs within Maker Faire events also helps to sustain the Maker Movement. Makers are encouraged to always learn more about their makings while passing on their knowledge to others. This way, future generations will have access to information allowing them to proliferate the movement.

Although makers find value in their end products, much of the value in making is found in the act of making itself. Dougherty (2012) explains, "... [makers] are finding their lives enriched by creating something new and learning new skills" (p.11). The great majority of makers join the movement as an escape from the mainstream lifestyle of consumerism (Dougherty, 2013). Makers do not want to be

defined by what they buy and, instead, see a greater purpose of creating and learning within themselves (Dougherty, 2013). Besides personal fulfillment, the Maker Movement fosters social wellbeing through its inherent socialization piece. Makers interact while they share their new ventures and products, tools, and information. This is most obviously expressed in the aforementioned Maker Faire festival. Furthermore, makers foster a sense of cultural wellbeing by sharing a common recreational activity which encompasses education, art, and language. Shared beliefs and actions, along with the transmission of knowledge, nurtures a maker culture that one may identify with and enjoy a sense of belonging. The combination of innovation and end products, or services, often leads makers to pursue the establishment of an enterprise. With this, makers may find economic success. Nevertheless, makers are not likely to suffer from a lack of economic prowess. Those who share tools and have access to workshops and Maker Faire festivals do not require a large amount of funds to engage in making. Besides, those who make goods themselves simply do not need as much money as those who purchase goods from external providers.

Direct-marketing farmers have much to learn from the Maker Movement. To begin with, direct-marketing farmers and makers already share a common belief system. They both have a deep desire to create, not only for its own sake but also as an act of defiance against the liberal capitalist system. Small-scale, organic farming is physically exhausting and time consuming work, those who adopt such a livelihood do so based on deep seeded sociopolitical beliefs. As direct-marketing farmers do not make an ample, or often even sufficient, income, the act of making is valued for its cost effectiveness. If a farmer is able to make something him- or herself, he or she avoids paying a third party for labour and new materials. For example, restoring old infrastructure into livestock housing, building greenhouses and cellars, and assembling fencing from reused materials are all acts of making that help farmers save their money. Understanding how to do such acts requires a great deal of kinesthetic learning. However, once these skills are developed they can be quickly employed in times of crisis such as the destruction of

animal housing during a storm. Making skills can also be passed onto future generations and shared with neighbouring farms. As is often done in the farming community, farmers can barter their skills as a way to further save money. Such a trade is very much in line with the Maker Movement which advocates for the sharing and distribution of knowledge. The Maker Movement also highlights the importance of sharing tools. Direct-marketing farmers could once again save funds by purchasing only a few tools, and sharing what they have with others while others also share with them. Sharing is an important part of the social makeup of direct-marketing farming as a culture is created through similar lifestyles, goals, and kindly relationships. If a direct-marketing farmer adopted the strategies of the Maker Movement, he or she would ultimately reduce farming costs, increase on-farm resiliency, educate future farmers, and create a vibrant barter culture.

3.3 Open Source Ecology

The Maker Movement and direct-market farming align well with the ideas and concepts associated with Open Source Ecology. Open Source Ecology was founded by Marcin Jakubowski in 2003. After finding his Ph.D. in fusion physics to be useless, Jakubowski (2014) started a farm in rural Missouri. His farm tractor proved to be a constant nuisance as it was often broken. After spending much of his time and money on fixing the tractor, Jakubowski (2014) found himself to be 'broke' as well. Upon deciding that there must be a more affordable and liberating way of keeping a tractor on his farm, Jakubowski was determined to build one himself. With some help, he was successful. The do-it-yourself spirit grew and evolved and, in 2006, an 'earthbag hut' was built from earthly materials like wood and mud (Open Source Ecology, 2015). In 2007, Open Source Ecology contributors named the Missouri property 'Factory E Farm'. The 'E' stands for 'Euler's number' to imply the disruptive approach of Open Source Ecology (Open Source Ecology, 2015). Factory E Farm is a hub for ideas, collaboration, and technology to grow. A brick press prototype, which makes Compressed Earth Bricks, was created shortly after. In 2008, the Global Village Construction Set was coined. The construction set "...is a modular, DIY, low-

cost, high-performance platform that allows for the easy fabrication of the 50 different Industrial Machines that it takes to build a small, sustainable civilization with modern comforts” (Open Source Ecology, 2015, para. 1). The Global Village Construction Set is commonly compared to a LEGO construction set. Rather than building individual machines, the Global Village Construction Set is intended to build machine construction systems that build other machines. Since the brick press, a tractor and soil pulveriser have been built and all three machines were used in 2013 to construct a micro-house. The machines in the Global Village Construction Set are also hyper-modular so parts may be taken out and used in other places. For example, the power cube in the tractor may be removed and used to power the brick press. In 2015, Open Source Ecology is nearing the completion of the power cube, 3D printer, and laser cutter, with more than twenty five other machines in the beginning stages of development. Completion includes not only a working prototype, but also an open enterprise model.

The mission of Open Source Ecology is to create an open source economy. The current mainstream economy creates artificial material scarcity in which, although production is efficient, distribution is inefficient (Jakubowski, 2014). Thus, while some people enjoy abundance, others suffer from deprivation. Those in poverty cannot afford to purchase, or have access to the technologies and comforts required to live a modern life. As such, they are without the means to escape their impoverishment. Even those who do own modern technologies must spend more money to fix or replace them once they are broken since the product designs are very complicated. To make matters worse, the large companies that have the information about the technologies spend massive amounts of money to protect the information from being shared (Jakubowski, 2014). However, under the open source economy model, open access to information and tools that are needed to build and operate affordable (and often repurposed) machines would be available to all people. Widespread adoption of Open Source Ecology would then significantly reduce global-market induced material scarcity.

A direct-marketing farmer operating within an open source economy may very well achieve a viable livelihood. Currently, direct-marketing farmers cannot often afford to purchase or upkeep much of the equipment and infrastructure necessary for farm work. If sharing and bartering networks do not exist around the farmer, he or she operates at a significant disadvantage. However, with Open Source Ecology and the Global Village Construction Set, direct-marketing farmers would have access to the blueprints and materials required for the construction of necessary machinery and tools. Under such a system, the farmer is thus liberated from dependence on prohibitively expensive farm machinery and conventional modes of production. Operating using Open Source Ecology approaches, therefore, allows the farmer to save money. Jakubowski (2014) found constructing machinery and infrastructure himself to be much more cost effective than purchasing the same equipment from outside providers. This is especially true when factoring in repair, maintenance, and replacement costs. Open Source Ecology and the anticipated open source economy will effectively break the cycle of economic and material insufficiency of direct-marketing farmers by offering them a way to cost effectively secure their own materials.

3.3 The Creative Economy

Direct-marketing farms cannot be fostered in the neoclassical economic model as it favours efficiency at the cost of sustainability. Thus, such farms must exist in an alternative economic climate. Opportunely, as digitalization, intellectual property, leisure culture, and globalization become more relevant in modern society, and cities are no longer limited by physical constraints, economic vitality has begun to be influenced by creative enterprises (Florida, 2005; Tepper, 2010). Cue the rise of ‘the creative economy’. Richard Florida (2005), has declared, “...creativity has become *the* principal driving force in the growth and development of cities, regions, and nations” (p.1). Those in the creative class are typically well educated and place great value on creativity and difference (Florida, 2002). Businesses actively try to attract these people and cities with such businesses are seeming to thrive (Florida, 2002).

Thus, people are becoming the driving force behind economic prosperity, opposed to the traditional view that geography initiates economic growth (Florida, 2003). This new view is known as the 'human capital theory'. Although written about by Florida, he makes special note that its roots are grounded in the work of Jane Jacobs (1984) who declared several times in *Cities and the Wealth of Nations* that economic life is excited by creativity. Robert Lucas (1988) is also mentioned by Florida as he agrees with Jacob's analysis. In *On the Mechanics of Economic Development*, Lucas (1988) explains that, if economies were truly developed by means of production, people and capital would locate outside of cities where land is cheaper and profits can be amplified. But, cities do not organize in this way and thus people are willingly choosing high cost modes of production (Lucas, 1988). "What can people be paying Manhattan and downtown Chicago rents *for*, if not for being near other people?" (Lucas, 1988, p.39).

If direct-marketing farmers can fit into the creative class, their likelihood of achieving greater economic success may be significantly improved. The most distinguishing characteristic of someone in the creative class is in the nature of their work; namely, to create meaningful new designs or forms that are "readily transferable and broadly useful" (Florida, 2002, p.18). Direct-market farming is inherently concerned with creating new agriculture forms or re-introducing forgotten designs that are new to the modern age. For example, 'Small Plot Intensive farming was created by Wally Satzewich and Gail Vandersteen about 6 years ago as an alternative to the large-scale, mechanized farming model ("SPIN Farming", 2014). Small Plot Intensive farms are sub-acre in scale, and are segmented into a series of beds that are two feet wide by 25 feet long (Christensen, 2007). The beds have paths one foot wide between them so the farmer has enough space to work in the beds with his or her hands and tools. While this system is non-technical and inexpensive to operate, it is production-based as it generates a wide variety of plants in a small space that is close to markets ("SPIN Farming", 2014). Those who wish to initiate a business based on Small Plot Intensive farming have access to much literature about marketing, revenue targeting formulas, and business concepts ("SPIN Farming", 2014). Small Plot

Intensive farms are highly transferable and useful as they can, and have been, implemented globally and in a variety of sites such as backyards, community gardens, and market gardens.

Florida (2002) also discusses a second group of the creative class called creative professionals who “...engage in creative problem solving, drawing on complex bodies or knowledge to solve specific problems” (p.18). Such professionals tend to be highly educated and employed in sectors like finance, law, and healthcare (Florida, 2002). Although rural farming remains a role that people typically acquire through family ties, direct-market farming, especially in urban areas, is now an area of study offered in universities across Canada. In Southern Ontario, for instance, the University of Guelph offers an Organic Agriculture Major and a Sustainable Urban Agriculture Certification. Also, Trent University offers a Bachelor of Arts or Science in Sustainable Agriculture and Food Systems in which students work with rooftop gardens and market the produce in a local café business. Such degree programs are often a blend of social and scientific studies, allowing the students to develop a holistic understanding of the agricultural system. As a result, they are highly educated as they become able to draw upon their knowledge, identify cross-disciplinary connections, and determine integrative solutions.

Nevertheless, for these students to enter the creative class, they must contribute further by offering an innovative and novel strategy or approach to address a particular concern. Locally-based farmers recognize problems like food security, food safety, and climate change, and attempt to combat them with entrepreneurship in various forms. Satzewich and Vandersteen created the first urban SPIN farm in response to the technical complications of mechanized farming (“SPIN Farming”, 2014). Although drawing upon traditional knowledge, ‘permaculture’ is another creative alternative founded by Bill Mollison and David Holmgren in the 1970’s. Noticing the adverse ecological effects of industrial agriculture, Mollison and Holmgren developed a way to design agriculture systems so they can work along with natural systems (King, 2008). Once the permaculture approach was proven effective, the founders wrote a book, *Permaculture One*, which has had great success. Mollison established a training

system in Tasmania, The Permaculture Institute, and Holgrem launched a business in consultancy. Thus, direct-marketing farmers may very well be talented, educated people who think and act creatively to offer novel strategies and fit into the creative class. The interest and subsequent demand for their outputs is amplified as the farmers locate in cities with like-minded, creative people.

If direct-marketing farmers were more often recognized as being part of the creative class, they would have a greater chance of obtaining a Sustainable Farming Livelihood. In order to gain greater recognition, direct-marketing farmers should pursue two tasks. Firstly, they must find a creative niche. Those gaining success as part of the creative class are offering society something new, useful, and transferable. Like Satzewich and Vandersteen creating the first urban Small Plot Intensive farm, direct-marketing farmers must create a product or service that satisfies these three criteria. Thus, finding a unique niche becomes paramount. Secondly, direct-marketing farmers must also place themselves in an area in which their niche is in demand. Becoming part of the creative economy would suggest inhabiting a creative city in which their products would be of value to other creative people. Thus, it is wise to conduct market research to determine the location of the most viable customer base. This way, operating within the creative economy will ultimately supply direct-marketing farmers with a Sustainable Farming Livelihood via market demand.

3.4 Maximizing Productivity and Value

When locally-based farmers, Jean-Martin Fortier and his wife, Maude-Hélène, decided it was time to settle down in a community, they knew their market garden would have to start generating enough of a profit to support a family. Rather than renting more land and investing in machinery, they remained small-scale. “To grow better instead of bigger became the basis of our model”, says Fortier (“The Market Gardener”, 2014, para.6). Such a strategy has worked for the couple as, after only a few years, they operate a productive and profitable locally-based farm in St. Armand, Québec. Fortier (2014)

explains, “Every week, our market garden now produces enough vegetables to feed over 200 families and generates enough income to comfortably support our household” (p.2). Fortier produces nearly \$140 000 a year from a 1.5 acre property with a profit margin of approximately 45% (“Urban Farmer Curtis Stone”, 2014). This is a substantial profit, especially when compared to other direct-marketing farmers in North America. Although the Fortiers were not concerned with making an excessive salary, they were interested in engaging in meaningful employment that enabled them to work outdoors in the summer and take the winter months off for recreational purposes (“Urban Farmer Curtis Stone”, 2014). Often, direct-marketing farmers do not have the time or money needed to enjoy leisure activities or, many times, even rest. Fortier wishes to change this gloomy reality for aspiring small-scale farmers by passing on his knowledge in his recently published book, *The Market Gardener*.

Addressing the question, *Can You Really Live off 1.5 Acres?* Fortier’s answer is ‘yes’.

A well established, smoothly running market garden with good sales outlets can bring in \$60 000 to \$100 000 per acre annually in diverse vegetable crops. That’s with a profit margin of over 40% - a figure that stacks up favorably against margins in many other agricultural sectors (Fortier, 2014, p.3).

To achieve such results, Fortier recommends adopting a biologically-intensive approach which refers to the maximization of crop yields from minimal acreage while maintaining, or bettering the quality of soil (Fortier, 2014). Working with this approach, Fortier’s crops are grown in permanent raised beds where the soil can continuously be amended with organic matter rather than wasting manure or compost by dumping it on paths. Raised beds are particularly important for Canadian farms that experience a cold spring season since they help the soil to warm more quickly and amplify drainage when the snow melts (“Urban Farmer Curtis Stone”, 2014). In accordance with the biologically intensive approach, the crops are planted close to each other within the beds. “The goal is to space the crops such that their leaves

touch each other when the plants reach three quarters of their full size” (Fortier, 2014, p.7). When the plants reach maturity, their leaves will create a canopy that will suppress weeds and retain soil moisture (Fortier, 2014). A dense garden also saves time, money, and energy. For example, it will take a farmer less time and less material to cover crops with row cover that are close together, rather than spread out.

Permanent raised beds save farmers even more time and money as they do not require a tractor to shape new beds each year. Large machines like tractors and rototillers may be useful for a couple of years but they will eventually compact the soil (“Urban Farmer Curtis Stone”, 2014). This is troublesome for someone who wishes to work the same land for many years or decades. Thus, Fortier is adamant about using appropriate tools. Rather than tilling, Fortier uses a broadfork for deep soil cultivation. Soil aeration is necessary to encourage the plant roots to grow downwards, rather than sideways, since they are planted beside each other (Fortier, 2014). Fortier (2014) labels the two-wheel tractor, or walking tractor, as the ideal power source for a market garden. The walking tractor is more powerful and maneuverable than the typical garden rototiller. It can pivot on spot, dismissing the need for wasteful turnaround land. The walking tractor is also designed to accommodate many attachments such as snow-blowers and hay balers, just like a larger tractor, for a much smaller cost (Fortier, 2014). Another major discovery made by Fortier was the use of tarps to replace rototillers, and save more time. In previous practices, when clearing a finished bed of crop remains and weeds, Fortier would either run a rototiller over the land or pull the plants out by hand. However, one day, he laid a tarp over the ground and found it effectively killed crop residues. Since then, Fortier lays a tarp over finished beds to simultaneously remove weeds and prepare the soil for the next seeding as the tarp creates a beneficial environment for seed germination.

The start-up costs of a small-scale, local farm amounts to \$39,000, notes Fortier (2014). This amount does not include some necessities, such as a delivery vehicle or a mortgage. Nevertheless, a bank loan for \$39 000 at 8% interest will total to only \$9 500 a year, for five years. Compared to

mechanized gardening, this is a relatively small cost (Fortier, 2014). Still, minimizing start-up costs is an important strategy employed by new farmers. It is wise for a farmer to acquire non-essential tools gradually, once he or she can afford them or the operation expands. Many tools can also be purchased secondhand. To save energy costs, harvesting can be completed the morning the crops are needed, rather than the night before. This way, the crops do not need to be refrigerated. Governments in many countries offer grants and loans to new farmers, as well. Fortier's (2014) market garden received financial aid from the government when it first began, increasing its chance of success. Once the garden becomes productive, the production costs must remain low. "Revenue minus expenses equals profit. This simple equation must always be kept in mind... Profit is what ultimately keeps the operation sustainable" (Fortier, 2014, p.10). Many small-scale farmers believe that scaling up production will increase business revenue. However, it must be realized that organic market gardens are limited by land, tools, and techniques that cannot be scaled-up the way a mechanized practice can be. "...if the revenue is finite and you still want profit to be high, this means expenses must be low. This is the logic market gardeners should follow: keep operating at a low cost" (Fortier, 2014, p.10). Avoiding machines will reduce production costs since their initial purchase, fuel, and upkeep are expensive (Fortier, 2014). However, the most effective way to limit operating costs is to avoid dependence on outside labour which can account for about half of production costs (Fortier, 2014).

Direct selling is another key business strategy to be used by local farmers. It permits the farmers to maintain the funds that would have otherwise been given to intermediaries.

Most grocery stores or food markets take a cut of between 35% and 50% of the selling price. The distributor, which transports and handles the product, takes another 15% to 25%. So, a salad that sells for \$2 in the store, the vegetable grower selling through conventional distribution channels makes about \$0.65 (Fortier, 2014, p.11).

A farmer can lose about two-thirds the value of his or her product to an intermediary while a market farmer can retain the full profit. In *Cultivating Opportunities: Canada's Growing Appetite for Local Food* report, the Conference Board of Canada noted the advantage of selling farm goods directly to consumers. Not only do direct-marketing farmers receive higher margins for their products sold, they are also less affected by market fluctuations than mainstream supply chains (Edge, 2013). Furthermore, the social experience of direct-marketing farms contributes to their viability as farmers and consumers create personal relationships with one another and their food (Edge, 2013). Nevertheless, small farms typically choose direct-marketing because "...they lack the volume and stable supply streams necessary to sell to large customers" (Edge, 2013, p.23). Still, those small farmers who wish to sell their products to large purchasers might do so by working together. The report takes note of the co-packing line in Cohn Farms in Bradford Ontario which 30 local farmers use as it enables them to sell their produce to large purchasers (Edge, 2013).

Fortier advises new farmers to consider adopting a Community Supported Agriculture, solidarity market, or farmgate model. He seems to prefer the Community Supported Agriculture model and lists several benefits including guaranteed sales, simpler production plans, risk sharing, customer loyalty, and networking (Fortier, 2014). Adding value to one's products is another way to secure a greater income. A simple way to add value is to leave the leaves on plants to indicate freshness. A bunch of carrots with the leaves intact will sell for more than double the price of carrots without leaves (Fortier, 2014). Fortier (2014) also forces his early crops to grow as early as possible so he can be the first to sell them at market. The rarity of crop also adds value to them. Once again, the Conference Board of Canada report agrees with Fortier. "By offering artisanal and niche local products, retailers can differentiate themselves through unique products that are unavailable elsewhere" (Edge, 2013, p.27). Bringing attention to the high quality of produce from direct-marketing farms, especially as compared to non-local foods, may also increase its value and attract customers (Edge, 2013). Nonetheless, as crops from

direct-marketing farms are often sold at higher prices than food from industrial producers, retailers must find customers who are not particularly price-sensitive (Edge, 2013). To encourage a greater willingness to pay for crops from direct-market farms, it is important to communicate the 'story' behind the food to form a connection between it and potential customers (Edge, 2013). This is a greater challenge for large retailers who collect goods from various farms. Small-scale, direct-marketing farms, however, have the ability to open their farm gates and encourage community members to tour the farms. Meeting the farmers and watching the farm products progress through the growing season invites people to become part of the farm experience. Offering product samples may also attract more customers in the same way that Whole Foods increased local food sales by conducting in-store tastings (Edge, 2013). As local food becomes increasingly popular amongst Canadians, the opportunities for direct-marketing farms continue to grow. Lastly, Fortier suggests that aspiring market gardeners learn the craft before beginning a business. Market gardening is physically and mentally demanding, requiring a lot of time and effort. Spending time in established gardens to gain experience, skills, and know-how, will prepare future farmers for what is to come.

There are several best practices presented by Fortier in *The Market Gardener*, and complemented by the Conference Board of Canada. A major theme is the importance of saving time and money. This can be accomplished through the use of biologically intensive farming methods in which a great amount of produce is grown with minimal resources. Employing appropriate tools and machinery is also helpful to complete a job efficiently with optimal results. To achieve a Sustainable Farming Livelihood, direct-marketing farmers should also keep production costs low. While scaling up is nearly impossible, it is crucial to keep expenses low if one wishes to continue generating a high profit. Removing intermediaries is a third key strategy. Selling farm products directly to consumers enables farmers to keep a higher sale margin as they do not have to attribute money to intermediaries. The final major theme is the effectiveness of showcasing the uniqueness of direct-marketing farm crops. The

widespread belief that locally produced food is fresher, healthier, and tastier is a key advantage of direct-marketing farmers. People appreciate these distinctive traits and might be willing to purchase them at higher prices. Further, adding uniqueness in the form of value-added products also contributes to the customers' willingness to pay. Fortier is acclaimed for his detailed account of his day-to-day practices and strategies to ensure a Sustainable Farming Livelihood in a Canadian context. His suggestions should be carefully considered as the fruitful results are confirmed on his own farm in Quebec.

3.6 Conclusion

Direct-marketing farms are needed to ensure a food secure future for Canadians. However, a detailed, reliable account of the best practices and strategies for direct-marketing farmers to employ in order to secure a viable livelihood is currently missing from the literature. Although some local farmers have revealed their experiences and resulting advice in books and internet webpages, the accounts are descriptive of only one farm. This thesis is meant to address this deficiency and provide a comprehensive document exploring the best practices and common failures of many direct-marketing farmers so newcomers can have a better chance of obtaining a Sustainable Farming Livelihood. This literature review explored three relevant socio-economic movements, namely the Maker Movement, Open Source Ecology, and the Creative Economy. A number of lessons for a Sustainable Farming Livelihood based on direct-market farming can be garnered from this review.

An overarching theme of lowering operating costs was prevalent in the literature. Scaling up is not a great possibility for direct-marketing farmers. Thus, expenses must be kept at a minimum in order to save the income one collects. To achieve this, farmers may adopt a maker lifestyle to avoid paying intermediaries for goods and services. Learning how to create and fix necessities like infrastructure or machines helps farmers to enhance their assets. Sharing one's discoveries, skills, and tools also fosters

social capital amongst farmers and makers, while nurturing social innovation. Being able to lend or receive assistance when a stressor has affected one's farming system allows him or her to address the problem and recover with haste. Drawing upon one's creative abilities is another vital strategy for direct-marketing farmers. Not only does creativity aid in the making process, it also has an impact on marketing and farm management outcomes. Positioning one's business in a creative city characterized by a young, educated population interested in, and capable of, innovation and higher thinking is likely to bolster one's market share. The creative class is interested in creative endeavours, of which direct-market farming very much applies.

Creativity implies uniqueness; farmers must also find ways to be special or differentiate themselves in the marketplace. For example, one could harvest spring crops as soon as possible in order to be the first farmer at the market with newly in-season produce ("The Market Gardener", 2014). Secondly, the *Cultivating Opportunities* report confirmed that customers see value in rare, niche products. Thirdly, education prevailed as a key strategy for direct-marketing farmers. Such farmers should learn traditional techniques, such as carpentry and cooking, in order to become self-sufficient and save money spent on external services. They may also learn how to construct the most necessary tools for farming like housing and a tractor. Open Source Ecology supporters would suggest studying the Global Village Construction Set to understand how to build, operate, and fix machinery. Educating the public is also important because they must understand the significance of direct-marketing farms in order to deem it worthy of their dollars. Educating farmers and consumers provides future generations with a solid foundation in which to build upon. A number of practical farming tips are conveyed in *The Market Gardener* by Fortier (2014), each created with a focus on efficiency and preserving the long-term use of the land. If people wish to farm for their livelihood, they must protect their workplace with gentle tools and practices. Table 3.1 offers a descriptive list of the strategies discussed in this chapter which may help a direct-marketing farm to achieve a Sustainable Farming Livelihood. The following

chapter provides a description of the methodology used in regards to the primary research of this study. Chapter 5 then offers a case study of direct-marketing farmers in Southwestern Ontario and their account of what best practices make for a viable livelihood.

Table 3.1: Best Practices for Achieving a Sustainable Farming Livelihood as a Direct-Marketing Farmer as Suggested by the Literature

Strategy:	Description:
Engage in making/do-it-yourself activities	Create tools, infrastructure, and necessary items to avoid paying intermediaries.
Share knowledge, skills, and farming equipment	Foster a social network in which goods and services can be shared to avoid the accumulation of expensive personal possessions.
Build machinery with possible assistance from the Global Village Construction Set	Build necessary machines such as tractors to lower maintenance and replacement costs.
Find a niche	Offer a product or service that is new and creative.
Find a location in which the product is in demand	Locate the farm operation in an area with many potential customers.
Employ biologically intensive farming methods	Manage productive land in such a way that a great amount of produce can be grown in a small space.
Use appropriate tools and technology to improve on-farm efficiency	Choose tools and farming methods that require the least amount of resources.
Do not rely on intermediaries for any aspect of	Do not employ third-party help in order to

the farm operation	maintain a high profit margin.
Noticeably showcase the uniqueness of the product	Place attention of the uniqueness of the product in terms of freshness, healthiness, and quality, especially when compared to industrial farm products

Chapter 4: Methodology

4.1 Introduction

Direct-market farming in Southwestern Ontario is not yet a widespread phenomenon but there are still a number of such farms scattered throughout the region. This chapter is based on a case-study approach examining eight direct-marketing farm operations. A mixed methods and case study approach were chosen for this primary research project. The following chapter is structured first to explain the mixed method approach. Following this, a description of the case study design is offered including the research tools and recruitment procedures. Finally, a review of the limitations of the methodology is discussed.

4.2 Mixed Methods Approach

Both an inductive and deductive approach were taken during the course of this study. An inductive approach was first taken through grounded research which allows themes, and often theory, to emerge from the data (Straus & Corbin, 1998, p.12). To achieve the goal of this study, ascertainment of the best practices of direct-marketing farmers, the researcher allowed the farmers to explain and demonstrate their farm and business strategies on their own terms. Asking questions against a set of criteria or pre-determined thought may have led the farmers toward certain answers or limited the amount and diversity of data collected.

A basic feature of grounded research is the requirement of 'coding'. Coding involves a process "...whereby data are broken down into component parts and given names" (Bryman, Bell, & Teevan, 2012, p.259). According to Strauss and Corbin (1990), there are three types of coding: open, axial, and selective. This thesis employed open coding in which the data were broken down by reviewing interview transcripts and field notes and giving labels to items that shared a similar theme. The items were then compared and grouped together to form categories. As is characteristic of grounded

research, an iterative approach was taken in which data collection and analysis occurred simultaneously (Bryman, Bell, et al., 2012). Therefore, the new and existing data were compared throughout the research process in a practice known as 'constant comparison' (Bryman, Bell, et al., 2012). With this, the resulting research is very sensitive to differences between emerging concepts and themes. Both the data collection and coding process ended when theoretical saturation was reached.

A deductive approach was later taken in Chapter 6. Deductive is defined as "...an approach to inquiry that begins with the statement of theory from which hypotheses may be derived and tested" (Bryman, Bell, et al., 2012, p.368). The approach begins when the researcher develops a theory or idea to explain a phenomenon (Bryman, Bell, et al., 2012). In this study, criteria were developed to describe the requirements of a Sustainable Farming Livelihood in Chapter 2. Also, in Chapter 3, an inventory of best practices that may explain the achievement of a Sustainable Farming Livelihood by direct-marketing farmers was constructed. In Chapter 6, the analysis, there will be a discussion about how the criteria from Chapter 2 and 3 apply to what came out of the inductive research. This direct comparison will help to acknowledge and confirm which strategies, both from the literature and the primary research, foster a Sustainable Farming Livelihood.

4.3 Case Study Design

Research pertaining to sustainability is exceptional. Unlike most research in other fields, sustainability inquiries must be approached with a "...formal research methodology which can encompass a wide variety of data from a wide variety of sources and disciplines" (Franklin & Blyton, 2011, p.54). This is imperative due to the complex nature of sustainability and its inherent inclusion of diverse societal phenomena, practices, and initiatives (Franklin & Blyton, 2011). A case study design is conducive to sustainability research as it is not limited to the assessment of a single phenomenon or discipline (Franklin & Blyton, 2011). Rather, a case study design allows for the exploration of physical and social

phenomena, especially when the context of the research may be inflicted with several influences and have multiple outcomes (Franklin & Blyton, 2012). Thus, this thesis includes a case study approach when investigating several farms in Southwestern Ontario to allow for the extraction of physical information, such as crop choice and prosperity, and social information, such as marketing schemes. Furthermore, sustainability researchers typically combine multiple methods, or tools, in a single study in order to extract a comprehensive data set (Franklin & Blyton, 2012). A case study design is a significant means to achieve an effective, rigorous, and valid combination of tools (Franklin & Blyton, 2011). The other three prominent research designs in social research did not fit with the purpose of this study. For instance, an experimental approach is mostly used for quantitative research and both cross-sectional and longitudinal research are meant for studies seeking to compare either different cases or one case throughout time which is not the goal of this thesis.

To achieve an academically sound research process, the case study approach taken in this thesis abided by the well-known 'case study protocol' outlined in *Case Study Research: Design and Methods* by Robert K. Yin (1994). The protocol consists of five components, beginning with the need for the study's question to be phrased as a 'how' or 'why' inquiry (Yin, 1994). This study primarily sought to examine *how* a business might be designed to support a direct-marketing farmer with a Sustainable Farming Livelihood. The second component suggests that case studies should state some propositions (Yin, 1994). The basic propositions of this thesis include the notions that direct-marketing farms are something to be desired, and their potential feasibility is worth exploring. Thirdly, a case study must state its units of analysis which, in this case, include the owners, employees, and volunteers of direct-marketing farms within Southwestern Ontario. The fourth component includes the logic linking the data to the propositions; namely whether or not direct-marketing farms are a viable proposition as a sustainable livelihood. The fifth component, approaches used for interpreting the findings, is based on a grounded theory approach and a deductive approach. First, the findings that emerged from the case

study were not compared to other findings or criteria but rather, were coded to develop an entirely new theory. Second, the new theory was compared to the literature to note similarities and differences.

4.3.1 Research tools: Semi-Structured Interviews and Participant Observation

Southwestern Ontario has been chosen as the location of the case study given its historic and current agricultural prosperity. In the late 18th century, after the US War for Independence, many Mennonite families trekked to Southwestern Ontario for its available and inexpensive land (Suderman, 1998). Many settled in the Waterloo Region including present-day Kitchener (Suderman, 1998). Today, approximately 90% of Ontario farms are located in Southern Ontario with much of the dairy, cash crop, and fruit production occurring in the Southwestern fraction (Southern Ontario Tourism, 2014). In recent years, there has been a major increase in local and urban food movements Southwestern Ontario. The case study was supported by semi-structured interviews and participant observation. Using these two sources of case study evidences created a situation of methodological triangulation to assure construct validity (Bryman, Bell, et al., 2012).

To begin the study, semi-structured interviews with direct-marketing farmers were conducted and ranged from 15 minutes to two hours in length and consisted of both narratives and question-and-answer style inquiries. An interview approach was chosen as opposed to other means of data collection as it allowed for story-telling and examples which aided in the in-depth discovery of business strategies. Interviews are also conducive to follow-up questions in which further explanation and details were requested of the interviewees to gain more information when deemed appropriate. An interview guide consisting of a list of fairly specific topics to be covered helped to direct the interview while, at the same time, provided the interviewees with leeway in deciding how to reply (Bryman & Bell et al., 2012). Similar topics and wording of questions were maintained from interviewee to interviewee, although the order of the questions varied.

The narratives allowed the interviewees to tell stories about their lives and other events concerning the operation of their businesses (Bryman & Bell et al., 2012). The raw material derived from the narratives include the connection between people's accounts of events and the sense they make of those connections (Bryman & Bell et al., 2012). The narratives were explored using thematic analysis in which the contents of the stories were analyzed rather than how the story was told (Bryman & Bell et al., 2012). The question-and-answer section of the interview consisted of open- and closed-ended questions. With the open-ended questions, the interviewees were able to answer in their own terms. In contrast, closed-ended questions allowed for the extraction of specific details such as the yearly income of the interviewees. The case study aided in the discovery of four main findings beginning with the motivating factors behind the participants' involvement in direct-marketing farms. Knowing why these people are involved in direct-marketing farms helped to find ways in which to proliferate involvement. Second, the study exposed how the participants define success in terms of their livelihood. Third, the trade-offs associated with adopting the lifestyle of an urban gardener were learned which helped to structure lessons to learn from in order to foster a Sustainable Farming Livelihood. Lastly, the barriers and opportunities to a Sustainable Farming Livelihood were discovered in order to understand what prevents direct-marketing farmers from, and encourages them to, practice their work.

When the participants were initially asked whether or not they would like to engage in an interview, the researcher also inquired as to their interest in being part of an observational study. Thus, the candidates had the choice between participating in the interview, the observational study, both, or neither. If an observational study was chosen, the researcher adopted the role of a participant observer and worked on the enterprise as a volunteer in order to experience the first-hand challenges, rewards, and activities associated with running a direct-marketing farm. Participant observation was essential for this study because it permitted a broad collection of data from sources such as candid conversations and

every-day activities rather than the perceptions of a single interviewed research participant. The researcher remained on site for a minimum of four hours (one half of a work day) to a maximum of 24 hours (four full work days). As an overt study, the other members of the enterprises' social settings were aware of the researcher's role of an examiner. While immersed in the regular interactions with people and participants in their daily activities, the researcher openly wrote down jotted and full field notes while situations and insights unfolded (Bryman & Bell et al, 2012).

4.3.2 Recruitment and Selection of Case Study Sites

To be included in the case study, potential candidates had to meet certain qualifications which would label them as direct-marketing farmers. As relayed in Chapter 1, direct-market farms are defined as organic, small scale (under 50 acres), local (selling products within the municipality in which it operates), and direct (selling products to consumers without the use of intermediaries) agricultural operations. When understood in a linear fashion, each qualification reinforces the other. To begin, the candidates must sell their products directly to the consumers, hence the title 'direct-marketing farmer'. Marketing in such a way helps to satisfy the second qualification of operating at a local level since those who sell directly to consumers often operate locally. Farmers who sell their products directly to consumers through the internet but allowed shipping to addresses outside of the municipality in which the products were grown were not included. Owning a local farm in Southwestern Ontario helped to ensure that the third qualification, being small in scale, is fulfilled. Both successful and struggling farmers were considered since this research is interested in discovering both useful and not useful practices, and the lessons learnt thereafter.

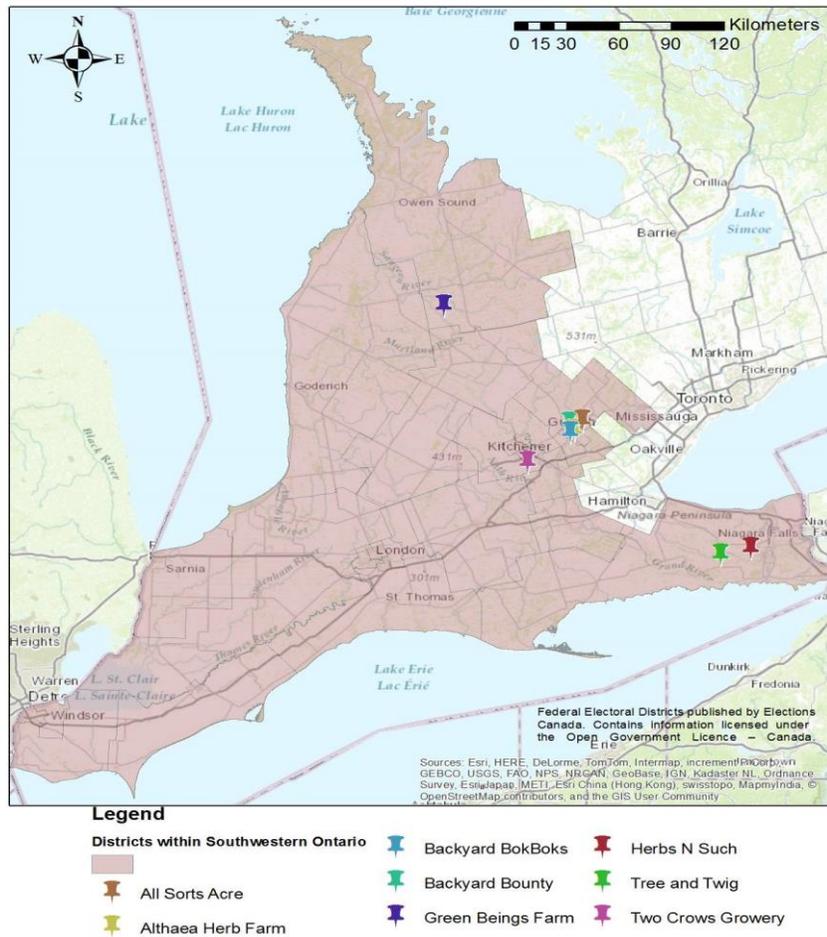
Snowball sampling was employed in which the initial participants provided the names of other relevant actors who were then contacted and asked to be involved in the study (Beck, Bryman, & Liao, 2004). This is a wise approach since those involved in direct-marketing farms are typically part of a

social network and are familiar with one another (Milestad & Darnhofer, 2003). The initial participants were found through internet search engines using key terms such as, “direct-marketing”, “local”, “farm”, and “Southwestern Ontario”. The data from both the interviews and participant observation were collected between May 2014 and August 2014.

A total of eight direct-marketing farms were involved in this research project. The first of these was *Backyard Bounty*, located in Guelph and owned by Robert Orland. The business operated in neighbouring backyards where the land was used to grow vegetables which were then sold in several venues, including Community Supported Agriculture and farmer’s market. The second participant was Gerry Mann, owner of *Herbs N’ Such* in Fenwick. Mann grows herbs, greens, and edible flowers in her backyard and sells her harvest to local residents and restaurants. Linda Crago was referred by Mann and became the third participant. Crago owns *Tree and Twig* in Wellandport, an heirloom tomato greenhouse. She hosts gardening workshops, sells tomato seedlings, and operates a mixed vegetable Community Supported Agriculture program. The fourth participant was Scott Reid, of *Althaea Herb Farm* in Guelph who specializes in herbal teas. Reid is involved in the entire process of making tea, from planting the seed to blending the dried leaves by hand. The teas are sold at the Guelph Farmer’s Market. Jennifer Osborn of *All Sorts Acre* in Guelph was the fifth participant. Starting off as a permaculture gardener, Osborn made a transition toward sheep farming. Osborn sells lamb meat, wool, and felt products, while also conducting workshops and operating a chicken Community Supported Agriculture program. Her products are sold mostly through word-of-mouth and online stores. The sixth participant, Tarrah Young of *Green Being Farm* in Neustadt, was referred by Reid. Young operates a winter Community Supported Agriculture program and produces both vegetable and animal products. Reid also referred the seventh participant, Mike Craig, who initiated a backyard chicken rental business, *Backyard Bok Boks*, in Guelph. Craig supplies all the necessities for raising and caring for backyard chickens for short periods of time so local residents can experience urban farming. The final participant

was Joel Knight of *Two Crows Growery* in Waterloo. Two Crows Growery supplies produce to local markets and restaurants, offers farming lessons to the community, and provides edible landscaping services for local homeowners. The location of each of these participants within Southwestern Ontario can be found in Figure 4.1.

Figure 4.1: Location of Participating Direct-Marketing Farms



4.4 Limitations of Methodological Approach

The methodology of this thesis has few limitations. To begin, while inductive and deductive approaches are neatly defined, it is nearly impossible to conduct research that is purely inductive or purely deductive at any given time (Bryman, Bell, et al., 2012). Although the researcher allowed the farmers to

explain their best practices without being led toward certain themes or conclusions, the researcher was not completely unaware of possible theories that could be applied to the emerging data. Likewise, during the deductive process, the researcher was not completely unaware of previous findings. Furthermore, the case study design is often criticized for its inability to ensure generalizability (Bryman, Bell, et al., 2012). A study of Southwestern Ontario cannot surely be representative of other regions. However, this thesis was not designed to produce generalizations. Rather than existing to create generalizations, case study research offers 'working hypotheses' and the development of concepts and theories (Gomm, Hammersley, & Foster, 2009).

The case study of Southwestern Ontario analyzes eight direct-marketing farms in total. This is mainly due to the fact that direct-marketing farms, although gaining popularity, are not particularly abundant. Every farmer who responded to recruitment agreeing to be a part of the study was included. Nevertheless, if more farmers were involved in the study, more strategies and narratives would have emerged which may have increased the amount of data and conclusions developed. There are also some constraints surrounding the research tools. In regards to the semi-structured interviews, 'interviewer effects' may have been present in which the interviewee gives socially desirable answers rather than genuine responses, or underreports activities that induce anxiety (Bryman, Bell, et al., 2012). The participant observation, as an overt approach, also carries the risk of not allowing the researcher to completely understand the social setting and participants enough to make absolute inferences (Bryman, Bell, et al., 2012). That said, the context of this study is not sensitive and therefore, it is not likely for the participants to alter or moderate their communication with, or behaviour around, the researcher.

4.5 Conclusion

The primary research of this study was approached using a case study design as it lends itself well to sustainability research. Sustainability research requires the use of multiple tools that are conducive to

the collection of information from various disciplines, of both a physical and social nature. In this thesis, semi-structured interviews and participant observation were used to collect the data. The data were coded and constantly compared to ultimately learn the best practices employed on several direct-marketing farms in Southwestern Ontario in order to achieve a Sustainable Farming Livelihood. A grounded research approach was taken as the questions asked, and behaviours observed were not compared to any already existing notions or theories. The next chapter offers an overview of the findings that emerged from the collected data.

Chapter 5: How Direct-Marketing Farmers Define and Achieve Success: A Case Study in Southwestern Ontario

5.1: Introduction

Direct-marketing farmers in Southwestern Ontario have been involved in a diversity of entrepreneurial businesses ranging from the production of heirloom tomato seedlings to the rental of backyard chickens. As the following discussion of the primary findings from eight direct-marketing businesses indicate, this growing industry presents many opportunities and challenges. The farmers identified many characteristics of what they consider to be a successful livelihood and offered numerous strategies in which to achieve it. Still, several barriers to a successful livelihood were also addressed by the participants. The names of the participants, as well as farm locations, farm names, and farm specialities, have been listed with their voluntary consent in accordance with research ethics protocols (see Table 5.1). This table is included for referencing purposes throughout the chapter.

Table 5.1: Information Regarding Research Participants Including the Names of the Farmers, and the Name, Location, and Speciality of their Respective Businesses

Name of Farmer	Name of Business	Location of Business	Farm Speciality
Linda Crago	Tree and Twig	Wellandport, Ontario	Heirloom tomatoes
Mike Craig	Backyard Bok Boks	Guelph, Ontario	Backyard chicken rentals
Joel Knight	Two Crows Growery	Kitchener, Ontario	Assorted vegetables
Gerry Mann	Herbs N' Such	Fenwick, Ontario	Herbs and edible flowers
Robert Orland	Backyard Bounty	Guelph, Ontario	Assorted vegetables

Jennifer Osborn	All Sorts Acre	Guelph, Ontario	Sheep for meat and wool
Scott Reid	Althaea Herb Farm	Guelph, Ontario	Herbal tea
Tarra Young	Green Being Farm	Neustadt, Ontario	Assorted vegetables and various livestock for meat

5.2: How Direct-Marketing Farmers Define a Successful Business and Livelihood

The purpose of this chapter is to describe the best practices employed by direct-marketing farmers in order to achieve a Sustainable Farming Livelihood. To avoid jargon which may lead to confusion on the part of the interviewees, the term ‘success’ was used instead of ‘Sustainable Farming Livelihood’ throughout the interviews. For instance, the participants were asked what practices, given their experience, would make for a successful business and livelihood. If the term ‘Sustainable Farming Livelihood’ had been used in the interview process, the term would have been too directional, thereby limiting the range of the possible responses. In turn, the questions and corresponding answers would each have been driven by a given definition. Rather, the researcher opted instead for a more open-ended’ approach to the interviews thereby allowing participants to provide their own definition of success near the beginning of their interviews. This way, the farmers were also able to answer each question in a more personally meaningful and relevant context.

To understand the best practices described by the farmers, it is important to first understand which goals they are seeking to achieve. Combining the results from each participant, a total of eight major criteria for success were found. They include: sufficient income to support the farm and the farmer, interest from the community in the farm and its products and/or services, fruitful production of products and/or services, contribution to the farmer’s personal happiness, contribution to

environmental health, attainment of goals originally set for the farm business, and discovery of efficient modes of production (see Table). The criteria are listed here in order of frequency of mention amongst participants. For instance, seven out of the eight farmers explicitly mentioned the first criterion whereas only one farmer mentioned the last criterion.

First, *income* was cited as a criterion for success by seven of the eight farmers. When asked how she defines success, Jennifer Osborn of All Sorts Acre (personal communication, July 7 2014) simply answered, “Money. Right now, that is success to us”. Osborn mentioned how, even if other benchmarks of success are achieved, a business cannot continue operating without a sufficient income to support itself and the farmers. Mike Craig of Backyard Bok Boks (personal communication, Aug. 6 2014) also directly stated, “...Did we make a profit? That would indicate success”.

Second, *success* was defined by the degree of interest the local community exhibits towards the farming operation and the products or services in which it produces. This criterion was identified by Orland, Craig, Crago, and Knight. “We’re successful in that we’re popular and have a lot of interest...” (Knight, personal communication, 2014). Linda Crago of Tree and Twig (personal communication, June 13 2014) anecdotally explained,

[Tree and Twig] is successful to me beyond my wildest dreams... For example, I have a big sale on the long weekend in May. The sale starts at eight in the morning and I had people here at seven, and by eight o clock there was a lineup of 30 people. I have hundreds of people that come from everywhere to get my plants.

Third, Knight, Orland, Young, and Osborn identified *evidence of productivity* as a criterion for success. Joel Knight of Two Crows Growery was asked to share a story of a time when he felt successful. He replied,

One of our big clients, he has a ten acre backyard... So we converted three acres for him and we put in thousands of dollars of fruit trees. So, he was growing plums, and cherries, and apricots, kiwis, all this great stuff. It's a beautiful installation. We tailored it to his backyard and we did a 45X45 raised bed area full of vegetables and it was lovely... It was gorgeous and all the fruit trees survived and were blossoming (Knight, personal communication, Aug. 7 2014).

Osborn, along with Tarrah Young of Green Being Farm, stated that they recognized the success of their respective businesses once receiving the meat of their livestock from the abattoir for the first time.

Osborn (personal communication, July 7 2014) shared her experience,

We actually saw [the sheep] hanging there with the heads and everything at the abattoir. The oddest sense of pride like, 'Wow, we did it'. The first time we ate it, the amount of pride of, 'Wow we did this really well'. We felt really successful.

Young's (personal communication, July 30 2014) story of experiencing success is quite similar. She said,

As far as success goes... We got our pork back from the butcher and it was really the first time we had meat of our own that we produced... it was just, 'Wow!' ... There's really success every day when we sit down to eat (Young, personal communication, July 30 2014).

Fourth, a *contribution to one's personal happiness* was also identified as an indicator of success by Young, as well as Gerry Mann of Herbs N' Such and Scott Reid of Althaea Herb Farm. When describing the value of her business, Mann (personal communication, June 11 2014) stated "It's fulfilling for me". Young (personal communication, July 30 2014) also explained,

It makes Nathan and I very happy. It's not uncommon for us to be on the farm, working away on the weekend, and just be struck with the beauty of the farm and how happy we are. And what better measure of success is there than to be happier than you ever thought possible?

The fifth criterion for success was *customer satisfaction* with the farm products or services, specifically in terms of whether or not their customers were happy. This criterion was identified by Mann and Craig. While recalling the questions that Craig (personal communication, Aug. 6 2014) asks himself to determine the success of his business, he stated, “Are the customers happy?” Commenting on her success, Mann (personal communication, June 11 2014), also remarked, “...I think people are happy with what they’ve got”.

Ranking as the sixth criterion for success, Osborn and Young mentioned the importance of having a *positive effect on environmental health*. “We are trying to be successful naturally. Meaning, as far as nature and the environment... I think we are successful” (Osborn, personal communication, July 7 2014). Young (personal communication, July 30 2014) shared a similar sentiment, “Environmentally, I think yes, we’re a good example of a sustainable farm”.

Achieving the goals that one sets for his or her business is the seventh criterion for success. As Craig (personal communication, Aug. 6 2014) assessed the success of Backyard Bok Boks, he said, “And also, did we meet our goals? Specifically, we set a goal of, last year was ten set ups, so we set a goal of 40 set ups this summer”. Reid initiated Althaea Herb Farm in part to offer local herbal tea to the Guelph community, a product that was not yet available in the area. When he reflected on the success of his farm, he noted, “...it’s definitely a success for me and what I like to do and as far as what I am offering to the community... it’s definitely a success. For sure” (Reid, personal communication, June 3 2014).

Lastly, only Reid spoke about feeling a sense of success through *learning* and on-farm education such as discovering efficient methods of production. For example, upon the discovery of a rake to quickly harvest chamomile flowers, Reid (personal communication, June 3 2014) felt as though he was had reached greater success.

Table 5.2: Criteria for a Successful Business and Livelihood as a Direct-Marketing Farmer as Specified by the Research Participants

Criterion for a Successful Direct-Marketing Farm	All Sorts Acre	Althaea Herb Farm	Backyard Bok Boks	Backyard Bounty	Green Being Farm	Herbs N' Such	Tree and Twig	Two Crows Growery
Sufficient income to support business and farmers	X	X	X	X	X	X		X
Interest from the community in the farm and its products or services			X	X			X	X
Evidence of productivity	X			X	X			X
Contribution to one's personal happiness		X			X	X		
Satisfaction of customers with their purchased products or services			X			X		
Contribution to	X				X			

environmental health								
Achieving goals of farming enterprise		X	X					
Learning		X						

5.3: How to Achieve a Sustainable Farming Livelihood as a Direct-Marketing Farmer

Each of the following sub-chapters depict a broad strategy for achieving a successful operation and its encompassing key practices as communicated by the research participants in either an interview or participant observation setting. The strategies and practices are presented as steps to be taken in terms of when they should be considered by both aspiring and current direct-marketing farmers who wish to either begin or improve their farm operation (see Table 5.4). However, it is important to recognize that the participants have also acknowledged that each best practice should be continuously reviewed and revisited by farmers. Furthermore, it was not evident that any participant placed greater significance on one particular practice or another that he or she spoke about or demonstrated. Thus, the practices were considered equally crucial to achieving a success as the participants have defined the term.

5.3.1: Mentally and Physically Prepare for a Direct-Marketing Farm Business

Each of the participants in this study, except for Mann, referred to the importance of mentally, physically, or monetarily preparing to operate a direct-marketing farm.

5.3.1.1: Gain experience working on a successful direct-marketing farm before beginning operation

Young, Crago, and Knight spoke about how future farmers may gain such knowledge by working on successful direct-marketing farms before beginning their own operation.

Get a lot of experience on farms. Farms that are profitable. There's a lot of internships out there but they're not all on farms that make money and there's no point to learning from a farm that's not profitable (Young, personal communication, July 30 2014).

Young has internship positions available on her farm, one being what she refers to as an 'incubatorship' in which experienced interns use a small piece of land on her farm to initiate or test a business idea. When choosing between internship opportunities, Young strongly suggests choosing farms whose farmers are dedicated to producing other farmers, rather than just employing labourers. Besides teaching interns about practical farming skills, host farmers should explain how they make decisions as well as how to properly conduct bookkeeping, budgeting, and marketing (Young, personal communication, July 30 2014). Young is also an advocate for on-farm internships since that is how she learned how to farm herself.

...I think [internships] are the right way to learn. If nobody offered me an internship, not only would I not have learned the skills, I wouldn't have learned what it really means to farm, and then I wouldn't have learned that it is really hard (Young, personal communication, July 30 2014).

Besides learning how to effectively raise field crops and livestock, Young believes that understanding the physical and mental challenges of farming is the most important lesson to learn before deciding to begin one's own business. Crago (personal communication, June 13 2014) agreed with Young in this respect, "I think one thing is people aren't prepared for how hard the work is... And I think that's what happens when some young people come along, they're just not prepared to see how hard it is...". Knight's experience of initiating Two Crows Growery, a now fully functioning farm, confirms Crago's comment. He said,

The first year [of farming] will be a bit rough because you don't realize how much work it is, even us, we were both experienced growers and it was a big shock of how much work it was. Absolutely phenomenal (Knight, personal communication, Aug. 7 2014).

In order to avoid an enormous struggle at the outset of a new operation, the participants suggested that one should prepare by gaining much practical and financial experience while developing an understanding of the labour-intense nature of farming.

5.3.1.2: Conduct primary and secondary research on direct-market farming specifically targeted at product and location

In the preparatory stage, the research participants stated that prospective farmers should conduct primary and secondary research concerning their more specific project. This practice was identified by Osborn, Orland, and Knight. They suggested that the research process reduces the need for, and challenges of, a trial and error period. Orland (personal communication, May 11 2014) advises farmers to talk to other people in the industry to discover their best practices. Through her struggles, Osborn learned that prior research into other operations is a wise choice. She explained, "As it become more necessary for us to make money and actually see a return from what we are doing. What are other people doing? Who is successful and why are they successful?" (Osborn, personal communication, July 7 2014) When conducting research, Osborn urges farmers to avoid mentally categorizing farms and only focusing on one type. She believes that doing so blocks information from reaching future farmers who should be trying to access as much information as possible. For example, although Osborn (personal communication, July 7 2014) wanted to farm organically, she still explored the lessons of conventional farmers since they have been engaged in the industry for a long time and have many insights to share.

The research that Knight and his business partner, Michael McPhearson, conducted prior to farming had an enormously beneficial impact on their productiveness. They attended conferences to

meet farmers, read several books about the sort of farming they intended to pursue, and sent out a number of emails to authors whose work they admired (Knight, personal communication, Aug. 7 2014). They asked the authors to elaborate on concepts mentioned in their books and to guide them to other helpful information. Many of the authors responded to Knight and McPhearson and were willing to work with them. From here, Knight and McPhearson continued to visit farms to see how similar farmers were conducting their operations. With organic farming, farmers have a plethora of issues to consider (Knight, personal communication, Aug. 7 2014). “It’s a lot more work because you can’t spray, weeding is a nightmare, especially down in those fields, that’s really sandy soil... it was months of research” (Knight, personal communication, Aug. 7 2014). To manage the sandy soil that Knight described as ‘beach sand’, he and McPhearson contacted soil experts and professors of soil ecology and asked for their advice.

...so that’s why there’s cover crops over there, the sunflowers over there, and grasses, that will all mix in with the soil to rot, and then we cover it with straw for the winter. Even from last year to this year, it’s amazing what the soil has done. It’s incredible the difference (Knight, personal communication, 2014).

Gaining information from the experiences of others can help reduce the time and money spent on learning and making mistakes oneself.

5.3.1.3: Hire a business coach

Research into how to initiate a direct-marketing farm may also include the attainment of a business coach, as recognised by Craig. In the third year of running Backyard Bok Boks, Craig needed to decide whether or not his business was going to financially contribute to his livelihood or just operate as a small project. In an attempt to bolster its profitability, Craig worked with a business coach from Innovation Guelph which offers free services as long as the customers complete their homework requirements. “In

terms of best practices, that was one of the most important things that I did was sign up with a business coach because their whole mandate is to support the success of the business” (Craig, personal communication, Aug. 6 2014). Working with a business coach completely transformed how Craig managed Backyard Bok Boks. “He asked hard questions like, ‘Why are you doing that?’ Ok, I’ll stop doing that. Like, ‘What are your actual costs and I want a spreadsheet by next week’. Those kinds of things” (Craig, personal communication, Aug. 6 2014). Craig (personal communication, Aug. 6 2014) noted that one of the most impactful questions posed him was, ‘What’s your marketing?’ At that time, Craig only attended food festivals and relied on word-of-mouth advertising. Craig’s business coach encouraged him to pursue a huge marketing push (described throughout this chapter), advice that he followed. Once the new marketing strategies were introduced, Backyard Bok Boks sold out of chicken coops and chickens. “It went from nothing to, ‘Oh my goodness, we need to buy more coops and build more set ups’” (Craig, personal communication, 2014). From this experience, Craig is suggesting that one should operate a direct-marketing farm the same way that one would operate any other business, especially in terms of cost analysis and marketing.

5.3.1.4: Start on a small scale

Several farmers involved in this study, specifically Orland, Reid, Craig, and Knight, also suggested beginning on a small scale as a wise practice. “Start with a garden plot and figure some stuff out... And then, expand it once you’ve figured things out. Then you’re not making mistakes at a large scale, you’re making mistakes with a lower risk” (Craig, personal communication, Aug. 6 2014). Reid started on a small scale which he acknowledged as a good practice in terms of develop useful techniques before renting a larger piece of land.

I started with a very small garden, it was probably a thousand square feet. I just tried out a whole bunch of different varieties of plants. There wasn’t anyone there to mentor me or teach

me so I started just by myself, learning from the ground up (Reid, personal communication, June 3 2014).

Osborn (personal communication, July 7 2014), who experienced some difficulties in the first couple years of her business, concurred, "...if you are a complete novice, my advice is don't buy a big farm to begin with. Start small because I shudder to think if we went through this on a 50 acre farm". During the first few years of operation, when it is most possible to make mistakes, it is wise to make those mistakes on a small scale as to reduce the output of time and money.

5.3.2: Ensure Adequate Financial Savings Before Committing to a Direct-Marketing Farm Operation

Direct-marketing farmers should have adequate financial capital before committing to their own operation so they can afford start-up costs and still support themselves through the initial stages on the business which may not produce a sufficient income.

5.3.2.1: Have enough money in savings before initiating the business

Osborn and Young recognized having adequate financial savings before beginning a direct-marketing farm as a best practice. "Have sufficient savings before you start up on your own because... you're going to spend a lot of money at first, and then you still need money to keep expanding your farm as you go along" (Young, personal communication, July 30 2014). Young, Reid, and Knight mentioned that the first few years of running their own farm were the most expensive due to start-up costs which include the purchasing of infrastructure and equipment. Financial savings are of particular importance, as well, if one wishes to make fundamental changes. When Osborn was working through finding both her niche and passion, she often changed the direction of her farm. However, she explained, "We didn't have the money to say, 'we're just going to stick it out'. And that's a big problem. How far can we fund this to make it happen?" (Osborn, personal communication, July 7 2014) Osborn noticed that having more

money set aside would have enabled her to allocate more time to growing and changing her farm without the need to generate immediate profit from it.

5.3.2.2: Apply for funding to help cover the cost of start-up fees

Another means to procure funds, as identified by Reid and Knight, is through governmental or organizational funding and grants. Although not used himself, Reid (personal observation, Althaea Herb Farm, June 3 2014) advocates for FarmStart, an organization that helps young people join the farming sector by subsidizing start-up costs and providing on-farm resources like access to land, skill training, and labour. Knight (personal communication, Aug. 7 2014) also commented that once a farm has been registered as a business for two years, farmers can also apply for government funding. He plans to submit an application for such funding in order to cover staff costs (Knight, personal communication, Aug. 7 2014). Still, there is some controversy surrounding funding for farms. For instance, Crago (personal communication, June 13 2014) strongly believes that for-profit farms supported by grants are not sustainable since such businesses should be able to financially support themselves.

5.3.2.3: Have a spouse or business partner whose income can subsidize the farm business

Half of the participants, specifically Osborn, Reid, Mann, and Knight, had a spouse or business partner whose off-farm income helped to subsidize the farm business. Reid (personal communication, June 3 2014) explained, “If I didn’t have a partner supporting me, I wouldn’t be able to do this”. When asked about his business partner, Knight (personal communication, Aug. 7 2014) told a similar story, “Michael McPhearson... He still works full time and that’s to finance stuff while we get started up”. Without adequate savings or external financial help through grants or support organizations, relying on a spouse or partner was the most prevalent practice to cover farm costs. That is not to say that these farms did not generate any profit. Rather, they typically created enough of a profit to sustain operating costs but not enough to provide the farmer with a large enough net income needed for living costs such a mortgage.

5.3.2.4: Engage in multiple projects/jobs that generate an income

Although many farmers did rely on a spouse or partner for financial support, Osborn, Reid, Craig, and Knight spoke about also contributing to the family and farm income by working an off-season (fall/winter) job themselves. A particularly interesting finding that is somewhat similar to off-season work, is the idea of partaking in 'income projects'. Craig was the only farmer in this study who made explicit mention of income projects as he had heard about the concept from Alex Baisley, who conducts workshops in Guelph about life choices.

[Baisley] talks about switching your sense of what it is we do. We're really trained to think we need to pick one thing and be an expert in that area which is very valuable, but what if we were to consider an income project instead of, 'This is my career and it's everything'... So we thought, let's just get an income project and the reason that's important with [Backyard Bok Boks] is it didn't have to do everything. It didn't have to sustain our entire family. It's a bit like permaculture principles where you're not growing monoculture crop. It's about getting resilient income streams so that if one fails, there's other ones that can come up (Craig, personal communication, Aug. 6 2014).

Thus, Backyard Bok Boks did not have to generate a financially-sufficient livelihood on its own because Craig was occupied with multiple jobs and projects that contributed to his family's living expenses. "We have other projects that make up income..." (Craig, personal communication, Aug. 6 2014). Knight follows a similar model. Even though each project is nested under Two Crows Growery, Knight and his business partner operate both a market garden and restoration agriculture consultancy. Both projects generate an income so when one is expanding, they are able to adjust and moderate the other. If a direct-marketing farm is unable to generate a sufficient profit, having another source of income lessens the economic expectations of the farm.

5.3.2.5: Conduct a cash-flow analysis

In order to ensure that one has enough financial savings to initiate a direct-marketing farm, research participants, Craig and Orland, indicated that they thought it was wise to conduct a cash-flow analysis.

Always, in any business, do a cash-flow analysis to forecast what you're going to get... Really suss out what you're doing, what you're going to make, because cash-flow is the life blood of any business and it could kill your great idea if you run into a deficit for too long (Orland, personal communication, May 11 2014).

Orland stressed the importance of taking into account the costs that one may not immediately think about. For example, if one will be transporting their products, he or she will have to purchase a large vehicle and should factor the gas spent travelling to various locations, and repair costs for the vehicle, into his or her budget (Orland, personal communication, May 11 2014). When Craig (personal communication, Aug. 6 2014) changed his profession from teacher to farmer, he admitted that the most critical strategy he learned was that of cash-flow analysis. The money one requires to purchase farm necessities comes only from the clients who pay for the products. Thus, an understanding of how much money will be received and how much will need to be spent is crucial (Craig, personal communication, Aug. 6 2014).

Chapter 5.3.2.6: Design a back-up livelihood choice to be quickly employed, if required

Nevertheless, even once a farmer is confident with his or her cash-flow analysis he or she should design a back-up plan, as identified by Orland, Osborn, and Knight. "Such as, if something fails, then you implement the next plan to make sure that you're not in a bad situation" (Orland, personal communication, May 11 2014). Orland's original plan for Backyard Bounty, bicycle delivery and scattered donated land, proved to be unrealistic and required more money to operate than expected. Rather than running a deficit, he implemented a back-up plan in which only one plot of land is farmed

and the products are transported by truck to a smaller number of cities (Orland, personal communication, May 11 2014). Osborn (personal communication, July 7 2014) also had to implement a back-up plan when she learned that sheep farming was not particularly practical in Ontario, especially since she did not receive the help from the Ontario government that she once expected. Thus, a previous back-up plan involving relocation to Nova Scotia is underway for Osborn (personal communication, July 7 2014) as land is less expensive and there is a great deal of support for new farmers from the provincial government. Knight (personal communication, Aug. 7 2014) also implemented a back-up plan due to a change in weather in the first year of Two Crows Growery.

5.3.3: Find a Niche, Location, and Customer Base

In preparation for one's own operation, the participants noted the critical importance of choosing a unique niche product, finding a suitable location, and recruiting potential customers.

5.3.3.1: Conduct thorough market research

Osborn, Craig, Young, Crago, and Knight recognized that much of this decision-making can be eased by performing thorough market research. For instance, when Young (personal communication, July 30 2014) decided to initiate Green Being Farm, she extensively researched the climate, soil, and the socio-economic status of various communities in Southwestern Ontario. It was important to Young to initiate a farming enterprise in a market that could support it. She explained, "We were basing this on assumptions that some historical data says organic customers are primarily middle to upper class – educated. So, we were looking for that" (personal communication, July 30 2014). Nonetheless, the final determining factor of where Young located her farm was the cost of land. In turn, Green Being Farm is located in, and sells to, areas that are typically considered economically depressed. Despite the poor market of these areas, Young (personal communication, July 30 2014) is able to amply sell her products which she believes may indicate that the demographic interested in organic agriculture is changing.

Knight also conducted market research before growing crops. “Before planting, we interviewed ten chefs saying, ‘What do you use the most of? What do you have the most trouble finding? What do you want to see in the local market?’” (Knight, personal communication, Aug. 7 2014) Knight (personal communication, Aug. 7 2014) discovered that a lot of chefs want collard greens since Southern-style cooking has recently gained popularity. However, very few people are growing them in the area since such greens typically require a hot climate. Still, by means of thorough research, Knight found a variety that is tolerant to weather variations and is now successfully growing collard greens. As chefs visit Two Crows Growery to choose and harvest the vegetables they would like to purchase, Knight (personal communication, Aug. 7 2014) works with them to further discover their preferences.

Osborn also conducted market research that had shifted her focus from Ontario to Nova Scotia. Interested in selling sheep products, Osborn (personal communication, July 7 2014) researched where there is a demand for both lamb meat and wool. She found that Canada imports about half of the lamb that Canadians consume so there is some opportunity to sell local lamb (Osborn, personal communication, July 7 2014). With respect to wool, Osborn is interested in selling value-added products like felt paintings and clothing which are typically purchased by tourists. While Osborn (personal communication, July 7 2014) could not find much information about tourists in Ontario, she found that Nova Scotia keeps detailed accounts of tourist spending habits and has ascertained that the average tourists spends an average of \$39.00 on a Nova Scotia item each visit. Thus, Osborn, (personal communication, July 7 2014) not being able to fund a farm, believes that her wool products will be much more in demand in Nova Scotia and was planning to relocate.

Backyard Bok Boks is another example of market research leading to a successful operation. Craig (personal communication, Aug. 6 2014) owned backyard chickens for many years and consistently heard people claim that they would also like to have chickens but did not know how to get started or how to care for them. Thus, Craig knew there was a local interest in backyard chickens. To gain a

clearer idea of who, and how many, may be interested, he initiated a weekly neighbourhood potluck in which he showcased a Backyard Bok Boks setup (Craig, personal communication, Aug. 6 2014). Craig talked to as many people as possible about his idea of renting backyard chickens and found that a lot of people were intrigued. Upon the initiation of the business, Craig and his wife, Mary-Kate, did not stop communicating with the community. The original plan for Backyard Bok Boks was to offer a four month rental package. However, by speaking to a colleague at her workplace, Mary-Kate found that people may be more interested in renting chickens for only two weeks (Craig, personal communication, Aug. 6 2014).

So we changed our whole model because what we were offering was, keep them all summer and if you want us to pick them up early, we'll come and get them. But it almost seemed like a failure then... We flipped it to start with two weeks and we'll pick them up... If you want to extend it, then you can have it all summer or all month. Then it's based on success and so we tried it with ten set ups last summer (Craig, personal communication, Aug. 6 2014).

With the new model came an increase in customers (Craig, personal communication, Aug. 6 2014).

Crago followed a similar theme as she allowed her business to evolve to fulfill the demands of customers. Tree and Twig began as a Community Supported Agriculture program but as Crago (personal communication, June 13 2014) realized that the community seemed to be more interested in purchasing seedlings rather than harvested crops, she altered her business accordingly and began to sell tomato seedlings. Currently, tomato seedlings are the most lucrative feature of Tree and Twig (Crago, personal communication, June 13 2014). Furthermore, as Crago started to speak at horticultural societies and schools, she had people approach her to compliment her knowledge of gardening. "So then I thought, 'Jeez, I could offer workshops', so I started offering gardening workshops and then it just evolves. It's all good" (Crago, personal communication, June 13 2014). Here, Crago (personal communication, June 13

2014) is suggesting that by accommodating the interests of the community, she was able to expand the scope of Tree and Twig and ultimately increased points of sale.

Additionally, Craig mentioned the importance of discovering the audience of any given business. For example, he learned not to market Backyard Bok Boks to 'do-it-yourselfers' since those people will likely build their own chicken coops (Craig, personal communication, Aug. 6 2014). Rather, Craig found his audience to be couples between the ages of 30 and 50, families with small kids, and retired couples. Thus, decisions about the business are made to appeal to these demographics; that is, people who did not have the time or inclination to build their own operations (Craig, personal communication, 2014). Finally, in terms of conducting thorough market research, Craig remarks on the importance of offering products at a price that people are willing to pay.

The way we did it was very expensive because we had to buy all the coops, all the netting, so the capital cost of purchasing everything was quite high. The idea was we'd rent it and start to pay it down but initially, to pay it down, we had to charge so much that no one would do it because it wasn't meeting the market. You could come up with the most brilliant business idea but if it doesn't actually match what people are willing to pay, or the perceived value of it, then it doesn't matter (Craig, personal communication, Aug. 6 2014).

For that reason, Craig (personal communication, Aug. 6 2014) altered the price of his backyard chicken rental packages to a price customers were more willing to pay.

5.3.3.2: Find potential customers before initiating business

Related to the practice of finding a market for one's business is the concept of recruiting customers before the actual farming takes place. This is the route that Crago took. She reported,

Before I started growing to sell, I already knew who my customers were going to be. I already had a customer base through people I knew and through my job. So, when I decided I was going

to sell, my market was already there. In my first year, my produce was all sold out. I did the leg work initially rather than looking around to see who I could sell to. I already knew (Crago, personal communication, June 13 2014).

Having an already established customer base during the first year of operation helped Crago quickly generate income during a time that is typically spent still recruiting customers.

5.3.3.3: Find a niche market that is not saturated

Osborn, Craig, Reid, Mann, Crago, and Young felt that operating within a niche was a best practice in order to achieve success as a direct-marketing farmer. Crago attributed some of her success to the fact that she offers a unique product to her surrounding community. “When word of mouth spread about what I was doing, because there was no one else doing it in Niagara at the time, it allowed me to quit my job and do this” (Crago, personal communication, June 13 2014). Since Crago was the first to offer local vegetables and heirloom tomato seedlings in her local area for some time, all customers interested in such products had to purchase them from Tree and Twig. Even so, Crago recognizes that other farmers will eventually offer the same product as her. Thus, it is important to foster a positive reputation in order to maintain one’s customer base (Crago, personal communication, June 13 2014).

While Osborn also acknowledged that finding a niche contributes to success, she also mentioned the importance of choosing a product that is not too different from what already exists.

Instead of trying to farm something really new, we went to the peripheries. We could still tap into where we really wanted to, but we have a new product, and it’s also closely related too. There’s already an existing demographic that’s interested in it but we’re not competing with the people who have already done it for 20 years. We feel we’re taking one step to the left or the right (Osborn, personal communication, July 7 2014).

Choosing a product that is only slightly different from what is already offered in the community allows new farmers to take advantage of the current interest.

Reid also found that a degree of his success may be owed to offering a niche product. When asked to share his best practices, Reid (personal communication, June 3 2014) explained, “What I do is fairly unique as far as growing herbs for herbal tea”. Young is very similar in this respect. She believes that Green Being Farm will generate a greater income as it begins to offer meat from Kune Kunes due to the rareness of the pig breed in Canada (Young, personal communication, July 30 2014). In terms of financial income, Young was one of the most successful farmers in this study. She was also the only farmer to offer a winter Community Supported Agriculture program (personal observation, Green Being Farm, July 30 2014). Craig is also considering offering a new product due to its rarity. “We have this whole idea about designing the perfect four season chicken coop because it doesn’t exist” (Craig, personal communication, Aug. 6 2014). These farmers are noting the economic advantage of producing and offering uncommon products.

5.3.3.4: Choose a place where potential customers are familiar with the product

Osborn spoke about the critical importance of locating one’s farm in an area populated with people who are familiar with his or her product or service. When Osborn first began to farm, she started with a permaculture garden. “This was one of our big mistakes from a financial perspective... nobody knew what permaculture was. It was a weird word that explained nothing but we were trying to go forward as a permaculture business” (Osborn, personal communication, July 7 2014). Since people did not understand what All Sorts Acre offered, they were not interested in the business. “All these things that work together, could you sell them all at the same time? It didn’t work for us. People had no clue” (Osborn, personal communication, July 7 2014). Later on, Osborn became more interested in selling sheep products and started by offering needle felted animals and felting supplies. “Unfortunately, no

one knows what felting is so they didn't want the supplies... We found that I couldn't sell anything because [the public] didn't get it yet. But it is changing" (Osborn, personal communication, July 7 2014).

5.3.3.5: Choose land that is guaranteed to be available for the duration of the business

Lastly, in terms of conducting market research, Orland and Knight suggested a wise practice to be choosing land that is guaranteed to be available for the expected duration of the farming business. For instance Knight (personal communication, 2014) said, "Find land that you can afford and you won't lose after a few years because it's going to be a three year process to get yourself where you want to be".

5.3.4: Connect to Customers' Needs

To achieve a successful livelihood as a direct-marketing farmer, the participants suggested developing an approach to promotion and advertising that will attract loyal customers.

5.3.4.1: Design an effective marketing strategy

Osborn, Knight, and Craig suggested designing an effective marketing strategy for attracting customers. Osborn (personal communication, July 7 2014) spoke about one of the reasons she was not able to break into local markets was the lack of marketing for All Sorts Acre. I'm sure the trouble breaking into markets has a lot to do with us and our poor marketing and not having enough money to market well (Osborn, personal communication, July 7 2014).

Craig also found himself in a position with little money to use for marketing, but also needing to advertise his business in order to generate more income. Craig's business coach asked about his current marketing plan to which Craig explained that he attends food festivals and relies on word-of-mouth promotion. The business coach was not satisfied and suggested they develop a more creative and detailed marketing plan (Craig, personal communication, Aug. 6 2014). "We did this huge marketing push. In fact, his idea was to do it at Christmas which is normally the season we don't pay attention. We have chickens but this is a summer thing" (Craig, personal communication, Aug. 6 2014). During the

Christmas holiday is a wise time to advertise a product or service because people typically adopt an attitude of consumerism due to gift giving. “The idea was, at Christmas, to offer a Bok Boks package as a unique Christmas gift because people are always looking for something different” (Craig, personal communication, Aug. 6 2014). After the Christmas push, Craig (personal communication, Aug. 6 2014) experienced an increase in sales.

Knight made note of the importance of remaining relevant within one’s community as an effective approach to marketing. As such, he is hoping to hire an employee to work not only in the field, but also with social media, in the following growing season (Knight, personal communication, Aug. 7 2014).

Probably two days of social media and three in the fields. Just to keep us going in the community. The food community in Waterloo Region is so involved and so supportive so it’s important that we stay part of it so our name stays out there... (Knight, personal communication, Aug. 7 2015).

Craig also uses social media, including a website, to market his business. “In terms of marketing, we took a social media course, we learned how to use Facebook and Twitter” (Craig, personal communication, Aug. 6 2014). From this, Craig was interested in what sort of language would appeal to his audience. “We brainstormed the principles based upon which Bok Boks operates. I think it was: fun, easy, local. Let’s use language that reflects those principles” (Craig, personal communication, Aug. 6 2014). While deliberating language choices, Craig thought it would be interesting to have a slogan like ‘Made in Guelph’ to reflect the local nature of the product, but more geared toward housing chickens. “And I was like, ‘Laid in Guelph!’ It was like, ‘Ah!’ It was kind of edgy and kind of funny” (Craig, personal communication, Aug. 6 2014). Craig (personal communication, Aug. 6 2014) identified the ability of

marketing one's business during times of high consumerism, and through social media channels with stimulating language, to lead to an increase in customers.

5.3.4.2: Create a logo to represent the business

Another piece of marketing advice from Craig is to create a logo for one's farm. "It sounds simple but the logo made a huge difference because it suddenly made us credible" (Craig, personal communication, Aug. 6 2014). The logo was created around the same time as the Christmas marketing push. Though farmers may believe that spending money on a logo is superfluous, Craig suggested that a logo is just as necessary as other farm expenses. "It looks professional and suddenly it's like, 'if you have this then maybe I'll consider what you have to say'" (Craig, personal communication, Aug. 6 2014). With the logo, Craig (personal communication, Aug. 6 2014) found that people considered Backyard Bok Boks in a more serious manner.

5.3.4.3: Educate potential customers about the value of the product

In the interview with Osborn, educating potential customers about the use and significance of one's product was identified as a key practice when considering promotional tactics. When Osborn realized that her felt products were not being sold because people did not understand felting, she took action.

I did a lot of explaining and demos. We went to lots of places. Anywhere we possibly could to bring the felting demos. We'd bring the carding machine with us and sometimes we'd bring sheep. Anything to help educate what felting was, and the importance and value of wool (Osborn, personal communication, July 7 2014).

When asked if such education made a difference in achieving greater success, Osborn (personal communication, July 7 2014) explained, "I think when they saw me back last year it did. Last year, I did make [back the cost of attendance] and I made a little bit extra. I sold something almost every week. It was a start".

5.3.4.4: Offer a sample of the product to potential customers

Just as Osborn offered demonstrations of her product, it is also wise to offer samples when applicable, as recognized by Reid and Knight. An intern of Reid's attended the Guelph Farmer's Market in his place. During her next encounter with Reid, the intern explained that she offered a sample to a family at the market and a little while later, they returned to buy a batch of tea (personal observation, Althaea Herb Farm, June 3 2014). Knight also offers samples to potential customers, usually chefs. "We just gave them whatever we had last year as a sampler. 'Just go pick what you want, try it out, and we'll grow it next year if you like it'" (Knight, personal communication, Aug. 7 2014). The use of samples helped Knight (personal communication, Aug. 7 2014) to successfully recruit and maintain customers.

5.3.5: Maximize Effectiveness and Profit by Choosing High-Value Products and Services

Reaching one's goals of further success may be best achieved by carefully choosing which, and how many, products and services to market to one's community.

5.3.5.1: Offer a diversity of products and services

Young, Mann, Crago, and Knight reported the importance of diversifying, meaning to specialize in more than one offering. Speaking about what aspiring direct-marketing farmers should consider when beginning their operation, Mann (personal communication, June 11 2014) said,

Diversify. Don't just grow one thing. Local production is getting more and more popular so there is a lot of opportunity for people to get into urban farms. You have to make your food available to people either at a gate, market, or CSA. Room to grow there.

Just as Mann suggested, Young sells her farm products in multiple forums. She sells pastured meat through orders and operates a winter vegetable Community Supported Agriculture program. With this, Young is able to reach a wider customer base compared to farmers who only offer one type of product (personal observation, Green Being Farm, July 30 2014).

Diversifying also improves efficiency and limits exhaustion for the farmer, as cited by Crago.

I survived with my business because I diversified. If I was only selling vegetables, I would be so burnt out right now and I'd be resentful because I'd be working so hard to earn money to sell people food. I would have given up a long time ago. I had to diversify and I think that's the only answer (Crago, personal communication, June 13 2014).

Further, in her experience, Crago has learnt that solely selling vegetables is not a lucrative business and has received a much greater income through multi-specialization. "With the way cost of food is, I just couldn't replicate that income just selling and growing vegetables. You just can't" (Crago, personal communication, June 13 2014).

Osborn has had a dissimilar experience. She believes that the large amount of services offered at the onset of All Sorts Acre was disadvantageous.

We did six very different things so essentially no one knew what we did. They couldn't categorize us. You are a farm, you are a teacher, you are eggs. That was our biggest mistake. If we had said, 'We're doing one thing, we're just doing teaching and that's all we're doing', it probably would have been a lot different (Osborn, personal communication, July 7 2014).

Osborn (personal communication, July 7 2014) suggested that direct-marketing farmers choose one area of specialization (especially if they are offering non-traditional food) so the public can gain a solid understanding of what their business has to offer.

5.3.5.2: Differentiate the products by emphasizing and ensuring a high level of quality

Once direct-marketing farmers begin to sell and offer their chosen goods and services, they must always ensure a high level of quality, as identified by Reid, Young, and Crago. Reid (personal communication, June 3 2014) described the reasons his customers choose to purchase his herbal tea:

If you compare my tea to tea you buy in the store, even if it's organic, it's a completely different product. It's fresh. It's therapeutically active. If they take my 'Sick Away' tea, it helps their cold or flu so they buy it. It works. Also, just flavour wise, it tastes better. It's fresher. It hasn't sat in a box for you don't know how long.

Crago operates Tree and Twig with the same mantra. She said,

I always try and make things good value. So, when people come [to workshops], I don't just stand at the front of the greenhouse and talk for two hours. We plant... When they come, they seed tomatoes and peppers and eggplants and anything else they want. I teach them how to grow these things in their garden (Crago, personal communication 2014).

It is the quality of the products, especially when compared to grocery store goods, that not only attracts customers but also upholds their loyalty (Young, personal communication, July 30 2014).

5.3.5.3: Offer products with extra value or features

Osborn and Knight acknowledged offering products with added value as another best practice to be employed by direct-marketing farmers to foster a successful business. When conducting market research to find ways in which to create a more lucrative business, Osborn discovered that value-added was a promising route. "We looked at where the money is often made in farming and it's often through, unless you have quota like chicken or dairy, value-added" (Osborn, personal communication, July 7 2014). Osborn (personal communication, July 7 2014) reinforced this notion by referring to instances in which chefs generate income by producing products from local food but the farmers of the food do not receive nearly as high of an income. While working and discussing future goals, Knight (personal observation, Two Crows Growery, Aug. 7 2014) and Reid (personal observation, Althaea Herb Farm, June 3 2014) both expressed interest in eventually offering value-added products, believing them to be a lucrative venture.

5.3.5.4: Grow perennials to minimize cost and labour

In terms of what one should produce on his or her farm, Knight and Reid suggest growing perennial crops. Planting perennials is an efficient practice since farmers can save money by not purchasing seeds every year while also avoiding the labour that is involved with yearly planting (Knight, personal communication, Aug. 7 2014). Reid is currently in the process of planting perennials. When considering the future, Reid (personal communication, June 3 2014) said, “There won’t be as much labour. Once those perennials are all up all you have to do is maintain”.

5.3.5.5: Sell meat to maximize profit

In order to increase efficiency and generate income, Osborn decided to sell meat.

At the first farmer’s market there was Peter who was a sheep farmer... We would see him every week at the farmer’s market, pick up his little cooler, put it on a table, people would come up, say hello, open up his cooler, he’d sell them lamb, and he’d shut it... He knew very well that all those pieces of meat that were frozen solid would go back in his freezer for a week (Osborn, personal communication, July 7 2014).

Osborn (personal communication, July 7 2014) viewed the strategy of the sheep farmer as much more efficient than a vegetable farmer who spends hours preparing the vegetables for market. Also, the unsold vegetables return to the farm, and those not eaten are wasted. However, with meat, it can be returned to the freezer to be sold at a later time. Young (personal communication, July 30 2014), who sells both meat and operates a vegetable Community Supported Agriculture program, acknowledged that chickens are her most lucrative enterprise. When discussing the greatest barriers prohibiting Young (personal communication, July 30 2014) from reaching her farming goals, she referred to livestock regulations and supply management. If Young (personal communication, July 30 2014) was legally

allowed to raise more chickens, she believes she would be able to sell them to contribute greater to her livelihood. The challenges of supply management are discussed further in Chapter 5.4.

5.3.6: Employ On-Farm and Business Practices that are Efficient and Effective

All practices employed by direct-marketing farmers should be cost-effective, labour-saving, and operative.

5.3.6.1: *Limit deliveries*

Orland and Knight recognized limiting delivery locations as a means of improving efficiency by limiting the cost of gas and vehicle maintenance and saving time.

It's hard to manage all these points of sale. You've got to drive your food to all these different locations... Some people would pay extra for delivery and that would be fine but it still takes time and I'm not sure we really recovered what we needed to for that. But driving to markets, loading and unloading, it's just a lot of wear and tear on the vehicles and people. It's a lot of work (Orland, personal communication, May 11 2014).

Knight also acknowledged the shortcomings of transporting one's services. Although Two Crows Growery is a market garden, it also offers ecological restoration services in which Knight and McPhearson travel to local homes to design and create backyard gardens. When comparing the ecological restoration service to the market garden, Knight (personal communication, Aug. 7 2014) said, "Going into people's backyards, you're making more food for people and you're making more money... But then we have to invest in a company truck, and a trailer, and all that stuff so we're losing a lot more money".

5.3.6.2: *Have a roadside market table*

A more efficient way to sell one's products that does not require transportation is to use a roadside market table. Osborn, Mann, and Knight mentioned such as a best practice in their interviews. Before

beginning Herbs N' Such, Mann operated a larger farm in a more rural setting. Her past farm had more potential to generate a sufficient income than her current. When asked why this is the case, she explained, "Probably location. We were on a road that had good traffic" (Mann, personal communication, June 11 2014). Mann's (personal communication, 2014) roadside table attracted customers which, in turn, increased sales.

Osborn's roadside table is also regularly frequented. She has a sign that notifies passersby of her eggs for sale and they are commonly sold out (personal observation, All Sorts Acre, July 8 2014). Osborn (personal communication, July 7 2014) trusts that vegetables set on a roadside table would also sell quickly but she does not have enough consistent produce for it to be reliable for herself or the customers. Additionally, Knight (personal communication, Aug. 7 2014) has had success with his roadside market table. However, he discovered that asking for a donation is a more valuable practice than setting a set price. If there is a set price, customers will come into the farm to ask for change which constantly takes time away from the farmer (Knight, personal communication, Aug. 7 2014).

Just pay what you want and then that way, people who don't have a lot of money have access to organic vegetables and people who can afford it can come take a little bit and leave more money. It totally worked out (Knight, personal communication, Aug. 7 2014).

Knight (personal communication, Aug. 7 2014) added, "...We ended up making more having everything being donated".

5.3.6.3: Take useful and detailed seasonal field notes

Keeping good field notes is a good practice to improve one's effectiveness as it helps farmers to reach their goals, as mentioned by Osborn, Reid, Knight, and Craig. When decided that Backyard Bok Boks needed to begin generating more of an income, his business coach urged him to create spreadsheets. "How much do we really need? Let's do some really specific cost spreadsheets... What are things

actually costing and what do we need to charge? And, to keep the price down, how many set ups do we need to do?” (Craig, personal communication, Aug. 6 2014). Learning the finances of Backyard Bok Boks helped Craig (personal communication, Aug. 6 2014) to more efficiently allocate his time and resources.

Reid (personal communication, June 3 2014) also uses spreadsheets as a tool for designing his farm in such a way to achieve future goals.

I have a spreadsheet. Say, last year I got 1,000 square feet of calendula, I pick the calendula and I dry it and then I weigh it all up. So, I know for 1,000 square feet I have this many pounds but I need five times that amount to get to my business goals so then I’m like, okay well I have to multiply that by five and I need 5,000 square feet to get to the goal (Reid, personal communication, June 3 2014).

Even with only four acres of productive land, Reid is confident that he has enough space to grow a larger amount of herbs in the future. “I have enough of a plan that I know how much space I’m going to need to take up, how much plant matter I’m going to need to harvest to get to the goal that I want to be at” (Reid, personal communication, June 3 2014). Knight (personal communication, Aug. 7 2014) also commented on the learning aspect of note taking, “We keep charts on time, and when seeds popped up, and what weeds we have and it’s amazingly educational”. Direct-marketing farmers who demonstrated a good understanding of the current state of their farm, either physically or financially, also had a good understanding of future plans and possibilities (personal observation, Althaea Herb Farm, June 3 2014; Green Being Farm, July 30 2014; Backyard Bok Boks, Aug. 6 2014; Two Crows Growery, Aug. 7 2014).

5.3.6.4: Ask the customers to pay in advance of receiving their purchased items

Asking customers to pay in advance of receiving purchased products was identified by Craig and Young as a strategy to ensure the efficiency and effectiveness of operating a direct-marketing farm. “People

pay in advance, we actually begin collecting payment in January. That's nine months in advance... You need your money before the growing season begins. Although we distribute in the winter, we grow in the summer" (Young, personal communication, July 30 2014). Craig (personal communication, Aug. 6 2014) concurred,

...we realized pre-booking was key. In terms of efficiency and in terms of our ability to plan. So, in terms of another best practice, the more people that buy ahead of time, the cheaper it is for us and the easier it is. If we had say 10 set ups and we had them all booked, we'd know exactly how many coops, how much netting, and how many chickens we would need. If people sign up last minute, we have to have this reserve of things available and it's costly to store them and to buy them and then you might not even use them... We actually can't do it without people paying upfront.

Receiving payment early allows direct-marketing farmers to purchase the needed supplies – not more and not less. This ensures that money is not spent on unnecessary, extra products.

5.3.6.5: Offer a variety of payment options

Offering a variety of payment options was also considered important by Craig.

Make it really easy to pay. Initially, it was old school. You had to drop off a cheque. You could send an e-transfer but not everybody does that. So, those were the two methods... It was limited because some people don't use cheques anymore. For lots of people it worked but we found we'd only get clients that would do that (Craig, personal communication, Aug. 6 2014).

To address the limits of offering only two payment methods, Craig signed up with an online invoicing program called FreshBooks. "It allows very easily to create an invoice, email it to the client, and it allows the client to click on Visa or PayPal to pay it" (Craig, personal communication, Aug. 6 2014). Increasing

the variety of payment methods enabled a wider demographic to sign up with Backyard Bok Boks (Craig, personal communication, Aug. 6 2014).

5.3.6.6: Allow physical and/or virtual access to the farm through tours, blogs, newsletters, etc.

Accessibility of direct-marketing farms has a direct impact on their effectiveness, reported Osborn, Craig, Young, Crago, and Knight. Osborn engaged in the Rural Romp farm tour, an initiative of Taste Real. The visitors generally tour large farms that span too great an area for them to view the entire operation, especially its inner-workings (Osborn, personal communication, July 7 2014). However, with Osborn's (personal communication, July 7 2014) small farm, the visitors could have a more in-depth experience of the farm and learn about it in detail. "We got a lot of encouragement from people. That kept us going" (Osborn, personal communication, July 7 2014). Craig also invited the community to visit Backyard Bok Boks to learn about the service and view the set ups. "We had 100 people here every Wednesday of the whole summer so let's just talk about [Backyard Bok Boks]. One person was like, 'I want one! Sign me up!'" (Craig, personal communication, Aug. 6 2014)

Many of the farmers used various forms of media to allow for virtual access to their farms. Osborn (personal communication, July 7 2014) exclaimed, "The internet and blog were huge for so long". The blog for All Sorts Acre that contained updates about on-farm happenings encouraged its viewers to visit the farm (Osborn, personal communication, July 7 2014). Crago also writes a blog for Tree and Twig. "Sometimes people get [produce] that stymie them, they're not sure what they are. So, I make a point to write a blog post every week so I can identify things and people can get ideas of how to use things" (Crago, personal communication, June 13 2014). Young also found that one of the main reasons her customers returned each year was because they enjoyed her newsletter. "They *love* reading the newsletter. I hear it a lot, 'Oh, you're such a good writer!' which is nice for me and I think the recipes are important, especially for the crops people aren't keen on" (Young, personal communication, July 30 2014). Customer interest was maintained as the customers felt connected to

the farm via the newsletters and they understood how to utilize their harvest (Young, personal communication, July 30 2014). Connecting with the community through media is also an important practice for Knight. Knight (personal communication, Aug. 7 2014) has found that when Two Crows Growery is mentioned in the media, such as Twitter or a CBC news article, he receives numerous same-day emails asking about his operation.

5.3.6.7: Survey the customers to discover ways to improve the farm business

Finally, surveying one's customers about what they liked and did not like about their experience with the farm is crucial, as identified by Craig and Young. Young (personal communication, July 30 2014) explains, "We survey [the customers]. 'What do you like about our CSA?' One is the human connection. They like Nathan and I. They like to support us. And the other is they like reading the newsletter". Although Craig does not currently have a customer survey, he speaks about the potential value of creating one. "Actually having a survey of what worked and what didn't, that's a really good idea because that gives us tangible information. Then we can adapt" (Craig, personal communication, Aug. 6 2014).

5.3.7: Minimize Operating Costs

Direct-marketing farmers should be concerned with reducing their operating costs as a way of saving money at the onset, especially given their limited ability to grow in scale.

5.3.7.1: Use appropriate technology to the type and scale of the farm

Reid, Young, and Knight noted the importance of employing methods and tools that are appropriate for a small-scale, labour intensive operation. A key strategy to ensure that appropriate tools are chosen is to always purchase equipment based on the final, or future, vision of the farm (Young, personal communication, July 30 2014). Young (personal observation, Green Being Farm, July 30 2014) refers to this as the "sweet spot". By purchasing tools that will be useful currently as well as in the future, the

need to purchase new tools once the farm has grown in size or scale is prevented (Young, personal communication, July 30 2014). Knight (personal communication, Aug. 7 2014) explained, “We have great [equipment] but to get it done faster we needed to upgrade our equipment right away and that was thousands of dollars in expense...”. Each farmer in this study who owned a tractor, namely Young, Reid, and Knight, had a walk-behind model known as a ‘BCS’ (personal observation, Althaea Herb Farm, June 3 2014 & Green Being Farm, July 30 2014 & Two Crows Growery, Aug. 7 2014). A BCS is small and able to move between crop rows while also operating as more than just a tractor due to its many attachments such as a snow plough, brush mower, and furrower (personal observation, Althaea Herb Farm, June 5 2014). Its multi-use and compact design is ideal for direct-marketing farmers, especially as they only have to purchase one machine and various attachments as opposed to several machines (personal observation, Althaea Her Farm, June 5 2014).

Crops and tools chosen should also utilize as little resources as possible. For example, Knight prefers to grow bush tomatoes as opposed to vine tomatoes. “We do a lot of bush style tomatoes so they’re low, easier to harvest for us” (Knight, personal communication, Aug. 7 2014). When Reid began to harvest chamomile for the first time, he used his fingers to pull the flowers off of the plant. Harvesting in such a way took an extraordinarily long amount of time (Reid, personal communication, June 3 2014).

That was a time where I thought, ‘I can’t grow chamomile. This isn’t going to work. How does anyone harvest this stuff and make any money? It takes too long’. But then I went home and a season went by and I was doing more research and I discovered there was this great tool. It’s like a blueberry rake but it’s retrofitted for chamomile flowers... It makes it a lot easier... You can just rake the top of the plant and the flowers pop off and collect in a little box (Reid, personal communication, June 3 2014).

Reid also strategically chose other farm tools in order to be more efficient. For instance, rather than growing seedling in plastic trays, Reid uses soil blocks (personal observation, Althaea Herb Farm, June 4 2014). The process of growing seedlings takes about the same amount of time using either soil blocks or plastic trays. However, soil blocks require a onetime purchase of a small tool, while plastic trays must be consistently purchased (Reid, personal communication, June 3 2014). Additionally, Reid makes his own potting soil with on-farm compost (personal observation, Althaea Herb Farm, June 3 2014). He remarked that doing so saved him money (personal observation, Althaea Herb Farm, June 3 2014).

5.3.7.2: Consider creative, low-cost ways of constructing infrastructure

Infrastructure is another aspect of farming that can cost a lot of money but also offer opportunities for savings, as reported by Osborn, Reid, Craig, Young, and Knight. Osborn noted the importance of balancing affordability with longevity. It is wise to choose products that one can afford and will remain intact for a long time to avoid future costs of repair or replacement (Osborn, personal communication, July 7 2014). Reid, Osborn, and Young built their own, bought used, or salvaged greenhouses and animal shelters in an attempt to save money (personal observation, Althaea Herb Farm, June 3 2014 & All Sorts Acre, July 7 2014 & Green Being Farm, July 30 2014). More drastic, Young (personal observation, Green Being Farm, July 30 2014) transformed an in-ground pool into a cold cellar to accommodate her winter Community Supported Agriculture program. Though not yet executed, Craig (personal communication, Aug. 6 2014) mentioned restoring old bike sheds into winter chicken coops for their insulation properties. Reid digs trenches covered with straw to store seedlings over the winter (personal observation, Althaea Herb Farm, June 4 2015). In all of these cases, the farmers creatively used what they had available to them in order to reduce the cost of infrastructure.

5.3.7.3: Create a social network to share equipment and knowledge

Craig, Reid, and Young recognized that operating costs can also be minimized by creating a social network in which to share equipment, skills, and knowledge. For example, Young has a network of

farmers in her area that share their tools and equipment (personal observation, Green Being Farm, July 30 2014). Sharing allows each of the farmers to only purchase a few tools (personal observation, Green Being Farm, July 30 2014). Young also bartered her skills. When she needed infrastructure built on her farm, a neighbour completed the carpentry work and, in exchange, Young and her interns weeded his land (personal observation, Green Being Farm, July 30 2014). Craig had a barter system set up for mutual gain as well. When asked where the chickens are kept in the winter, Craig (personal communication, Aug. 6 2014) replied,

We established a relationship with a farm last year and the deal was we'd pay for feed up until the time they start laying... and then they would take over feeding and housing them in exchange for eggs. So they get paid in eggs. They had a winter [Community Supported Agriculture program] so they made the eggs part of [that program].

This arrangement prevented Craig from having to rent land for the chickens, and provided a source of income for the other party. Additionally, Reid has an interesting barter arrangement with local residents. He offers herbalism lessons on Saturdays in exchange for on-farm labour Monday to Friday (personal observation, Althaea Herb Farm, June 3 2014). However, this arrangement is not open to everyone as he interviews and carefully chooses the participants at the beginning of the growing season.

5.3.7.4: Recruit dedicated volunteers and employees

Recruiting volunteers and employees who are dedicated to the farm operation is a further best practice to lower costs as recognized by Reid, Craig, Crago, and Knight. Currently, Knight and his business partner, McPhearson, spend a combined total of 13-14 hours working on-farm at Two Crows Growery each day. "And that's not nearly enough. Next year we'll have employees, probably", Knight (personal communication, Aug. 7 2014) added. Knight is hoping to hire employees with funds received through government funding. The extra help will shorten the work day, so Knight's and McPhearson's time and

energy can be used elsewhere. Craig (personal communication, Aug. 6 2014) also commented on the importance of staff, "... a business is actually defined as removing yourself from the equation. So, one determinant of success is, 'Can it run without you?'... If you get hurt or sick, it can kick in so it's not completely dependent...". Having a staff that one can depend on for good work prevents possible loss in productivity in one's absence (Craig, personal communication, Aug. 6 2014).

5.3.8: Foster a Self that is Capable of Pursuing and Upholding the Lifestyle of a Direct-Marketing Farmer

Achieving a success as a direct-marketing farmer requires that the farmer have certain personality and behavioural traits.

5.3.8.1: *Love the job*

One of the most critical traits direct-marketing farmers must possess is an absolute love of farming. This was identified by Osborn, Reid, and Crago. An intense love for farming is particularly important in the beginning when the farm requires the most inputs, such as time, energy, and funds, and generates the least amount of outputs. "If you don't love it, you probably won't stick with it" (Osborn, personal communication, July 7 2014). Osborn grew vegetables at the start of her farming career. However, she did not enjoy the long work days, especially when preparing for the farmer's market, and there was something missing from vegetable farming that prevented Osborn from fulfilling the expectations she had for her livelihood. "The thing was, vegetable farming didn't scratch that itch to make something - to create something" (Osborn, personal communication, July 7 2014). Thus, Osborn eventually stopped growing vegetables and started raising sheep for meat, wool, and value-added products like felt paintings. Osborn realized that a major motivating factor behind her dismissal of market gardening was her lack of adoration for the work.

Reid believes that developing a passion for farming can be nurtured in the realization that the community appreciates the farmer and his or her work. “You need to know that what you’re doing matters. You need to know that what you do, people appreciate, because it’s too difficult to not have those things” (Reid, personal communication, June 3 2014).

5.3.8.2: Work hard

A seemingly obvious best practice, though only mentioned by Crago, is to work hard. “... You’ve got to work really hard. There’s nothing more important than working really hard” (Crago, personal communication, June 13 2014). Farming requires a great deal of lengthy physical exertion. The observed farmers in this thesis each demonstrated an extraordinary work. Still, taking short breaks as a group was also important to maintain momentum and a positive attitude (personal observation, Althaea Herb Farm, June 3-6 2014).

5.3.8.3: Adopt a humble lifestyle

Furthermore, to achieve a successful livelihood, direct-marketing farmers must be willing to live a humble lifestyle. This best practice was reported by Young, Craig, Orland, and Knight. When asked about the adequacy of Young’s (personal communication, July 30 2014) net income, she replied,

...it isn’t a living wage if you live in the city. It’s closer to a living wage if your grocery bill is next to nothing. We don’t have the kind of lifestyle where you go on vacation, and you go to restaurants, and you buy new clothes... We don’t feel a need to go on vacation as often because we’re so happy. Buying new clothes would be silly because they just get destroyed. And you can eat better at our house than you can at any restaurant in the county.

Knight (personal communication, Aug. 7 2014) had a similar response as Young, “That’s the benefit of living on the farm though. We don’t pay for vegetables or meat, we don’t have food costs so it’s OK...

it's just a very self-sufficient lifestyle so [a small income] doesn't affect us too much". The responses of Crago and Orland were akin to those of Young and Knight.

5.3.8.4: Hone decision-making skills to effectively guide the business towards established goals

Craig and Young spoke of the importance for one to hone his or her decision-making skills. It is possible for one to be a great farmer but if he or she does not make good decisions, the likelihood of a long-term, prosperous business is diminished (Young, personal communication, July 30 2014). Young referred to the work of a past rancher, Allan Savoury, who created a 'decision-making framework'. She explained his ideas in her own words,

He asks you to take a look at your life goals from economic, ecological, and social perspectives and what's important to you, and craft statements that epitomize what you stand for and what you want out of life, what you want to provide to the community. Really boil it down. At a certain point in the framework, he provides you with seven testing questions that are questions you would ask yourself when faced with any day-to-day decision that refers back to your larger goals. It just means that over and over, whenever you're making decisions, they're in line with what you stand for (Young, personal communication, July 30 2014).

While not referring to the specific framework laid out by Savoury, Craig had a similar view of decision-making. "It is really critical to get your overall vision and where you're going and what's your mission. What's the purpose of what you're doing because, otherwise, it's very difficult to make decisions. Like, 'do we go and do that thing? Do we buy this? Well, based on what?'" (Craig, personal communication, Aug. 6 2014).

5.3.8.5: Develop a sense of reciprocal trust with the customers

Crago spoke a lot about dealing with trustworthy people, and being trustworthy herself. She said, "I think you've got to treat people with respect and be honest with people, and give them good quality. I

think that's the bottom line of being successful..." (Crago, personal communication, June 13 2014).

Crago (attributes much of her success to the relationships she has fostered with her customers that are built on trust. When considering how she has achieved success, Crago (personal communication, June 13 2014) stated, "I built a reputation and people know who I am. I've worked really hard to develop relationships and be honest with people". Maintaining an honest disposition helped Crago cultivate a successful business. She also mentioned the importance of dealing with honest people. There have been several instances in which Crago has felt mistreated by dishonest people, whether by growers not paying for plants or workers learning her techniques and establishing business of their own in the same niche and location. In this way, interacting with dishonest people can have negative effects on one's business such as the loss of income or heightened competition (Crago, personal communication, June 13 2014).

5.3.8.6: Regularly re-evaluate the business to discover what changes could be made

Lastly, as identified by Osborn and Knight, it is wise for direct-marketing farmers to regularly re-evaluate their business to discover whether or not it is satisfying its purpose. When discussing possible errors made while developing All Sorts Acre, Osborn (personal communication, July 7 2014) said, "I think not listening to... conventional business wisdom harmed me in a big, big way. And holding onto this, 'it will all work out', instead of stepping back and taking a really good look at what's working and what isn't". With this, Osborn suggested that by re-evaluating her business earlier, she may have been able to re-shape the focus earlier, saving her time and resources in the process.

In only the second year of Two Crows Growery, Knight and McPhearson are re-evaluating their approach to the business. "We're just debating, do we want to keep up with the market garden and pull back on our urban installation stuff, or do we want to get rid of the market garden, maintain our own little plots..." (Knight, personal communication, Aug. 7 2014). To make a decision, Knight and

McPhearson are considering factors such as income generation, required labour, and personal satisfaction.

5.4: Greatest Barriers of Direct-Marketing Farmers to Achieve Further Success

Throughout the course of the interviews, the farmers identified several barriers (see Table 5.3) that are preventing them from achieving their goals and fostering what they consider to be a more successful livelihood. The barriers include: a lack of dedicated employees, a lack of affordable land, negative emotional response to livestock slaughter, restrictions of the supply management regulation, and a decline in abattoirs. The barriers are discussed below in order of frequency of mention amongst the participants. Thus, the first barrier was mentioned by three participants while the last barrier was mentioned by only one participant. It should be noted that three participants failed to describe any barriers or challenges during their interview.

First, Reid, Crago, and Knight recognized *labour* as major barrier. “My limits are solely labour” (Crago, personal communication, June 13 2014). Crago has a waiting list of people wishing to become a member of her Community Supported Agriculture program. With more employees or volunteers, she would be able to accept more members and sell to more restaurants. Nevertheless, though labour in this way was a barrier for her in the past, she is currently seeking to downscale her business as she gets older (Crago, personal communication, June 13 2014). Reid also commented on labour being a barrier, however, in a different sense. Although he currently has a hardworking group of interns, in the past he has had workers that were not as efficient (Reid, personal communication, June 3 2014). Knight has had a similar problem with workers. Many people have shown interest in volunteering with Two Crows Growery at the beginning of the growing seasons but they eventually stop their involvement. “You have tonnes of people that, in the spring, are like, ‘I want to come help. This is amazing’. But by July, there’s

no one. They're done. They do one day of weeding carrots and they're out" (Knight, personal communication, Aug. 7 2014).

The second barrier is simply *access and cost of land* as recognized by Knight and Young. When asked to explain her barriers to future success, Young (personal communication, July 30 2014) responded, "Price of land... we really need more land if Nathan is also going to farm full-time and land is ridiculously expensive". It has more than doubled in price since we bought our farm" Knight (personal communication, Aug. 7 2014) also recognized the expense of purchasing land in Southwestern Ontario. He exclaimed,

Land access in this area is ridiculous. You're not going to buy a farm unless you're a millionaire. There's no way you can buy land in this area. Ten acre plots can be millions of dollars in this area so it's a matter of finding land and getting access to that land that's your biggest trick.

Of the two participants who farm livestock for meat, both Osborn and Young acknowledged a third challenge being *the process of sending the animals to the abattoir*. While discussing a time that she experienced failure, Young (personal communication, July 30 2014) explained,

On slaughter day. I remember the first time we ever did that, taking our pigs to a place where the fear is palpable. You can't help it, it's a slaughterhouse. Just the fear that the pigs had was visceral, absolute. I was so sad. I was so upset I had to take my pigs to this place. I was depressed for weeks.

Osborn had a similar experience. Speaking about the first time she brought lambs to an abattoir for slaughter, she said, "In some ways, we failed because Scratchy had such a bad time of it. She was scared, she hurt herself by falling and scraping her knee... When we left, I bawled for hours" (Osborn, personal communication, July 7 2014). Young (personal communication, July 30 2014) later explained that she overcomes this barrier by avoiding an emotional response. "...I've gotten used to slaughter. I

just don't let myself get worked up about it but I don't think that's a good thing. I think farmers should get emotionally worked up. If your animals aren't dying in a way that makes you feel good, then there's a problem".

Fourthly, and finally, Young also identified, with vigour, the barriers that regulations pose to small-scale farmers. She is particularly wary of the *supply management* regulation in Ontario.

Unless you purchase quota, you're only allowed to raise a certain number of turkeys and chickens, laying hens, dairy cows. Chicken being our most lucrative enterprise, we used to do turkeys but we got out of it because we were only allowed to raise 50. I just think it's a good system if you're not doing your own marketing but if I'm willing to compete with chicken that is far cheaper than my own chicken, then I should be able to raise as many as I want. If I'm going to be doing the marketing myself and not be dependent on a marketing board, then I don't think a farmer like me should have to be part of the supply management system (Young, personal communication, July 30 2014).

Young did not only explain her distaste for the current supply management system, but she also offered an alternative. "Another option is to keep supply management but increase exemption limit. In Alberta, you can raise 2 000 chickens and not have to pay and there's far fewer people in Alberta" (Young, personal communication, July 30 2014). In the same discussion, Young spoke about the purpose of supply management being to ensure that there is enough of certain products produced to meet the demand in a given province. In light of this, she noted, "...we're not producing enough organic chicken and turkey in Ontario to supply demand. Not even close. At Thanksgiving, if you're lucky enough to get yourself an organic turkey, chances are it came from Quebec" (Young, personal communication, July 30 2014).

Young is also sceptical of the regulations governing abattoirs in Ontario. She explained that a few abattoirs have been found guilty of hideous infractions like processing animals that arrived dead, referred to as ‘deadstock’ (Young, personal communication, July 30 2014).

So, the government responded by really coming down hard on regulations. They really toughened them up and instead of working with abattoirs that weren’t able to meet regulations, they would basically be like, ‘We’ll be back in a week and if that wall isn’t moved six inches we’re going to close you down’. So, they were all going out of business (Young, personal communication, July 30 2014).

A lack of abattoirs will be a major challenge for farmers looking to slaughter the livestock in which their livelihoods depend upon. Still, Young mentioned how she recently learned that the government might be softening their stance and employing a more co-operative approach

Table 5.3: Barriers to the Achievement of Success as Identified by the Participants

Barrier to further success and the attainment of a Sustainable Farming Livelihood	All Sorts Acre	Althaea Herb Farm	Backyard Bok Boks	Backyard Bounty	Green Being Farm	Herbs N’ Such	Tree and Twig	Two Crows Growery
Lacking dedicated workers		X					X	X
Limited access to, and high cost of land					X			X
Having an emotional response to abattoir process	X				X			

Supply management regulation restraining amount of livestock to be raised by farmers					X			
Limited availability of abattoirs					X			

5.5 Personal Reflection from Working On-farm with the Participants

Throughout the course of the research, I engaged in many thoughtful conversations with the farmers and, in a few cases, worked alongside them for anywhere between one day to one week. During these encounters, information was passed onto me in a more implicit nature than that of an interview. For example, although it was mentioned a couple times that a farmer must love farming in order to be a farmer, I would have known this to be true without being told with words. Farming is incredibly demanding work. It is time consuming, incredibly laborious, mentally exhausting, and, generally, economically unviable. So, what is driving these farmers? It did not take me long to find that the answer is their unwavering passion for local, organic, small-scale agriculture. On several occasions, the farmers referred to their farms as their ‘happy place’ or their ‘dream come true’. They work day and night, and do not seem to mind. For instance, Knight works in the field from 7:00am until 3:00pm until his business partner arrives at 3:00pm and is meant to relieve him. However, Knight typically stays in the field for a few hours longer, if his schedule allows it, for the sake of enjoyment. Agriculture is a regular topic of discussion amongst the farmers and their employees or volunteers. It is discussed while working and also, often during break-time as well. I was warned by Osborn (personal communication, July 7 2014) that our interview together might take longer than I expected because, “You can’t get organic farmers to

shut up". There was also an over-arching theme narrating the farmers' reasons for beginning a life of farming, being that they needed to. They needed to farm in order to feel like themselves, and to lead a fulfilling and meaningful life. A deep-seated need to farm is required if one intends to become a direct-marketing farmer.

It may not come as a surprise to learn that I wish to own and operate a direct-marketing farm someday. However, one of the main lessons I learned while conducting research for this thesis, is not to do so until I am financially ready. The farmers in this study were quite young when they initiated their own farming businesses, likely due to a desire to follow their dream and an unwillingness to wait. Now, many are in a problematic cycle of needing to purchase more tools and infrastructure in order to sell more products, while needing to sell more products in order to generate the funds required to purchase more tools and infrastructure. Thus, they need the income from their farms to generate a large enough net income to support on-farm developments, as well as necessities such as a mortgage, a vehicle, and perhaps children. An income of this size is not typical for direct-marketing farmers, especially in the first few years of operation. This study offers a variety of strategies and best practices to employ in order to generate a larger income and ultimately, a Sustainable Farming Livelihood. Taking each into consideration is wise, noting that one strategy bluntly states to ensure adequate financial savings before committing to a direct-marketing farm operation. I believe that if one was to save enough money required to begin a farm operation, including equipment purchases spanning 2-3 years (and keeping in mind the net income during that time will likely be meagre), and initiated his or her farm thereafter, he or she would escape the cycle.

Osborn asked an interesting question during our time together that I was unable to answer. She asked if anyone had conducted a study about the relationship between a direct-marketing farmer and his or her spouse. She hypothesized that the career and relationship of a farmer with a spouse who does not supports his or her career, or who does not share an interest in agriculture, would suffer. In other words,

Osborn suggested that direct-marketing farmers require supportive spouses. I agree. Every farmer in this thesis who was in a relationship, had a spouse who offered enormous support to his or her career. In a few cases, spouses wished to also become a farmer once their income from elsewhere was no longer required. In other cases, spouses displayed noticeable interest in the farming profession by spending time in the farm fields and by engaging in positive conversations about the farms. Possibly the most obvious way support was demonstrated by spouses was through economic contribution. Many of the farmers would not be able to farm without his or her spouse's financial input, whether it be allocated to a mortgage, housing bills, child care, or actual farm costs. While I originally started to think that one must be in a relationship in order to initiate a farm business (without adequate savings), I was then introduced to Two Crows Growery which is operated by two business partnerships rather than spouses. While Knight spends the day working at the farm, his partner is employed elsewhere and allocates a portion of his income to farm costs (while still spending several hours in the evening working on the farm). Thus, it can easily be surmised that a partnership, whether spousal or through business, with one partner allocating income from an off-farm job to the farm is very beneficial to begin a direct-marketing farm.

In sub-chapter 5.3.8.2, I mention Crago's advice to aspiring direct-marketing farmers to work hard. Although she was the only farmer to explicitly mention such in her interview, a strong work ethic was evident in every farmer involved in this study. Driving up to Osborn's sheep farm, it was clear that she, with the help of her husband, had built the entire structure, from the shelter to the battery used to power the fencing. Osborn moves her sheep every three days which requires the re-orientation of the shelter and 600 feet of 'Premier Permanet' fencing. While working with Reid, I noticed that he always chose to carry out the more intensive tasks, like tilling and digging, while asking his interns to complete less intensive tasks like transplanting seedlings to larger pots. Throughout the days I spent at Althaea Herb Garden, I would look around for Reid and was awed by the amount of time he was occupied with a

laborious task. Farming is known to be physically demanding work but what was most remarkable is that it was never discussed. Working hard came so easily to the farmers that it was not mentioned, not even in the interviews. An innate willingness to work hard may then be a defining characteristic of direct-marketing farmers.

5.6: Conclusion

The findings of this primary research can be organized into three categories. First, the research revealed criteria used to measure success as identified by eight direct-marketing farmers. Since a major goal of this project is to devise a plan for direct-marketing farmers to achieve their versions of success, it is important to first develop an understanding of what such farmers wish to accomplish. Second, the research uncovered the broad strategies and more precise practices employed by the direct-marketing farmers to reach the success they had earlier described. Compiling this information helped to develop a comprehensive document so farmers may learn from one another's triumphs and failures. Third, the investigation exposed some of the challenges of operating a direct-marketing farm, as well as the major barriers to success. The challenges are difficult to overcome as they are intertwined with larger, systemic issues such as property value and provincial policies. Nevertheless, identifying these challenges is a necessary first step in addressing possible solutions. Chapter 6 offers a more in-depth interpretation of the findings.

Table 5.4: Strategies and Best Practices Employed and Suggested by Direct-Marketing Farmers in order to Achieve a More Successful Livelihood

Strategy	Best practice	All Sorts Acre	Althaea Herb Farm	Backyard Bok-Boks	Backyard Bounty	Green Being Farm	Herbs N' Such	Tree and Twig	Two Crows Growery
1. Develop a thorough understanding of what is involved in direct-market farming before initiating operation	Gain experience working on a successful direct-marketing farm before beginning operation					X		X	X
	Conduct primary and secondary research on direct market farming	X			X				X

	specifically targeted for product and location								
	Hire a business coach			X					
	Start on a small scale	X	X	X					X
2. Have adequate financial capital before committing to a direct- marketing farm operation	Have enough money in savings before initiating the business	X				X			
	Engage in	X	X	X	X		X		X

	multiple projects/jobs that generate an income								
	Have a spouse or business partner whose income can subsidize the business	X	X	X			X		X
	Apply for funding to help cover the initial start-up costs		X						X
	Conduct a cash-flow analysis			X	X				
	Design a back-up livelihood choice	X			X				X

	to be quickly employed if needed								
3. Scope out a niche area and potential customer base by conducting extensive research	Conduct thorough market research	X		X		X		X	X
	Find potential customers before initiating business			X				X	
	If renting land, choose a space that is guaranteed to be								X

	available for the duration of the business								
	Find a niche market that is not saturated	X	X	X		X		X	
	Choose a place where potential customers are familiar with the product	X							
4. Create an approach that will attract a loyal customer base	Design an effective marketing strategy	X		X					X
	Educate potential	X							

	customers about the value of the product								
	Create a logo that has a cache			X					
	Offer a sample of the product to potential customers		X						X
5. Maximize effectiveness and profit by choosing high- value products	Offer a diversity of products and services					X	X	X	X
	Grow perennials to minimize cost and labour		X						X

	Sell meat to maximize profit	X				X			
	Offer products with extra value or features	X							X
	Differentiate the products by emphasizing and ensuring a high level of quality		X			X		X	
6. Employ marketing and business strategies that are both efficient and effective	Take good seasonal field notes	X	X	X					X

	Have a roadside market table	X					X		X
	Limit delivery locations				X				X
	Ask the customers to pay in advance of receiving their purchased items			X		X			
	Offer a variety of payment options			X					
	Allow physical and/or virtual access to the farm through tours, blogs, newsletters, etc.	X		X		X		X	X

	Survey the customers to discover ways to improve the farm business			X		X			
7. Reduce operating costs by using methods that are appropriate for small-scale, labour intensive operations	Use appropriate technology to the type and scale of the farm		X			X			X
	Consider creative, low-cost ways of constructing infrastructure	X	X			X			X

	Create a social network to share equipment and knowledge			X		X			
	Recruit dedicated volunteers and employees		X	X				X	X
8. Self-reflect on the importance and merits of a sustainable livelihood	Love the job	X	X					X	
	Work hard						X		
	Live a humble lifestyle				X	X		X	X
	Hone decision			X		X			

	making skills to effectively guide the business towards established goals								
	Develop a sense of reciprocal trust with the customers							X	
	Regularly re-evaluate the business to discover what changes could be made	X							X

Chapter 6: Analysis

In the context of a liberal capitalist society, it would be clear that direct-market farming would not be a prosperous livelihood given that the financial income earned is not enough to fulfill one's needs.

However, the findings in Chapter 5 suggest that there is a variety of strategies that can be employed to achieve greater success and even economic sufficiency. The criteria for success given by the participants in Chapter 5 is very similar to the criteria for a Sustainable Farming Livelihood devised in Chapter 2.

Both sets of criteria are concerned with environmental health, social wellbeing, productive livelihoods, and social innovation. The following further investigates the ability of a direct-marketing farmer to achieve a Sustainable Farming Livelihood by examining the criteria presented in Chapter 2. The significance of income to a direct-marketing farmer is perceived differently than those involved in a more conventional economic enterprise. In part, this is due to the importance of thinking in systems if one wishes to be successful as a direct-marketing farmer. This reconceptualization of livelihoods opens up new possibilities and opportunities for those operating a direct-marketing farm outside of a conventional liberal capitalist paradigm.

6.1: Does Direct-Market Farming Support a Sustainable Farming Livelihood?

The case study of Southwestern Ontario found 41 best practices of direct-marketing farmers, while the literature review found only nine best practices. Seven of those nine strategies found in the literature review (see Table 3.1) were also found within the 41 best practices from the case study. Thus, the case study revealed 34 new best practices. Jennifer Osborn of All Sorts Acre, Scott Reid of Althaea Herb Farm, Tarrah Young of Green Beings Farm, and Joel Knight of Two Crows Growery suggested that direct-marketing farmers consider low-cost ways of building infrastructure such as salvaging old materials and employing one's own labour. This is a similar strategy to that suggested by both the Maker Movement and Open Source Ecology which promote a do-it-yourself lifestyle. Both movements also promote the

sharing of tools and bartering of services amongst friends and neighbours to foster a social network and save money. Sharing tools and resources was mentioned as a best practice by Young, as well as Mike Craig of Backyard Bok Boks. Open Source Ecology also encourages farmers to construct their own machinery such as tractors by using the blueprints provided in the Global Village Construction Set. While many of the research participants constructed their own infrastructure and tools, they did not build machinery.

The importance of operating within a niche and noticeably showcasing the uniqueness of products were other strategies prevalent in the literature. Linda Crago of Tree and Twig, along with Osborn, Reid, Craig, and Young, noted the necessity of discovering a niche market and offering unique products to avoid competition. Young expanded by explaining the benefits of maintaining high quality products. Since the freshness and taste of local produce is often what makes it unique from grocery store goods, it is important to draw attention to, and uphold that standard. Locating the farm in an area in which one's product is in demand was also found in the literature as a strategy for direct-marketing farmers. Osborn, Craig, Young, Crago and Knight made mention in their interviews about the significance of thorough market research, including the selection of location, to ensure a customer base is available.

The lessons learned from *The Market Gardener* were also found within the case study. Author Jean-Martin Fortier suggests the use of high-efficiency tools by direct-marketing farmers in order to save resources. For instance, he recommends simply laying a tarp over finished garden beds to remove weeds and prepare the soil for future use. The use of a tarp would replace the need to operate a rototiller which requires more time and effort by the farmer. Reid, Young, and Knight also remarked on the importance of using tools and technology that are efficient, especially for such labour-intensive operations. Fortier also warns against the use of intermediaries in any circumstance as a way to retain high profit margins by avoiding the cost of paying a third-party. Although the participants did not

explicitly mention the importance of avoiding intermediaries, it is assumed that they comprehended and appreciated the strategy since they each employed direct-marketing. The participants also created and constructed their own infrastructure which would further suggest that they understand the value of avoiding third-party labour. Lastly, Fortier suggests the use of biologically intensive farming methods so direct-marketing farmers may grow a great amount of crops in a small space. It was not evident that any of the research participants employed biologically intensive farming methods. However, although he cannot currently execute the idea, Knight said that he would like to practice permaculture, a biologically intensive farming method, in the future.

Ultimately, this thesis offers 34 best practices for direct-marketing farmers that were not found in the literature. At the same time, it provides an account of what direct-marketing farmers are seeking to achieve with these practices. While it is largely assumed in the literature that direct-marketing farmers wish to secure a greater income and greater production of goods, there are many other criterion of success for the farmers. The notion that success should be based on various factors of one's overall wellbeing (rather than solely income) has been conceptualized in the wellbeing indices that have emerged in recent years, as well as the long-established Sustainable Livelihoods Approach. In sub-chapter 2.5.2, criteria for a Sustainable Farming Livelihood were developed using wellbeing indices and the Sustainable Livelihoods Approach as blueprints. Accordingly, a Sustainable Farming Livelihood reflects the requirements for comprehensive welfare, specifically for direct-marketing farmers, making it a more useful measure of success and wellbeing. The criteria for success identified by the participants fit into the Sustainable Farming Livelihood requirements (see Table 6). Thus, as the participants spoke about success in their interviews, they were also speaking about Sustainable Farming Livelihoods. In a deductive analytical approach, the following sub-chapters offer an account of whether or not the findings from the primary research reinforce each of the five criteria of a Sustainable Farming Livelihood. The criteria are not presented in any particular order.

Table 6.1: How the Criteria of Success for Direct-Marketing Farmers Fit into the Sustainable Farming Livelihood Model

Sustainable Farming Livelihood Requirement	Criteria of Success Identified by Participants
Environmental Health	Contribution to environmental health
Social Vitality	Interest from the community in the farm and its products or services
	Contribution to one's personal happiness
	Satisfaction of customers with their purchased products or services
	Achieving goals for the farm business
Physical health	Discovering efficient modes of operation
Economic sufficiency	Discovering efficient modes of operation
	Sufficient income to support business and farmers
Innovation	Fruitful production of goods and services

6.1.1: Environmental Health is Closely Linked with Direct-Marketing Farms

Environmental health is consistently cited as a measure of welfare throughout various wellbeing indices, with few exceptions. The indices regularly refer to environmental health in the context of the biophysical environment, including concerns such as ecological diversity and ecological footprint (Canadian Index of Wellbeing, 2014; The New Economics Foundation, 2014; OECD, 2014). The lifestyle of direct-marketing farmers undoubtedly contributes to a healthy biophysical environment through multiple means.

Several farmers interviewed for this research project in the months of May, June, July, and August in 2014 began their careers for the purpose of having a positive effect on the environment. Jennifer Osborn (personal communication, July 7 2014) of All Sorts Acre, for example, said, "I've always wanted to work with animals and nature, and just make the earth a better place...". In the same way, Tarrah Young (personal communication, July 30 2014) of Green Being Farm declared, "I came to farming with the idea that agriculture can save the world...". Robert Orland's motivation to begin Backyard Bounty was similar in that he wanted to reduce greenhouse gas emissions by offering locally grown food which requires less transportation (personal communication, May 11 2014). Even those who did not explicitly refer to environmental health as a reason for their farming career still displayed a pre-disposition to act environmentally benign. For example, Scott Reid of Althaea Herb Farm uses soil block trays for his seedling transplants rather than plastic trays in an effort to reduce plastic waste (personal communication, June 4 2014).

Although many efforts to be environmentally conscious are also made to save funds since acts of reuse and recycling require less money than repurchasing, they are also explicitly employed for the environmental benefits. It was common for the farmers to reuse outputs like materials and waste from farm processes as inputs into other processes. For instance, Reid used crop residue to create compost to be spread back into the land (personal observation, Althaea Herb Farm, June 3 2015). While this practice saved money, Reid directly discussed the environmental benefits of on-farm composting. Young and Osborn have the more radical goal of creating closed-loop farm systems in which all waste produced on-farm will be reused for farming purposes. Osborn cites her interest in permaculture as the motivation for her goal, with permaculture benefitting the environment through ecological diversification and resilience (personal communication, July 7 2014).

Besides on-farm behaviours, direct-marketing farms contribute to a healthy environment in a much broader sense as well. For instance, Backyard Bounty was created, in part, to combat the effects of globalization on the food system. Orland explained (personal communication, May 11 2014),

I shopped locally in town even in season and noticed that the organic vegetables I wanted to purchase were coming from California and other places. That to me was just wrong. Not only does it have very little nutritional value by the time it gets to me but also the transportation effect it has on the environment, just all the greenhouse gas emissions that would come from transportation. Very inefficient model.

Although not proven conclusively, several academic studies have made the argument that direct-marketing farms emit fewer greenhouse gas emissions than industrial, large-scale agriculture (Paxton, 1994; Pirog, Van Pelt, Enshayan, & Cook, 2001; Weber & Matthews, 2008; Smith, 2005). For instance, Weber and Matthews (2008) found that "... a totally 'localized' diet reduces [greenhouse gas] emissions per household equivalent to 1000 miles/yr (1600 km/yr) driven" (p.3512). Still, the case for direct-market farming being more nutritionally valuable compared to industrial agriculture is highly agreed upon. Industrial agriculture requires transportation and, in effect, storage which reduces vegetable quality due to spoilage and nutritional loss (Edwards-Jones, Canals, et al., 2008). Stored produce often requires to be blanched and frozen which further diminishes its nutritional value (Edwards-Jones, Canals, et al., 2008; Puupponen-Pimiä, Kkinen, Aarni, Suortti, Lampi, Euroola, Piironen, Nuutila, & Oksman-Caldenty, 2003). Thus, the very existence of direct-marketing farms have a positive impact on the biophysical environment by fostering high quality agriculture goods and possibly reducing harmful emissions.

6.1.2: Fostering Community, Civic Engagement, and Happiness by way of Direct-Marketing Farms

Wellbeing indices highlight the importance of social welfare. For example, from the 11 indicators for wellbeing outlined in the Better Life Index, more than half are of a social nature, specifically, housing, community, education, civic engagement, life satisfaction, and life-work balance. This is a consistent theme throughout various indices with other indicators including leisure and culture. This subsection will discuss the ways in which the lifestyle of a direct-marketing farmer meets or challenges these indicators.

To begin, communities of interest were created by the direct-marketing farms involved in this research project. For example, Green Being Farm is located in proximity to other small-scale farms. Rather than operating in silos or directly competing with one another, the farmers help one another succeed (personal observation, Green Being Farm, July 30 2014). Tools are passed along and shared between farms based on who is in need of the equipment at a given time (personal observation, Green Being Farm, July 30 2014). When a farmer required help with a task, other farmers, and sometimes neighbours, would offer their assistance which usually operated as a barter system (personal observation, Green Being Farm, July 30 2014). When speaking about the farmers in her area, Young referred to them as an intrinsic part of her farm system, rather than existing outside of it (personal observation, Green Being Farm, July 30 2014). Orland, as well as Mike Craig of Backyard Bok Boks, also spoke about the sense of community their farms have fostered within surrounding residents. Orland declared, "...we were successful at building relationships within the community and making connections". People would meet at Backyard Bounty's food stand to compliment the initiative, purchase goods, and discover ways to get involved (Orland, personal communication, May 11 2014). Relationships between community members were stimulated by a shared interest in locally grown food and Backyard Bounty. Craig also initiated a community of interest more intentionally by beginning a

Facebook group for people living in Guelph who have, or are interested in, backyard chickens. “You just have a sense of what’s going on in the community. What are people talking about? What are the problems? That was an interesting way to get tapped into this community of people who have backyard chickens...” (Craig, personal communication, Aug. 6 2014). The Facebook group allows for a community to build and support itself around a common curiosity and passion.

Farmers and their interns also manifested a palpable sense of community. At Green Being Farm, the two interns lived on the farm for several months and spent the majority of their time with each other, as well as with Young and her family. When the work day was finished, everyone joined together to prepare and eat dinner. As this small group worked, ate, and spent time together, it was clear they resembled a small community (personal observation, Green Being Farm, July 30 2014). Reid and his interns also shared a similar bond. Though living away from the farm, Reid and his three interns came together throughout the week to work toward a common goal – to learn about herbal teas and provide them to the broader community (personal observation, Althaea Herb Farm, June 3-6 2014). The group would work all day with intermittent breaks spent conversing and eating in a shady spot (personal observation, Althaea Herb Farm, June 3-6 2014). On Saturdays, the group would reconvene while Reid taught a lesson about herbalism. By engaging in conversations of pleasure and education, while sharing work and passion, this small group formed a community.

Joel Knight of Two Crows Growery offered a means by which to foster equality within communities by operating on an intentionally affordable model.

...I feel that everyone should have equal access to food. It’s always been a big issue of mine. If you go to the store and you see organic versus non-organic, and the organic is five times as much, that’s not really fair necessarily. So, I wanted to figure out how everyone could have access to that (Knight, personal communication, Aug. 7 2014).

To foster equal access to organic food, Knight operates a backyard installation business in which he and his partner convert backyards into gardens. "...we can produce a phenomenal amount of food through that. Easily enough to feed a family of five on a very small plot" (Knight, personal communication, Aug. 7 2014). The other side of his business includes a market garden that offers a roadside food stand.

...I made everything donation only. Just pay what you want and then that way, people who don't have a lot of money have access to organic vegetables. And people who can afford it can come take a little bit and leave more money. That totally worked out (Knight, personal communication, Aug. 7 2014).

Knight found that some people would leave large amounts of money for a small amount of food while others would take larger amounts of food and leave less money. The income was eventually balanced so that he was receiving more money through donation than when he had set prices for the food at an earlier time. This way also enabled everyone, regardless of income, to have access to fresh, organic produce.

The farmers who employed interns, namely Young and Reid, also contributed to the education factor embedded within social welfare. The OECD's Better Life Index cites education as a key means to improve life, and the United Nations Development Programme notices education as a critical dimension of human development (OECD, 2014; United Nations Development Programme, 2014). The OECD website further explains the significance of education:

Education plays a key role in providing individuals with the knowledge, skills and competences needed to participate effectively in society and in the economy. In addition, education may improve people's lives in such areas as health, civic participation, political interest and happiness.

Young and Reid employ people who are genuinely interested in direct-market farming and teach them the skills to be farmers themselves. Young (personal communication, July 30 2014) believes in truly teaching her interns how to farm and how to manage the economic concerns of farming, rather than just using interns for labour. Reid (personal communication, June 3 2014) operates with the same maxim as he does not only have interns for their labour, but he provides his interns with weekly herbalism lessons so they may learn more about the plants they care for. Education about farming is limited within the formal school system, and thus interested parties must pursue internships to acquire information. Farmers that offer internships ultimately provide the interns with the skills and competences needed to acquire a meaningful livelihood in farming and to contribute to society.

Civic and democratic engagement are other indicators of wellbeing as identified in several wellbeing indices such as the Better Life Index and the Canadian Index of Wellbeing (Canadian Index of Wellbeing, 2014; OECD, 2014). The Canadian Index of Wellbeing (2014) explains democratic engagement as "...participation of citizens in public life and in governance..." (p.1). Although there was not any evidence of the direct-marketing farmers participating in governance, there was much indication that the direct-marketing farms supported engagement in public life. A personal connection between farmers and the public is a quality that lies within the very nature of direct-marketing (King, 2008). The farmers must sell their products straight to the consumer via farmer's markets or Community Supported Agriculture programs. These programs involve choosing a pick-up location for the members to gather weekly, or bi-weekly, to collect their goods. These pick-up locations become spaces of public life. Tegtmeier and Duffy (2005) found that, "[Community Supported Agriculture programs] may spur local, civic involvement by energizing environmental initiatives, preservation of open and rural landscapes and other community building activities" (p.5). Sumner, Mair et al (2010) also found that citizens used their Community Supported Agriculture involvement as a way to get more

involved in public life, especially as it concerns access to healthy food. Thus, Community Supported Agriculture programs are a means in which to achieve greater civic engagement within a community.

Farmer's markets are also public events with farmers such as Reid getting involved by occupying a table with goods to sell and samples to share. In a study of the relationship between older consumers and farmer's markets, Szmigin, Maddock and Carrigan (2003) found that older people are attracted to farmer's markets for their sense of community. Adams (2002) similarly found that the general public attends farmer's markets to build and showcase their community pride. In regards to the farmers themselves, Lawson, Guthrie, Cameron and Fischer (2008) report, "The continued reference to community dimensions in relation to farmers' markets can only arise because farmers are willing to come together and recognise the potential benefits that emerge from cooperative activity" (p.14). Thus, farmer's markets are a hub for public life and community participation that would not be possible without direct-marketing farmers. Some of the study's participants engaged with the community life in other, creative ways. For example, Osborn offers on-farm workshops to teach the art of felting. Linda Crago of Tree and Twig offers workshops as well so the community may come together and learn how to plant a garden in their own backyards. She also speaks at community events and schools about the merits of local and traditional agriculture.

6.1.3 Direct-Market Farming as Both Work and Leisure

Time use and work-life balance are other indicators of wellbeing used by indices like Gross National Happiness, Canadian Index of Wellbeing, and the Better Life Index. While Gross National Happiness only considers the amount of hours of work and sleep one receives each day, the Canadian Index of Wellbeing examines the amount and quality of one's spare time by analyzing activities like extended work hours, child and senior care, volunteer activities, and active leisure (Centre for Bhutan Studies & Gross National Happiness Research, 2014; Canadian Index of Wellbeing, 2014). The Better Life

Index reviews time use in terms of work-life balance and whether or not one is able to distribute their time in such a way to achieve their work and personal goals (OECD, 2014). The farmers who participated in this study demonstrated an interesting and unique conception of time use.

At one point in time, Crago considered growing a variety of vegetables to sell, just like many of the other study participants. However, she quickly recognized the amount of time such a livelihood would cost her. “If I was only selling vegetables, I would be so burnt out right now and I’d be resentful because I’d be working so hard to earn money to sell people food. I would have given up a long time ago” (Crago, personal communication, June 13 2014). She recalled a morning spent jogging in which she thought to herself:

There’s only so much when you are one person doing what I do that you can actually grow. I couldn’t nor would I desire to have 50 or 100 people in my [Community Supported Agriculture program]... I’d work ten times harder and have to hire people, I wouldn’t make any more money although I added tones of stress to my life.

In response, Crago thought of ways to generate an income through agriculture that did not require growing mixed vegetables. As a result, she began growing and selling tomato seedlings for people to plant in their own gardens.

Osborn also noted the excessive work hours required to grow mixed vegetables for the farmer’s market. Thinking back on when she and her husband began farming, she said, “We came in thinking we are going to provide, I laugh at this now, a decent part time income for somebody...” (Osborn, personal communication, July 7 2014). Osborn laughs because she now understands that not only did farming not generate the income she had expected, but direct-market farming is also not a part time job.

So we started planting and we soon realized, this is going to take longer than anticipated. We worked all the time... Every week, starting Friday morning, we’d start harvesting, washing, and

bagging and because we have other animals and responsibilities, there would be other things to do and I'd be going all day getting ready for market (Osborn, personal communication, July 7 2014).

Although Osborn enjoyed gardening at first, as the size and scope of her garden grew each year, she began to lose interest. So, she considered new livelihoods that she believed to be less time consuming but still fulfilled her passion for agriculture and creating (Osborn, personal communication, July 7 2014). In the end, Osborn became a shepherd.

The stories of Crago and Osborn illustrate the great amount of energy and time required to farm mixed vegetables or plants which is the career path of each of the other participants, except for Craig. Farming of this kind is incredibly time consuming. Reid (personal communication, June 3 2014) spends a great deal of time thinking of, and discussing ways in which to be more time efficient. "...another thing you need to do as a farmer is be more efficient. How can I do this in less time?" (Reid, personal communication, June 3 2014). When Backyard Bounty was still in operation, Orland (personal communication, May 11 2014) was occupied with similar thoughts. The farmers demonstrated an understanding of how demanding farming is, in terms of time, and were looking for ways to reduce the demand. Young (personal communication, July 30 2014) also spoke about working on her farm in the evenings and on weekends. Knight explained his work hours to be equally as prolonged. While his agreement with his business partner dictates for Knight to work on the farm from 7:00am-3:00pm Monday to Friday, Knight actually works longer hours. When his partner arrives on the farm at 3:00pm, Knight spends some time explaining the tasks he accomplished that day and what should be worked on next. He then stays on the farm for a while longer to help his partner.

When the farmers discussed their long work hours, it was not in a tone of complaint. On the contrary, they either mentioned it as a matter-of-fact, or with a positive subtext. For example, after

explaining that he works on the farm more than expected, Knight (personal communication, Aug. 7 2014) declared that he was glad to do so since the farm is his “happy place”. Young’s comments about working on weekends were spoken nonchalantly. For instance, she said, “It’s not uncommon for us to be on the farm, working away on the weekend, and just be struck with the beauty of the farm and how happy we are...” (Young, personal communication, July 30 2014). The notion that direct-market farming induces feelings of fulfillment amongst the farmers is related to time use research in the field of ecological economics which suggests that one’s quality of life is enhanced through meaningful, sustainable work (Costanza, Fisher, Ali, Beer, Bond, Boumans, Snapp, 2007).

It is also worthwhile to mention Craig’s situation. Although he does not operate a vegetable farm, he is experimenting with beginning a backyard vegetable garden as another project. Craig is interested in such projects, in part, to be closer to his family.

I taught high school for 17 years and was commuting to Burlington, great outdoor ed job. Amazing. But as I had kids, I was gone. I was just away. And so I resigned to try and create something more local... So, how do I create income locally and also spend time with my kids at different times in the day, not just before 7:00 in the morning and after 5:00 or 6:00 at night? (Craig, personal communication, Aug. 6 2014).

By initiating direct-marketing farms, such as Backyard Bok Boks or a backyard garden, Craig believes time at work is also time spent with family. Even as Craig was interviewed for this study in his garden, his daughter sat upon his lap (personal observation, Backyard Bok Boks, Aug. 6 2014). Similarly, Knight and Young relate time spent farming not only with work but also pure enjoyment. It is clear then, that the line between work and life is blurred. How can one balance work and life if they are one in the same?

The notion that direct-marketing farmers enjoy their work so much that they may also deem it as leisure also speaks to the personal satisfaction and psychological wellbeing one derives from one's career. When discussing the merits of the urban installation feature of Two Crows Growery against the market garden feature, in respect to the garden, Knight (personal communication, Aug. 7 2014) said, "I love being out there, that's my happy place, you get to spend time in the dirt and find out how everything grows". Now, as a shepherd, Osborn (personal communication, July 7 2014) also describes her career as something that she loves to do. For Craig (personal communication, Aug. 6 2014), Backyard Bok Boks satisfies his passion for teaching and enabling people to experience life-changing events such as eating eggs laid from their own chickens. Ultimately, direct-market farming is simultaneously fulfilling the farmers' work and leisure goals, despite the laborious nature of the livelihood.

6.1.4: The Physical Health Benefits and Disadvantages of Farming on a Small Scale

Besides social and psychological health, wellbeing indices also include physical health in their assessment of wellbeing. Indices like the Human Development Index and Happy Planet Index assess physical health by means of life expectancy (United Nations Development Programme, 2014; The New Economics Foundation, 2014). Others, like Gross National Happiness and the Canadian Index of Wellbeing, consider indicators such as nutrition, perceived physical health, and absence of illness and activity restrictions (Centre for Bhutan Studies & Gross National Happiness Research, 2014; Canadian Index of Wellbeing, 2014). The availability and accessibility of direct-marketing farms positively impacts the physical health of the surrounding community. However, small-scale farming may have some negative physical effects for the farmers themselves.

To start, direct-marketing farmers eat what they grow. Thus, they are regularly consuming fresh and healthy produce and meat. Knight (personal communication, Aug. 7 2014) explained, "We don't pay

for vegetables or meat. We don't have food costs...". Osborn (personal communication, July 7 2014) also acknowledged the benefit of her permaculture garden "We have more food that we can even hope to harvest. We have something to eat from April to October that we don't have to plant, it just appears". Young (personal communication, July 30 2014) also remarked on the homegrown nature of her meals, "We don't say grace but we look at the food on our plate and where it all came from and usually everything on our plate comes from our farm". Not only is the produce plentiful, but it is fresher compared to the produce purchased from large grocery stores. In terms of his tea plants, Reid (personal communication, June 3 2014) said, "It's just like food – the fresher, the better. When people come buy my tea, I know exactly when it was harvested". As mentioned in sub-chapter 6.2.1, fresh food is healthier in itself, but since direct-marketing farms are almost always organic, the means in which it is grown also fosters health through the absence of added chemicals and hormones. Young (personal communication, July 30 2014) declared, "You can eat better at our house than you can in any restaurant in the county". Crago (personal communication, June 13 2014) shared a similar sentiment, "We live simply but we live well. We eat well".

While direct-marketing farmers provide fresh and healthy food for themselves and their families, they are also serving their communities. Bellows, Brown, and Smit (2004) found that "Practical experience with fresh food – growing, harvesting, identifying varieties in stores and farm stands, understanding seasonality, cooking, and preserving – positively impact dietary habits" (p.2). This suggests that people who volunteer on direct-marketing farms or tour the farms, develop food knowledge and begin to make healthier dietary choices. Bellows, Brown et al. (2004) also found, "Direct marketing improves the producer-consumer relationship and maximizes opportunities and interest in increased consumption of fresh fruits and vegetables" (p.3). Thus, the presence of direct-marketing farms within communities aids in the availability of fresh, healthy produce and meat for community members to access and contribute to their physical wellbeing.

Direct-market farming might also beneficially contribute to the farmers' physical health through exercise. Bellows, Brown et al. (2004), state "Gardening and food production is good exercise" (p.6). A widely cited journal article by Mattson (1992) explains how gardening improves fine motor skills through tasks like cutting flower stems, as well as aerobic motor involvement like turning compost piles. Research into the physical benefits of gardening for various groups such as seniors, children, incarcerated people, and pregnant women is also well documented (Cox, burns, & Savage, 2004; Alexander, North, & Hendren, 1995; Lindemuth, 2007; Evenson, Savitz, Huston, 2004). The physical exercises witnessed in this research project include farmers engaged in moving 600 feet of Premier Permanet fence every three days, operating a walk-behind tractor, digging trenches, raking compost throughout rows, weeding, transplanting seedlings, and harvesting crops. As noted in the literature, the activities of the research participants would seem to produce physically-beneficial results. However, the current research is most often concerning small plot gardening such as backyard gardening and tending allotment plots which are much smaller in size than market gardens. Brown and Jameton (2000) notice this deficiency in the research:

More research, however, is needed to understand the prevalence of potentially harmful impacts on health, particularly for those who are involved in market gardens, where the stress from depending on agriculture for a livelihood, the physical strain of hard, repetitive labor, and the risks of injury from farm machinery and of toxic exposures to agricultural inputs would likely compare to the experience of their rural counterparts (p.30)

Thus, direct-marketing farmers may not reap the physical benefits of gardening previously mentioned. Academic research into the physical health impacts of rural farmers, which was said to be more closely related to market gardeners, is also lacking. One study, however, about the impact of physical work exposure on the musculoskeletal symptoms among rural Swedish farmers and non-farmers found that farmers reported more low back and hip problems, and less neck and shoulder

symptoms than non-farmers (Holmberg, Thelin, Stiernström, and Svärdsudd, 2003). More research is required into the long-term physical effects of farming at the scale of most direct-marketing farmers. Nevertheless, people who volunteer or are employed part-time on direct-marketing farms are more likely to receive the same physical benefits expected for those working with community garden plots.

6.1.5: Working for Sufficiency: The Financial State and Goals of Direct-Marketing Farmers

Wellbeing indices and the Sustainable Livelihoods Approach suggest economic sufficiency as a requirement for human welfare. The wellbeing indices that have an economic component focus primarily on income level and job security (United Nations Development Programme, 2014; OECD, 2014; Canadian Index of Wellbeing, 2014). Maintaining a position in employment that generates an income is important for the accumulation of wealth. "...wealth makes up an important part of a household's economic resources, and can protect from economic hardship and vulnerability" (OECD, 2014, para.5). Wealth is not required so one may live a lavish lifestyle, but rather to provide ongoing access to basic needs like health care and housing (OECD, 2014; Canadian Index of Wellbeing, 2014). The Sustainable Livelihoods Approach considers income and wealth in much the same way. A livelihood is considered sustainable if it provides the worker with the ability to enhance or maintain his or her capabilities and assets of both a material and social nature (Scoones, 1998). Once again, economic sufficiency, and not economic abundance, is the goal. The Sustainable Livelihoods Approach is interested in providing workers with strategies, skills, and access to resources needed to acquire a livelihood that generates a sufficient income so they are not impoverished.

Only two direct-marketing farmers who participated in this thesis, namely Young and Crago, generated what they considered to be a living wage. They each reportedly received a yearly net income between \$25,000 and \$50,000. Young and Crago exemplify the possibility of achieving a sufficient income to support oneself and one's business as a direct-marketing farmer. Each of the remaining

participants, however, acknowledged that the yearly net income from their farm was below \$25,000 and was not considered a living wage because it was not enough to cover all of the costs of living while also supporting the business. Still, during discussions of income and living wage, several farmers commented on the fact that although they do not make a substantial amount of money, they also do not have to purchase many groceries since they grow their own food. For example, Knight (personal communication, Aug. 7 2014) said, “we don’t pay for vegetables or meat, we don’t have food costs...”.

The General Minimum Wage in Ontario is \$11.25 per hour (Ontario Ministry of Labour, 2015). Someone who works 40 hours a week each week of the year would earn a yearly income, excluding taxes, of about \$23,400 which would fall under the ‘less than \$25,000 a year’ bracket that the majority of the direct-marketing farmers associate with. Statistics Canada (2012) found one-person households to spend \$2,907 on groceries each year. Thus, groceries account for 12.4% of a person’s gross income who is earning minimum wage. Direct-marketing farmers may then be able to save up to \$2,907 if they only consumed food grown themselves. This is a minimalist scenario since, unless vegetarian, the farmers would have to purchase meat and, similarly, a livestock farmer would have to purchase vegetables. Nevertheless, even if \$2,907 was saved by avoiding grocery costs, direct-marketing farmers have other costs that are unique to their livelihood and not typical of the average citizen. A farm requires inputs such as seeds, compost, and labour. For example, hiring just one intern to work for \$300 a month (the typical payment) for a growing season from April to November would cost a farmer \$2,400. With this, the money saved by growing one’s own food would be spent on labour. Nonetheless, there are ways in which to avoid costly inputs such as saving seeds from previous years, making compost from farm materials, and accepting volunteer labour. Farmers in the first year of farming would, of course, have many other start-up costs. Ultimately, if a direct-marketing farmer is able to significantly reduce costs of inputs while also avoiding the costs of groceries, he or she may be able to keep the earnings from the farm to spend on essentials like a mortgage, hydro, and cable/internet. However,

many news and journal articles have documented the reality that minimum wage does not cover costs of living in Canada (Kimball, 2014; Ontario Federation of Labour, 2014). In the end, direct-marketing farmers must earn more than minimum wage in order to achieve economic sufficiency. Nonetheless, as this thesis sought to discover the best practices used by direct-marketing farmers to support a Sustainable Farming Livelihood, which includes economic sufficiency, several best practices are described in detail in Chapter 5 and are summarized in Table 5.4. The farmers believe that these practices are helping them to achieve their goals and future success, including economic sufficiency.

One practice identified by Craig is particularly remarkable as it does not require the farmer to increase his or her income. This practice involves viewing a direct-marketing farm as an income project. If direct-marketing farms were thought to be income projects, and not careers, they would be economically viable because they would not have to meet the same financial expectations. Currently, in most circumstances, a person assumes a career that is the sole generator of his or her income. Thus, if the chosen career does not produce a sufficient income to pay for all of his or her necessities, it is not considered to be an economically viable career since it leaves the worker impoverished. However, if one is to assume multiple activities that each generate an income, the activities would only have to provide a portion of the total income required by the worker. For example, Craig receives a living wage by engaging in multiple activities of which Backyard Bok Boks is only one. The income generated by Backyard Bok Boks is considered sufficient since the remaining income required to meet a living wage is produced by other activities. Nevertheless, many direct-marketing farms would not serve as income projects due to the amount of time they require to maintain. If a farmer spends days, evenings, and weekends working on-farm, he or she does not have much time left over to engage in other activities. Still, this barrier may be overcome by choosing less time consuming farm activities such as raising livestock rather than growing mixed vegetables.

6.1.6: Ecological Sustainability

A livelihood must not only generate a sufficient income, but it must do so while simultaneously respecting the environmental goods and services which supports the livelihood. The Sustainable Livelihoods Approach is primarily concerned with rural people, specifically farmers. If the land is jeopardized in order to gain other benefits, the benefits will not be sustained. Thus, sustainable farming techniques that support long-term use of the farmland are mandatory in order to foster a Sustainable Farming Livelihood.

Every participant involved in this study is an organic farmer. Thus, they do not use chemicals such as pesticides and growth hormones in the production of agriculture products. Instead, they employ natural techniques like crop rotation, permaculture, compost, and a great deal of hand labour. For example, Two Crows Growery was first built on very sandy soil which is not ideal for the majority of agricultural pursuits. Rather than using fertilizers and heavy machinery to convert the soil into a more useful state, Knight (personal communication, Aug. 7 2014) employed organic techniques. He planted cover crops, sunflowers, and grasses that mix into the soil and rot. The rotting plants are covered with straw during the winter and when recovered in the spring, the soil is of a less sandy texture and better able to grow crops (Knight, personal communication, Aug. 7 2014). Chemicals and large machinery diminish ecological integrity by compacting and eroding the soil (Reganold, Papendick, & Parr, 1990). As a result, soil aeration is diminished along with organic matter which is required for productive crop growth (Reganold, Papendick et al., 1990). While industrial agriculture practices jeopardize long-term land use, organic methods are more likely to foster future use of the farmland (King, 2008).

In terms of livestock farming, Young deems Green Being Farm organic due to the way her animals are raised and cared for (Young & Carey, 2013). The animals live on outdoor pasture and feed on high quality certified organic grain and green forages (Young & Carey, 2013). Osborne also considers

All Sorts Acre to be organic as she is currently in the process of becoming certified. The sheep do not receive growth hormones or antibiotics, and the wool is not chemically treated. However, the sheep are given a 'dewormer' to rid them of internal parasites if rotational grazing is not enough which is not considered organic, and therefore, not a sustainable practice. This opens up an interesting debate concerning the meaning of sustainability. Although the sheep are given a synthetic product to consume, if a sheep was to be infected with worms, it would cost Osborn a great deal of resources. She would have to spend her limited income on healing the sheep, and, if the sheep were to die, she would no longer receive the income for the sheep's meat and wool. If sheep became regularly ill, the economic loss may affect the productivity and sustainability of the business. Nevertheless, the sheep of All Sorts Acre, are raised in a way that cares for the natural resource base of the farm and therefore contributes to a sustainable livelihood as defined in the Sustainable Livelihoods Approach.

6.1.7: Considering Direct-Market Farming as Both a Career and Lifestyle Fosters Social Innovation

To be sustainable, a livelihood must be able to react to changes and shocks without jeopardizing its stability. Direct-marketing farmers are involved in every aspect of their businesses, from marketing to tending crops, so they are able to recognize a shift in stability as soon as it happens. By fostering a deep connection with their enterprises, the farmers in this study were able to foster social innovation and respond to challenges posed to their livelihood. Farming is not only their career, but also their way of life. With this, there were several incidences identified by the participants of this study that exemplified their potential for social innovation.

Research participants Osborn and Craig responded effectively to economic stresses. The cost of land and marketing in Southwestern Ontario was higher than ideal for Osborn. She could not farm as much land as desired, and advertising was paid for by herself since government support was lacking.

Rather than be defeated and retire All Sorts Acre, she conducted thorough market research to discover a place more suitable for her needs. Soon after, Osborn (personal communication, July 7 2014) was planning to relocate to Nova Scotia where land is more affordable and the provincial government is more willing to provide financial aid for new businesses. Nevertheless, the relocation to Nova Scotia was cancelled due to poor water quality on the perspective property. Still, Osborn did not stop searching for a more appropriate and economically beneficial location. She has recently accepted a rental agreement for 80 acres of land with a farm house in Orangeville, Ontario. The affordable, larger property will allow Osborn to increase her flock of sheep, construct more appropriate infrastructure, and sell more product. She has also begun developing connections with other local farmers in Orangeville, as well as a fiber processor and the Local Economic Development of Orangeville which will be able to provide support for All Sorts Acre.

In Craig's case, he had run out of his line of credit by the end of the second year of Backyard Bok Boks. "It suddenly changed the whole game... We had to make money... It was either survive or do something else" (Craig, personal communication, Aug. 6 2014). Rather than allow this stressor to devastate his business, Craig creatively responded by increasing efficiency and developing a marketing plan. During the first summer of operation, one backyard chicken setup would take an entire day to install which was expensive in terms of time and resources. In response, Craig devised a plan so two setups could be taken down and installed in one day. Additionally, the following summer, Craig hired a business coach who helped him create a marketing plan. Strategies like selling packages at Christmastime and creating a logo have resulted in much success for Backyard Bok Boks (Craig, personal communication, Aug. 6 2014).

Backyard Bounty also underwent a transformation that demonstrates social innovation. In the first few years of operation, Backyard Bounty was not making the profit that Orland had hoped to make. There were several reasons for this including the low prices restaurants were willing to pay for the

produce, loss of crops from drought and tomato blight, and the costs associated with paying employees, transportation, and repairing broken equipment (Orland, personal communication, May 11 2014).

“...we were just hovering over the ‘break even’ mark every year or just slightly running a deficit. It was [the year 2013]... that I decided that I am not going to run Backyard Bounty the same way anymore” (Orland, personal communication, May 11 2014). The new model was no longer based on sales through Community Supported Agriculture membership, restaurants, and markets, but rather through corporate and foundation sponsorship.

What we did was we sought out corporate sponsorship and then all of the food we grow gets donated, in this case, to the Guelph Food Bank... All we did was we sought out the corporate sponsorship, it doesn't have to be a corporation, it could be any one, it could be a private individual, but we would get the donation to come in go directly to the Guelph Food Bank. The Guelph Food Bank would then issue a cheque to Backyard Bounty, then issue a tax receipt to the sponsor. That's the legal way of doing it... so the sponsor is making a donation to a charitable organization and because Backyard Bounty is not charitable, then we get retained by the Guelph Food Bank and then we execute and then provide them all the food (Orland, personal communication, May 11 2014).

The profit generated by means of the second model was higher than the first model. Although it is still small, it is enough to pay the cost of transportation and equipment breakdowns while supporting Backyard Bounty so it may grow as a business (Orland, personal communication, May 11 2014).

The acts of social innovation mentioned thus far are of a broad nature, dealing with business relocation and remodelling. However, direct-marketing farmers are often engaging in acts of innovation on a smaller scale. Such farmers work directly with the land, plants, and animals that they tend as well as with the customers. Close ecological and social relationships enables the farmers to acknowledge

and respond to stresses and disturbances as they occur. For example, rather than sending an intern, Reid works both on-farm and tends the farmer's market table. He noticed how people would pick up his business card and carry it around for a short time to eventually throw it into the garbage. Reid (personal communication, June 3 2014) believes that people just enjoy the feeling of taking someone's business card but rarely actually use the information on the card. In response, Reid only gives his business cards to people who ask for them in order to save printing and paper costs (personal observation, Althaea Herb Farm, June 3 2014). In another example, Young (personal communication, July 30 2014) asks her Community Supported Agriculture customers about their experience with her farm in order to improve the business. Young found that the customers enjoy the recipes included in her newsletter. Realizing how important the recipes are, Young (personal communication, July 30 2014) continues to include them in the newsletter, especially those that include unpopular crops. Lastly, Knight is a great example of avoiding vulnerability as he begins each day with a thorough check of the farm. "We'll walk down every row, we'll inspect every plant..." (Knight, personal communication, Aug. 7 2014). Even as the weather changed to what was unexpected, Knight was able to implement a new plan to continue the farm productivity. The early detection and the first-hand knowledge of direct-marketing farmers contributes to their aptitude for innovation.

Nevertheless, a limited income will greatly affect the ability of one to be resilient. For example, if a farmer was to be injured and unable to work, he or she would not have the capital required to hire a replacement. A spouse or partner might be able to take care of the farm but consequentially, he or she would not be able to work his or her regular job which would likely further impact the overall income of the farm and family. Additionally, if equipment or infrastructure was to break and need repair, a farmer with a meagre income would likely not be able to afford repair costs or a replacement. If a technical breakdown was to occur only occasionally, he or she may be able to cope economically. However, if breakdowns were to occur more frequently, the farmer would not be able to respond. To combat this

reality, farmers would optimally learn how to fix their machinery and infrastructure on their own. This would be best achieved by choosing non-complex products. For instance, during a thunderstorm, Osborn was worried that the shelter for her sheep had collapsed. Rushing over to it, she noticed that the roof had fallen apart (personal observation, All Sorts Acre, July 7 2014). Since she constructed the shelter herself, mostly from tarp and wood, she was able to quickly fix the roof (personal observation, All Sorts Acre, July 7 2014). This example displays an act of innovation, even on a limited income. However, it is also clear that resilience in regards to an economic shock is rigid for direct-marketing farmers as it depends on the frequency of the shocks and the ability to offer a non-financial response.

6.2: The Significance of Income and Wealth for Direct-Marketing Farmers and Non-Farmers

Money plays a significant role in liberal-capitalist societies as an indicator of success as noted in Chapter 2. In such a paradigm, a larger income signifies a more successful life or livelihood. With this system, direct-marketing farmers are unlikely to be deemed successful due to the insufficient income which is typical of their profession. Consequently, direct-marketing farmers must discover other measures of success if they are to deem themselves successful. However, Chapter 5 helped to identify the priorities of direct-marketing farmers and found that seven out of eight participants in this study believed income to be a major criterion of success. The second criterion to be declared most frequently by the participants was only mentioned by four farmers. Thus, income was deemed a criterion of success much more often than any other criterion. In terms of the degree of significance given to one's income, direct-marketing farmers are not dissimilar from others operating in a liberal-capitalist society.

Nevertheless, what is remarkable is the way in which money is considered by direct-marketing farmers in comparison to what is typical of the rest of society. The objective of a capitalist society and its citizens is to accumulate monetary wealth (Næss, 2006). By way of mass media and advertisement,

the objective is reinforced within the capitalist and he or she develops a greater desire for superfluous goods and, in turn, a lifestyle characterized by consumerism (Johnston, 1989; Næss, 2006). In contrast, the direct-marketing farmers who participated in this study had different reasons for prioritizing income as a major goal. For example, some farmers were not receiving a large enough income to pay for farm expenses as well as necessities of life such as housing costs. In other cases, the farmer's spouse or business partner wanted to farm as well but was unable to do so since an off-farm income was required to pay for living expenses. The spouse or partner could not join the farm until the income of the current farmer was increased. Often, the farmer wished to expand his or her farm, whether in regards to infrastructure, services, or land, in order to increase sales but could not afford to do so until he or she accumulated more money. Therefore, the motivation for direct-marketing farmers to strive for greater wealth was a result of need rather than greed. Where the capitalist pursues plenitude, the direct-marketing farmer seeks sufficiency.

Additionally, dominant societal liberal paradigms typically associate success with income. This is evident as the pursuit of greater income is given much attention and effort at the cost of other dimensions of one's life, such relationships and leisure. Diener and Oishi (2000) report,

[A] concern with material prosperity as a major goal is that it might redirect attention from more important aims such as love, self-development, and spirituality. Perhaps the pursuit of money will distract us from endeavors that are essential to human well-being (p.186).

The results of this thesis found that income as the sole indicator of success is not an appropriate indicator in regards to direct-marketing farmers. While they do consider economic growth, insofar as it is required to reach economic sufficiency, they also identify many other determinants of success that are often ignored by the masses. For example, three of the participants declared that they consider their businesses to be successful because they contribute to their personal happiness. This is a radical

declaration given that many people risk their personal happiness to cope with a large workload which ultimately leads to higher stress levels (Shor, 1991). There are also many recent studies linking work to stress-related diseases such as coronary heart disease (Chandola, Britton, Brunner, Hemingway, Malik, Kumari, Badrick, Kivimaki, & Marmot, 2000; Vrijkotte, van Doornen, & de Geus, 1999; Bosma, Siegrist, & Marmot, 1998). Furthermore, farmers Osborn and Young identified a contribution to environmental health as an indicator of a successful livelihood. This is another atypical indicator of success since the measures taken to achieve economic prosperity are frequently in conflict with environmental protection. “Not only does wealth production require the use of natural resources... it also produces byproducts that can pollute water, air, and land” (Diener & Oishi, 2000, p.186). For instance, industrial farm operators diminish the quality and long-term use of the land to allow for mass production. Lastly, the direct-marketing farmers did not express a major interest in progress but rather in steady performance. For example, fruitful production of agricultural goods, interest from the community in the goods and services, and customer satisfaction were identified as indicators success. The farmers considered their businesses to be successful if they were working as intended, as opposed to progressing toward massive expansion.

6.3: Understanding, Appreciating, and Working with the Value of Complexity

Urban and small-scale agriculture is often prescribed as a means to combat climate change (Zeeuw, 2011). Employing hand labour, rather than large machinery, and using ecologically benign techniques such as crop rotation and permaculture instead of chemicals, is expected to preserve the integrity of fertile land for future use, especially in light of a growing population. Not only does small-scale farming scale down production, but it also reduces the packaging, marketing, and distribution of goods to a local scale which may range from the boundaries of a community to a country. A localized system is considered to foster sustainability by limiting the amount of energy required to ship not only foodstuffs,

but also packaging materials, globally (Paxton, 2011). Thus, a direct-marketing farm has many diverse goals and responsibilities.

In turn, one who initiates a direct-marketing farm does not just become a farmer. He or she also informally becomes a scientist, a marketer and advertiser, a financial planner, a delivery person, and a vendor. For example, Young raises livestock and grows vegetables. As such, she must understand the processes of these living things in order to bolster their productivity. This includes animal health and nutrition, the content and creation of compost, plant growth and succession, and detecting and reacting to plant disease, among other scientific understandings. At the same time, Young must develop a customer base which she did mostly by communicating with the public via word-of-mouth advertising, and being featured in the local newspaper. Finding customers is not enough, however, as Young is now faced with the task of maintaining those customers. She has found that a monthly newsletter sent to her customers has encouraged their loyalty and interest in her farm (Young, personal communication, 2014). Young is also directly involved in the transportation of products, specifically to nearby churches that act as pick-up locations for her Community Supported Agriculture boxes. Throughout all of her pursuits, Young is engaged in the financial planning of her business, and has a thorough understanding of monetary inputs and outputs as to conduct a cash-flow analysis. Currently, Young (personal communication, 2014) is considering the finances associated with having a milk cow.

Nevertheless, direct-marketing farmers do not see their livelihood as made up of separate tasks. Rather, they understand their livelihood to be greater than the sum of its parts. The direct-marketing farm – the whole – is created by the blending and interacting of many tasks. Thus, a direct-marketing farmer will not be successful if he or she has only one skill. If one is proficient in animal and plant science, but lacks other abilities such as communicating or managing finances, he or she will not adequately operate a direct-marketing farm. An interdisciplinary livelihood requires a worker with a set of interdisciplinary skills. Coinciding with the need to be skillful is the inherent ability to think in

systems. Being greater than the sum of its parts, a direct-marketing farm cannot be understood by only considering the parts but, rather, it must be understood as a complex whole. Therefore, the various interactions, connections, and processes between the parts becomes paramount. By understanding connections, one is able to identify points of change, success, and failure within a farm system and respond or adapt efficiently and effectively.

For instance, Osborne identified links between the sort of agriculture goods one offers at a farmer's market, financial possibilities, and work-life balance. Osborne (personal observation, All Sorts Acre, July 7 2014) once grew vegetables which took an excessive amount of time to prepare to be sold. At the market, she made a meagre income and any unsold produce was likely wasted as a direct revenue stream. She noticed another farmer at the market who would arrive with a freezer full of frozen meat. "He knew very well that all those pieces of meat that were frozen solid would go back in his freezer for a week. We sat there going, 'Oh my gosh'" (Osborne, personal communication, July 7 2014). With respect to this observation, Osborn first considered increasing her marketing efforts to sell more vegetables. However, she realized that it is possible for much more money to be spent on marketing than what might be received by selling her crops. She believed that altering her speciality, from vegetables to meat, would be more efficient since preparing meat for the market would require less time and any leftover product can be kept frozen for future sales (Osborne, personal communication, July 7 2014). The next year, Osborne was given her first sheep. By recognizing and understanding interactions between agriculture goods, marketing, financial planning, and time use, Osborne was able to be flexible in her approach to farming, adapt to external conditions, and make a change in the system to better fulfill her goals.

6.4 The Implications and Possibilities of Direct-Market Farming in an Alternative Society

This thesis has clearly argued the inability of direct-marketing farmers to operate in a liberal capitalist society since the major goal, and measure of success, is based on income. Direct-marketing farmers do not generate a large enough income to pay for living expenses and farm costs. Nevertheless, the probability of doing so is greatly increased by employing the practices discussed in Chapter 5, or by simply viewing one's farm as an income project. Another means of boosting the ability of direct-market farming to support a Sustainable Farming Livelihood is to allow it to operate within an alternative society, distinct from that of liberal capitalism. Several movements have emerged in recent years such as the Maker Movement, Open Source Ecology, and the Creative Economy that are forming their own societies and communities as discussed in Chapter 3. The cultural practices of the newfound communities are better able to support direct-marketing farmers on their journey toward greater success and sustainability.

The Maker Movement has created an alternative 'do-it-yourself' community in which people make their own goods. This may include a variety of activities including building furniture, growing food, cooking meals, and making and repairing clothing. With this, the need to purchase products (rather than materials) and hire third party labour is greatly diminished which enables the maker to save money. The Maker Movement also promotes the sharing of tools and equipment to avoid intermediaries and to further avoid spending an individual's personal capital. Moreover, Open Source Ecology suggests that if one is to construct machinery and tools, such as tractor, oneself, he or she will save money by avoiding repair, maintenance, and replacement costs. Direct-marketing farmers may not have all they need because they cannot afford to purchase materials and infrastructure. Accessing and making use of blueprints and inexpensive materials can overcome this barrier. Direct-marketing farmers may also be more successful if they become part of the creative class situated within the Creative Economy. In recent years, the cities that are thriving economically are those that are occupied by

educated, creative people who are offering creative goods and services within a unique niche. Thus, by situating a direct-marketing farm in a creative space and tweaking the operation to ensure that a creative product is generated, the business is more likely to flourish.

In and of itself, direct-market farming is not a sustainable livelihood as it is currently being practiced. However, it must be considered as part of a broader non-capitalist approach to living. If direct-market farmers were to become a part of movements like the Maker Movement, Open Source Ecology, the Creative Economy, or a combination of the three, it would be easier for a direct-marketing farmer to achieve a Sustainable Farming Livelihood. Indeed, the strategies associated with the movements were all mentioned by the study participants – although not speaking about the movements explicitly. By adopting a ‘do-it-yourself’ mindset and making everyday goods oneself, building required farm machinery and infrastructure oneself, and offering a creative product in a creative city, a farmer is able to operate outside of the liberal capitalist society. They no longer require the funds that would be necessary to support the lifestyle of an average citizen living in a society characterized by mass production and mass consumption. Also, with this, a careful distinction between income and wealth is paramount. While operating in an alternative society may not always increase the farmer’s income, it does increase his or her wealth. “...income is a flow, since it is meaningful only when defined in relation to a period of time... [Wealth] is a stock, increasing as new assets are acquired, debts repaid, or savings accumulated” (Augustin & Sanga, 2002). Accumulated savings will ultimately generate greater wealth.

6.5 Conclusion

Direct-market farming does not, as it is now, entirely fulfill the criteria of a Sustainable Farming Livelihood. While direct-marketing farmers undoubtedly foster environmental health, social innovation, and community wellbeing, the physical impacts of farming at a small scale are unclear, financial resilience is rigid, and the farmers do not typically receive a living wage. Nevertheless, it was also

discovered that the issues arising from a lack of income may only be problematic for farms operating within a liberal capitalist system. If direct-marketing farms were to operate within an alternative society, like that formed by the Maker Movement, Open Source Ecology, or the Creative Economy, the farmers would have several new strategies available to them. By utilizing these strategies, as well as the ones identified in Chapter 5, the farmers are more likely to attain the required wealth to foster a Sustainable Farming Livelihood.

Chapter 7: Conclusion

Industrial agriculture, characterized by the use of heavy machinery and harsh chemicals, is diminishing the long-term fertility of agricultural land. At the same time, the effects of climate change, particularly extreme weather events, are causing further loss in crop yields. As human labour is not as required in the highly automated, large-scale operations, as it is in small-scale farms, fewer people are employed in the agriculture field. With this development, urban communities today largely lack the skills and knowledge needed to provide sustenance for themselves. As the stability of the global food system becomes increasingly jeopardized, communities that are unable to produce food locally may face future food security crises. People who are separated from the activities associated with growing their own food also suffer other consequences such as a disconnection from their cultural heritage and traditions. As noted in Chapter 2, there is great potential for local, small-scale agriculture, especially direct-marketing farms, to make up for the deficiencies of the global food system. Direct-marketing farms contribute to healthy communities in terms of fostering wellbeing for individuals, communities, and the physical environment. Small-scale, local farms are typically organic and the practices employed safeguard the long-term use of the land. At the same time, local farms bolster the self-sufficiency of communities so they are not completely reliant on outside sources of nourishment. Additionally, as more people are able to find employment and volunteer opportunities on small farms, they are able to promote the protection of traditional food knowledge and culture. Despite the many wide-ranging and widespread benefits of direct-market farming, such farmers are not currently earning a living wage and, in turn, are likely unable to foster a Sustainable Farming Livelihood.

In Canada, direct-marketing farmers generally receive an income less than minimum wage. With such a meagre income, direct-marketing farmers are unable to financially support themselves, their families, and the future of their businesses. This current reality may cause direct-marketing

farmers to forgo their careers as farmers in order to occupy more lucrative careers. Alternatively, they may shrink the scale of their farms to operate merely as a hobby which would not have the same extensive benefits of larger market gardens. Also, as the economically unprofitable nature of direct-market farms becomes more well-known, it is expected to discourage people from becoming new farmers.

Nevertheless, the liberal capitalist notion that economic vitality is the sole measure of success is now becoming challenged by alternative models based on different assumptions. Moreover, the pursuit for greater wealth can have negative impacts on the physical, mental, and social wellbeing of individuals. Furthermore, once one has enough economic wealth to fulfill one's basic needs, a further increase in wealth is not proven to positively affect one's subjective wellbeing. Thus, when assessing the viability of direct-marketing farms, it is essential to consider a broader definition of wellbeing and success. Recently, a variety of wellbeing indices, such as the Canadian Index of Wellbeing and Gross National Happiness, have emerged for the purpose of devising more comprehensive measures of success. While the indices still consider economic vitality in their assessments, it is considered in terms of sufficiency rather than unending growth. The indices also include social, physical, and environmental health in their assessments of wellbeing. The Sustainable Livelihoods Approach has also been traditionally used to develop an understanding of the welfare of farmers as it looks at the ability of farmers to achieve economic sufficiency and innovation.

This study sought to discover whether or not, and how, direct-marketing farms could achieve a Sustainable Farming Livelihood. A Sustainable Farming Livelihood is considered to be one that meets the indicators of wellbeing indices (social, physical, economic, and environmental wellbeing) as well as the concerns associated with the Sustainable Livelihoods Approach (economic sufficiency and innovation). A number of movements have emerged in recent years that may help direct-marketing farmers achieve greater economic success by encouraging them to operate outside of the liberal

capitalist model. The Makers Movement, Open Source Ecology, and the Creative Economy have not been intensely studied for their ability to help support the financial livelihoods of direct-marketing farmers. However, this study assessed their potential of doing so and found that the Makers Movement and Open Source Ecology may help these farmers save income and, in turn, increase their wealth. It was also found that direct-marketing farmers may benefit from being a part of the Creative Economy and selling niche products in areas populated by creative youth.

Also, most direct-marketing farms in Canada are fairly new and the farmers are only in the beginning stages of developing their businesses. While they might not be currently earning a living wage, they may be employing practices and techniques that are helping them move in the direction of a Sustainable Farming Livelihood. Thus, this thesis included in-depth, semi-structured interviews with eight direct-marketing farmers to discover how they define success, and what practices they have employed that have helped them to achieve such success. In order of frequency of mention amongst participants, eight major criteria for success were identified: sufficient income to support farm and farmers, interest from the community in the farm and its products or services, fruitful production of products or services, contribution to the farmers' personal happiness, contribution to environmental health, attainment of goals originally set for the farm business, and discovery of efficient modes of production. When asked how they meet these criteria of success, the participants were not discouraged but rather, they were inspired. Through an aggregation of the findings from the participants, the research participants identified eight broad strategies that have been helping them achieve the success they seek, including economic sufficiency. In no particular order, they are: develop a thorough understanding of what is involved in a direct-market farm before initiating an operation, have adequate financial capital before committing to a direct-marketing farm operation, scope out a niche area and potential customer base by conducting extensive research, create an approach that will attract a loyal customer base, maximize effectiveness and profit by choosing high-value products, employ marketing

and business strategies that are both efficient and effective, reduce operating costs by using methods that are appropriate for labour-intensive operations, and self-reflect on the importance and merits of a sustainable livelihood.

The majority of the study participants are not currently earning a living wage. They do believe, however, that they will be able to do so in the future by employing the eight aforementioned strategies. With respect to the other components of a Sustainable Farming Livelihood, the literature and participant interviews suggested that direct-market farming supports social wellbeing and environmental health. However, the ability to foster social innovation was, to some degree, dependent on economic status. Thus, a direct-marketing farmer may not be able to be fully innovative until he or she has achieved economic sufficiency. Also, the physical impacts of farming at such a scale are unknown.

The research conducted within this thesis has made an academic contribution by filling a gap in the literature. Currently, much information is available about the social and environmental benefits of direct-market farming. There are also many documents outlining the economic downfalls of direct-marketing farmers, and some documents celebrating those direct-marketing farmers who have somehow managed to earn a significant income. However, the literature was missing materials concerning the best practices used by direct-marketing farmers to achieve success and financial sufficiency. This thesis has taken the first-hand accounts of direct-marketing farmers to create a comprehensive document outlining the various ways in which success in various forms may be achieved. This thesis study also situated timely social movements in the context of the direct-market farming to identify points of cohesion. Lastly, this thesis study has made a practical contribution by finding that it is possible for direct-marketing farmers to achieve a Sustainable Farming Livelihood which should encourage current direct-marketing farmers to continue in their career paths, and inspire people to become future direct-marketing farmers.

7.1: Recommendations for Future Research

Many of the best practices suggested by the study participants were mentioned by several farmers but there were a few practices only mentioned by one farmer. For example, the practice of advertising one's goods at Christmas time was suggested once by Mike Craig of Backyard Bok Boks, and the practice of actively educating the public about the significance of one's products was discussed only once by Jennifer Osborne of All Sorts Acre. Thus, future studies could further test the viability of these best practices by finding farmers who employ the same practices, and questioning those farmers about their usefulness. Future research may also concentrate on the viability of income projects in respect to direct-marketing farms. Craig found that including a direct-marketing farm as an income project amongst other income projects to help lessen the economic expectations of the farm. He is, however, in a unique situation of running a backyard chicken rental business. Other direct-marketing farmers are likely to grow vegetables to be sold in a Community Supported Agriculture program or farmer's market. Are market gardens too time-demanding to be income projects? Developing a greater understanding of what sorts of direct-marketing farms are more able to be income projects can better help future farmers to compose a business plan.

The degree to which a direct-marketing farmer must rely on a spouse or business partner for economic support is another potential area for future research. Half of the farmers involved with this study depended on the off-farm income of another person to help subsidize the costs of running their direct-marketing farm. The differences between the farms who do depend on the income of another person and the farms who do not are unclear. The amount of financial savings a farmer has before beginning a direct-marketing farm is expected to play a role in reducing the dependency on another's income. Originally, it was considered that those who require another income to subsidize the business were also needing to support children, but those farmers who do not require subsidization were equally as likely to have children. Also, this study did not include any farmers who were single. Even those

farmers who did not require the economic support of another person may have been in need of another person's time. Without the support, whether economic or something else, can a single person support the operation of a direct-marketing farm? Gathering a more in-depth understanding of the differences between these farms would help future farmers to be more financially prepared to initiate a direct-marketing farm.

Lastly, this thesis would benefit from a future follow up study. This study took the best practices of several direct-marketing farmers and grouped them together into one comprehensive document. Rather than learning lessons through trial and error or by making mistakes, it's expected that future farmers who employ, from the beginning, the best practices already learnt by current farmers will be better able to foster a Sustainable Farming Livelihood. Thus, this expectation should be tested. Those farmers who use the information offered in this study should be interviewed as well to discover the effectiveness of applying, together, the strategies and techniques from Chapter 5.

7.2 Final Reflection

In order to foster a Sustainable Farming Livelihood, direct-marketing farmers must put a great amount of effort into planning. Aspiring farmers must ask themselves questions such as: Do I have sufficient financial savings to support myself and my family throughout the first few years of the farm operation? What products or services should I offer, especially in light of market demand? What city should I be located in? Will the land that I plan to rent be available long-term? What tools should I purchase given the final vision of my farm and which tools might I be able to borrow from other farmers? Am I able to fix my essential tools and infrastructure by myself?

While these questions, amongst others, are critical, it is also important to actually start farming. It is possible to spend years writing business plans and become so focused on planning that the actual business never gets started (Craig, personal communication, Aug. 6 2014). Craig mentioned Seth

Grodin, an American marketer and entrepreneur, who speaks about the importance of ‘shipping your art’. “The art you make just sits in a cupboard and is not really art because no one experiences it. So actually ship. Actually do it. Actually start” (Craig, personal communication, Aug. 6 2014). Direct-marketing farmers should remember that it is entirely acceptable to begin farming before all of his or her questions have been answered – as long as he or she starts on a small scale (see Chapter 5.3.1.4). Start small enough that the mistakes made do not result in a major loss of time, money, or effort. Learn from the mistakes that are made and expand once solutions and answers have been found. The global agriculture system poses some real threats to food security. Direct-marketing farms offer one sustainable alternative. A final note from one farmer, Mike Craig (personal communication, Aug. 6 2014) to all others who wish to foster a sustainable future:

“Start. Get as close as you can AND GO!”

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Appendix 1: Definitions

Creative economy: The production and consumption of the creative industries which includes the arts, new ideas, and technologies as they contribute to the wealth and resources of a country or region (Howkins, 2002).

Direct-marketing farm: An agricultural operation that advertises, communicates, and sells products and services directly to the consumer without the use of an intermediary.

Livelihood: The activities, assets, and entitlements through which people support their living and aid in their individual health and wellbeing.

Maker Movement: The active transition toward a society in which objects are repaired and reused and human lives are enriched through personal, hands-on creation and learning of something new.

Sustainable Livelihoods Approach: “A framework that helps in understanding the complexities of poverty [and] a set of principles to guide action to address and overcome poverty” (International Fund for Agriculture Development, 2014, p.1).

Sustainable Farming Livelihood: An occupation and way of life that provides farmers, especially direct-marketing farmers, with the ability to fulfill the indicators of emergent wellbeing indices and meet the requirements of a sustainable livelihood as defined by Scoones in 1998.

Wellbeing index: A comprehensive measure of human welfare with various indicators such as, environmental health, economic sufficiency, and community vitality.