



Original Research Article

Community financing for sustainable food systems: The case of FarmWorks Investment Co-operative

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Abstract

Since 2011, FarmWorks Investment Co-operative Limited (FarmWorks) has been boosting Nova Scotia's farm and food economy through small loans to local food businesses. The fund relies on community investments and relationship-based lending, markers of the provincial government's Community Economic Development Investment Fund (CEDIF) program. FarmWorks was motivated by decreasing food production, dwindling agricultural employment and the resulting decline of rural communities across the province. These factors were compounded by systemic changes including the increased financialization of the agri-food sector. As a social economy organization, FarmWorks seeks to remedy the shortcomings of the dominant food system by prioritizing the social and ecological regeneration of local communities. It simultaneously works with existing market structures while challenging mainstream practices and developing an alternative model. Through a document review and interviews with stakeholders, our paper assesses the extent to which FarmWorks has been successful in its efforts "to increase the viability and sustainability of agriculture and the security of a healthy food supply." Specifically, we discuss economic outcomes as well as social impact of FarmWorks loans. We situate our analysis in literature on social economy, financialization, and sustainable food systems.

Keywords: FarmWorks; community financing; local investment; cooperatives; sustainable food systems

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Introduction

In recent years scholars have identified how financialization, a manifestation of advanced neoliberal capitalism, leads to the industrialization of the food system. Fundamentally, these scholars maintain that the economic system shapes the food system (Hawken, 1993; Patel, 2007). The concept of the social economy shares this perspective and aims to build a regenerative market system, one that takes broader social and environmental values into account in order to build a more sustainable world. This article brings these bodies of literature into conversation, to build greater understanding of the interactions between sustainable food systems, finance and alternative economies.

We present a case study of a Nova Scotia community investment fund, FarmWorks,¹ to explore how existing community-based initiatives work on the margins of capitalist economy and seek to challenge agri-food financialization and industrialization. We argue that FarmWorks puts the social economy concept into action, by attracting investments that are not aimed at maximizing profits, but rather at social and environmental impact alongside economic sustainability. By operating according to principles of social economy, FarmWorks responds to symptoms of the degenerative neoliberal economic system and ultimately enhances the resilience of Nova Scotia's food system. Government intervention through the Community Economic Development Investment Funds (CEDIF) model facilitates FarmWorks' goals.

Through a document review, our paper assesses the extent to which FarmWorks has been successful in its efforts to “to increase the viability and sustainability of agriculture and the security of a healthy food supply” (FarmWorks, n.d.). We consider the documented economic outcomes as well as social impact of FarmWorks loans. We then reflect on these outcomes through engaging with data from stakeholder interviews. Eleven semi-structured interviews were conducted in person with FarmWorks staff, investors, investees and an official from the Nova Scotia government. These interviews added valuable insight into the viability and outcomes of the CEDIF model.

We draw on the existing measures of FarmWorks' success, but also view those measures as incomplete indicators of the organization's full impact in the community. This study and the broader project on the Social and Informal Economy of Food that comprises it, uncover a problematic tension that social economy organizations experience: on one hand, they are called upon to demonstrate their success in the form of positivist, quantifiable measures of impact (employment, revenue increase, business expansion), on the other, they typically find those measures wholly inadequate. While the political and economic system they operate in insists on the positivist approach, which “values the measure, rather than measuring the value” (Mount,

¹ In conjunction with this article we produced a video that highlights the work of FarmWorks. You can find the video, Community Financing is Cultivating Local Food: FarmWorks shows the way, at <https://www.youtube.com/watch?v=ZIVSIuErN5M>

personal communication, 2019), organizations that play important roles in their communities find it challenging to communicate the extent of their importance.

We delve into the measures that FarmWorks has used, but argue that these cannot be the only ways to understand the organization’s success. We support this position with qualitative data gathered through stakeholder interviews, and couch our argument in Gibson-Graham’s (2008, 2014) concept of “diverse economies” proposing that the positivist notions of success are only able to capture the proverbial tip-of-the-iceberg of the work that organizations like FarmWorks actually do. At least part of the value of such organizations is found in the ways that they counter some of the most troubling contemporary trends in the food systems. Our analysis incorporates the research framework developed by the larger project to assess FarmWorks’ contributions. Specifically, this project asks whether or not, and how, a social economy of food: increases prosperity for marginalized groups; builds adaptive capacity to increase community resilience in the face of economic and environmental challenges; bridges divides between elite consumers of alternative food products and more marginalized groups such as producers and low-income consumers; increases social capital; and fosters innovation.

The paper is organized as follows: First, we review the literature on sustainable food systems, financialization and social economy, laying the theoretical groundwork from which we assess FarmWorks’ role in Nova Scotia’s food system. Next, we bring forward insights from the document review and interviews to assess the degree to which FarmWorks is meeting its self-defined goals as well as broader objectives of social impact. We demonstrate that the positivist measures of success underestimate the organization’s community impact. We conclude with a discussion about how, within the context of a financialized food system, FarmWorks employs tools of social economy to build alternative pathways to the unsustainable industrial food system.

Literature review

Sustainable food systems

Sustainable food systems² deliver “food security and nutrition for all in such a way that the economic, social and environmental bases to generate food security and nutrition for future generations are not compromised” (HLPE, 2014, p.31). They stand in contrast to the dominant food system—global, corporate-led, profit-driven industrial system (Knezevic et al., 2017). The industrial model treats food as any other industrial sector—“as if food were a commodity like

² “A food system gathers all the elements (environment, people, inputs, processes, infrastructures, institutions, etc.) and activities that relate to the production, processing, distribution, preparation and consumption of food, and the outputs of these activities, including socio-economic and environmental outcomes” (HLPE, 2014, p. 12).

cars and widgets”—and places a high value on the role of production in the food system (Blay-Palmer, 2008, p. 2). Proponents of this system describe it as efficient and productive (Lusk, 2017; Seufert, Ramankutty & Foley, 2012), and it is true that over the last several decades the total global agricultural output has increased (Roser & Ritchie, 2018a) while the average market cost of food relative to income has decreased in most parts of the world (Roser & Ritchie, 2018b). Market cost of food, however, obscures inequalities and the external costs of its production. The industrial food system has far reaching consequences: it fragments the food chain, emphasizes short term “efficiency”, and rests on the values described above as fundamental to neoliberal economy—unfettered markets, deregulation, and private property. The increasingly complex and lengthy supply chains characteristic of industrial agriculture and global trade problematically create distance in the food system along social, environmental and even, emotional and intellectual lines (Blay-Palmer, 2008, p. 17). Greater distance is detrimental because it is associated with a growing concentration of control, and therefore inequality, along the food chain (Princen, 2010, p. 38).

The exploitative nature of industrial agriculture is responsible for more than half of the global greenhouse gas emissions (GRAIN, 2011), and it displaces and impoverishes communities (ETC Group 2015). It has fueled the consumption of ultra-processed foods, animal products, sugars, saturated fats, and sodium, all of which are associated with unhealthy dietary patterns that have resulted in record rates of non-communicable disease (IPES-Food, 2017). It has also added to the burden of malnutrition, sometimes paradoxically characterized by overconsumption of energy and underconsumption of nutrients, especially micronutrients (IFPRI, 2015).

The International Panel of Experts on Sustainable Food Systems observes that “...industrial agriculture does not and cannot reconcile the multiple concerns of sustainable food systems. Food and farming systems can be reformed, but only by moving away from an industrial orientation and organization” (IPES-Food, 2016, p.41). The key to sustainability, the Panel argues, is diversity—of crops, farm practices, size of operation, and so on. Whereas the Panel also observes that the alternatives to the industrial food systems, or “diversified agroecological systems”, can compete with industrial production in terms of outputs, and show great resilience in face of environmental stresses (IPES-Food, 2016), there are multiple barriers to entry for small scale food operations, be they farms, fishing operations, processing plants, or distributors. Initial investments in farmland and/or equipment are costly and regulatory frameworks typically designed for industrial-scale operation tend to be scale-insensitive (Andrée, Ballamingie, & Sinclair-Waters 2014; Blay-Palmer, Knezevic, & Spring 2014; Knezevic, 2016; Mount 2012). Moreover, financial investment patterns tend to increase distance within food systems through further abstraction. Clapp (2012) explains how “investment takes place in a virtual space, largely removed from the physical act of both agricultural production on the one hand and eating on the other hand” (p. 156).

Financialization in the food system

External market dynamics profoundly shape food systems on the ground, yet scholars have only recently begun to unpack the specific ways in which financial investment patterns play out in the food system. A burgeoning scholarship on the financialization of the food system traces how the rising share of finance in the economy impacts access to food, the way food is grown and the structure of rural communities (Breger Bush, 2012; Burch & Lawrence, 2005; Clapp & Isakson, 2018; Fairbairn, 2014). Notably, “financialization does not ‘just happen’, but has agency” (Bracking, 2012, p. 274). Knowing who the beneficiaries of financialization are and the tools they use to consolidate their power is necessary for mobilizing change within the food system.

There are two frequently cited definitions of financialization. The first is by economist Gerald Epstein (2005), who describes financialization as “the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of domestic and international economies” (p. 3). The second, by historical sociologist Krippner (2011), emphasizes the abstraction from the real economy: “financialization is the tendency for profit making in the economy to occur increasingly through financial channels rather than through productive activities”.

The areas that have received the most scholarly attention with regards to financialization in the food system relate to financial speculation in agricultural commodity markets (Breger Bush, 2012; Clapp & Helleiner, 2012; Isakson, 2015), the financialization of farmland (Fairbairn, 2014; Ghosh, 2010; Magnan, 2015; McMichael, 2012), and the financialization of agri-food supply chains and its implications for corporate power (Burch & Lawrence, 2007; Isakson, 2014; Murphy, Burch, & Clapp, 2012).

Scholars make convincing connections between financialization of the food sector and increased food price volatility (Clapp & Helleiner, 2012, p. 2012; Ghosh, 2010; Howard, 2016). In the wake of the 2007/2008 financial crisis, investors turned to agriculture as a safe haven to place their investments. This rapidly drove up the price of staple foods, leading to the subsequent 2008 food crisis which had disastrous consequences for the food security of poor consumers around the world (Schmidt, 2015). Investor interest in farmland is seen as a response to high food prices, but it is also debated as a causal factor in the food crisis (Scoones et al, 2018). Indeed, political economists point out how the “incorporation of farmland into financial circuits” threatened small-holder livelihoods, drove up the cost of land, and, consequently the price of food (Fairbairn, 2014; McMichael, 2012). In Saskatchewan, for example, land grabs have resulted in ownership concentration in the hands of farmland investment firms, pension funds, and family-based and corporate mega-farms, significantly impacting the rural way of life and the price of farmland (Desmarais, Qualman, Magnan, & Wiebe, 2015).

The literature at the intersection of financialization and agri-food businesses focuses on the distribution of corporate power within the food system. Four firms dominate the global grain trade (Howard, 2016, p. 73). These are ADM, Bunge, Cargill and (Louis) Dreyfus, also known as

the ABCD companies. Murphy et al. (2012) reveal how intertwined these businesses are with the world of finance, to the point where they now operate like banks (p. 5). These companies have set up commodity investment funds and land investment funds open to external investors (Isakson, 2014, p. 762). The availability of these products has shaped the types of actors involved in the grain trade. For instance, traditional financial firms like Goldman Sachs have recently increased their presence in agricultural markets (Howard, 2016, p. 75).

One key aspect of financialization and agrifood businesses focuses on the “financialization of objectives” to describe “the implementation of shareholder value norms, whose concrete consequences are an increase of the financial flows from non-financial corporations to the financial sector” (Baud & Durand, 2012, p. 241). The privileging of shareholder value in the food retail sector is addressed by a number of scholars in the literature (Clapp & Isakson, 2018; Fuchs, Meyer-Eppler, & Hamenstädt, 2013; Isakson, 2014; Jones & Nisbet, 2011). These scholars share the view that allowing shareholders, rather than other stakeholders, to dictate company strategy tends to produce unsustainable outcomes.

The literature on financialization in the food system indicates that dominant patterns of financial investment support an unsustainable food system. Even just a cursory review of banks' lending practices indicates that they stymie the growth of local, alternative food systems. For instance, “a supermarket is more likely to receive a bank loan than the neighborhood grocery store” (Vander Stichele 2015, p. 260). The same is true for industrial farmers versus small scale or agroecological farmers. These lending preferences create a situation where smaller, alternative producers are forced to seek out more marginal forms of financing under less favourable terms. Certainly, farmers can “turn to agribusinesses for financial and hedging services, to contract farming, to long-term contracts with buyers and supermarkets, or to the derivatives markets in order to hedge against the risk of price changes” (Vander Stichele 2015, 260). Unfortunately, the power dynamics involved in these types of arrangements often lock farmers into an industrial, export-oriented model of agriculture (Vander Stichele, 2015).

Social economy, the co-operative model, and impact investing

Unlike the imbalanced relationships that are typical of financialization, social economy encompasses economic activities that value individual and community well-being over capital. The sector embraces values of service to association-members or the community, autonomous management, democratic decision making, primacy of persons and work over capital, and principles of participation, empowerment and individual and collective responsibility (Canadian CED Network, n.d.a). While this is a vibrant sector of economy (Stephens et al., this issue) it still represents a small proportion of the contemporary economic order, which is a global market economy with neoliberal values of free markets, private property, and deregulation.

Historical tracing of the global neoliberal order often begins with the British “enclosures”, the process by which church and nobility declared private ownership of the

“commons”—and that had previously been used collectively by communities. In his seminal 1944 *The Great Transformation* Karl Polanyi described the enclosures as “a revolution of the rich against the poor” (p. 37) while detailing how the consequent rise of market economy in post-Industrial Revolution Europe transformed not only economic relations, but also more broadly social organization. Nineteenth and twentieth century colonialism and imperialism facilitated the spread of such a social order globally, and ushered in the dominance of economists in “development” discourse (Escobar, 1995). This historical trajectory has had immeasurable impact on human communities and the environment, revealing the unsustainable nature of the current economic order (see, for example, Harvey, 2007; Milanovic, 2016; Patel, 2007; Perelman, 2003).

Alternative forms of economic organization do exist and social theorists have attempted to give voice to them. Nobel Prize-winning political economist Elinor Ostrom challenges mainstream economic theory that imagines self-interested humans driven by the need to generate and accumulate capital. Ostrom (2010) has documented how in practice, human communities are more than capable of managing resources in the common interest. Economic geographers Gibson-Graham (2008, 2014) have similarly written about “diverse economies” arguing that conventional economic accounting unfairly discounts a wide range of activities like the gift economy, informal economy, household labour, etc. Social economy essentially maintains the principles of the commons in that it assumes that economies can serve the shared interests of communities and even societies. Social economy activities can be found in virtually every sector of the economy and some countries, like Belgium, Spain, Greece, Portugal, France and Romania have even passed laws that both protect social economy and recognize its contributions to each nation’s prosperity (European Economic and Social Committee, 2017). As of 2017, Nova Scotia also has a framework for social economy, developed by the provincial Department of Business (Government of Nova Scotia, 2017).³

Likely the best understood form of social economy is the co-operative model. Co-operatives, or co-ops, are organizations whose members come together voluntarily, and share decision-making as well as profits associated with the co-op’s activity (Co-operatives and Mutuals Canada, n.d.). The rise of the modern co-ops dates back to the 1800s, notably in the same place as the enclosures, the British Isles (Thompson, 2012). While this research is primarily concerned with co-ops in relation to the food and agricultural sector, Nova Scotia co-operative operations also include home care, movie theatres, funeral homes, and airports.⁴ In 2013, Nova Scotia’s co-ops accounted for some 1 percent of all registered businesses, but

³ For more information on the province’s social economy sector, see Donatelli, Voltan, & Lionais, 2018.

⁴ In the 1920s and 1930s, the Extension Department at St. Francis Xavier University in Antigonish, NS, led by Rev. Dr. Moses Coady, developed what is now known as the Antigonish Movement. The movement was an approach to community development that emphasized adult education and cooperative economy to strengthen rural communities that relied on fickle industries like fishing and mining. The current landscape of co-ops in the province is commonly seen as the legacy of the Antigonish Movement.

contributed 2.2 percent of the provincial GDP, 2.5 percent of all jobs (20 percent more than the provincial government), and \$142 million in tax payments (Karaphillis & Lake, 2015).

As social economy establishes that businesses can behave ethically and still make a profit, pressures grow on corporate entities to demonstrate their social and environmental ethics and restrain from unchecked exploitation. There is growing support for hybridized forms of investment, such as impact investing (Palandjian & Giddens, 2017), which emphasizes “investments intended to create positive impact beyond financial returns” where investors are “intentional in their efforts to generate both” (Rockefeller Foundation, 2012, p. 5). While impact investing has the potential to realize certain positive attributes of social economy, some scholars are skeptical. Impact investing requires making nonfinancial value calculable, thus reconfiguring social and environmental services as a source of market value (Rosenman 2017, p. 11). Nevertheless, impact investing may hold some potential for developing sustainable local food systems (Young, 2015).

Community investment funds are a form of impact investing where investors have a more direct link to the enterprises they support. They “are locally sourced and controlled pools of capital that are capitalized by individual investors within a specific geography or community” and “have demonstrated success in helping provincial governments achieve policy objectives in job creation, small and medium sized business development, and affordable housing development” (Amyot, 2014, p. 4). Community investment funds have been leveraged for a range of projects in Canada, from workers’ co-ops to renewable energy projects, but researchers observe that the “[m]otivation to invest locally appears stronger in rural communities, perhaps in response to growing concerns that current economic trends are threatening the sustainability of their local economies” (Reimer & Bernas, 2014, p. 19). The community investment model supports Gibson-Graham’s (2006) notion of diverse economies, where non-market values destabilize economic assumptions and reshape market relations—and in the process re-signify economic interactions.

Methodology

This in-depth case study focuses on FarmWorks as a recognized model of community financing that attempts to bolster social, economic and environmental sustainability of Nova Scotia’s food through loans to small farms, and processing and distribution operations in light of increased financialization. To assess if FarmWorks has been successful in these efforts, we relied on document review and worked with existing data. Readers should bear in mind that almost all of this data is self-reported by FarmWorks, and although some of the reporting involved independent consultants, and/or relied on client-generated data, what can be gleaned from this data set may not be a complete picture of the organization. Nevertheless, the data set offers an opportunity to reflect on this unique model and its ability to both find organizational success and contribute to food system sustainability. In addition to the self-reported data, we conducted semi-

structured interviews with key stakeholders, to bring a richer picture into view of the impact of FarmWorks on local communities.

The key documents were two evaluation reports released in 2014 and 2017, which reported on the findings from client surveys conducted in 2012/13 and 2016, respectively. In addition to these reports, we also reviewed a range of documents available from FarmWorks and about FarmWorks. These documents included the FarmWorks website, business plan and annual reports, minutes from annual general meetings, and presentations delivered at conferences and to potential investors. All of the documents used are publicly available.

The interviews were conducted in 2018, on location in Nova Scotia. The interviews took place in-person and ranged from 20 minutes to one hour in length. Of the 11 interviewees, there were four board members (all of whom are also investors), one staff member, five investees, and one provincial government employee. Interviewees were asked questions related to sustainable food systems, impact investing, and their relationship to and experience with FarmWorks.

We aimed to accomplish two things. First, with FarmWorks we wanted to undertake a retrospective analysis to understand the broader context of its work, its evolution, and its ongoing motivations and objectives. In other words, we were interested in seeing to what extent FarmWorks accomplished what it set out to do and if its evolution over the seven years of its existence (2011 – 2018) suggested that the co-op was organizationally sustainable. The interviews provided valuable insights into the viability of FarmWorks and the CEDIF model more generally. The government of Nova Scotia established CEDIFs as an economic development strategy, which provides tax incentives to Nova Scotians who invest in the local economy. Second, we sought to understand how FarmWorks fit within the larger context of social economy and assess if and how it bolstered Nova Scotia's food system. For this latter part of the analysis, we relied on the research framework of the larger project on Social and Informal Economy of Food (Stephens et al., this issue). FarmWorks is a key partner in that project, and we used the project's five guiding questions as an analytical tool.

Analysis and findings

Organizational sustainability of FarmWorks

Responding to Context

FarmWorks was created as a response to the erosion of economic and social vitality within Nova Scotia's rural communities. Demographic trends such as population stagnation and youth out-migration coupled with economic decline plague small communities across the province (Canadian CED Network, n.d.b). These troubling demographics can be linked to how dramatically food production has plummeted over the last fifty years; the number of farms has

dropped from 12,518 to 3,905 with farm populations shrinking from 58,000 to 8,000 (Local Prosperity, 2015). Today, only 15 percent of food is produced locally, compared to 60 percent half a century ago (Local Prosperity, 2015). Food sector employment, particularly in food processing, is correspondingly diminished—in less than a decade, it dropped by 20 percent from 12,300 jobs in 2005 to 8,900 in 2012 (Local Prosperity, 2015).

These numbers are all the more concerning in light of the significant multiplier effect food production has on local economies. That is, a dollar spent on the local food system tends to circulate within the local economy many times over (Econometric Research Limited, et al. 2015; Meter, 2008). Building on this concept, FarmWorks maintains that Nova Scotia as a whole will benefit from orienting its food economy toward local and regional markets (FarmWorks, 2017a). From the organization’s perspective, “strategies that increase the availability of Nova-Scotian grown food will help improve the local economy” (FarmWorks, 2017a). Such strategies require investments in food production and infrastructure, but investment is not readily flowing into the sector.

While the general decline of rural prosperity across Nova Scotia can be linked to a confluence of external, often global, factors, government policies have tended to further weaken the food sector. Indeed, government support withdrew as Nova Scotia’s food production declined, exacerbating an already dire situation. From 1996 to 2016 the percentage of the provincial budget earmarked for agriculture fell from 0.9 to 0.6 percent (Kennedy, Borgstorm, Best, & Knezevic, 2017). The banking sector also appears to have focused its attention elsewhere. Commercial lending has become increasingly centralized because of the popularity of online banking and dwindling foot traffic to brick-and-mortar-branches. As a result, in recent years Canada’s major banks have shut down many of their rural branches (Canadian CED Network, n.d.b). Agricultural lending “is a specialty that requires a knowledge of farming, often very specific to the region, to the farm or to the farmer, and a longer-term perspective” (Lux & Greene, 2015, p. 2). The demise of local, rural branches thus may increase the difficulty for food producers to be approved for loans, particularly those operating small-scale alternative (i.e. organic, agroecological, triple bottom line) businesses, because lenders may not be familiar enough with the risks and contexts associated with such businesses.

The broader trends of financialization in the food system (rising food prices and costs of farmland, and greater concentration amongst agrifood corporations) have also been felt in Nova Scotia and have shaped the local context in several ways. First, the province has one of the highest food insecurity rates in Canada, leaving the local population particularly susceptible to the dramatic spikes in global food prices in recent years (CBC News, 2018). Second, rising costs of farmland also extends to Nova Scotia. As reported by Farm Credit Canada, “The average value of Nova Scotia farmland increased 9.1 per cent in 2016, following gains of 6.3 per cent in 2015 and 7 per cent in 2014. Values in the province have continued to increase since 2005” (Farm Credit Canada, 2017, p. 18). The rising price of agricultural land has significant implications for the structure of rural communities, including blocking young farmers from entering the market, and attracting distant investors often motivated by short-term profits.

Finally, the hollowing out of Nova Scotia’s food and farming sector can be linked to greater corporate consolidation along the food chain. The lack of infrastructure to support direct marketing initiatives by farmers illustrates how the consolidated power of retailers and distributors shapes the landscape and options available for farmers.

This situation does not bode well for local food producers working to sustain or expand their operations. Access to capital is consistently cited as a roadblock by businesses in rural Canada (Canadian CED Network, n.d.b), limiting the potential for building diverse, local food economies. As interest in and demand for local food grows, the lack of infrastructure, in part due to limited financing options, is holding small producers back. This gap is felt most acutely amongst food processors, leading Nova Scotian business owners to call for more abattoirs, and processing, freezing and refrigeration facilities in order to increase production (Kennedy et al., 2017). FarmWorks recognized that the food sector needed accessible financing in order to reverse the decline of rural communities and remain sustainable and established itself as a solution to a stagnant economic environment.

Purpose

In its own words, FarmWorks “promotes and provides strategic and responsible community investment in food production and distribution in order to increase access to a sustainable food supply for all Nova Scotians” (FarmWorks, n.d.). It aims to bring about a measurable increase in food production while delivering positive outcomes to investees and a return on investment for shareholders (FarmWorks, 2013). Its goal is to “move the needle” for local food production from 13⁵ to 20 percent by 2020 (Fledge, 2016; Scott & MacLoud 2010,). More broadly, FarmWorks asserts that its initiatives can help revitalize rural communities, increase access to healthy food, generate employment, reduce reliance on imports and “contribute to an improving economic outlook for Nova Scotia” (FarmWorks, 2013).

Community leaders seeking to improve social, environmental, health and economic outcomes through a robust food and agriculture sector established FarmWorks in 2011 (Kennedy & Knezevic, 2014). Operating as a CEDIF enables Nova Scotians to purchase common shares on an annual basis in a diversified portfolio of businesses in the food sector that “yield *meaningful* financial returns on investments” (emphasis added, FarmWorks, n.d.). FarmWorks provides loans to businesses along the food value chain including farms, food processors, retailers and restaurants (Kennedy et al., 2017). Approximately 50 percent of FarmWorks clients are food producers and another 50 percent are food retailers and restaurants (Kennedy et al., 2017). These loans tend to be more accessible than those offered through traditional financial institutions

⁵ It is unclear exactly how much food is sourced locally in Nova Scotia, but as of 2010 Food Secure Canada found that at most 13 percent of food dollars are going back to Nova Scotia’s farmers (Scott & MacLoud, 2010).

because they do not require collateral or immediate repayment (Kennedy and Knezevic, 2014), and while credit checks are required, clients are asked to request them themselves, so that their credit scores are not affected. Prior to lending, FarmWorks conducts due diligence which includes careful review of the business’ application, business plan and financial statements. However, the organization prioritizes its relationship to the applicants, considering the character and commitment of the applicant and states that its approach is “about relationship lending” (FarmWorks, 2016). There is also a significant mentorship component involved in FarmWorks lending philosophy, potentially strengthening bonds within the community. FarmWorks “thrives on a principle of “patient capital” and thanks to Nova Scotia’s CEDIF program, shareholders who maintain their investments receive beneficial tax credits every 5 years” (FarmWorks, 2017b).

The organization is incorporated as a for-profit co-operative and therefore subscribes to and acts in accordance with co-operative principles in addition to those outlined in Box B. It is operated by a 14-member volunteer Board of Directors who are elected by shareholders. As of 2018, FarmWorks has one full-time paid staff member (with partial funding from Clean Nova Scotia Foundation) to support communications and logistics efforts. FarmWorks’ strategic goals are to “Promote investing locally and buying local food to gain health, economic, social, environmental and other benefits that result from growing and processing food in Nova Scotia. Use investment vehicles to allow Nova Scotians to invest a significant percentage of their capital in NS agriculture and food related enterprises” (FarmWorks, 2014). In its first annual report, it announced that it would measure the following outcomes annually to ensure that it is meeting its stated goals (FarmWorks, 2013):

1. percent increase in production by each loan recipient
2. percent increase in profitability by each loan recipient
3. percent increase in employment
4. CEDIF contribution to increase in production
5. CEDIF contribution to increase in new food-related businesses.

A survey conducted for the BC Rural Centre (Kennedy et al., 2017) found that 87 percent of FarmWorks clients believed that FarmWorks has improved outcomes for their business. In the 2013 Annual Report, FarmWorks also set the goal of raising \$5 million dollars after five years, which has unfortunately not been reached. It is unclear what the barriers are reaching this goal, but the small population of the province, with options to invest in other CEDIFs, is likely a limiting factor. There are currently nearly 50 different CEDIFs in Nova Scotia in which the population of under one million can invest.

Guiding Principles (FarmWorks, 2017a)

- Empower others to build sector strength and capacity;

- Consider all stakeholders;
- Food self-sufficiency;
- Co-operate with other organizations;
- Community based development;
- Community participation in ownership and governance;
- Educated choices for the public;
- Socio-economic and environmental justice;
- Adherence to environmentally sound principles

Whereas FarmWorks has not achieved its goal of raising \$5 million over five years, the organization has successfully accomplished its other goals, chiefly supporting local food businesses, providing mentorship in addition to financial support, and maintaining steady investment growth. Out of nearly 90 clients as of summer of 2018, with an average loan of \$27,000, only three have gone out of business, thus defaulting on their loans. The total cumulative loss at the end of 2018 was at \$65,228, though this loss was covered by the revenue from interest. This demonstrates that while the investment fund appears high-risk at a glance, the intangible support and trust generated through relationships that are in line with the organization’s ethos are ensuring that the risk is minimized.

Viewed in this way, the social/relationship dimension of FarmWorks helps make it a robust investment fund. However, FarmWorks has also relied heavily on volunteer labour with heavy time commitments, which comes with a risk of burnout and undermines the overall sustainability of the organization. Investees shared a concern for the longevity of the organization under current arrangements. One interviewee stated that, “The reason it exists here, is you have two volunteers. But one step further, and they’re retired. There aren’t that many people with the passion and other things lining up to do this voluntarily, there has to be more support.” Founding board members travel across the province every year to promote the annual offer of shares, but they are not paid for any of that labour. Finding ways to rely more significantly on paid labour will strengthen the robustness and ensure long-term success of FarmWorks. There was a sense from investees and investors that FarmWorks is taking on a much larger role than originally intended; if the organization had more funding it would be able to better focus on its core competencies. As of June 15, 2018, FarmWorks had invested \$2,835,000 in 89 companies (Best, 2018).

Table 1: Amount of funds raised by FarmWorks through their public offerings

YR	Amount	Average	Cumulative ttl
2012	\$224,200	\$2, 163	\$224,200

2013	\$225,300	\$2, 888	\$449,500
2014	\$271,500	\$3, 234	\$721,000
2015	\$312,400	\$3, 383	\$1,033,400
2016	\$372,300	\$3, 442	\$1,405,000
2017	\$378,900,200	\$3,845	\$1, 784,600
2018	\$444,000	\$4, 879	\$2,228,600

Source: FarmWorks annual reports.

Enabling factors

FarmWorks functions as a Community Economic Investment Fund (CEDIF), a policy framework set up by the Government of Nova Scotia. The CEDIF program was established in 1999 in an effort to stimulate local economic development (Kennedy et al., 2017). The program was designed to keep taxpayer dollars in the province because a staggering 98 percent of Registered Retirement Savings Plans (RRSPs) was leaving Nova Scotia for larger commercial centres (CEDIF, n.d.). The CEDIF model is a result of extensive public consultations in the mid-nineties that highlighted the importance of developing funding sources within the community, and emphasized the need to uphold local autonomy regarding investment decisions (CEDIF, n.d.).

CEDIFs provide tax advantages to individuals who invest in local projects in order to “provide new employment opportunities and rejuvenate existing economic sectors in the province” (Kennedy et al., 2017). CEDIFs cannot be charitable, non-taxable or non-profit (CEDIF, n.d.), positioning them as a hybrid between funds that are focused solely on maximizing economic return and pure philanthropy. The success of this hybrid model is attracting attention from other jurisdictions seeking to revitalize local economies in underserved communities. PEI replicated the CEDIF model under the Community Economic Development Business (CEBD) program (Canadian Cooperative Association, 2013, p. 5). In 2003, after reviewing Nova Scotia’s experience, Manitoba created the Community Economic Development Tax Credit Program (CEDTC) (Canadian Cooperative Association, 2013, p. 10). As of 2012, the Alberta Community and Co-operative Association was working on replicating elements of the CEDIF program (Canadian Cooperative Association, 2013, p. 1). Further westward, in 2016 the Union of British Columbian municipalities endorsed a resolution for the Ministry of Finance for British Columbia to initiate a CEDIF program (Community Impact Investment Coalition, 2017, p. 4). These developments indicate that the larger model under which FarmWorks functions, is increasingly

viewed as an essential component of successful rural economic revitalization (Canadian CED Network, n.d.a).⁶

The CEDIF model relies on significant incentives to investors to invest their money into local economy. Investors purchase shares that are non-refundable for five years. Those shares are eligible for a 35 percent Nova Scotia non-refundable Equity Tax Credit that can be carried forward 7 years and backward 3 years, and are eligible for further Equity Tax Credits of 20 percent and 10 percent are offered at the 5 and 10-year investment anniversaries, respectively, provided the CEDIF meets Department of Finance conditions. CEDIF shares are eligible registered retirement savings plan (RRSP) investments (Kennedy et al., 2017). The most recent provincial information indicates that there are 47 CEDIFs in Nova Scotia that have raised and invested \$40 million locally, through a total of 120 offerings and over 5000 investors (Community Economic Development Investment Fund, n.d.).

FarmWorks considers CEDIFs the best available mechanism to “efficiently and effectively leverage local capital to help build a sustainable agricultural and rural food economy, help rebuild rural communities and contribute to all aspects of life in the province” (Local Prosperity, 2015). However, the organization sees ample opportunity for improvement and is continuously working “with government to simplify and clarify regulations” (FarmWorks, 2015). The investment limit has been adjusted from an initial \$50,000 down to \$15,000 for portfolio CEDIFs. This move troubled some FarmWorks investors as they perceive it as an attempt by the finance industry to curtail the potential of CEDIFs. Despite this drawback, board members view the tax incentive provided by CEDIFs as a critical piece of the puzzle in terms of attracting investors. As one board member stated, “I like the CEDIF model because it helps to underwrite the investors’ profit, it makes it a more secure investment rather than just an altruistic investment”. Though the CEDIF model has many advantages, it also has some drawbacks that make it undesirable to some prospective investors. When speaking with a provincial government employee, they pondered how certain regulatory changes could strengthen CEDIFs. Currently, it is difficult to sell shares as a CEDIF shareholder, which is a challenge for those who may realize that they need the money. They would have to find another CEDIF shareholder to sell it to.

Contributions to sustainable food systems

Beyond the organizational sustainability, this study also considers how FarmWorks fits within broader understandings of social and informal economy, and the ways in which those sectors can contribute to food system sustainability. The research framework developed by the larger

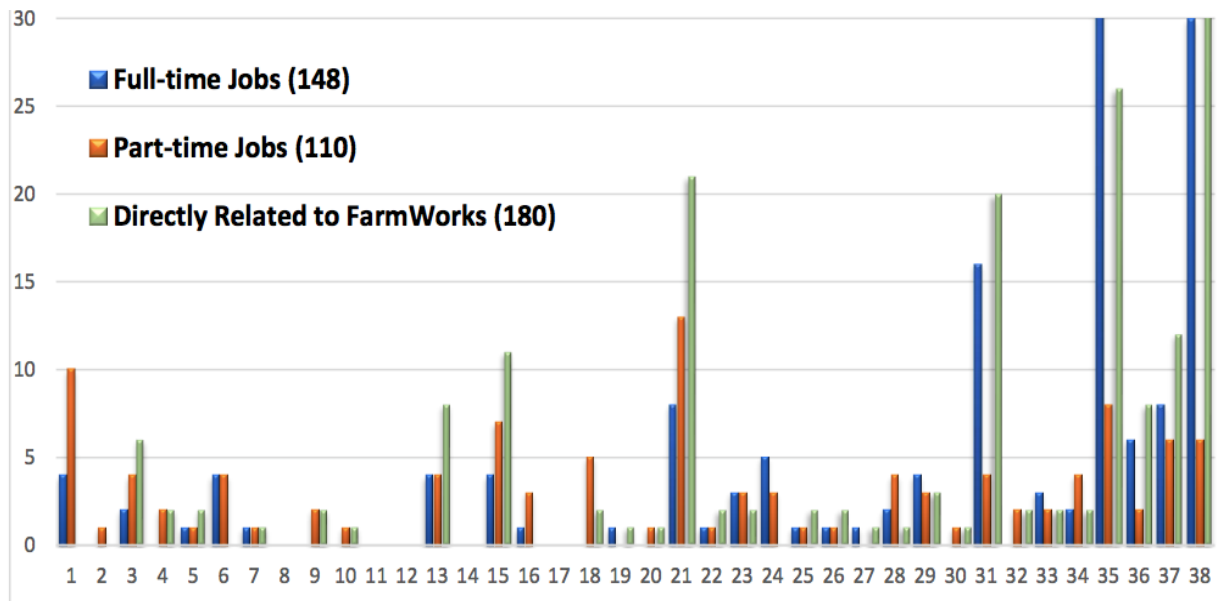
⁶ Linda Best, a FarmWorks founding Board Member (and co-author of this article) has presented on FarmWorks across the country as well as in the United States. She has also brought her FarmWorks expertise to consult on numerous projects such as Vancity’s Knives and Forks Community Investment co-operative.

research project on the Social and Informal Economy of Food is used to assess FarmWorks’ contributions. Specifically, this project asks whether or not, and how, a social economy of food: increases prosperity for marginalized groups; builds adaptive capacity to increase community resilience in the face of economic and environmental challenges; bridges divides between elite consumers of alternative food products and more marginalized groups such as producers and low-income consumers; increases social capital; and fosters innovation.

Increasing prosperity

As described above, rural communities in Canada are often marginalized, with dwindling access to financial services and government support combined with aging demographics. Whereas it is difficult to ascertain if FarmWorks, or CEDIFs more generally, can reverse this trend, creating economic opportunities has the potential to keep young people in the community, and make rural communities more attractive to service providers. The CEDIF model is an effective tool for regenerating local economies and struggling rural communities. Census figures show that in 2011, Nova Scotia saw an increase in the number of farms since 2006. Notably, it is the only province in Canada witnessing this shift (FarmWorks, 2017a). However, that slight upward tick reversed between 2011 and 2016 (Statistics Canada, 2016). This suggests that farms are both still important to Nova Scotia’s rural economy and also vulnerable to the larger global trends.

Figure 1: Job creation as of 2016



Source: Kennedy et al, 2017, p. 12.

FarmWorks loans have allowed its clients to increase their revenue and hire more employees. Every investee that we interviewed stated that FarmWorks filled a financing gap that they could not access elsewhere. Job creation and enhanced profitability are helping to revive the local food sector, increasing prosperity within small rural communities. FarmWorks has significantly contributed to employment in Nova Scotia's food sector, with 70 percent of jobs generated by FarmWorks clients being attributed to their FarmWorks loans (Kennedy et al., 2017), which would amount to more than 1 percent of total employment in the agri-food sector in the province⁷. FarmWorks clients are able to source between 65 percent and 70 percent of their goods and services from their home province, allowing them to support other local businesses (Kennedy et al., 2017). Moreover, there is evidence that these businesses are helping to support a budding local food culture, positioning Nova Scotia as a culinary tourism destination. As one investee, who owns a booming business in Dartmouth, put it, "I feel very strongly about putting my money in other people's hand who are here in Nova Scotia. I also want to create a unique place in Nova Scotia for people to visit]." Because of the economic multiplier effect of the food sector, and based on the past data, it is estimated that the annual gross revenue of FarmWorks' clients, amounting to \$8 million could generate between \$11.2 to \$20.8 million for the provincial economy (Kennedy et al., 2017). Far from suggesting that the organization deserves sole credit for this, both the FarmWorks client survey and our interviews suggest that this revenue would not be possible without the support from this investment fund.

Building adaptive capacity

As a CEDIF, FarmWorks takes a holistic approach to its lending practices. In addition to loans, FarmWorks provides assistance in the form of advice and mentoring, promotion, encouragement, connection-building, and awareness-raising (Best, 2018). This mix of support is intended to increase businesses' resilience to external shocks. Another way in which FarmWorks strengthens community resilience is by supporting a diversity of businesses. Diversity is a cornerstone of resilient ecosystems and is increasingly being recognized as a vital component of resilient economies (Bharma, Samir, & Burnard, 2011, p. 5387). Through the interviews it became clear that, board members incorporate a systems lens in their investments decision-making. They are cognizant of the importance of building markets for local farmers and are thinking of ways to grow processing, retailing and restaurants in order to strengthen the prospects for Nova Scotian farmers. While, to a degree, the board is constrained by which types of businesses approach them for loans, they can still consider the benefits of lending beyond the impact to one particular business and strategically invest in ones that may support the growth and sustainability of the food system as a whole.

⁷ Nova Scotia Business Inc. estimates that 10,000 jobs in the province are "linked" to agriculture and agri-food and beverage industry; see <https://www.novascotiabusiness.com/business/agri-food>

In the food system, corporate concentration is associated with a host of unsustainable effects including environmental degradation, social inequality, a lack of transparency and accountability and adverse health outcomes. Decentralization and the coinciding diversity is often seen as a step towards creating a more resilient, sustainable food system (IPES-Food, 2017). From a health standpoint, FarmWorks clients are helping to increase public awareness of the connection between fresh, locally grown food and improved diets. For example, one investee running a retail store in Halifax, takes strides to label and educate consumers on the source of the local produce on store shelves to help reconnect producers and consumers. Another, is selling wholesale local produce to public schools in the Annapolis Valley and meeting with the school board to increase their reach.

Bridging divides

Industrialized food systems such as those found in Canada, are characterized by a high degree of corporate concentration along the food chain (Lawrence, 2017). Those seeking to decentralize and diversify the system frequently cite the “missing middle” in agriculture as a significant barrier to achieving their goals for a more sustainable food system. The missing middle refers both to the size of farms and the current structure of the food supply chain. A lack of mid-scale farms persists creating a polarized system, with small farms on one end and large industrial farms on the other. Small farms tend to be insufficient to meet the needs of local food processors and distributors catering to urban markets while industrial farms are too large to work with the mid-scale businesses (Binkley, 2018).

This has led to the situation of another “missing middle” along the food supply chain (Kirschenmann, Stevenson, Buttel, Lyson, & Duffy, 2008). The absence of mid-scale farms has translated to a glaring lack of mid-scale food processors, which is inhibiting the growth of a more diverse and resilient food system. FarmWorks’ willingness and interest in working with businesses along the entire food supply chain combined with the flexibility of their loans is helping to revitalize this struggling link in the food supply chain. Indeed, FarmWorks “realized that providing funds to support primary production of food was only part of the picture... Restaurants serving and promoting local produce deserve our support, as do those adding value to food products through innovative processing and presentation” (FarmWorks, 2015). When describing the active role of a FarmWorks volunteer, one long-standing client of the fund stated that, “She’s a bee, she’s a great cross pollinator. She’s very proactive in getting local businesses to work together.”

Social networking is vital to helping FarmWorks achieve its goals as evidenced through interviews with investors. With little official marketing, all investees interviewed learned about FarmWorks either through word of mouth, or by attending on of FarmWorks’ events. Moreover, the deliberate effort to bring FarmWorks clients together through events (e.g., the annual client showcase, April Flavors) and online communication (newsletter, FarmWorks client map) has

enabled producers and processors to connect with retailers and restaurants who may have similar values and face similar challenges.

Increasing social capital

As stated at a FarmWorks Annual General Meeting “CEDIF can be a high-risk investment. We mitigate that risk by developing relationships and continuing to maintain relationships” (AGM meeting minutes). The “relationship lending” approach taken by FarmWorks makes a meaningful contribution to strengthening the social capital or social fabric of Nova Scotia’s rural communities. FarmWorks board members believe strongly in the virtues of this type of lending. For example, one member concluded that, “The actual personal lending is in some ways better than collateral, because nobody wants to tell [FarmWorks] that they’ve lost their money so they’ll do whatever they can. Whereas if it’s an anonymous bank holding a lien on a property, and things get too difficult and they feel the bank doesn’t care they could easily just walk away.”

Food is a powerful tool in building social cohesion, often bringing multiple generations together. FarmWorks’ clients are also providing “new and innovative spaces to gather around food” in urban areas (Kennedy et al., 2017). FarmWorks loans have also provided rural businesses (55 percent) with the opportunity to hire family members. Family owned businesses are an important component of community vitality, providing a more “human” alternative to global corporations. The power of social capital should not be ignored; Kennedy and Knezevic point out that the type of social capital supported by FarmWorks “allows for peer-to-peer knowledge sharing, and a strengthened social safety net that can sometimes support local businesses when they fall on hard times” (2014). There was a common sentiment shared amongst investees that larger institutions, such as banks, were not interested in supporting small businesses. Close to tears, one investee expressed how, “[FarmWorks] are the only ones that actually believe in you, they actually want to give you a chance. Makes me want to cry, because no-one else would help us. I call [them] all the time.” The mentorship and social support that FarmWorks provides to clients and the broader community undoubtedly helps to sustain small businesses that often feel left behind by more formal institutions.

Fostering innovation

An investee who has both received a FarmWorks loan and created their own CEDIF to raise funds lamented how, generally, provincial government funding is biased towards large-scale agribusiness and stifling innovation. Beyond FarmWorks, there is very little funding available for innovative, small-scale food businesses. FarmWorks touches innovation through several avenues. Not only does it foster innovation within the food system by providing loans to emerging and existing food system entrepreneurs, but it also embraces innovation within its own governance model as it “adopts and adapts the CEDIF program to meet food system needs” (Fledge, 2016). FarmWorks loans are intended to allow businesses to innovate and take greater

risks than they otherwise would be able to. However, the relatively small size of the loans often means that businesses require more financial support to realize their goals. Therefore, FarmWorks fosters partnerships with Community Business Development Corporations across the province, as well as Futurpreneur and the network of credit unions (FarmWorks, 2016). Arguably, this collaborative approach to strengthening the food system allows for even greater potential for innovation (Beckie, Huddart, and Wittman, 2012; Marsden, 2010). FarmWorks is also dedicated to working closely with government in order to foster innovative policies that further their mission of supporting Nova Scotia's food sector. Finally, FarmWorks' contribution to innovation has been recognized by one of Canada's leading charities. Tides Canada chose FarmWorks for its Top Ten award, one that is given to "groundbreaking initiatives that are leading the pack in social change innovation" (Tides Canada, 2014).

Discussion

Throughout this article, we have revealed the widespread and pernicious impact that financialization has on Nova Scotia's food system. FarmWorks takes these challenges head-on. Whereas its influence is too limited to substantially undermine the dominant food system structures, the organization offers an alternative way for all players in the food system (including investors and consumers) to participate in food markets. Perhaps equally important is its ability to demonstrate that such alternatives are not only possible, but also viable, making FarmWorks an important model for businesses, individuals and communities who have reservations about the current dominant trends that characterize global industrial food. It is a model that embodies Gibson-Graham's notion of diverse economies, which while often marginal "potentially have more impact on social well-being than capitalism does" (2008, p. 617).

The abstraction required for new financial tools means that food and agricultural activities have to be conceptualized and represented as financial metrics (Clapp & Isakson, 2018). Reducing information in this way ignores the multidimensionality of agriculture, and represents it solely as an economic endeavor. Here again FarmWorks exemplifies the potential of alternative thinking. Relying on the co-operative model and the broader principles of social economy, the organization uses some of the practices typical of neoliberal economy (investment incentives, loan structure), but subverts those practices and extends them with values and relationships that support diversity and multifunctionality of food and agriculture by making economic success only part of its value system.

As described above, consolidation is often encouraged through the ascendancy of shareholder value, a core aspect of financialization (van der Zwan, 2014). The emphasis on delivering shareholder value has profoundly shaped decisions by large agribusinesses and food companies to satisfy shareholders' demands for dividends. Meeting shareholder needs often involves mergers and acquisitions, and more consolidation along the food chain (Clapp and Isakson, 2018). FarmWorks focuses on providing shareholders with meaningful returns, of which

financial returns are only a part. Shareholders receive financial returns, but rather than maximizing those returns at any cost, FarmWorks bolsters the returns with social and environmental returns on investment through contributions to vibrant communities, more ecologically sound practices, and more diverse—and thus more resilient—local food system.

The power of shareholders to influence decisions that impact all actors along the food chain including wage workers, the health of consumers, farmers etc., demonstrates the unrepresentative nature of the current food system. For a food system to be sustainable, all those impacted by it should be able to participate in it beyond their mere purchasing power. In the case of FarmWorks, shareholders still wield power, but that power is curbed by the principles of the organization, which ensure that the shareholder power is limited by the types of investments that the organization can make, those being investments that put community benefits on the same footing as the financial returns to shareholders.

Transparency and accountability are required for a well-functioning, participatory/democratic food system. However, financialization erodes these qualities because “the complexity of the markets, combined with the multiple actors involved, make it nearly impossible to unambiguously trace the decisions of specific financial investors to particular ecological and social outcomes of specific agricultural landscapes” (Clapp, 2015, p. 313). Therefore, those looking to challenge the status quo are limited in their ability to acquire accurate information and hold perpetrators accountable due to the distancing and abstraction encouraged through financialization. The diligent and detailed record-keeping, much of which is made publically available, ensures that FarmWorks maintains a high level of transparency.

FarmWorks is not unique in its ability to attract investors who accept somewhat smaller financial returns knowing that their investments are going to community development and environmental remediation. What does make FarmWorks noteworthy, is that it does not depend on market dynamics alone, but also leans heavily on the state. The structure of the CEDIF model and the well-established and provincially supported co-operative way of doing business, further ensure both fiscal responsibility and responsibility to local communities. These frameworks, unlike the fickle nature of “free” markets, make certain that where investments are made, they are maintained over time and do not depend on the leadership of the organization at any given time. Hence, FarmWorks’ performance thus far is evidence of not only its own success, but also of the potential of the CEDIF model. In other words, the organization offers a compelling case for the relevance of the CEDIF model to other jurisdictions. The organization also serves as further evidence of the vitality and continued popularity of the co-operative model in Nova Scotia. Beyond its local context, it also speaks to the importance of imagining economies in all their different forms (Gibson-Graham, 2008). In particular, it highlights community economic relations that recognize interdependence and re-embed social and political dimensions into market dynamics (Gibson-Graham, 2006). Such models can be starting points for socio-economic transformation (Ballamingie, Poitevin-DesRivières & Knezevic, 2019).

Conclusion

Amn, Cameron and Hudson describe the social economy as constituting, “a broad range of activities which have the potential to provide opportunities to local people and communities to engage in all stages of the process of local economic regeneration and job creation, from the identification of basic needs to the operationalization of initiatives” (2002, p. 12). This research illustrates the ways in which FarmWorks closely fits within the social economy concept. The primary purpose of the CEDIF program is to regenerate Nova Scotia’s local economy, and, as a CEDIF FarmWorks draws on the unique attributes of food system change to tackle a broad spectrum of challenges within its local communities. Its impact extends beyond economic development, albeit in ways that are difficult to measure.

FarmWorks demonstrates that not relying solely on capitalist, positivist measures of success, and investing in diverse economies, can make communities better places to live in both tangible and intangible ways, as interviews with stakeholders have revealed. Its adherence to principles of cooperation, mutuality, participation and community empowerment is reflective of FarmWorks’ alignment with common understandings of the social economy (Jennings, 2012, p. 4). Moreover, its dedication to building social capital through relationship lending is another strong indicator that FarmWorks seeks to employ the tools as well as build the capacity of social economy. Organizations such as FarmWorks are all the more necessary in the current context of neoliberal capitalism in its most advanced form, financialization. This study reveals the degree to which a small, voluntary run organization can respond to these broader structural pressures. While FarmWorks is limited in its ability to reverse these powerful trends, it is clear that government intervention such as the CEDIF program provides small organizations with a platform upon which to challenge dominant systemic structures.

References

- Amyot, S. (2014). *Enabling community investment: Policy brief*. Victoria, British Columbia: Community Social Planning Council of Greater Victoria.
- Andrée, P., Ballamingie, P., & Sinclair-Waters, B. (2015). Neoliberalism and the making of food politics in Eastern Ontario. *Local Environment*, 20(12), 1452–1472.
- Ballamingie, P., Poitevin-DesRivières, C., & Knezevic, I. (2019). Hidden Harvest's transformative potential: An example of 'community economy'. *Journal of Agriculture, Food Systems and Community Development*. In press.
- Baud, C., & Durand, C. 2012. Financialization, globalization and the making of profits by leading retailers. *Socio-Economic Review*, 10, 241-266.
- Beckie, M.A., Huddart, E., & Wittman, H. (2012). Scaling up alternative food networks: Farmers’ markets and the role of clustering in western Canada. *Agriculture and Human Values* 29, 333–345.

- Best, L. (2018). *Investing in Nova Scotian food: FarmWorks investment co-operative limited*. Rural investment: a pathway toward food system sustainability workshop, January 11, 2018. Blythe: Centre for Rural Creativity.
- Bharma, R., Samir, D., & Burnard, K. (2011). Resilience: The concept, a literature review and future directions. *International Journal of Production Research*, 49(18), 5375-5393.
- Binkley, A. (2018). The missing middle. *Manitoba Co-operator*. Retrieved on August 7, 2018 from <https://www.manitobacooperator.ca/news-opinion/news/mid-sized-farms-to-face-big-challenges/?module=carousel&pgtype=homepage&i=2#>
- Blay-Palmer, A. (2008). *Food fears: from industrial to sustainable food system*. Farnham: Ashgate.
- Blay-Palmer, A., Knezevic, I., & Spring, A. (2014). Seeking common ground for food system transformation. *Dialogues in Human Geography*, 4(2), 185–189.
- Bracking, S. (2012). How do investors value environmental harm/care? Private equity funds, development finance institutions and the partial financialization of nature-based industries. *Development and Change*, 43(1), 271-293.
- Breger Bush, S. (2012). *Derivatives and development: a political economy of global finance, farming, and poverty*. New York: Palgrave Macmillan.
- Burch, D., & Lawrence, G. (2005). Supermarket own brands, supply chains and the transformation of the agri-food system. *International Journal of Sociology of Agriculture and Food*, 13(1), 1-18.
- Canadian CED Network. (n.d.) a. *The social economy*. Retrieved from <https://ccednet-rcdec.ca/en/page/social-economy-0>
- Canadian CED Network. (n.d.) b. *The FarmWorks CEDIF: An economic overview and assessment*. Retrieved from <https://ccednet-rcdec.ca/en/toolbox/farmworks-cedif-economic-overview-assessment>.
- Canadian Co-operative Association. (2013). *Government-facilitated capitalization measures for co-operatives in Canada: a replication toolkit*. Ottawa: CCA.
- CBC News. (2018). *Food insecurity rates for Nova Scotia and Halifax worst in Canada*. Retrieved from <https://www.cbc.ca/news/canada/nova-scotia/food-insecurity-unemployment-1.3262622>.
- CEDIF. (n.d.) *Local investing: The Nova Scotia CEDIF program*. Retrieved from <http://cedif.ca/>.
- Clapp, J. (2015). Distant agricultural landscapes. *Sustainability Science*, (10)2, 305-316.
- Clapp, J. (2012). *Food*. Cambridge: Polity Press.
- Clapp, J., & Helleiner, E. (2012). Troubled futures? The global food crisis and the politics of agricultural derivatives regulation. *Review of International Political Economy*, 19(2), 181-207.
- Clapp, J., & Isakson, R. (2018). *Speculative harvests: financialization, food and agriculture*. Halifax: Fernwood Press.

- Community Economic Development Investment Fund. (n.d.). *Local investing: The Nova Scotia CEDIF program*. Retrieved from <http://cedif.ca/>.
- Community Impact Investment Coalition. (2017). *Unleashing impact investment for BC Communities*. Saanich: CIIC.
- Co-operatives and Mutuals Canada. (n.d.). *Values & principles*. Retrieved from <http://canada.coop/en/values-principles>.
- Desmarais, A.A., Qualman, D., Magnan, A., & Wiebe, N. (2015). Land grabbing and land concentration: Mapping changing patterns of farmland ownership in three rural municipalities in Saskatchewan, Canada. *Canadian Food Studies*, 2(1), 16–47.
- Donatelli, C., Voltan, A., & Lionais, D. (2018). *Mapping the social shift: Nova Scotia's Social Enterprise Sector*. Nova Scotia: Social Enterprise Network of Nova Scotia
- Econometric Research Limited, Cummings, H & Associates, & MacRae, R. (2015). *Dollars & sense: Opportunities to strengthen Southern Ontario's food system*. Greenebelt, J.W. McConnell Family Foundation, and Metcalf Foundation.
- Epstein, G. (2005). *Financialization and the world economy*. Cheltenham: Edward Elgar.
- European Economic and Social Committee. (2017). *Recent evolutions of social economy - study*. Retrieved from <https://www.eesc.europa.eu/en/our-work/publications-other-work/publications/recent-evolutions-social-economy-study>.
- Escobar, A. (1995). *Encountering development: The making and unmaking of the third world*. Princeton: Princeton University Press.
- ETC Group. (2015). *Breaking bad: Big ag mega-mergers in play*. Communiqué 115. Retrieved from <http://www.etcgroup.org/content/breaking-bad-big-ag-mega-mergers-play>
- Fairbairn, M. (2014). 'Like gold with yield': evolving intersections between farmland and finance. *Journal of Peasant Studies*, 41(5), 777-795.
- Farm Credit Canada. (2017). *Farmland values report*. Regina, SK: Government of Canada.
- FarmWorks. (2016). *Annual general meeting*. Retrieved from <http://farmworks.ca/wp-content/uploads/2017/04/Minutes-2016-AGM-FarmWorks.pdf>
- FarmWorks. (2013). *Annual report*. Retrieved from <http://farmworks.ca/wp-content/uploads/2013/06/FarmWorks-Annual-Report-2013.pdf>.
- FarmWorks. (2014). *Annual report*. Retrieved from <http://farmworks.ca/wp-content/uploads/2013/06/FarmWorks-Annual-Report2014.pdf>.
- FarmWorks. (2015). *Annual report*. Retrieved from <http://farmworks.ca/wp-content/uploads/2013/06/FarmWorks-Annual-Report-2015.pdf>.
- FarmWorks. (2017b). *Annual report*. Retrieved from <http://farmworks.ca/wp-content/uploads/2013/06/FarmWorks-Annual-Report-2017.pdf>.
- FarmWorks. (2017a). *Business plan, board manual articles*. Retrieved from <http://farmworks.ca/about/business-plan/>.
- FarmWorks. (n.d.). *Home*. Retrieved from <http://farmworks.ca/home/>.

- Fledge. (2016). *FarmWorks*. Retrieved from <https://fledgeresearch.files.wordpress.com/2016/08/farmworks.pdf>.
- Fuchs, D., Meyer-Eppler, R., & Hamenstädt, U. (2013). Food for thought: the politics of financialization in the agrifood system, *Competition and Change*, 17(3), 219-233.
- Ghosh, J. (2010). The unnatural coupling: food and global finance. *Journal of Agrarian Change*, 10(1), 72-86.
- Gibson-Graham, J.K. (2006). *A postcapitalist politics*. Minneapolis: University of Minnesota Press.
- Gibson-Graham, J.K. (2008). Diverse economies: Performative practices for 'other worlds'. *Progress in Human Geography*, 32(5): 613–632.
- Gibson-Graham, J.K. (2014). Rethinking the economy with thick description and weak theory. *Current Anthropology*, 55(S9), S147-S153.
- Government of Nova Scotia (2017). *Framework for advancing social enterprise*. Retrieved from <http://novascotia.ca/business/docs/social-enterprise-framework.pdf>.
- GRAIN. (2011). *Food and climate change: the forgotten link*. Retrieved from <https://www.grain.org/article/entries/4357-food-and-climate-change-the-forgotten-link>.
- Harvey, D. (2007). *A brief history of neoliberalism*. Oxford: Oxford University Press.
- Hawken, P. (1993). *The ecology of commerce: a declaration of sustainability*. New York: Harper Collins.
- HLPE (High Level Panel of Experts on Food Security and Nutrition). (2014). *Food losses and waste in the context of sustainable food systems*. Rome: HLPE. Retrieved from <http://www.fao.org/3/a-i3901e.pdf>.
- Howard, P. (2016). *Concentration and power in the food system: who controls what we eat?* New York: Bloombury Academic.
- IFPRI (International Food Policy Research Institute). (2015). *Global nutrition report 2015: Actions and accountability to advance nutrition and sustainable development*. Washington, DC: International Food Policy Research Institute.
- IPES-Food (International Panel of Experts on Sustainable Food Systems). (2016). *From uniformity to diversity: A paradigm shift from industrial agriculture to diversified agroecological systems*. Retrieved from www.ipes-food.org/images/Reports/UniformityToDiversity_FullReport.pdf.
- IPES-Food (International Panel of Experts on Sustainable Food Systems). (2017). *Unravelling the food-health nexus: Addressing practices, political economy and power relations to build healthier food systems*. Retrieved from http://www.ipes-food.org/images/Reports/Health_FullReport.pdf.
- Isakson, R. (2015). Derivatives for development? Small-farmer vulnerability and the financialization of climate risk management. *Journal of Agrarian Change*, 15(4), 569-580.

- Isakson, R. (2014). Food and finance: The financial transformation of agro-food supply chains. *The Journal of Peasant Studies*, 41(5), 749-775.
- Jennings, D. (2012). *Summary report and literature review*. Christchurch: New Zealand Community Economic Development Trust.
- Jones, B., & Nisbett, P. (2011). Shareholder value versus stakeholder values: CSR and financialization in global food firms. *Socio-Economic Review*, 9, 287-314.
- Karaphillis, G., & Lake, A. (2015). Economic impact of the Nova Scotia co-operatives. *Journal of Co-Operative Accounting and Reporting*, 2(2), 7-18.
- Kennedy, C., & Knezevic, I. (2014). *Why FarmWorks matters in Nova Scotia and beyond: evaluation*. Prepared for the Board of Directors, FarmWorks investment cooperative. Retrieved from <http://farmworks.ca/wp-content/uploads/2013/06/FW-evaluation-report-May-2014.pdf>.
- Kennedy, C., Borgstorm, G., Best, L., & Knezevic, I. (2017). *Economic and social impacts of FarmWorks support for food related businesses in Nova Scotia*. Prepared for: FarmWorks Investment Co-operative Limited, BC Rural Centre and Food, Locally Embedded, Globally Engaged Partnership. Retrieved from <http://www.bcruralcentre.org/wp-content/uploads/2017/11/Impacts-of-Local-Investment-Survey-of-FarmWorks-Clients-2016.pdf>
- Kirschenmann, F., Stevenson, S., Buttel, F., Lyson, T., & Duffy, M. (2008). Why worry about the agriculture of the middle?. In T.A. Lyson, G.W. Stevenson, & R. Welsh (Eds.). *Food and the mid-level farm: Renewing an agriculture of the middle* (pp. 3-22). Cambridge: MIT Press.
- Knezevic, I. (2016). Illicit food: Canadian food safety regulation and informal food economy. *Critical Policy Studies*, 10(4), 410–425.
- Knezevic, I., Blay-Palmer, A., Levkoe, C.Z., Mount, P., & Nelson, E. (Eds.). (2017). *Nourishing communities: From fractured food systems to transformative pathways*. New York, NY: Springer.
- Krippner, G. (2011). *Capitalizing on crisis*. Cambridge: Harvard University Press.
- Lawrence, G. Re-evaluating food systems and food security: a global perspective. *Journal of Sociology*, 53(4), 774-796.
- Local Prosperity (2015). Investing in Sustainable Food for Nova Scotians. Retrieved from <http://www.localprosperity.ca/wp-content/uploads/2015/04/Linda-FarmWorks-Local-Prosperity-2015.pdf>.
- Lusk, J. L. (2017). Evaluating the policy proposals of the food movement. *Applied Economic Perspectives and Policy*, 39(3), 387–406.
- Lux, M., & Greene, R. (2015). *The state and fate of community banking*. M-RCBG Associate Working Paper Series No. 37. Cambridge, MA: Mossavar-Rahmani Center for Business & Government, Harvard Kennedy School.

- Magnan, A. (2015). The Financialization of Agri-Food in Canada and Australia: corporate farmland and farm ownership in the grains and oilseed sector. *Journal of Rural Studies*, 41, 1-12.
- Marsden, T. (2010). Mobilizing the regional eco-economy: evolving webs of agri-food and rural development in the UK. *Cambridge Journal of Regions, Economy and Society*, 3(2), 225–244.
- McMichael, P. (2012). Food regime crisis and reevaluating the agrarian question. *Research in Rural Sociology and Development*, 18, 99-122.
- Meter, K. (2008). Local food as economic development. Minneapolis: Crossroads Resource Center. Retrieved from www.crcworks.org/lfced.pdf.
- Milanovic, B. (2016). *Global inequality: A new approach for the age of globalization*. Cambridge: Harvard University Press.
- Mount, P. (2012). Growing local food: scale and local food systems governance. *Agriculture and Human Values*, 29(1), 107–121.
- Murphy, S., Burch, D., & Clapp, J. (2012). *Cereal secrets*. Oxford: Oxfam.
- Ostrom, E. (2010). Beyond markets and states: Polycentric governance of complex economic systems. *American Economic Review*, 100 (June 2010), 1-33.
- Palandjian, T., & Giddens, M. (2017). *Investing for impact: case studies across asset classes*. London: Bridges Ventures, GIIN, The Parthenon Group.
- Patel, R. (2007). *Stuffed and starved: Markets, power and the hidden battle for the world's food system*. Toronto: HarperCollins
- Perelman, M. (2003). *The perverse economy: The impact of markets on people and the environment*. New York: Palgrave Macmillan.
- Polanyi, K. (2001 [1944]). *The great transformation: The political and economic origins of our time*. Boston: Beacon Press.
- Princen, T. (2010). *Treading softly: paths to ecological order*. Cambridge: MIT Press.
- Reimer, B., & Bernas, K. (2014). *Community economic development investment funds*. The Canadian CED Network.
- Rockefeller Foundation (2012). *Impact investing evaluation report*. Retrieved from <https://www.rockefellerfoundation.org/report/impact-investing-evaluation-report/>.
- Rosenman, E. (2017). The geographies of social finance: poverty regulation through the ‘invisible heart’ of markets. *Progress in Human Geography*, 43(3), 1-22.
- Roser, M., & Ritchie, H. (2018a). *Yields and land use in agriculture*. OurWorldInData.org. Retrieved from <https://ourworldindata.org/yields-and-land-use-in-agriculture>
- Roser, M., & Ritchie, H. (2018b). *Food Prices*. OurWorldInData.org. Retrieved from <https://ourworldindata.org/food-prices>.
- Schmidt, T.P. (2015). *The political economy of food and finance*. London: Routledge.

- Scoones, I., Smalley, R., Hall, R., & Tsikata, D. (2018). Narratives of scarcity: Framing the global land rush. *Geoforum*.
- Scott, J., & MacLoud, M. (2010). *Is Nova Scotia eating local? And if not...where is our food coming from?* Food Secure Canada. Retrieved from https://ecologyaction.ca/files/images-documents/file/Food/FM%20July4%20_final_long_report.pdf.
- Seufert, V., Ramankutty, N., & Foley, J.A. (2012). Comparing the yields of organic and conventional agriculture. *Nature*, 485(7397), 229–232.
- Statistics Canada, S. C. (2016). *2016 census of agriculture*. Retrieved from <https://www.statcan.gc.ca/eng/ca2016>.
- Stephens, P., Nelson, C., Levkoe, C., Mount, P., Knezevic, I., Blay-Palmer, A., & Martin, M. A. (2019). A perspective on social economy and food systems: Key features insights and thoughts on future research. *Canadian Food Studies, this issue*.
- Thompson, D. (2012). *Weavers of dreams: Founders of the modern cooperative movement* (2nd ed.). Wausau, WI: Twin Pines Press.
- Tides Canada. (2014). *Annual tides top ten celebrates canadian changemakers*. Retrieved from <http://tidescanada.org/media/annual-tides-top-10-celebrates-canadian-changemakers/>.
- van der Zwan, N. (2014). Making sense of financialization. *Socio-Economic Review*, 12, 99-129.
- Vander Stichele, M. (2015). How financialization influences the dynamics of the food supply chain. *Canadian Food Studies*, 2(2), 258-266.
- Young, C. (2015). *Food, farms, fish and finance: Practical impact investment strategies to seed and sustain local food systems*. Montreal: J.W. McConnell Family Foundation.