La Revue canadienne des études sur l'alimentation

Canadian Food Studies

the journal of the Canadian Association for Food Studies
la revue de l'Association canadienne des études sur l'alimentation

Vol 6 No 3 (2019)

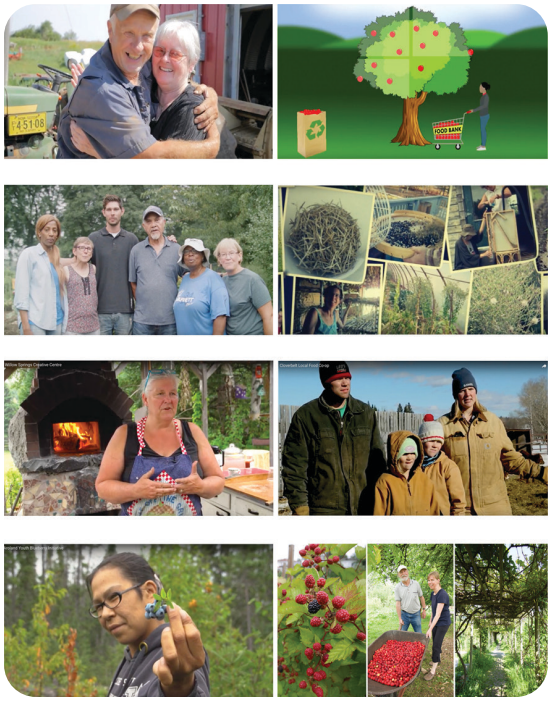
THE SOCIAL AND INFORMAL ECONOMY OF FOOD

canadianfoodstudies.ca

c/o Department of Health Sciences
Lakehead University
955 Oliver Road
Thunder Bay (ON) P7B 5E1

ISSN: 2292-3071

IN THIS ISSUE



While the “social economy” and “informal economy” have traditionally been regarded as separate areas of research, findings from a number of Canadian studies indicate significant overlap between the two. First, both share an emphasis on personal relationships, trust, and non-market values—which are inherently challenging to define, and often impossible to quantify. Second, both offer spaces for non-traditional forms of innovation as well as opportunities for deep insights into social relationships, cultural meanings, and environmental values. Most importantly, both challenge us to think of economic systems in far more complex ways than mainstream economic theory would propose. In this special issue, we offer a set of papers and field reports that detail the work of several community food initiatives, link our observations to broader bodies of literature in food studies and in social economy, and invite other researchers to engage in this discussion and collective efforts.

guest editors: Irena Knezevic, Charles Z. Levkoe, Phil Mount, Connie Nelson

Published: 2019-11-29

Canadian Food Studies La Revue canadienne des études sur l'alimentation

Guest Editorial

Introduction to the special issue on the social and informal economy of food

Irena Knezevic[a*], Charles Z. Levkoe[b], Phil Mount[a], Connie Nelson[b]

[a] Carleton University
[b] Lakehead University

Within the dominant political and economic logic, people are considered to be self-interested, profit-seeking, utility-maximizing creatures. Critics, however, argue that people are better conceived of as members of complex social and ecological systems, whose choices are deeply embedded in social relationships and ecological context (Bourdieu, 1998; Ophuls 2000; Patel, 2009; Siebenhüner, 2000). Recent work on the concept of *social economy* focuses on actual and existing initiatives that foreground social and environmental values, yet still recognize the importance of economic viability. While research suggests that such initiatives may be sites of significant innovation and creativity (Downing, 2012, Gibson-Graham 2006, Leyshon et al. 2003), work to date has focused heavily on cooperatives and social enterprises, with significantly less attention paid to activities that are not so formally structured.

While both the concepts of *social economy* and *informal economy* have traditionally been regarded as separate areas of research, findings from a number of Canadian studies indicate significant overlap between the two (Knezevic, 2015; Teitelbaum & Beckley, 2006; Thomson & Emmanuel, 2012). First, both share an emphasis on personal relationships, trust, and non-market values—which are inherently challenging to define, and often impossible to quantify. Second, both offer spaces for non-traditional forms of innovation as well as opportunities for deep insights into social relationships, cultural meanings, and environmental values. Most importantly, both challenge us to think of economic systems in far more complex ways than mainstream economic theory would propose (Ostrom, 2010).

Keywords: social economy; informal economy; food

*Corresponding author: irena.knezevic@carleton.ca
DOI: 10.15353/cfs-rcea.v6i3.379
ISSN: 2292-3071

As the Nourishing Communities Research Group[1], we have been engaged in community-based research of food systems for over a decade. In 2014, and with the financial support from the Social Sciences and Humanities Research Council of Canada, we started exploring social and informal economies of food. We aimed to examine the transformative potential of food initiatives committed to social and environmental values that included, but went far beyond, economic benefit. Nourishing Communities is based at the Laurier Centre for Sustainable Food Systems in Waterloo, Ontario, but it is community-based, and its academic researchers are scattered throughout Canada and beyond.

This expansive network allowed us to work-in-place with community food initiatives that operate in diverse geographic and social contexts. We have used case studies to identify and document a spectrum of multifunctional social economy of food activities where people trade and share material resources and skills, at times, in informal ways. The case studies and interviews have been grounded in community-based research as a way to develop a clearer sense of issues, and dig into specific challenges as identified by the community partners. Working within groups over an extended period of time has enabled a deeper understanding of the challenges and opportunities, which we are exploring through ongoing engagement.

After five years of this research, we reflect on what we learned—from each individual case study, and from those studies as a whole. In this special issue, we offer a set of papers and field reports that detail the work of several community food initiatives, link our observations to broader bodies of literature in food studies and in social economy, and invite other researchers to engage in this discussion and collective efforts.

Our collection is driven by the following questions: What are the gaps in our current understandings of food economies? How do social and informal economy initiatives contribute to community well-being? How do we find better ways to demonstrate the value and acknowledge the under-recognized contributions of community food initiatives to social and environmental well-being, and how do we support them in continuing this work?

The collection begins with a perspective piece by Stephens, Nelson, Levkoe, Mount, Knezevic, Blay-Palmer, and Martin, which synthesizes key concepts of social economy as relevant to the study of food and food systems. Next, Poitevin DesRivières examines fruit rescue as an exemplar of initiatives that blur the line of social and informal economy. Nelson, Stroink, Levkoe, Kakegamic, McKay, Stolz, and Streutker draw on a complexity science approach to analyse four case studies situated in Northwestern Ontario to demonstrate key features of social economy of food systems. Stephens, Knezevic and Best analyze community investment in Nova Scotia, as a pathway to both economic development and community resilience. Martin offers a feminist perspective on how community food initiatives contribute to social reproduction. Worden-Rogers, Glasgow, Knezevic, and Hughes consider how collective efforts of seed saving

[1] See www.nourishingcommunities.ca

offer insights into other-than-economic value generated by such initiatives, from biological biodiversity to social capital. Barron looks to community orchards to examine gift economy and the complex social interactions involved in organizing and maintaining contemporary "commons". Finally, Martin, Knezevic, and Ballamingie synthesize the collective work we undertook, by examining how food initiatives nourish communities through "power-with" practices.

Several of the articles come with accompanying videos that we co-produced with the community partners.[2] As a collection, these writings and videos are intended to contribute to existing debates and enrich a long overdue conversation in food studies.

We are grateful that this collective undertaking has been supported with funding from the Social Sciences and Humanities Research Council, through their Insight Grant program. We wish to thank our community partners whose knowledge has been the driving force behind this work. We would also like to thank the editorial team at *Canadian Food Studies,* particularly Ellen Desjardins, for helping bring this special issue to fruition.

References

Bourdieu, P. (1998). *Acts of Resistance against the Tyranny of the Market.* The New Press, New York.

Downing, R., ed.. (2012). *Canadian Public Policy and the Social Economy.* Canadian Social Economy Research Partnerships E-book, accessed online at http://ccednet-rcdec.ca/en/node/10641

Gibson-Graham, J.K. (2006). *A Postcapitalist Politics*. Minneapolis: University of Minnesota Press.

Knezevic, I. (2015). Illicit food: Canadian food safety regulation and informal food economy. *Critical Policy Studies, 10* (4): 410-425.

Leyshon, R., Lee, A., & Williams, C. (2004). *Alternative Economic Spaces*. London: Sage.

Ophuls, W. (2000). Notes for a Buddhist Politics. In S. Kaza & K. Kraft. Boston (eds.), *Dharma Rain: Sources of Buddhist Environmentalism,* Shambhala Publications Inc., pp. 369-378.

Ostrom, E. (2010). Beyond markets and states: Polycentric governance of complex economic systems. *American Economic Review, 100* (3): 1-33.

Patel, R. (2009). *The Value of Nothing: Why Everything Costs So Much More Than What We Think*. Harper Collins, Toronto.

Siebenhüner, B. (2000). Homo sustinens – towards a new conception of humans for the science of sustainability. *Ecological Economics,* 32: 15-25.

[2] Readers can find the complete video playlist at https://tinyurl.com/y355smnv.

Teitelbaum, S. & Beckley, T. (2006). Harvested, Hunted and Home Grown: The Prevalence of Self-Provisioning in Rural Canada. *Journal of Rural and Community Development, 1:* 114-130.

Thompson, M. & Emmanuel, J., eds. (2012). *Assembling Understandings: Findings from the Canadian Social Economy Research Partnerships:2005-2011*. E-book, accessed online at: http://ccednet-rcdec.ca/en/node/10642

Canadian Food Studies La Revue canadienne des études sur l'alimentation

Perspective Article

A perspective on social economy and food systems: Key insights and thoughts on future research

Phoebe Stephens[a*], Connie H. Nelson[b], Charles Z. Levkoe[b], Phil Mount[d], Irena Knezevic[d], Alison Blay-Palmer[e], Mary Anne Martin[f]

[a] University of Waterloo
[b] Lakehead University
[c] Ottawa University
[d] Carleton University
[e] Wilfrid Laurier University
[f] Trent University

Abstract

For a concept that was largely outside of the public gaze a decade ago, "social economy" has, in a short time, captured the attention and imaginations of civil society organizations, mainstream institutions, and funders. Local and national governments, international agencies and foundations are embracing the social economy in an effort to generate new models for development and sustainability. This turn requires clarity and critical reflection on what "the social economy" entails, and its possible future directions. In this Perspective, we shed light on these areas, focusing on issues of sustainability and food systems, and in the process, we advance three arguments. First, context-dependent diversity is a defining characteristic of social economy. Second, though frequently positioned as a counter-point to neoliberalism, the social economy is far broader and more nuanced. Third, research in the social and informal economies of food has opened critical discussions on the appropriate pathways, effectiveness and viability of such initiatives to transform food systems that structurally promote marginalization, exclusion, food insecurity and ill-health for many. In the current rush to brand all things "social economy", such critical reflection will play a valuable role in shaping the discussion around those transformative pathways. We conclude by suggesting that the study of social economy has to include deliberate

*Corresponding author: phoebe.stephens@uwaterloo.ca
DOI: 10.15353/cfs-rcea.v6i3.355
ISSN: 2292-3071

consideration of its informal manifestations, and that food studies scholars are challenged now to develop a comprehensive body of scholarship that articulates impacts and value of social economy in creative and compelling ways.

Keywords: social economy; informal economy; context-dependent diversity; food systems; social economy of food

Introduction

For a concept that was largely outside of the public gaze a decade ago, social economy has, in a short time, captured the attention and imaginations of civil society organizations, mainstream institutions, and funders. As evidence of its recent popularity, in September 2018, the McConnell Foundation launched "Garantie Solidaire", a pilot initiative designed to help Quebec's social economy organizations. If successful the model could be replicated in other provinces (McConnell Foundation, 2018). In November 2018 the Government of Canada announced the creation of the Social Finance Fund with $755 million over ten years to help charities and non-profits fund social projects (Dept. of Finance, 2018, pp. 37-38). These initiatives reflect a trend where local and national governments, international agencies and foundations are embracing a particular version of the social economy, in an effort to generate new models for development and sustainability (Downing, McElroy, & Tremblay, 2012, p. 361). This turn requires clarity and critical reflection on what the social economy[1] entails, and its possible future directions. In this Perspective article, we shed light on these areas, focusing on issues of sustainability and food systems, and in the process, we advance three arguments.

First, context-dependent regional diversity is a defining characteristic of social economy. Manifestations of social economy are fluid and intimately connected to their local environment; the rich diversity of social economy initiatives has arisen precisely because they have responded to specific regional needs. While it is possible to identify common attributes that help sustain social economies, the particularity of local context means that attempts at identifying "good practices" to stimulate social economies tend to be in vain.

Second, though frequently positioned as a counter-point to neoliberalism, the social economy is far broader and more nuanced. Today's social economy grows from deep historical roots with a shared quality: the prioritization of other-than-economic value in the activities that shape society. In this way, the social economy can be seen as responding to the challenges fostered by the neoliberal agenda. But it does so only by overlooking the continuity between the values

[1] The concept of the "social economy" has no broadly accepted single definition. The breadth of initiatives and practices that can be considered part of the social economy require a flexible understanding of the concept.

promoted in the social economy and historical—often mainstream—efforts to address inequality and social exclusion.

Third, research in the social and informal economies of food has opened critical discussions on the appropriate pathways, effectiveness and viability of such initiatives to transform food systems that structurally promote marginalization, exclusion, food insecurity and ill-health for many. Bringing this new research into conversation with existing food systems work on social and ecological justice will deepen the discussion around those transformative pathways.

We conclude by identifying potential areas for future research, hoping to encourage intellectual and practical collaboration.

Situating the Social Economy

The early cooperative movement, seen as the foundation of the modern social economy, was catalyzed by working conditions in the early industrial revolution, and offered an alternative vision of the organization of industry based on a balance of social values and priorities (Thompson, 2012). The contemporary social economy similarly responds to a diversity of challenges, exclusions and inequalities with solutions that foreground other-than-economic social priorities.

Aspects of what we now call social economy have existed for centuries in the sense that they can be found wherever "humans have worked communally and shared in the results of their labour" (Fontan & Shragge, 2000, p. 3). The term was formally used for the first time in Canada in *Canada's Social Economy: Co-operatives, Non-profits, and other Community Enterprises* (Quarter, 1992). In it, Quarter describes the growing third sector in the Canadian economy and explores alternative ownership models and alternatives for managing social services. Since then, a body of scholarship has developed on Canada's social economy. Amin, Cameron, and Hudson (2002) offer the following definition of social economy in their frequently cited book, *Placing the Social Economy*:

> The social economy…consists of non-profit activities designed to combat social exclusion through socially useful goods sold in the market and which are not provided for by the state or the private sector. The social economy generates jobs and entrepreneurship by meeting social needs and very often by deploying the socially excluded (p. vii).

This explanation positions the economy as filling a gap that the state and free market are unable, or unwilling, to fill. This familiar characterization suggests that crises are prerequisite—Defourny and Develterre maintain that social economy organizations develop out of "conditions of necessity" (1999, p. 22). Yet, while specific pre-conditions may define the gap, the nature of a social economy initiative is defined by how it goes about filling that gap.

Echoing original cooperative movement principles, Sonnino and Trevarthen-Griggs (2013) identify "the synergy between economic and social goals, rather than the pursuit of profit" as the baseline for defining social economy (p. 274). This theme runs through the academic literature and is championed within practitioner communities. The Canadian Community Economic Development Network's definition, premised on the one upheld by the Chantier de l'économie sociale, Québec's institutionalized social economy network, similarly states:

> The Social Economy consists of association-based economic initiatives founded on values of:
>
> - service to members of community rather than generating profits
> - autonomous management (not government or market controlled)
> - democratic decision making
> - primacy of persons and work over capital
> - based on principles of participation, empowerment
>
> (Canadian Social Economy Research Partnership, n.d., p. 3)

The emphasis on participation and democratic decision-making in this list of values is noteworthy. Downing et al. (2012) compare strong versus weak social economy, highlighting the role of political actions in maximizing the potential of and benefits to communities. Weak social economy approaches fail to fundamentally challenge the structures that constrain social, economic and environmental outcomes.

Equality and redistribution remain high on the agenda within a strong social economy (Downing et al. 2012, p. 342). As Jan (2009) explains "The social economy is a 'bottom-up' concept co-constructed by the actors who make up or take up space in the social economy in their localities. Place, community and participatory democracy can be seen to be important cornerstones for engaged social and economic activity" (p. 20). Social economy thus upholds a number of principles that aim to redirect economies to produce greater social and ecological benefits.

Context-dependent diversity

Social economy's common elements can be identified, but an all-encompassing definition remains elusive. We argue that context (most often, though not exclusively, place-based) is a critical aspect behind the diversity of social economies that have emerged across Canada and continue to unfold today. To illustrate this, we briefly explore the unique manifestations of social economy in Québec and Northern Ontario.

Québec's advanced model of social economy has garnered interest from around the world. Some argue that Québec is the only Canadian province to boast a formal social economy

sector thanks, in good measure, to provincial government policies (Arsenault, 2018, p. 77). While farmer-owned, non-profit cooperatives profoundly shaped the economic and social landscape of many rural communities across Canada in the 20th century, in the last thirty years many of these efforts have been dismantled. Quebec's collective enterprises, social movements and territorial intermediaries are woven together through participatory networks and multi-stakeholder partnerships (Mendell & Neamtam, 2009, p. 1). The Chantier de L'économie sociale—an independent, non-partisan organization that supports social enterprises and participatory governance—a pillar of Québec's social economy.

The reasons behind Québec's success are many, with some pointing to its well-developed cooperative movement, a progressive political tradition and a culture rich in social capital (Charron, 2012, p. 4). Participatory governance is another feature of Québec's social economy and has led to the uptake of comprehensive policy tools (Mendell & Neamtam, 2009). This complexity of factors may be helpful as others seek to develop equally advanced social economies in their particular locales.

The influences of place on the development of the regional social economy can also be observed in the case of Northern Ontario. As with many regions of Canada's North, Northern Ontario has a mixed economy. Communities are sustained through a combination of wage-labour alongside traditional hunting and subsistence activities. Southcott and Walker (2009) also identify the continued importance of the State in Northern communities, the dependence on large-scale resource extraction projects as well as a lack of "stakeholder" culture as impacting the way the social economy continues to uniquely develop in these areas (p. 16).

The particular way in which the social economy and its informal incarnations manifest in Northern Ontario is likely rooted in the strength of long-held traditional values such as sharing, interdependence, cooperation and reciprocity—evident amongst the region's Indigenous populations (Abele & Southcott, 2007). These values are intimately aligned with the concept of social economy but predate it by thousands of years. Within traditional economies, consumption is practiced as a reciprocal exchange, meant to benefit communities as a whole, including other living beings and the nature upon which we all depend (LeBlanc, 2014; Simpson & Driben, 2000).

Geographic and demographic constraints limit the neoliberal economy's reach in Canada's North. Indeed, Nelson and Stroink (forthcoming) note how, "the mechanisms of the capitalist economy do not in and of themselves enable the development of the transportation and distribution networks that are required for market access by small processors and producers in a large geographic area with sparse population". In such remote areas, only the most "efficient" options—as measured by global food system standards—tend to prevail. This leaves consumers who want more choice and producers looking for greater control over their markets with little option but to establish informal market activity. Therefore, when scale, social consensus and organization is warranted, these underserved regions mobilize to support social economy initiatives.

The thwarted reach of neoliberalism in Northern Ontario and the semi-institutionalized development of the social economy in Quebec are evidence of two complementary realities: the "uneven development of neoliberalization", spawned by unique contextual variations (Brenner et al. 2010, p. 331); and post-neoliberal governance, which embraces "(re)mobilization, recognition, and valuation of multiple, local forms of development, rooted in local cultures, values, and movements" (Brenner et al, 2010). Mount and Andrée (2013) suggest that this subtle shift toward non-neoliberal governance "constitutes an important point of egress… allowing local and regional actors to re-frame their relations in a common-sense manner, and negotiate regionally responsive policies and regulation" (p. 588). This assertion adds breadth and nuance to the common interpretation of social economy as a response to or refinement of neoliberal capitalism. The case of Northern Ontario and the uneven application of neoliberalism bring to the light the necessarily place-based nature of social economy.

Relationship to neoliberalism

Since the concept and many of the associated initiatives arose in a void framed by the withdrawal of the state and the rise of unfettered corporate interests, the social economy is sometimes referred to as the "third sector" (see e.g., Beckie and Bacon, 2019). This description draws attention to the fact that, in the current global context, the state has in many ways abdicated the roles that offered a counterbalance to laissez-faire ideology, while those who work to fill the void have been ghettoized. Where Polanyi (1944) identified a counter-movement encouraging the state to protect against the destruction and excess inherent in market forces , that role increasingly falls to civil society actors who are constructing social economy alternatives while operating without the power and resources of the state.

However, the term "social economy" conceals a diversity of approaches, interests and goals. For some, the social economy is a reaction to social inequalities and environmental degradation that have been exacerbated by neoliberalism (Amin, 2009a). But the social economy is not merely the antithesis to neoliberalism, indeed:

1) It can run in parallel, rather than counter, to capitalism particularly where initiatives arise within communities;

2) It can be used as a tool of neoliberalism, as is the case when needs are turned into markets;

3) It can deepen neoliberalism, which is evident through the rapidly growing impact investment sector where social and environmental values are conceptualized as add-ons to traditional investing

This list suggests a more nuanced relationship between neoliberal capitalism and social economy than may be evident at first blush. Meanwhile, other scholars view social economy more as a subversive force, one that has transformative potential to "prise open the possibilities

of a post-capitalist future" (Hudson, 2009, p. 508). The contours of the social economy differ considerably amongst scholars.

Empirical evidence shows that all of these scholars are correct to some extent. While some social economy initiatives—explicitly or surreptitiously—stand in stark contrast with neoliberal economy, others work alongside it (Amin, 2009b). However, all engage to some extent with this ubiquitous system. One of the most significant challenges many of them face is the ability to effectively demonstrate the value of their work in a political and economic environment that constricts our notions of value (i.e., that defines value on neoliberal terms). In some cases, that challenge may account for the apparent variations in initiatives' alignment with the neoliberal economy.

The social economy of food

Focusing on the social economy of food extends previous work on alternative food systems that actively integrates social values, alternative economic models, ecologically sound practices, cultural meanings, and environmental values (Blay-Palmer et al., 2013; Knezevic, Blay Palmer, Levkoe, Mount, & Nelson, 2017). To date, significant research has been undertaken to understand food-related issues embedded within contemporary food systems (Friedmann, 2009; Koc, Sumner & Winson, 2016; Weiss, 2007; Winson, 2013), the cost of food and food access (Williams et al., 2012a, 2012b), the impacts of food insecurity on disadvantaged communities (Green-Lapierre et al. 2012; Kirkpatrick & Tarasuk, 2011; Power 2008), organic agriculture networks (Sumner & Llewelyn, 2010), sustainable community food initiatives (Levkoe, 2014) and more general food policy (MacRae & Abergel, 2012).

As well, literature on grassroots food initiatives demonstrates opportunities for greater equity, sustainability and development through activities outside of the formal economy that aim to reconnect communities and their natural and built environments (Patel, 2009; Connelly et al., 2011; Sonnino & Trevathen-Griggs, 2013; Sumner, 2012; Wittman, Beckie,& Hergesheimer, 2012). Building from feminist, political economy, and political ecology literatures, this work documents the value(s) and spaces for change to include food system and related activities that are categorized as informal and therefore not widely perceived as contributing to the economy. It also allows for creative consideration of ways in which marginalized economic activities can be mainstreamed to build economic resilience where the neoliberal economy has failed to do so, creating space for a social economy analysis (Donald, 2009; Blay-Palmer, 2008).

From a food systems perspective, critics of neo-liberalism suggest that the neo-liberal economic system undervalues the informal economy by marginalizing small-scale (or peasant) producers and production, especially subsistence production by women (Shiva, 1988), and perpetuates neo-imperialist notions of development (Knezevic, 2014). Close examination of informal economic activity within the food system offers an opportunity to make the social and environmental justice—as well as economic—contributions of such activities more transparent.

As Alkon and Agyeman (2011) explain, "Our desire is not merely to better understand the effects of institutional racism and economic inequality in the food system but also to help to create a broad, multiracial, and multiclass movement that can challenge the dominance of industrial agriculture and help to create something more sustainable and just" (p. 322). Central here is the intersection of food and social justice, including questions of gender and class inequalities in relation to food production and distribution, food access and quality, and income and health (Patel, 2009). In the Canadian context, this raises questions about the issues of migrant labour, creating living-wage jobs in food production, the lack of small-scale food processing, and Indigenous people's loss of food-producing lands. Alternative food systems research explores how a social economy, particularly its informal manifestations, counters neoliberal inequities and creates space for alternatives—for social relations, gifting and sharing, exchange (of material goods and labour), fostering traditional knowledge (Turner, Davidson-Hunt & O'Flaherty, 2003), and community development (Wekerle, 2004). Social economy also focuses on the range of stewardship activities undertaken by volunteers, farmers and other citizens to remediate or mitigate environmental degradation (Francis et al., 2003; IPES-Food, 2016). Our empirical work with community partners also indicates that such initiatives foster civic engagement, political literacy, and advocacy, working to not only embody the change they want to see, but also to influence traditional levers of power (Andrée, Clark, Levkoe & Lowitt, 2019; Knezevic et al., 2017; Levkoe, 2011; Mount et al., 2013).

Research on the social economy of food provides opportunities to add to the critical literature on alternative and industrial food systems. It also enables an exploration of how communities challenge socially constructed markets and forms of governance and instead reconstruct their socio-economic relations in ways that better support their individual and collective well-being, ecosystems, and cultural and knowledge systems. However, the research must critically assess whether projects are facilitating a turn to a more socially and environmentally informed economy, whether they provide what Portes and Haller (2005) described as "social cushioning", or whether these activities are letting the state off the hook and further marginalizing those who need assistance the most.

Conclusion and future research

The social economy has and will continue to support alternative sustainable food systems in Canada and is worthy of more engaged research from food scholars. The literature that explores the intersection between food systems and social economy remains quite limited but is beginning to garner interest. We see two directions for future research, acknowledging that there is much more to explore.

First, the study of social economy has to include deliberate consideration of its informal manifestations. Food sharing, for instance, is garnering attention of Indigenous and Indigenist scholars, but does not seem to be given the same consideration by social economy researchers.

The study of food and foodways may offer an opportunity to bridge the gap between social and informal economy scholarship.

Second, the growing interest in social economy from academics, practitioners and policy-makers is testament to its potential in addressing some of today's most pressing issues. However, practitioners and scholars alike struggle to make compelling arguments about the value of social economy activities. Constrained by contemporary language that tends to associate "value" with monetary, capitalist economy, they find it difficult to demonstrate the social and environmental impacts of such activities in ways that effectively impact policy and institutions. This is changing, as noted in the opening paragraphs of this essay, and we are challenged now to make the case for social economy by developing a comprehensive body of scholarship that articulates impacts and value in creative and compelling ways. We invite fellow food scholars to join us in that effort.

References

Abele, F., & Southcott, C. (2007). *The social economy in Northern Canada: Developing a portrait*. Presented at the 1st International CIRIEC Research Conference on the Social Economy, Victoria.

Alkon, M.A., & Agyman, J. (2011). *Cultivating food justice: Race, class, and sustainability.* Cambridge: MIT Press.

Amin, A. (2009a). Extraordinarily ordinary: working in the social economy. *Social Enterprise Journal, 5*(1), 30-49.

Amin, A. (Ed.) (2009b). *The social economy: International perspectives on economic solidarity*. London: Zed Books.

Amin, A., Cameron, A., & Hudson, R. (2002). *Placing the social economy*. London: Routledge.

Andrée, P., Clark, J. K., Levkoe, C. Z., & Lowitt, K. (Eds.). (2019). *Civil society and social movements in food system governance*. Routledge.

Arsenault, G. (2018). Explaining Quebec's social economy turn. *Canadian Journal of Nonprofit Research and Social Economy Research*, *9*(1), 58–75.

Beckie, M., & Bacon, E. (2019). Catalyzing change in local food system governance in Calgary, Alberta: The role of YYC Growers and Distributors cooperative. In: P. Andree, J. Clark, C.Z. Levkoe, & K. Lowitt. *Civil Society and Social Movements in Food System Governance*, pp. 81-100. Routledge.

Blay-Palmer, A. (2008). *Food fears: From industrial to sustainable food systems*. Ashgate Publishing, Ltd

Blay-Palmer, A., Landman, K., Knezevic, I., & Hayhurst, R. (2013). Constructing resilient, transformative communities, through sustainable "food hubs." *Local Environment, 18*(5), 251-528.

Brenner, N., Peck, J., & Theodore, N. (2010). Variegated neoliberalization: geographies, modalities, pathways. *Global Networks, 10*(2), 182-222.

Canadian Social Economy Research Partnership. (n.d.). *Building and strengthening communities through the social economy*. Victoria, BC: University of Victoria.

Charron, A. (2012). *The growth of the social economy in Quebec through the unification of the movement since 1996*. The Canadian CED Network. Retrieved from https://www.ccednet-rcdec.ca/sites/ccednet-cdec.ca/files/ccednet/Alex_Quebec_paper.pdf

Connelly, S., Markey, S., & Roseland, M. (2011). Bridging sustainability and the social economy: Achieving community transformation through local food initiatives. *Critical Social Policy*, *31*(2), 308-324.

Defourny, J., & Develterre, P. (1999). The social economy: The worldwide making of a third sector. In J. Defourny, P. Develtere & B. Fonteneau (Eds.), *L'économie sociale du Nord et au Sud*. Louvain-la-Neuve: De Boeck.

Department of Finance, Canada. (2018). *Investing in Middle Class Jobs: Fall economic statement 2018.* Cat. no. F1-52E-PDF. Retrieved from https://www.fin.gc.ca/n18/18-107-eng.asp.

Donald, B. (2009). *From kraft to craft: innovation and creativity in Ontario's food economy.* Working paper published by the Martin Prosperity Institute, Rotman School of Management, University of Toronto, February 2009, ref. 2009-WPONT-001.

Downing, R., McElroy, R., & Tremblay, C. (2012). Converging agendas for the social economy and sustainable development. In R. Downing (Ed.), *Canadian public policy and the social economy* (pp. 329-374). Victoria, BC: University of Victoria.

FarmWorks. (2016). *Annual general meeting.* Retrieved from http://farmworks.ca/wp-content/uploads/2017/04/Minutes-2016-AGM-FarmWorks.pdf

Francis, C., Lieblein, G., Gliessman, S., Breland, T. A., Creamer, N., Harwood,… & Poincelot R. (2003). Agroecology: the ecology of food systems. *Journal of Sustainable Agriculture*, *22*(3), 99-118.

Fontan, J., & Shragge, E. (2000). *Social economy: International debates and perspectives*. Montreal: Black Rose Books.

Friedmann, H. (2009). Feeding the empire: The pathologies of globalized agriculture. *Socialist Register, 41*, 124-143.

Green-LaPierre, R., Williams, P.L., Glanville, T., Norris, D., Hunter, H., & Watt, C. (2012). Learning from 'knocks in life': Food insecurity among low-income lone senior women. *Journal of Aging Research,* 2012, 450630, 1-11.

Hudson, R. (2009). Life on the edge: Navigating the competitive tensions between the "social" and the "economic" in the social economy and its relations to the mainstream. *Journal of Economic Geography*, *9*, 493–510.

[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 http://www.ipes-food.org/images/Reports/UniformityToDiversity_FullReport.pdf.

Jan, M. (2009). *In search of...Exploration of the boundaries, scope and definitions of the social economy: a discussion paper*. Halifax, NS: Social Economy and Sustainability Research Network.

Kirkpatrick, S. & Tarasuk, V. (2011). Housing circumstances are associated with household food access among low-income urban families. *Journal of Urban Health, 88*(2), 284-296.

Knezevic, I., Blay Palmer, A., Levkoe, C., Mount, P., & Nelson, E. (Eds.). (2017). *Nourishing communities: From fractured food systems to transformative pathways.* New York: Springer.

Knezevic, I. (2014). Free markets for all: Transition economies and the European Union's Common Agricultural Policy. In P. Andree, J. Ayres, M. Bosia, & MJ. Massicotte (Eds.), *Globalization and food sovereignty: Global and local change in the new politics of food* (pp.228-252). Toronto: University of Toronto Press.

Koc, M., Summer, J. & Winson, A. (eds). (2016) *Critical perspectives in food studies,* Second Edition. Toronto: Oxford University Press.

LeBlanc, J. (2014). *Natural resource management and Indigenous food systems in Northern Ontario.* Faculty of Natural Resources Management. Lakehead University. Retrieved from https://knowledgecommons.lakeheadu.ca/bitstream/handle/2453/589/LeBlancJ2014d-1b.pdf

Levkoe, C. Z. (2011). Towards a transformative food politics. *Local Environment*, *16*(7), 687-705.

Levkoe, C.Z. (2014). The food movement in Canda: A social movement network perspective. *Journal of Peasant Studies, 41*(3), 385-403.

MacRae, R.J., & Abergel, E.(eds). (2012). *Health and sustainability in the Canadian food system: Advocacy and Opportunity for Civil Society*. Vancouver: UBC Press.

McConnell Foundation. (2018). Garantie solidaire: Improving access to capital in the social sector. Retrieved from https://mcconnellfoundation.ca/garantie-solidaire-improving-access-to-capital-in-the-social-sector/.

Mendell, M., & Neamtam, N. (2009). The social economy in Quebec: Towards a new political economy. In L. Mook, J. Quarter, & S. Ryan (Eds.), *Why the Social Economy Matters* (pp. 32–58). Toronto: University of Toronto Press.

Mount, P., & Andrée, P. (2013). Visualising community-based food projects in Ontario, *Local Environment, 18*(5), 578-591.

Mount, P., Hazen, S., Holmes, S., Fraser, E.D.G., Winson, T. Knezevic,… & Wakefield, S.. (2013). Barriers to the local food movement: Ontario's community food projects and the capacity for convergence. *Local Environment*, *18*(5), 592-605.

Nelson, C.H., & Stroink, M.L. (In Press) Exploring the unique aspects of the northern social economy of food through a complexity lens. *Northern Review.*

Nitsch, T.O. (1990). Social economics: The first 200 years. In: M.A. Lutz (ed.) *Social economics: Retrospect and prospect*. (pp. 5-90). Springer, Dordrecht.

Patel, R. (2009). What does food sovereignty look like? *The Journal of Peasant Studies. 36*(3), 663-673.

Polanyi, K. (1944). *The great transformation.* Boston: Beacon.

Portes, A., & Haller, W. (2005). The informal economy. In N. Smelser & R. Swedberg (Eds.). *Handbook of Economic Sociology*,(2nd ed., pp. 403-428). Princeton, NJ: Princeton University Press.

Power, E. M. (2008). Conceptualizing food security for Aboriginal people in Canada. *Canadian Journal of Public Health, 99*(2), 95-97.

Quarter, J. (1992). *Canada's social economy: Co-operatives, non-profits, and other community enterprises.* Toronto: James Lorimer.

Simpson, L. R., & Driben, P. (2000). From expert to acolyte: Learning to understand the environment from an Anishnaabe point of view. *American Indian Culture and Research Journal*, *24*(3), 1–19.

Sonnino, R., & Trevarthen-Griggs, C. (2013). A resilient social economy? Insights from the community food sector in the UK. *Entrepreneurship and Regional Development*, *25*, 272–292.

Southcott, C., & Walker, V. (2009). A Portrati of the Social Economy in Northern Canada. *The Northern Review*, *30*, 13–36.

Sumner, J. (2012). Dining on the social economy: Local, sustainable food systems and policy development. *Canadian Review of Social Policy*, *67*, 30.

Sumner, J., & Llewelyn, S. (2010). Organic farmers and the social economy: positive synergies or community development. In L. Mook, J. Quarter, & S. Ryan (Eds.), *Researching the social economy* (pp. 289-311). Toronto: University of Toronto Press

Thompson, D. (2012). *Weavers of dreams: Founders of the modern cooperative movement* (2nd ed.). Wausau, WI: Twin Pines Press.

Weiss, T. (2007). *The global food economy: The battle for the future of farming.* London: Zed Books.

Winson, A. (2013). *The industrial diet: The degradation of food and the struggle for healthy eating.* Vancouver: UBC Press.

Wekerle, G. R. (2004). Food justice movements: policy, planning and networks. *Journal of Planning Education and Research, 23*(4), 378-86.

Williams, P., Amero, M., Anderson, B., Gillis, D., Green-Lapierre, R., Johnson, C., & Reimer, D. (2012). A participatory food costing model: in Nova Scotia. *Canadian Journal of Dietetic Practice and Research*, *73*(4), 181-188.

Williams, P. L., Watt, C. G., Amero, M., Anderson, B. J., Blum, I., Green-LaPierre, R., ... & Reimer, D. E. (2012). Affordability of a nutritious diet for income assistance recipients in Nova Scotia (2002–2010). *Canadian Journal of Public Health*, *103*(3), 183-188.

Wittman, H., Beckie, M., & Hergesheimer, C. (2012). Linking local food systems and the social economy? Future roles for farmers' markets in Alberta and British Columbia. *Rural Sociology*, *77*(1), 36-61.

Canadian Food Studies La Revue canadienne des études sur l'alimentation

Field Report

Uncovering hidden urban bounty: A case study of Hidden Harvest

Chloé Poitevin-DesRivières*

Carleton University

Abstract

Urban food systems primarily rely on foods grown in rural spaces, and often face challenges in creating spaces to grow fresh, healthful and affordable food in cities. Urban food harvest organizations aim to overcome these challenges by locating and harvesting food that already exists in cities on the numerous fruit- and nut-bearing trees located on public and private lands. Hidden Harvest is a leading initiative for urban fruit and nut harvesting in Canada, and unique in its for-profit social enterprise model. The organization aims to legitimize and support the practice of harvesting fruits and nuts in urban areas and provides a means to increase access to—and availability of—fresh, healthful foods hyper-locally in Ottawa, as people harvest from their own (or nearby) neighbourhoods. This field report examines the challenges and opportunities faced by Hidden Harvest in attempting to link multiple social, environmental and economic goals relating to food sovereignty, social justice, and ecological sustainability. In particular, the organization seeks to establish a self-sustaining business model through innovative solutions and the development of networks with local food processes, food organizations, and businesses, which enables Hidden Harvest to grow and develop distinct ties and relationships in Ottawa. This case study reveals how organizations such as Hidden Harvest use food to enhance and tie together local economies, knowledge, food security and community well-being.

Keywords: gleaning; social enterprise; localized food systems; diverse economies; social economies

*Corresponding author: chloe.poitevin@carleton.ca
DOI: 10.15353/cfs-rcea.v6i3.354
ISSN: 2292-3071

Introduction

During my summertime commutes in Ottawa, my attention is almost immediately drawn to the trees. More specifically, the ones bearing fruit or nuts. I find myself trying to identify and ascertain the ripeness of the bounty hanging from the branches, and wondering if the owner of the property on which the tree sits will put this food to good use or let it go to waste on their lawn. If left unharvested, a majority of the ripe fruits will fall off the tree to rot on the ground below. This phenomenon of seeing trees for the food they produce is an aftereffect of participating in the harvest of fresh fruits and nuts, and what the co-founders of Hidden Harvest, Jason Garlough and Katrina Sisk, refer to as "tree goggles". These tree goggles shine a light on the abundance of locally-available, healthful and fresh foods growing on trees throughout urban environments.

The Hidden Harvest model is a multi-pronged approach to address food insecurity in urban environments, and provides a source of free and healthful food to people in need, supports small business, and educates people about fruit and nut trees while providing opportunities to enhance food literacy and skills (Bartlett, 2012). The Hidden Harvest volunteers pick fruits and nuts from trees on city-owned and private properties throughout Ottawa and share it with harvest volunteers, homeowners, food processors, and local food agencies.

Hidden Harvest is a leading example among Canadian urban fruit and nut harvesting organizations, particularly in their goals as a social enterprise to become profitable and use surplus funds to grow the impact of the organization. This model allows Hidden Harvest to innovate and strive for independence from external funding while forging connections with like-minded businesses. These businesses offer fundamental support through a more reliable source of revenue and the promotion of Hidden Harvest's cause. For these reasons, Hidden Harvest provides a unique example by which to examine the social economies of food.

This research describes the key facets of Hidden Harvest and reflects on the challenges and opportunities faced by the organization, based on participant observation of harvest activities and interviews with the founders of Hidden Harvest. The case study of Hidden Harvest is tied to a larger inquiry into the social economy of food by the Nourishing Communities research group. This broader study seeks to understand the transformative potential of organizations like Hidden Harvest in their attempts to create economic opportunities in which profit is not the primary goal, but equally important to social and environmental motivations. Hidden Harvest is of particular interest in its attempt to use their profit to create social good, thereby reconceptualizing surplus, both material and economic, as something to be shared among communities.

Research Methods

The case study of Hidden Harvest took place over the summer of 2015 until fall 2016, in which participant observation was the primary method of data collection. Participant observation allowed for

a rich and illustrative narrative of harvesting activities to emerge, particularly as the experience of picking fruit in an urban context is a largely informal and underrepresented activity. This method allowed for data to be generated in a way that captures the material and social aspects of 'place', grounding the observations in particular geographies and contexts (Elwood & Martin, 2000). I participated in harvests on two different occasions; the first being the harvest of sour Cherries with a small group in the east of the city, and the second picking crab apples and apples with a larger group, organized in collaboration with a local food agency—the Parkdale Food Center—and documented by a local television network. I also attended a workshop organized by Hidden Harvest on home brewing using harvested black walnuts as brewing adjuncts, and a presentation at city hall concerning the proposed urban forestry plan, during which Hidden Harvest advocated for the consideration of fruit-bearing trees in the Ottawa's Offical Plan.

Participant observation was coupled with semi-structured interviews Hidden Harvest co-founders Jay Garlough and Katrina Siks. The interview questions sought to better understand the opportunities and challenges faced by Hidden Harvest, and how the co-founders envision the future of the organization. In order to ensure that the study was of mutual benefit to Hidden Harvest, the founders asked that I help design a Social Return on Investment (SROI) tool that would aid the organization to track and make transparent their impacts and activities for funders and the broader community. The design of the SROI tool was a collaborative process between myself and the organization, based on a previous iteration of a more complex SROI commissioned by Hidden Harvest.

'Rescuing' food: The Hidden Harvest model

As a city bounded by a largely agricultural greenbelt, Ottawa is connected to rural landscapes and a strengthening local food movement which is supported by local government (Ballamingie & Walker, 2013). There is a push from government and local food organizations to enhance urban food system sustainability in Ottawa through a network of community gardens, a food hub and farmers markets (Ballamingie & Walker, 2013.). Hidden Harvest is a vital part of creating a sustainable urban food system for the city by making use of food that is already available and accessible to urban residents.

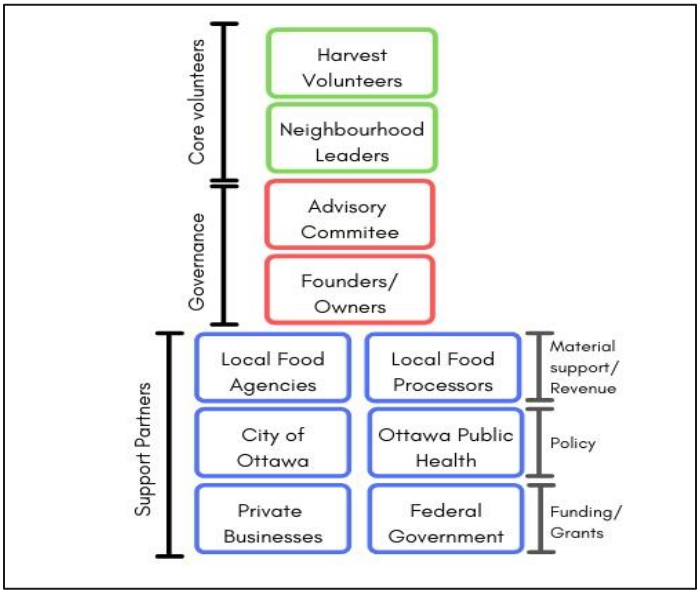
Diverse fruit and nut tree species, native and introduced, are a part of Ottawa's urban landscape, and their role in enhancing local ecologies and food systems have been largely under-recognized. Despite the bounty of fresh and healthful foods these trees offer, most often, their fruits and nuts are left un-harvested—to be eaten by animals, or to decompose, but with a good portion of the food ultimately going to waste. Many homeowners lack the capacity and/or time to harvest trees on their land, or else may not want or be able to use all the food produced. Often, un-harvested fruit and nut trees are cut down as they become labelled a nuisance, as the fallen fruits attract animals and insects, and a posing a slipping hazard from fruit rotting on sidewalks (Bartlett, 2012; Nordahl, 2014). Fruit that has fallen on roadways and sidewalks may be dealt with by residents or removed through normal street-sweeping operations. The fruit on city-

owned trees is most often treated as waste and is typically mulched during grass-cutting operations by maintenance staff and left in place as natural compost (Nordahl, 2014).

Hidden Harvest co-founders Jay Garlough and Katrina Siks partnered in 2011 to act upon their concern over these large amounts of unused food produced by trees in the City of Ottawa. Garlough revealed that people have unofficially collected fruits from trees on private and public lands in the area, and he and Siks wanted to legitimize, formalize and popularize the practice. Upon realizing that no organization existed to harvest nuts and fruits in the city at that time, Garlough and Siks put their plan for Hidden Harvest into action, securing local partners and funding. In doing so, Hidden Harvest aimed to create a self-sustaining business model to build public capacity and knowledge to access fresh, healthful food in their own neighbourhoods. The first official fruit rescue operation took place in 2012, and there have been approximately 467 harvest events held since then, as of October 2018[1].

Hidden Harvest attempts to redefine the ways in which food trees are valued in urban environments by creating a legitimate means to collect and distribute the fruits and nuts produced, a practice that they depict as 'rescuing' food. The founders use the word 'rescue' to describe their harvesting activities, as the term denotes that the organization is helping the products of fruit trees fulfill their purpose as food. The enterprise works to identify and catalogue city- and privately-owned trees that, with permission, they harvest when the produce is ripe, to share within the local community. Homeowners register their trees to be harvested through the Hidden Harvest website, and city-owned trees are identified through a tree inventory that the municipal government created in 2009.

Figure 1: Hidden Harvest Business Model



[1] For up-to-date harvest data, see http://ottawa.hiddenharvest.ca

As an organization, Hidden Harvest is supported by different categories of volunteers, as well as private business, governmental organizations and other institutions that offer financial, material and policy assistance (Figure 1). There are two categories of core volunteers, neighbourhood leaders and harvesters, as well as additional volunteer positions, including research assistants, harvest tool builders, and volunteers for outreach and fundraising events. Interested persons can apply for any volunteer position, including that of neighbourhood leader, which requires specific training (Hidden Harvest, 2012b). Hidden Harvest relies on volunteers to coordinate harvest events and pick the fruit, as well as govern the organization through its advisory board. While Garlough and Siks remain the owners and co-founders, they found that the time they could dedicate to Hidden Harvest becoming increasingly limited due to other obligations, and the organization moved to become largely volunteer-lead through their advisory board. This group of volunteers, along with Garlough and Siks, outline the strategic plan for the organization, coordinate with business, government and funding partners, and help to organize fundraising and outreach events.

'Neighbourhood leaders' coordinate with property owners and organize harvests; in turn, Hidden Harvest provides them with training on tree identification, and best practices regarding food safety, in order to meet the requirements of local food agencies. Neighbourhood leaders organize the harvests, first identifying when the fruit will be ready to be harvested, and then coordinating with property owners to plan the event. Once a time and date are secured, the neighbourhood leader creates an event invitation, listing the species to be harvested, event time and a general locale, permitting volunteers to sign up and receive the exact address of the tree. Harvesters make up the majority of volunteers, and anyone can sign up on the Hidden Harvest website to become a volunteer and receive invitations to sign up for harvest events. The number of harvests that participate in a given event varies greatly and is determined by the number of trees to be harvested. For instance, the largest harvest event in 2017 took place at a former orchard, and 16 volunteers harvested 40 trees. On average, only a single tree will be harvested, and neighbourhood leaders will cap the number of volunteers based on the size of the property and the number of available fruits. At a minimum, harvest events require at least one volunteer (in addition to the neighbourhood leader). The number of harvest events hosted per year is dependent on a set of different factors, including volunteer availability, homeowner participation and the growing season.

At the harvests, neighbourhood leaders ensure that the harvest equipment, including ladders, bags and pole harvesters, is available and that the site is free of hazards, such as rotting fruit beneath the tree. As volunteers arrive, they are given instructions on the appropriate harvesting techniques and basic food safety guidelines. While Hidden Harvest does not need to adhere to formal regulations, the enterprise adopted a set of best practices that conform to the needs of the food agencies they work with. These include not collecting windfall (food that has fallen on the ground that might potentially be contaminated) for donated shares, discarding rotten and bug-eaten fruits, and storing food to meet the food safety standards set by the participating food agencies.

During the event, the neighbourhood leader provides guidance and assistance to harvesters, and then weighs, records and divides the collected fruits between the homeowner, the volunteers and the food agency of the leader's choosing. Typically, the neighbourhood leader will connect with the food agency closest to the harvest location and gauge their needs for fresh fruits and their capacity to store and process certain varieties. As a 'for-profit' social enterprise, Hidden Harvest may also retain a quarter share of the fruit collected to share with a local food processor, if the amount and type of fruit can be put to good use and be used to generate revenue. Garlough stresses that the best fruits collected during harvests are the ones that are donated, as they are typically better for fresh eating, while fruits with cosmetic discrepancies and minimal bruising are best suited to being processed. Of the 6,396lbs of fruits harvested at 97 harvest events in 2017, which included cherries, serviceberries, apple species and elderberries, 2,880lbs were donated to local food agencies, 1,130lbs were shared with processors, and 2,386lbs were divided between homeowners and volunteers (Hidden Harvest, 2018, p.21). Although the total amount of fruits harvested since 2013 varies per year, the amount that Hidden Harvest donates to food agencies continues to increase yearly (Hidden Harvest, 2018).

A harvest event lasts approximately two hours, from set up to clean up, and most events take place in the later summer months and into the fall as fruits come to ripen. Hidden Harvest's peak season is from May until October, and the quieter winter months are used to plan and train volunteers for the next season. The harvest events provide meaningful opportunities for participants to connect with people in their neighbourhoods, as well as contribute to local food agencies. Hidden Harvest's activities cultivate interpersonal relationships between homeowners and neighbourhood leaders, and friendships between volunteers. Prior to harvests, relationships are established between homeowners and neighbourhood leaders to coordinate the harvest event when the fruits are ripe. Relationships are cultivated between neighbourhood leaders and volunteers, particularly as many will live in the same neighbourhood. The very local scale of the relations is by design, as Hidden Harvest uses an algorithm to keep harvest invitations within a particular geography when they are initially sent out to volunteers, to help build more localized social relations. During the semi-structured interviews, Garlough indicated that the reason for this design is that people are more likely to attend a harvest nearest their residence or workplace; they are more likely to walk, bike or take public transit to the event; they are more likely to treat the property with respect, or stay a bit longer to help the neighbourhood leader clean up; they are more likely to remain engaged with the program when discovering 'hidden' fruit that is close to areas they know well. Only when more volunteers are needed will a harvest event be broadened to include more volunteers from a wider geographic area.

Social entrepreneurship: Profit as a social good

As a social enterprise, Hidden Harvest aims to create a sustainable means of garnering an income to support harvest activities and, eventually, become profitable. A social enterprise is defined as a social-

purpose business that is oriented towards the improvement of social and environmental well-being (Diochon & Anderson, 2014). Some enterprises are for-profit businesses that use the economic resources garnered through market-based activities to create social good, while others do not engage in formal market activities and can be categorized as non-profit (Diochon & Anderson, 2014, p. 11). In general, social enterprises are autonomous and self-reliant entities that are innovative in their approaches to addressing social issues and must seek a balance between economic and social goals (Diochon & Anderson, 2014, p. 24). Some urban gleaning organizations in Canada and the United States operate as not-for-profit social enterprises, producing value-added products with harvested fruits and partnering with local processors (Bartlett, 2012).

Community and economy are intrinsically linked in the Hidden Harvest model, and Siks explained that the pursuit of profit for Hidden Harvest has community-minded intentions with the aim of realizing broader social and ecological good. Siks noted that 'profit' in the context of social and environmental organizations often holds negative connotations, as capital is largely retained by a select few and is often the result of exploitative activities. She argues that profit can be a positive goal so long as it used as a means to support and grow harvesting activities, and is defined as a financial return based on the goods and services provided to society. Siks posits that good work should generate good pay: people who engage in work that benefits the wider community should be afforded a living wage. In this, Hidden Harvest does not shy away from identifying as 'for-profit', as they attempt to reframe the idea of profit as benefiting multiple actors: the organization aims to provide its employees with an adequate and secure living while sustaining its operations and to benefit community members through enhanced socio-economic and ecological resilience.

This model and description of profit are illustrated in Gibson-Graham's (2006) notion of the community economy, in which economic activities are place-based, community-led and ethically oriented in the aim of providing social and physical well-being. Surplus, or profit, is directly connected to the survival of individuals and communities, with alternative ways of conducting business, such as social enterprises, re-orienting how surplus can be distributed in a more democratic fashion (Gibson-Graham, Cameron and Healy, 2013).

As a social enterprise, the majority of Hidden Harvest's profit gets reinvested in the organization to help expand harvesting activities. Over a three-year period, Hidden Harvest reports its revenues as between $16,000 - $22,000 per year, and expenses between $11,500 - $19,000 per year (Hidden Harvest, 2018, p.18). The organization's expenses include outreach (e.g. posters and promotional materials), funding for part-time staff for special projects, and harvesting tools such as buckets, bags and pole pickers (Hidden Harvest, 2018). In light of their restricted budget, Hidden Harvest attempts to reduce overhead costs where possible, including forgoing a physical office space and telephone to rely solely on a web-based platform for activity coordination and outreach.

Although Hidden Harvest has a ways to go before achieving profitability and becoming self-sustaining, the organization seeks support for activities through funding and partnerships with community organizations and businesses. Economic viability is an ongoing challenge for social enterprises, many of which depend on external funding and operate at a loss (Diochon & Anderson,

2014). Hidden Harvest relies primarily on publically funded grants and donations, in which partnerships with local businesses and food agencies are key in securing funding. For instance, certain larger businesses in the region provide financial support to the organization through donations and help market the Hidden Harvest brand and cause. Most notably, Beau's Brewery, based in Vankleek Hill, Ontario, hosts an annual Oktoberfest weekend, through which Hidden Harvest is able to generate their most significant source of income by means of donations collected through a Midway Games setup. The Midway Games are staffed by volunteers and typically generate around $10,000 in funding for the organization (Hidden Harvest, 2018). A smaller portion of the organization's earnings comes from the partnerships with food processors through the sales of goods, such as jams and preserves, which use harvested fruits.

Certain partnerships with food agencies and processors work to decrease the organization's dependence on the cash economy through non-monetary donations and bartering practices. Bartering, or non-monetary exchange of goods or services, occurs when food processors receive Hidden Harvest fruit in exchange for a portion of the profits and/or marketing for the organization. These partnerships allow small-scale processors, such as craft breweries and artisanal jam producers, to access locally-harvested fresh fruits and nuts, enabling them to tell a rich and locally embedded story to their consumers about where the fruit comes from. In each case, these processors supply Hidden Harvest with either a portion of the products made with Hidden Harvest fruits or a share of the profits from these products. Often, the processors of these value-added products will use the Hidden Harvest name and/or logo on their products, which provides the social enterprise with marketing impact as well as income.

These arrangements often provide mutual benefits for the organizations that lend a hand in supporting Hidden Harvest, as the organization provides both direct and indirect social, ecological and economic benefits beyond collecting foods. For instance, fruit donated to a local food agency, Parkdale Food Centre, is often used in their Muesli social enterprise (Thirteen Muesli), which helps to offset the cost of purchasing fruit wholesale. In return, the Parkdale Food Center shares its refrigerated trucks with Hidden Harvest and provides space to hold food education workshops. This mutuality is also exemplified through the relationship the organization developed with the municipal government. The city of Ottawa provides support to Hidden Harvest by reducing the cost of permits necessary to harvest on city-owned land, and in return, city officials cite Hidden Harvest as a means to reduce waste and enhance food security in Ottawa. In seeking municipal support, Garlough underlines the importance of fostering relationships between Hidden Harvest and city councillors who champion local food and environmental causes in Ottawa.

In hopes of growing partnerships with food processors, Garlough is developing a perspective plan to increase profitability that would emulate a community-supported agriculture (CSA) model—by sharing risks with consumers—while borrowing from the supply management model, as seen in the Canadian dairy industry (Garlough's parents are dairy farmers). Dairy processors purchase quota for the opportunity to buy milk to then make cheese or other products. In the case of Hidden Harvest, the quota would take the form of a sponsorship through which a local food processor would buy a license for a share of the harvest of a particular species in a

geographic area. For instance, a brewery would be able to buy the first right of refusal to ¼ of the sour cherries in a particular neighbourhood. In purchasing this license, the business would have access to not only the produce but also its accompanying story, which would include a social media story and pictures to share with their consumers for marketing purposes.

The enhancement of local economies through the work of Hidden Harvest is a long-term project. Much of their work directly contributes to the local economy, particularly through the tangible economic benefits generated through partnerships with local food processors. Hidden Harvest also impacts the local economy indirectly by developing an ecologically sound, inclusive and accessible means of accessing food. This benefit is demonstrated through their work to increase the food and ecological values of urban fruit trees, and create a space for low-income populations, people with disabilities, women, new Canadians, and Indigenous peoples in the local food economy. Equally, the harvest events are structured in a way that people with mobility issues can participate, as volunteers are needed to harvest fruits and sort the collected bounty. While Hidden Harvest does not survey or ask for data on marginalized groups, Garlough notes that certain volunteers, after attending a few harvests, are comfortable with sharing their stories, which conveys the diverse backgrounds and experiences of participants.

Growing urban food sovereignty

Food sovereignty advocates seek to build a food system where people have control over the ways in which food is grown, distributed and consumed, and strives for social, economic and ecological resilience (Wittman, 2011). Garlough describes Hidden Harvest as aligned with the principles of food sovereignty as the organization aims to build adaptive capacity and allow people to have greater control over their local food system through harvesting and food education activities. In addition to guaranteeing basic tenets of food security, such as adequate access to and availability of healthful and culturally-appropriate foods, proponents of food sovereignty also advocate for food systems that are more localized in terms of supply chains and governance. Within the Hidden Harvest model, people in the community decide where the harvested food goes beyond the mandated half share, which is donated to the nearest food agency. Often, participants and homeowners will donate part of (or the whole of) their share in lieu of keeping it. Donations and partnerships with local food banks not only provide low-income populations with food but also offer the opportunity to harvest food and develop food skills through workshops. The donated fruits allow food bank clients (respectfully referred to as ‘neighbours’ by Hidden Harvest) to not compromise their dignity when accessing harvested food, particularly as many participate in the harvests themselves. Furthermore, many people don’t have the ability or desire to harvest their own fruit trees, and so the portion of fruit reserved for homeowners can be a means to increase food security for these individuals.

For many, the harvests provide a means through which to connect with their agrarian roots and food traditions through harvesting particular fruits and nuts. Certain foods are difficult to access through conventional markets but are nonetheless available locally. For instance, Garlough recounted

that some people with rural Canadian roots want to access Eastern black walnuts—something their grandparents would have eaten, but which is not readily available in stores. The harvest events offer people the opportunity to gain access to these foods and connect with their roots and culture. Ultimately, the work undertaken by Hidden Harvest aims to increase people's appreciation for urban trees as potential food sources. Moreover, by encouraging the planting and care of fruit-bearing trees in Ottawa, Hidden Harvest ultimately increases the availability of fresh, healthful and local foods.

Equally, Hidden Harvest strives to build relationships in the food system, particularly between volunteers, food agencies and local businesses, and awareness of local food issues. Many neighbourhood leaders' first in-person interaction with their local food bank was when they dropped off the food bank's share of fruit. The ties to food agencies are a fundamental part of Hidden Harvest's mandate, as neighbourhood leaders come to understand the unique needs of different food agencies through the donations of fruit. Many of the workshops offered by Hidden Harvest are conducted in partnership with local food processors, and harvest volunteers become more aware of—and more likely to purchase—the products from these processors.

One of Hidden Harvest's primary goals is to raise awareness of urban trees as a food source and as a vital part of urban ecologies, and harvest events provide an important experiential learning opportunity through which people build their knowledge of local fruit trees and ecosystems. Hidden Harvest seeks to highlight the importance of fruit trees for urban biodiversity. Many studies show that a close relationship with nature—even in urban areas—is critical to maintaining health, results in a reduction of healthcare costs, and bolsters citizen support for greenspace conservation (Clark & Nicholas, 2013; Poe et al., 2013). Hidden Harvest provides such opportunities for people to engage with nature in their own neighbourhoods and educates the public about the benefits of planting fruit trees. The organization's founders note that homeowners that have hosted or participated in harvests are also more aware of the benefits of fruit-bearing trees and are more likely to plant a tree that can produce food on their property. In order to directly support natural ecosystem functions as part of their activities, Hidden Harvest purposefully leaves some portion of the fruit during harvest events, recognizing the critical role of different species in propagating urban fruit trees. For example, Garlough stressed the efficacy of squirrels in propagating fruit trees in urban areas, as their foraging activities lead to fruit trees being planted on vacant lots and the edge lands of city parks.

In seeking to promote urban natures, the organization also advocates for increasing the number of fruit trees on public lands in Ottawa. When the City of Ottawa sought input into its Urban Forest Management Plan, Hidden Harvest advocated for fruit-bearing trees to be recognized as vital components of urban food security and ecosystems. Though an official mandate is still being drafted, city officials demonstrate support for Hidden Harvest's approach to engaging citizens with urban forests. To wit, in their first year of harvesting, some city councillors would first approach Hidden Harvest rather than forestry services, out of fear that the latter might then remove the offending tree.

Harvest volunteers develop the knowledge needed to harvest and care for different fruit trees, as well as learning how the fruit tastes, the different ways to consume, prepare and preserve the food, and what stories describe the trees, such as Indigenous medicinal and food uses. Through these activities, harvest volunteers develop the aforementioned 'tree goggles' as they become more familiar

at identifying fruit trees by appearance. In developing harvester knowledge and capacity, Hidden Harvest strives to be culturally inclusive; efforts are being made to engage with the Indigenous communities and New Canadians. Their recent strategic plan outlined their commitment to engaging with notions of reconciliation by decolonizing the food system (Hidden Harvest, 2018). Steps towards these goals comprise the inclusion of Indigenous stories and knowledge as part of harvest events, and efforts to recruit and train Indigenous harvest leaders. So far, the success in these efforts has been limited, although the organization is working towards developing strategies that engage Indigenous populations in ways that produce lasting and mutually beneficial partnerships in order to recognize and re-embed traditional knowledge in urban landscapes and food systems.

The social enterprise also strives to build capacity through workshops on food preparation and preservation, some of which are aimed at new Canadians who may have limited knowledge of how to prepare locally-available fruits—though, as mentioned, they may also have familiarity and expertise in harvesting and preparing non-native species that have been planted locally. To further enhance inclusivity, Hidden Harvest has developed programs with local food banks—predominantly the Parkdale Food Centre and Dalhousie Food Cupboard—which aim to provide opportunities for more low-income populations in harvest activities.

Knowledge building opportunities for volunteers take place post-harvest as well, through workshops and advisory board meetings. The food preparation workshops are an important means to share knowledge about often underused and relatively unknown fruits and nuts that may require special skills or knowledge to prepare. Hidden Harvest also provides the opportunity for volunteers to govern the organization through its advisory board. In engaging with a broad range of tasks and issues associated with the direction of Hidden Harvest, these volunteers have had to develop their understanding of policies that apply to urban gleaning and fruit trees, and their corresponding capacities to analyze and comment on these policies.

Overcoming challenges

With every new season, Hidden Harvest sees its popularity grow with increased demand from volunteers to participate in harvest events. Ironically, success was identified as a possible threat for Hidden Harvest, particularly in their aspirations of becoming self-sufficient. The potential profitability of the social enterprise holds both positive and negative outcomes and hosts a set of new and distinctive challenges. Notably, Garlough remains concerned about the attention that a bigger and more profitable Hidden Harvest might attract from other food producers, funders, supporters and regulators. In particular, Hidden Harvest fears that the increased scale of Harvest activities could subject the organization to the agricultural requirements of the Ontario Ministry of Agriculture, Food and Rural Affairs, particularly those around food safety that would be difficult and expensive to implement (Hidden Harvest, 2018). Much of the funding and financial support the organization receives is contingent on the income generated by activities and could be limited if Hidden Harvest manages to turn a profit. Currently, and for the foreseeable future,

funding is essential to maintain operations. Hidden Harvest proponents also expressed concern over the ways in which profitability might impact the primarily volunteer labour force that is fundamental to Hidden Harvest operations. Garlough views the reliance of many community-supported agriculture businesses on unpaid labour through internships as problematic, and questions whether people will still want to volunteer with Hidden Harvest if they were to become profitable. In light of these challenges, Hidden Harvest is working to restructure its activities and governing structure so as to become a non-profit organization, which would allow them to pursue additional grants and funding opportunities to expand their reach within the city of Ottawa (Hidden Harvest, 2018). While profitability remains a key method of supporting their activities, their central goal is supporting community well-being and contributing to sustainable urban food systems (Hidden Harvest, 2018).

A current challenge for Hidden Harvest is the need to communicate the impacts of their activities to policymakers and funders, as they continue to rely on the support of municipal officials and external funding opportunities. While the organization's goals supersede the attainment of profit, as a social enterprise, they need to demonstrate their financial value to remain accountable to funders, government and their community. In doing so, Hidden Harvest must adhere to conventional economic models to estimate the monetary value of their activities, which often do not have a clear economic value. The organization, therefore, chose to create a social return on investment (SROI) tool to calculate the economic value of social and environmental goods, which provides a means to illustrate the monetary value of harvest activities. The tool allows them to demonstrate the economic impacts of their knowledge building activities, environmental conservation efforts, waste diversion practices and food donations. In effect, the SROI allows the organization to justify its value to funders, policymakers and the broader community in a way that is easily understood and fits within conventional economic paradigms. For instance, the SROI tool estimates the monetary value of the harvested fruits using proxies based on data garnered from wholesale market prices in Ontario. Other SROI proxies illustrate the monetary value of volunteer labour, volunteer training sessions and public workshops. While the SROI cannot capture all the myriad benefits of Hidden Harvest's activities, particularly the less tangible social and environmental services, it provides a snapshot of how 'rescuing' fruits contributes to local economies. Currently, the tool is used by harvest leaders to track the outcomes of harvest events, with data being relayed on the Hidden Harvest website.

Conclusion

Hidden Harvest embraces innovation as it continually evolves to not only better meet community needs, but also become a self-sustaining social enterprise. Co-founder Garlough sees each new harvest season as a means through which to rebuild the organization based on lessons learned over the previous year. This openness to change and willingness to adapt has allowed the

enterprise to grow the number of events and increase the amount of fruit and nuts rescued each year. In part, the reliance on their online platform to coordinate harvest events has provided a means to reduce overhead costs and staffing needs, while enabling growth and flexibility. Equally, social media provides a key method for the organization to promote itself and its cause by sharing stories and pictures of harvest events and workshops. Traditional media outlets also serve as an important means to spread their message, and Hidden Harvest has been featured on local television and radio programs, in local newspapers and magazines, and in a national Canadian journal. Communicating their impacts to funders, government and their community feeds into Hidden Harvest's goal of transparency and accountability. More recently, their activities were documented in the Social Economy of Food video series by Nicole Bedford, which illustrates the need to recognize the importance and weight of the work done by Hidden Harvest and other organizations working towards creating resilience in the food system through alternative economic models. The opportunity to spread Hidden Harvest's message is vital to increase the buy-in and participation in harvest events, in order to increase the amount of food being rescued and the access to fresh, healthful food for people in Ottawa.

The ability to share their story brings legitimacy to the practice of harvesting urban fruits and nuts and can help to inspire similar actions in other municipalities. In seeking to support the cause of urban fruit and nut rescue, Hidden Harvest has made important connections with several similar groups, to share experiences and provide support. As one of the more well-established and larger organizations, Hidden Harvest shares their experiences with groups wanting to set up their own urban gleaning projects in other cities—including, most recently, a group from Halifax that established the urban gleaning organization Found. In growing these partnerships, Canadian urban tree harvest organizations work together to draw attention to and legitimize the practice of gleaning fruits and nuts in cities.

In continuing to develop and change the ways in which Hidden Harvest operates, partnerships with local organizations and actors play a key role in the reevaluation and progression of business practices and organizational models. This enables Hidden Harvest to learn how to communicate their role and benefits in ways that the municipal government understands, particularly in emphasizing the ways in which they contribute to food security and offer an effective means to divert waste and increase sustainability in Ottawa. Through their harvesting events and workshops, Hidden Harvest offers services to the community and the city by creating alternate means to feed people, managing renewable resources, developing green infrastructure and diverting waste from landfills. These actions speak to the aims of different city offices, including community and social services, energy planning, and forestry services.

In partnering with food agencies, Hidden Harvest is able to meet their needs by providing training opportunities and harvest equipment as well as helping to organize harvest events for clients. Garlough states that food agencies continually need to apply for funding, and that projects with Hidden Harvest allow them to access additional funds while expanding their program offerings. He notes that it is not much different than if the food agency were to apply for a grant to hire a professional chef to run food preparation workshops for their clients,

particularly as Hidden Harvest events also provide opportunities to improve food knowledge and skills.

Both Garlough and Siks stressed the unrealized potential of Hidden Harvest, particularly as their own personal and professional commitments have drawn them away from the social enterprise. Siks hopes Hidden Harvest will eventually be taken over by the community entirely, possibly leading to neighbourhood-led branches connected to an overarching and supporting organization. She ties this type of model to that of Ottawa's Community Gardening Network (run by Just Food), which oversees and supports garden projects throughout the city that function relatively independently of one another.

While the social enterprise hopes to engage more formally in the local economy to become profitable, Hidden Harvest also engages in practices not typically accounted for in conventional, that is capitalist, economies by building towards diverse and community economies. Activities such as sharing foods, enhancing food literacy and knowledge, and forming partnerships with other businesses contribute largely indirectly to strengthening local economies, and aren't typically considered as part of 'formal economies' (Gibson-Graham, 2006; Ballamingie et al., 2019). By broadening their conception of profit and engaging in these activities, Hidden Harvest helps to orient local economies towards broader community well-being rather than the accumulation of profit (Ballamingie et al., 2019).

All told, Hidden Harvest aspires to demonstrate that profitability can go hand in hand with social good by meeting local community needs.

References

Ballamingie, P., & Walker, S. M. L. (2013). Field of dreams: Just Food's proposal to create a community food and sustainable agriculture hub in Ottawa, Ontario. *Local Environment*, *18*(5), 529–542.

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* (Advance Online Publication).

Bartlett, B. (2012). Revealing the Hidden Harvest: Prospects and challenges for urban fruit tree projects. *Vancouver Current Issues Paper*, 1–44.

Clark, K. H., & Nicholas, K. A. (2013). Introducing urban food forestry: A multifunctional approach to increase food security and provide ecosystem services. *Landscape Ecology*, *28*, 1649–1669.

Deby, D. (2013). Concrete Orchard. *Alternatives Journal*, *39*(3), 52–53. Retrieved from http://search.proquest.com/docview/1365660831?accountid=43603

Diochon, M., & Anderson, A. R. (2014). Social enterprise and effectiveness: a process typology. *Social Enterprise Journal*, *5*(1), 7–29.

Elwood, S., & Martin, D. G. (2000). “Placing” interviews: Location and scales of power in qualitative research. *Professional Geographer*, *52*(4), 649–657.

Gibson-Graham, J. K. (2006). *A postcapitalist politics*. Minneapolis: University of Minnesota Press.

Gibson-Graham, J. K., Cameron, J., & Healy, S. (2013). *Take back the economy: An ethical guide for transforming our communities*. Minneapolis, Minnesota: University of Minnesota Press.

Hidden Harvest. (2012a). *Our story*. Retrieved from http://ottawa.hiddenharvest.ca/about/our-story/.

Hidden Harvest. (2012b). *About*. Retrieved from http://ottawa.hiddenharvest.ca/about/.

Hidden Harvest. (2018). *Hidden Harvest Ottawa strategic plan 2017-2021*. Retrieved from http://ottawa.hiddenharvest.ca/wp-content/uploads/HH-Strategic-Plan-v9-2018-edited-for-public-sharing.pdf

Nordahl, D. (2014). *Public produce: Cultivating our parks, plazas, and streets for healthier cities*. Washington: Island Press.

Poe, M. R., McLain, R. J., Emery, M., & Hurley, P. T. (2013). Urban forest justice and the rights to wild foods, medicines, and materials in the city. *Human Ecology*, *41*(3), 409–422.

Wittman, H. (2011). Food sovereignty: A new rights framework for food and nature? *Environment and Society: Advances in Research*, *2*(1), 87–105.

Vol. 6 No. 3, pp. 33–59 November 2019

Canadian Food Studies La Revue canadienne des études sur l'alimentation

Original Research Article

Understanding social economy through a complexity lens: Four case studies in Northwestern Ontario

Connie H. Nelson*, Mirella L. Stroink, Charles Z. Levkoe, Rachel Kakegamic, Esther McKay, William Stolz, Allison Streutker

Lakehead University

Abstract

Broadly described, the social economy refers to a series of initiatives with common values representing explicit social objectives. The roots of social economy organizations predate the neoliberal economy and are integral to the human condition of coming together in mutual support to address challenges that benefit from collective efforts. Drawing on a complexity science approach, this paper analyzes four case studies situated in Northwestern Ontario—blueberry foraging, Cloverbelt Local Food Co-op, Willow Springs Creative Centre and Bearskin Lake First Nations—to demonstrate key features of social economy of food systems. Their unifying feature is a strong focus on local food as a means to deliver social, economic and environmental benefits for communities. Their distinct approaches demonstrate the importance of context in the emergence of the social economy of food initiatives. In the discussion section, we explore how these case study initiatives re-spatialize and re-socialize conventional food system approaches.

Keywords: social economy; food systems; complexity science; complex adaptive systems; foraging; context

*Corresponding author: cnelson@lakeheadu.ca
DOI: 10.15353/cfs-rcea.v6i3.357
ISSN: 2292-3071

Introduction

Since the 1970s, neoliberalism is the predominant form of social and economic relations and has led to rising inequality, ecological degradation and a breakdown of the welfare state (Heynan, McCarthy, Prudham, & Robbins, 2007; Restakis, 2006). The social economy predates the neoliberal economy and is deeply integral to the human condition of addressing challenges through collective efforts (Defourny & Develterre, 1999; Jennings, 2012). In this way, social economies address the limitations of the profit-driven, free market approach. Broadly described, the social economy refers to a series of initiatives with common values representing explicit social objectives (Amin, Cameron, & Hudson, 2002; Moulaert & Ailenei, 2005).

The term social economy first appeared in France in the early 19th century; however, the legal framework that formalized entities like cooperatives and non-profits that make up the modern social economy did not arise until the end of the 19th century (Defourny & Develterre, 1999). The diversity of conditions in which people associated for cooperative and mutual assistance resulted in the modern social economy being forged from the interplay of many ideologies including socialist movements that promoted producer cooperatives and dominated the international workers movement. This pluralistic ideological legacy continues to shape the diversity and breadth of applications of social economy including co-operatives, non-profits and social enterprises (Moulaert & Ailenei, 2005). The concept was first used in Canada in 1992 where Quebec has played a leadership role in its development (Downing, McElroy, Tremblay, & Amyot, 2012; Charron, 2012; and Mendell & Neamtam, 2009).

To explore the social economy in Northwestern Ontario, this paper presents four case studies to demonstrate key features of social economy of food systems. These case studies are linked by their focus on local food as a means to deliver social, economic and environmental benefits for communities, and by their adaptive emergence within the shared context of Northwestern Ontario. Their distinct approaches reveal the complexity of social economy of food initiatives and their rootedness in social and physical context. Each case study is presented using the unique voices of those involved in an attempt to remain true to our community-based methodology. This is also a way to share the perspectives of the people and communities along with the diversity of social economies that have emerged in Northwestern Ontario.

We argue that complex adaptive systems theory is a useful theoretical approach within which to understand social economy initiatives. Following an introduction to the relevant literature and our analytical approach, we provide an overview of the Northwestern Ontario region and our research methodology. We then present an analysis of each case study that explores how they provide social, economic and environmental benefits that enhance community prosperity. We conclude by suggesting that these initiatives re-spatialize and re-socialize conventional food system approaches.

The social economy

Defourny and Develterre (1999) maintain that social economy initiatives develop out of "conditions of necessity" (p. 22). Since the 1980's, there has been a re-emergence of interest in the social economy that is linked to global shifts including the decline of industrialization and the ability of the welfare state to meet basic human needs. Hudson (2009) suggests that currently there are three basic positions on social economy.

First, there is the perspective that social economy works in parallel with the mainstream economy and is a safety net for those who are marginalized. Secondly, the social economy has disruptive qualities with the potential to transform to a post-capitalist future (p. 508). Thirdly, according to Hudson, the perspective most widely discussed in the literature is the position that the social economy is neither an adjunct to the mainstream economy nor a replacement of it, but is an alternative that emerges in parallel to, and at times in competition with, mainstream capitalism.

Notably, Moulaert and Ailenei (2005) explain that in the sociological literature of the 1980s, the term was employed to include activities rejecting the capitalist market. More recently when the public or private sectors are unable to meet collective needs and there is a crisis in the mainstream economy, the social economy re-emerges as an alternative vision playing a complementary or supplementary role instead of a subversive one (Golob, Podnar & Lah, 2009; Moulaert and Ailenei 2005; Myer, 2009). Jennings (2012) cautions that social economy initiatives should not be viewed as the transfer of responsibilities from the state to social economy initiatives. Rather, they suggest a unique parallel role for the social economy to the market and state where a diversity of issues specific to community and local place are addressed.

Social economy initiatives provide an alternative model that can reconnect communities with unique local attributes, which can enhance local strengths and resilience (Sonnino & Griggs-Trevarthen, 2013). Malloy et al. (1999) suggest an emphasis on the primacy of people's needs where the focus is on building social capacity and responding to under-met needs. While there is no unifying definition of the social economy (Moulaert & Ailenei, 2005), Sonnino and Trevarthen-Griggs (2013) identified one common feature of social economy throughout the literature: "the synergy between economic and social goals, rather than the pursuit of profit" (p. 274).

The place-based and contextual nature of the social economy makes it difficult to establish a clear definition (Hun & Endo, 2016; Kay, 2006; Moulaert & Ailenei, 2005; Myers, 2009). This decentralized nature has led to the recognition of a different type of social economy that is generally community-based, functioning with fewer government interventions in both formal and informal sectors (Defourny & Develterre, 1999). Social economies arise organically within a specific locality, but even when relatively small, these initiatives can have profound impacts through large-sector social and structural changes (Downing et al., 2012). Thus, we suggest an articulation of the social economy as a fluid concept, rather than attempting to take characteristics of one place and apply them in another location (Myers, 2009). Place and

community are important anchors for engagement in a social economy and for collective mobilization of local resources. Attempts to develop a one size fits all definition or model is to write out specificity of both project and place and thus decontextualize social economy initiatives (Amin, Cameron & Hudson, 2002).

While its application remains specific to locality, there is consensus on the core principles of social economy. The following principles whose origins are credited to Chantier de l'economie sociale (2013) are now widely accepted as central principles of a social economy that work well for both market and social-oriented activities (Canadian Community Economic Development Network, 2008; Defourny & Develterre, 1999;):

1. placing service to its members or the community ahead of profit;
2. autonomous management;
3. a democratic decision-making process

Key to a social economy is the emphasis on benefit to its members and/or the wider community rather than generating profits for further capital investment. The autonomy in management places emphasis on participation and community empowerment and further distinguishes the social economy from the production of goods and services by government. A democratic decision-making process places emphasis on respect for equity in participation of all, mutuality and cooperation.

A complexity science approach

Our study builds on research that has applied a complexity science approach to various complex social ecological systems, including food systems (Holling, 2001; Matei & Antonie, 2015; Morcol, 2014; Nelson & Stroink, 2014; Randle, Stroink & Nelson, 2014; Stroink & Nelson, 2013). In this paper, we argue that a complexity science approach is useful in conceptualizing social economies of food. This approach draws on theories and concepts from several disciplines, including complex systems theory and complex adaptive systems theory (Mitchell, 2009). All complex systems are characterized as a collection of independent agents that act in unpredictable ways; yet whose actions are interconnected in a network such that one agent's actions change the context for other agents. These other agents then adapt to their changed context by changing their own behavior.

In a food system, the individual agents include consumers, producers, and processors, and these agents are independent yet interdependent in a network, affecting each other and responding adaptively to their contexts which include biophysical, social, and economic aspects of place. Thus, through dense interactions or connections, a complex system as a whole produces outcomes that cannot be predicted by any individual actions. As a result of these

interdependencies, complex systems may produce emergent behavior that is highly sensitive to initial conditions, where slight variations cascade and multiply, and ultimately produce major differences, and their emergent behavior may appear unpredictable and non-linear. Thus, system properties are best understood as patterns that adapt and change over time. Patterned outcomes, including social economy of food initiatives, emerge out of these interactions.

Complex adaptive systems (CAS) are able to learn from experience, altering their behavior in response to changes in the context and adapting dynamically through feedback loops (Holland, 2006; Ostrom, 1990; Ostrom, 2010; Stacey, 1996). Feedback loops that are tighter, that return information to the system on the effects of its emergent outcomes more quickly, enable the system to be more responsive to its environment. Complex adaptive systems also exist across scales and are nested within one another. Each level can thus be both its own complex adaptive system and an individual element within a broader CAS. As a result of interactions across these scales, complex adaptive systems are both affected by and affect emergent properties at different scales. Such systems are constantly adapting and evolving.

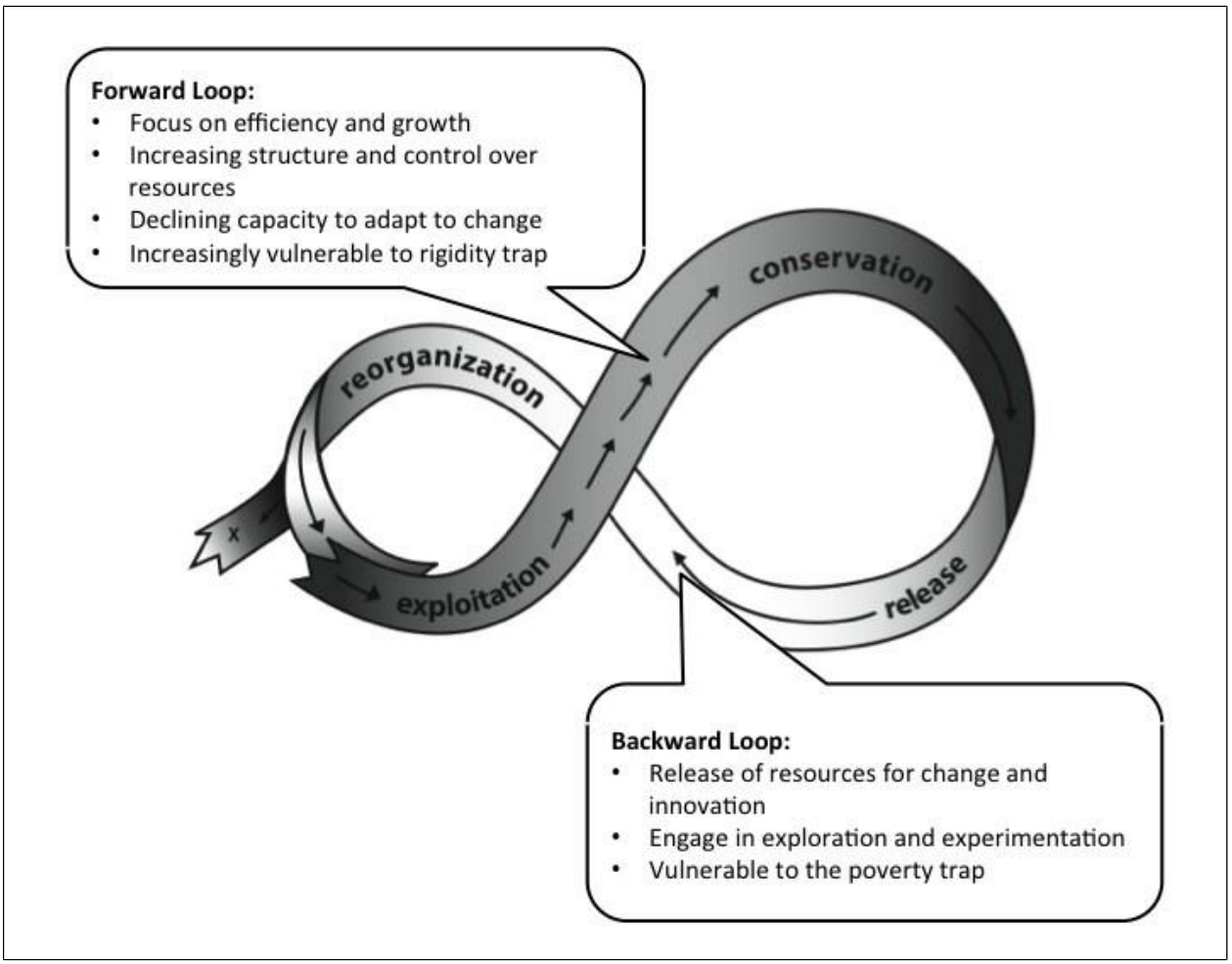
The self-organizing adaptive behaviour in complex adaptive systems is now widely referred to in terms of four phases of the adaptive cycle. The widespread use of the adaptive cycle is based on the early work of Holling from his patterning observations of the cycles of forest ecosystems following disturbance (Gunderson & Holling, 2002). In the adaptive cycle as shown in Figure 1, the CAS moves through the phases of exploitation, conservation, release and reorganization. As the interdependent agents in the CAS interact with each other and their context, adapting dynamically through feedback loops, patterned behavior begins to emerge out of what is initially more diverse and chaotic behaviour.

If the pattern is adaptive it becomes supported with stabilizing structures that serve to store capital and energy within the system. For example, in Stroink and Nelson (2013), the relevance of the adaptive cycle to the evolving nature of local food systems in Northern Ontario is described using five case studies. In a food system, this capital includes skills, knowledge, human energy, and economic wealth; stabilizing structures include legislation, policy, and physical infrastructure (Nelson & Stroink, 2014). With increasing stability, the system moves from exploitation (growth) to conservation. In conservation, the stabilizing structures provide efficiency but also undermine diversity and resilience as the system's energy and resources are consumed in maintaining the stabilizing structure and the system's ability to adapt quickly to the context declines. Release occurs when the system's structure collapses into a more chaotic state, often following a triggering event, and is followed by a phase of reorganization as agents from the collapsed system begin interacting in diverse new ways (Gunderson & Holling, 2002; Walker & Salt, 2006).

As complex adaptive systems, social economy of food initiatives are highly sensitive to contextual factors in place. Indeed, the particular role of place in social economy is noted throughout the literature (Defourney & Develterre, 1999; Hun & Endo, 2016; Kay, 2006; Moulaert & Ailenei, 2005; Myers, 2009). We now turn to examine how the place-based context

of Northwestern Ontario has shaped our social economy of food case studies along with our research methodology.

Figure 1: The Adaptive Cycle of Growth and Release*



* Based on Holling, 1986, 2001; see also Stroink & Nelson, 2013

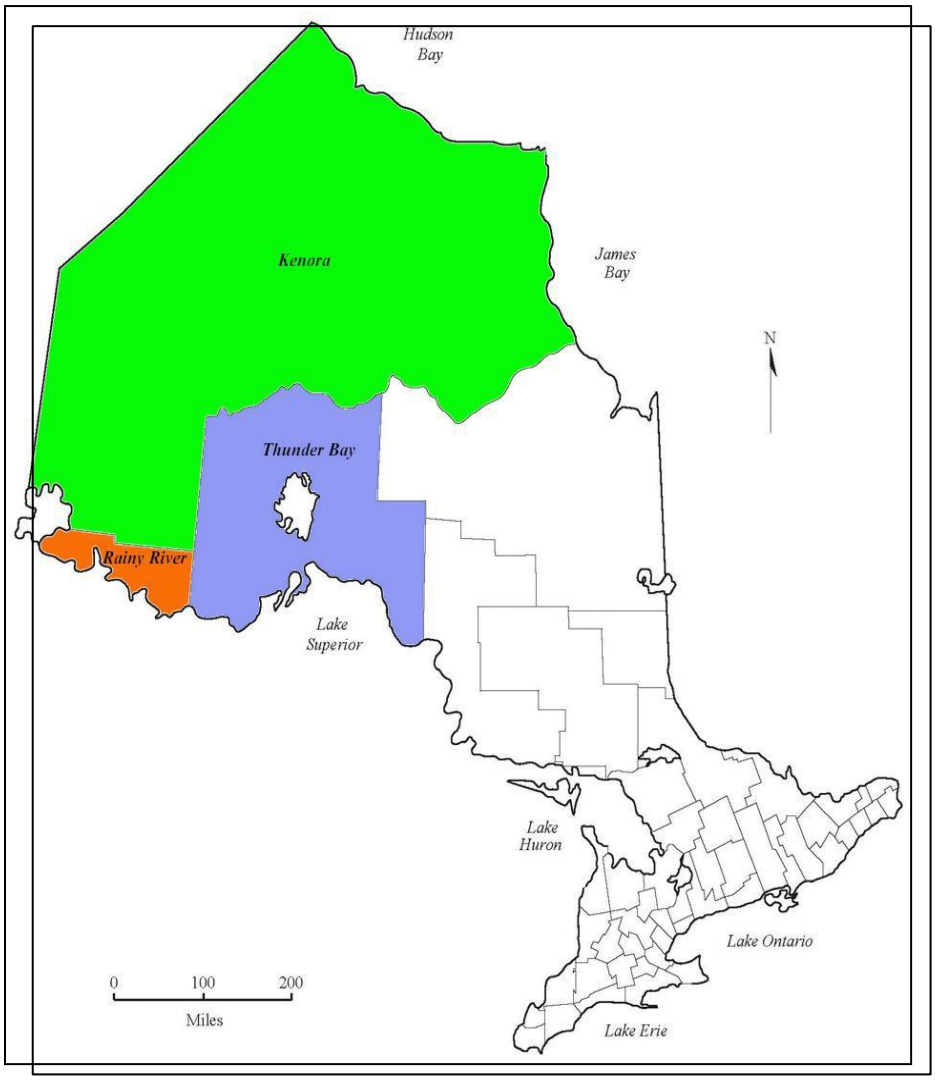
Overview of the study region, methodology and the case studies

Overview of the study region

Northwestern Ontario is comprised of Thunder Bay, Rainy River and Kenora Districts, the three most western districts in Ontario; and covers an area of 526,417 km^2, which is about 57.9 percent of the land area of Ontario (see Figure 1). The population of Northwestern Ontario is 231, 691

(Statistics Canada 2016) with Thunder Bay and surrounding satellites comprising the only area with over 100,000 people. There are four treaties signed between settler governments and Indigenous populations of Ojibway, Cree and OjiCree tribes located in 88 First Nations in Northwestern Ontario. These treaties maintain the right of Indigenous peoples to hunt, fish and gather as they had done for centuries and permitted for the sharing of land and resources. The Robinson Superior Treaty was the first treaty in Canada to explicitly protect the hunting and fishing rights of Indigenous people in the territory (Nokiiwin Tribal Council, nd). Diverse interpretations of the meaning of these treaties on access to traditional food sources remain. The Indian Act of 1876 further challenged historic access to land and resources through the reserve system that limited traditional mobility to hunt and fish. The introduction of treaties and the Indian Act into the traditional food practices of Indigenous people meant that heretofore unfettered mobility was compromised.

Figure 2: Districts of Northwestern Ontario



Source: Modified from Brock University Map Library (Brock University, 2012)

Northwestern Ontario is bounded by key landscape features, including the province of Manitoba to the west, Hudson Bay to the north, Lake Superior to the south, and the irregular eastern boundary of James Bay, the Albany River and then south to the municipality of White River. The landform features are primarily of glacial origin circa 9 – 10,000 BP (Sims & Baldwin, 1991). This includes the vast waterways that flow north to Hudson Bay or south to Lake Superior, the largest surface area of fresh water in the world, and provide an abundance and diversity of fish for food; scattered rich deposits of clay laid down by glacial streams and lakes that support grain and vegetable production; as well as notable lush pastures for animal production; and sandy soil a legacy of glacial rebound that yields an abundance of native wild blueberries. Northwestern Ontario features areas with Agriculture Soil Classed 2 to 4 soils that are suitable for sustained production of common field crops (Natural Resources Canada 1969).

The region has a number of unique food resources that are not classified by the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) as agricultural foods and thus may not be eligible for agriculture funding. These food sources include a diversity of native fish species, native wild rice, blueberries, saskatoons, mushrooms, and wild meats such as moose, geese and spruce grouse. Wild meats are prohibited from market sales and fish must be obtained through a commercial license. These regulations may also limit opportunities to develop the culinary aspects of northern tourism (Stroink & Nelson, 2013).

For food production, climate change is expected to have major implications for the length of the growing season, the variety of crops grown, as well as grain yields in Northern Ontario. It is predicted that climate change will increase growing days in Northern Ontario by 30-45 days by mid-century pointing to emerging growing opportunities and challenges due to earlier springs and later falls (Qian et al. 2005, Cummings 2009 a-c). Other challenges for access to both native plant, animal and fungi food sources include competitive land uses such as mining and logging as well as related potential contamination.

Methodology and the case studies

This research was part of a larger project studying the informal, under-recognized contributions of the social economy of food to community prosperity. Funded by the Social Science and Humanities Research Council of Canada (SSHRC), the research focused on areas of the social economy of food that are often overlooked. The aim was to identify ways that learnings could benefit those most impacted by the dominant food system including low-income groups, Indigenous people, youth and women. Inviting collaborative research teams to focus on key geographic regions, the intention was to share research findings among the broader network through articles, workshops, and videos.

To explore the social economy of food in Northwestern Ontario, we adopted a community engaged research methodology. The case studies were originally chosen to represent breadth in diversity of the types of social economies that have emerged in Northwestern Ontario. As food studies researchers committed to community-based approaches, we had pre-existing relationships that had existed for over a decade. These previous engagements facilitated trust with the people and knowledge about each social economy initiative. This involved conducting four case studies and working directly with community partners who were engaged in food-related social economies. The cases focused on blueberry foraging, an on-line regional food distribution system, a community-based food market and use of boreal plants for therapeutic healing, and on a remote Northern First Nation. Research was conducted between November 2016 and March 2018 through a series of qualitative and quantitative methods (see Table 1). In all cases, research was co-designed and implemented in collaboration with the community partners.

Table 1: Social Economy of Food System Case studies

Case Study (links to additional case study materials)	**Key Methods Used**
Blueberry Foraging http://nourishingontario.ca/blueberry-foraging-as-a-social-economy -in-northern-ontario/	participant observation before, during and after the blueberry harvest; Semi-structured interviews (n=34) with key knowledge holders from each blueberry initiative
Cloverbelt Local Food Co-op http://nourishingontario.ca/the-cloverbelt-local-food-co-op/	farmers, growers, processors (n=3); board members (n=2); staff (n=2); stakeholder organizations (n=2); community members (n=3); focus group of producers, processors, board members, staff, and community members (n=9)
Willow Springs Creative Centre http://nourishingontario.ca/willow-springs-creative-centre/	survey of market customers to understand demographics as well as what motivates customers to attend and purchase goods at their weekly farmer's market (n=72); survey of customers with the Soup and Bread Extravaganza (n=47); semi-structured interviews with market vendors (n=6); participant observation with trainees (n=3)
Bearskin Lake First Nation http://nourishingontario.ca/the-social-economy-of-food/case-studies-subversions-from-the-informal-and-social-economy/the-social-economy-in-northwestern-ontario/ video is under construction. For release, see Nourishing Communities http://nourishingontario.ca/	informal interviews with community members engaged in accessing traditional foods, elders and knowledge keepers employed by the band with special responsibilities to protect and preserve traditional food sources; participant observation (note: researcher is a member of Bearskin Lake First Nation)

Once the on-site research had been completed, we met with Sheba Films[1] to discuss the co-production of four short videos that would highlight key features of each of our case studies. Each of our partners were asked to identify persons and places that they would like to see featured. Each partner has permanent access to these completed videos to use for promotion or to inform the public about their work. These videos are embedded into our analysis of the case studies for further enhancement of portraying the on-site dynamics of each of our social economies of food studies. Table 1 includes the URLs.

Four social economy case studies through a complexity science approach

Through our case study analysis, we show that complexity science provides a unique perspective on how each of the case studies demonstrate key characteristics from the social economy literature—that they prioritize social, community, and ecological benefits over profits, are autonomously managed, and democratic in structure. We further discuss how these initiatives re-spatialize and re-socialize conventional food system approaches as they provide social, economic and environmental benefits to their local and regional communities. We present our analysis through each case study to demonstrate how each social economy as a complex system produces outcomes that cannot be predicted by any individual actions. We look at the patterns that define a social economy through the dense and dynamic interactions that occur within each case study. Through this approach, we discuss how each of these four social economies contribute to building a local food system in Northwestern Ontario. Each social economy of food reveals that their unique contexts shape the way key characteristics of a complexity lens are exhibited.

Blueberry foraging

Wild lowbush blueberries (*Vaccinium angustifolium, nigrum var., and myrtillus*) are highly abundant in the boreal forest which dominates the forest landscape of Northwestern Ontario and have been part of the local diet, supporting food security since Indigenous people first arrived as the glaciers retreated 9,000-10,000 years ago (Dawson,1983). Foraging for food is thus an important part of the lives of many residents of Northern Ontario and has great economic, social, cultural, and environmental significance. People utilize local foods like wild blueberries as a source of nutrition and food security while building connections to land and a respect for nature. The connection to land that blueberry foraging provides is considered a greater priority than its potential for economic profit, consistent with the defining characteristics of social economy initiatives. While the social economy is exhibited differently in each case of blueberry foraging, as a whole the contributions of each add to a burgeoning resurgence of community control over

[1] https://www.shebafilms.com

local food systems. Recent shifts toward community or locally-based management promotes opportunities for the continuation and growth of blueberry foraging as a forest food social enterprise.

Each initiative demonstrates the independent and interdependent interactions of agents. Algoma Highlands is independent in determining the size of the operation, but interdependent on the community and outside markets to expand to value-added products. Two of Algoma's markets are connected to two other social economy initiatives in Northwestern Ontario—Willow Springs Creative Centre market and Cloverbelt Local Food Co-op. Moreover, to address the need for blueberry harvesters, they innovatively employ seasonal tree-planters who rotate to blueberry picking after the tree planting season has ended. This reveals an interdependence between blueberry picking, which happens in July and August, and tree planting, which operates in May and June, extending the length of seasonal employment.

The Aroland Youth Blueberry Initiative (AYBI) is an independent initiative of the community. Currently, revenue from the initiative buys equipment for the community, such as baseball gloves, bats, balls, safety equipment, and floor hockey sticks. Purchasing equipment helps those who could not afford it otherwise and provides an opportunity for the youth to become motivated and participate in recreational activities. The AYBI recognizes that they could grow into a large business but that is not the purpose or the desire of the community.

Becoming a business is seen as unnecessary because they only want to provide support to the community and there are many rules and regulations that would need to be adhered to if they decided to expand to a larger commercial operation. As the Aroland First Nation councillor Sheldon Atlookan says, "this is the best way, the way we do it now because there is nothing holding us back, nothing in our way." In other words, the current form of the initiative allows the community to retain their independence. Autonomous decision making is indeed a defining feature of social economy initiatives. Further, the initiative provides community members with a way in which they can continue to practice traditional activities, connect with one another, and be active on the land, all important components of well-being (Stroink & Nelson, 2009). Their interdependence is within the community itself, with the land, with other First Nation communities, and between the community and their consumers.

The boreal forest is in a constant state of disturbance and renewal which provides opportunity for native wild lowbush blueberries to establish since they are a pioneer species that colonize disturbed areas such as recently cut forestry operations and wildfire burned areas. Blueberry foraging, which exists within the complex adaptive system of the boreal forest, is found to be its own complex adaptive system that adapts to a constantly changing environment. Through blueberry harvesting, pickers were found to gain connections to the land and to each other. How these connections were expressed was impacted by the social and cultural values of individuals and communities. What appeared

to remain consistent was the ability of the relational values associated with the social economy to support adaptation. A blueberry patch only lasts for approximately six to ten years before being out-competed by other vegetation that diminishes the light needed for the plants to produce berries. The Nipigon municipality organizes a celebration called the Nipigon Blueberry Blast that builds community connectivity and bonding around the blueberry festivities and attracts tourists that support local businesses. The Nipigon Blueberry Blast is co-evolving based on growing interest from the community to broaden the activities that celebrate the blueberry while building community relationships, sharing of blueberry stories and making new friends through increased attraction of tourists

Feedback loops enable these social economy initiatives to respond adaptively to community and historical knowledge, to the land, and to the input from consumers. Blueberry picking is part of the identity of many people in Northern Ontario as they connect with the land, and many have lifelong memories of picking berries as a child (Stolz, 2018). An increased social network of trust is built between oneself, nature, and other community members. Through this social network, blueberry picking becomes the norm, a part of the annual cycle that mutually benefits the community as food security is increased and relationships with each other and the land are strengthened. Through blueberry picking, the AYBI incorporates values for the youth around identity and connection to the land. They are taught traditional knowledge that is passed down from generation to generation around how to harvest and care for the berries.

Arthur Shupe Wild Foods is another small-scale social entrepreneurship blueberry foraging initiative. He prides himself on a reputation for having very clean berries: "Customers have told me they can take my berries and pour them right out of the basket into the pie shell". Through this blueberry initiative he has taught many community members about respect for the land while picking blueberries. Algoma Highlands Wild Blueberry Farm developed as a result of feedback from consumers from initially selling fresh and frozen blueberries to selling value-added products such as blueberry syrup, preserves, and sauces.

Each of these initiatives have thus emerged through independent yet interdependent interactions, through ongoing adaptation to the ecosystem dynamics that support blueberry growth, and in response to feedback loops from the market and community, as individuals connect in pursuit of social and ecological benefits and sustainable revenue.

Willow Springs Creative Centre

Willow Springs Creative Centre (WSCC) is an organization that offers a range of programs out of the rural village of Lappe, located about 20 kilometers northwest of Thunder Bay. Located on a winding dirt road, there are little more than two signs along the highway that advise travellers of its location. WSCC is housed in the historical international Co-op built

by local Finnish homesteaders in 1934. It was later used as a general store, and purchased by WSCC in 2000 (Willow Springs, 2016). It is easy to imagine the old general store serving as a historic community hub, once bustling with rural locals. The smell of a wood fire hangs in the air, emanating from WSCC's signature artisan outdoor oven. There is a window that gives visitors a sneak peek into the bustling activities taking place in the commercial kitchen in the back. Painted above the window is Willow Springs' mission statement: "*To promote growth through creative expression and community development."*

WSCC is a not-for-profit organization employing four staff and governed by a volunteer board of directors (Willow Springs, 2016). They blend food related programs and activities with skills training for people with disabilities, art, and horticultural therapy. These activities generate revenues that are invested back into the mission of the organization, bridging the divide between consumers and producers of food while building social inclusion, food security and resilience. Overall, WSCC contributes to community development through improving inclusivity, accessibility, and quality of life, both for rural, as well as urban community members.

WSCC's use of revenues to prioritize social benefits as an autonomous entity places them within the spectrum of social economy initiatives. For example, WSCC runs a weekly market on Friday evenings from late June to late September. The Market is a bustling hub that incorporates food, celebrations, art activities, and music with a wide variety of food products sold by local vendors. Goods include local meat, cheese, produce, preserves, premade foods and local artisans' work as well as WSCC's signature artisan bread and wood fired pizza oven. The Market provides an opportunity for small, local area producers wanting to sell their goods. One vendor at the market shared that the sales made during the summer months at the market provide an important source of revenue, sometimes as much as $200 each week. Another vendor shared memories of humble beginnings at the Market, emphasizing that the support provided from WSCC assisted them to become vendors in larger markets or even continue in their own home-based business ventures.

Most of the vendors are women interested in running a small business from home. The Market provides them with a supportive place to begin as well as assistance with kitchen certification, advertising, and developing customer service skills. Meanwhile, revenues from the Market help to sustain WSCC and draws residents and travelers to the centre. By inter-connecting various social benefit activities with each other and with revenue generating activities, WSCC enhances its resilience through internal connectedness and demonstrates a defining feature of a social economy initiative.

The Soup and Bread Extravaganza is a social enterprise program in which food from the WSCC gardens is used to provide training and skills development opportunities for young adults with disabilities or other barriers to employment (called trainees) in an industrial kitchen. Customers subscribe to the six-week supply of fresh bread and soup for a fee that is paid up front, and the food is picked up at an accessible location in town once

per week. Mentorship for trainees is often provided by placement students in the field of social work, recreational therapy or inclusive outdoor recreation from both Lakehead University and Confederation College. This environment enables many of the trainees to have the opportunity to learn kitchen skills that can be applied in day to day living and in future employment. Feedback on the success of the Soup and Bread Extravaganza and the increasing demands from individuals wishing to take food service training, led to the expansion of the model to a Pizza and Salad program, and the introduction of local seasonal berry pies and Harvest/Holiday Baskets.

The four cofounders of WSCC were all gardeners and artists by trade. Most of their work was inspired or created from natural materials growing on and around the property. Through partnerships with professional gardeners and people trained in Horticultural Therapy, WSCC began taking a leadership role in providing opportunities for those working in the helping professions to gain skills in bringing the physical and mental health benefits of working with plants, gardens, and the unique northern landscape to their clients through a Therapeutic Gardening Certificate program.

The market, soup and bread and horticultural therapy program have multiple purposes including individual development, skill building and social benefits. Access to the market for the Lappe community allows income generation for Willow Springs, vendors and trainees. Willow Springs assists trainees and small, local vendors and as a result, creates increased community resilience. Social innovation, entrepreneurship and economic diversification are the direct result of job skills training, adjusting to the changing needs of the populations served and creating new partnerships to provide vendors with new economic opportunities.

Examining the activities of WSCC through the CAS approach reveals a social economy initiative that is rooted in place and responsive to a dynamic context, while re-investing economic gains in its social benefit activities. The activities of WSCC are grounded in the immediate landscape of the centre and proudly and uniquely northern. They leverage a large network of over 18 local community service providers to support their work and they respond promptly to feedback loops. This interdependence within a tight network of community organizations spanning the social services, food, art, and environmental sectors, enables the organization to adapt quickly and find and fill niches of community need. Examples of social services include programs for people with special needs, mental health programs, senior centres and corrections. All of the programs at WSCC have emerged from these diverse connections, with each initiative creating the momentum for subsequent initiatives.

Bearskin Lake First Nation

Bearskin Lake First Nation (BLFN) community is situated in scattered pockets of homes spread around Michikin Lake, which flows north into the Severn River, one of the largest river systems in Ontario, and empties into Hudson Bay. The land and northern flowing water system are bountiful with traditional food sources. People have lived in this area since the glaciers receded thus forming generational connections with the land and waterways as food sources. The on-reserve population is 446 with an additional 426 living off reserve. The community is part of Treaty 9 territory and part of the larger Nishnawbe Aski Nation governed area. The people of BLFN are removed from mainstream society to some degree by distance. Travelling to and from the community of BLFN takes planning and is quite expensive. Most goods (clothing, food, household items, fuel, etc.) are shipped via air and the freight alone is costly. During the coldest months of the year an ice road can be used to travel through the small town of Pickle Lake to other urban towns and cities. This short ice road season also enables people to travel by skidoo and truck to visit family and friends, and to attend outside community events such as fishing derbies, bingos, hockey tournaments, and jamborees, and to offer support in times of loss or crisis. The ice road provides the opportunity to bring in goods and reduces the cost of shipping during the two to four months that it is accessible depending upon climatic fluctuations. Travel by ice road to transport bulk food, fuel and other heavy necessities is always hazardous, made more so now by seasonal weather fluctuations.

BLFN has an airport, diesel generating station, water treatment facilities, garage, landfill site, post office, elementary school, offices for distance education and Internet high school, health centre/nursing station, two stores that sell food- externally owned Northern Store and community-owned Co-op, a police station and various offices to carry out administrative and government supported social services within the community. There are three churches, a radio station and recreation facilities also in the community. In the warmer seasons, the community has a beach and feast grounds with a stage, boat launch and tipis to celebrate events.

Food security can be challenging in northern, land-based community food systems. However, the varied relationships between First Nation communities and subsequent waves of European and then Canadian governments, and their policies and practices, as well as the ongoing expansion of the capitalist economy have produced additional challenges to food security in communities such as BLFN. This expansion of the western and capitalist approach created an imbalance for one side of the treaty signatories (Assembly of First Nations, 2011; Harring, 1998; Manuel & Derrickson, 2015).

The Elders have spoken of the broken treaty agreements that were made in the early twentieth century. One of the agreements included the development of shared knowledge and tools for harvesting new foods within the First Nation communities. This treaty agreement was never written into the official treaty document. This is one example of the historical barriers Indigenous people have faced in Northern Ontario. In spite of these

challenges, the traditional lifestyle of hunting and gathering wild foods has been preserved and is still practiced.

BLFN community members maintain a strong connection to the values, language and customs that were present prior to the time of contact with Europeans. Most members speak Anishiniimowin, or Oji-Cree, and there are efforts to continue teaching the language to the younger generations. Traditional values are revealed through the respect for all living things from young children to elders and animals on the land; by preserving the lands and waters; and using the resources from their traditional territories. Social economy began as a way of life, not as an off-shoot of the mainstream industrial economy (Nelson & Stroink, in progress). Concepts of social economy and food sovereignty merge within this context. Identity is deeply embedded in the land which is the traditional giver of food. Food is viewed as a medicine to create well-being.

BLFN places high priority on holistic social and ecosystem health benefits over profit and thus demonstrates key features of a social economy. There is a sharp distinction made between community well-being and market enhancement. The community views the outside economy and external government and its policies as "just a phase". For members of BLFN, primacy is given to the "law of the land" whereby in-depth feedback is constantly active to assess what is happening within ecosystem-human relations. While the community is very much aware of how external legislation starting with the Indian Act holds influence, from a generational perspective it still is viewed as "just a phase". Land and identity with the land supersedes all outside influences. Trust and respect are vital for community relationships and interactions to thrive.

Utchete (in Oji-Cree) is a concept referring to the idea that if you put goodness in, goodness will come back to you. As such, *Utchete* creates a state of community spiritual balance. Likewise, exhibiting negativity may create feedback that disturbs healthy positive well-being that can impact on the community and individual and family members. The BLFN community practices a culture that holds strong to distinctive Indigenous ways of knowing, balance and relationship with land and water. For example, there is resistance around some of the guidelines put out by the Ministry of Natural Resources (MNR), but community members rarely speak of it directly. Moreover, this hesitation in disrupting spiritual balance raises concern with selling fish to market because of the different stewardship approach and the potential implications of commodification and ecological protections. Nevertheless, discussions with traditional knowledge keepers are underway to consider applying for a commercial fishing license to expand local food security.

Through *Utchete*, stewardship values, not a quest for profit, drives food activities and trade. The community does not want to be dependent on charity with outside communities for food but seeks instead to work as a partner with neighboring communities to develop adaptive resiliency. Ideally, trade would be among First Nation communities that can be reasonably accessed through ice roads, boat, all-terrain vehicles and skidoos. Trade among neighboring communities can be done with stewardship values if it is done

independently of both the market economy and government money. The desire is to distribute local foods and crafts within community first before selling externally, so that the cultural significance of the craft stays within community and food is kept local when possible.

Members of BLFN have adapted contemporary tools to augment the traditional social economy of sharing food. Michikan Auction Wars is a page on Facebook for Bearskin Lake members and communities that are close enough to be reached by all-terrain vehicles and snow machines. BLFN members trade and sell baked goods and meals quickly and easily through this page on Facebook. This type of informal food economy is not a new one in Bearskin Lake, but it is one that could be further expanded on a larger scale. On the Michikan Auction Wars, there are crafts, clothing, children's toys and household items listed as well as food.

The Bearskin Lake community organizes many community events that focus on healthy living. Hunting and harvesting festivals enhance social capital and resilience by rebuilding knowledge and skills of traditional diets. These festivals and other customs are ways of giving thanks and sharing the food that has been provided. Community fundraisers such as flea markets, penny sales and bingos ensure that these festivals, celebrations, and customs are possible. During Christmas festivities, the community hosts a month-long array of activities including a frozen turkey hunt. The recreation workers place 10 – 20 turkeys all over the community during the night then host a turkey hunt the morning after. This is one example where Bearskin Lake's social economy is able to aid community members in need, while having fun together with family and friends. The band council encourages these types of activities in order to foster a positive approach to assisting those who struggle with basic needs.

These initiatives of Bearskin Lake First Nation reveal a social economy of food that has historical roots long pre-dating the capitalist economy, as well as contemporary adaptations of technology. This combination of adaptations with land and culture rooted in place plus economic activities and tools all mobilized with the aim of achieving social and ecological benefits are consistent with the defining features of social economy in a uniquely Northern manner. The processes through which these social economy features emerge in BLFN are also usefully understood with the complexity science approach. Members of the community engage with each other, with the land, and with other communities as independent yet interdependent agents in pursuit of collective survival and well-being.

Through *Utchete*, the independence of community members is respected, while the focus is on the interdependent functioning of the community as a whole. People's interactions with each other and with the land are dynamic and responsive to change. For example, access to traditional foods and ice-road access to outside food sources vary by seasons, and the reliability and safety of ice-roads increasingly vary within seasons as a result of climate change. The people continue to adapt to these pressures, as in the use of

social media to facilitate food exchange.

Cloverbelt Local Food Co-op

Before Cloverbelt Local Food Co-op (CLFC) was founded in 2014, there was a concern that the agricultural community in Northwestern Ontario was becoming smaller, disjointed, and unable to attract new producers. Overall options were limited to seasonal markets that required producers to spend ten or more hours each week traveling to these widely scattered markets rather than spending this time on farm production and processing. They could sell at the Farmers' Market, which operated in Dryden and the nearby township of Oxdrift, Sioux Lookout, Vermillion Bay and Kenora, but these markets only ran during the summer and early fall months when fresh produce was abundant. It was also difficult for some farms to have the capacity to regularly supply seasonally.

From this position where growth in local food production seemed stagnated, there emerged a desire among farmers in the Dryden area to be better connected for producer and processor support, knowledge transfer among producers and processors, and local food distribution. Explained as an adaptive cycle, the producer and processor were locked into a local food system where they were responsible for both producing or processing and marketing. They reorganized to accommodate the release of the knowledge of the land and its production capabilities, the skills of the producers and processors and the desire of regional consumers for access to naturally grown foods.

The emergence of CLFC as the first online co-op system in Northwestern Ontario overcame many of the obstacles faced uniquely by farmers and consumers wanting a food system in the north that was sensitive to the conditions where a sparse population is spread over a vast geographic area. The location in Dryden held many local advantages for the emergence of an on-line co-op as Dryden is the geopolitical centre of the region, with air, road, and railway connections from Thunder Bay to Winnipeg which makes it well situated as a central road and air distribution point for communities across the region, allowing CLFC to scale up and establish hubs in multiple locations.

The CLFC grew quickly and its vision "to become the central hub for production and distribution of local goods in Northwestern Ontario" resulted in a dramatic re-spatializing of how local foods could be distributed. Within one year, the Dryden hub was joined by a hub in Sioux Lookout and then the neighbouring city of Ignace. Four years later in 2018 there are eight regional hubs with several more potentials in the near future. A complexity approach helps to explain how local food was distributed - from only seasonal markets where each producer and processor were responsible for their own marketing to a collective approach facilitated by an online ordering system. This structure quickly led to an uptake of locations to access local food and to the number of producers, processors and consumers. While the vision was clear from the beginning, the hubs and participants were an emergent and non-linear process that is best

described as a self-organizing distributed control pattern. A community shows interest by supporting the location of a community-based hub. Diversity seems to be the pattern as each of the eight hubs has a different type of distribution centre such as a restaurant, volunteer bureau, a chamber of commerce tourist information centre, and an agriculture centre. Next the potential community hub gathers consumer members on-line.

A desire to have greater connections rather than competition among farmers in the Northern Ontario region and building connections within and between communities is a major part of everything CLFC does. This is a striking change from the previous distribution practices where each producer and processor typically attended 5 – 7 different seasonal markets each week where they competed against each other. The online marketplace means that producers and consumers re-socialize so that they are supporting each other and connecting from different communities in NWO that may not have been previously able to buy and sell from each other.

As a complex adaptive system, CLFC producers and processors are able to learn from experience, alter their behaviour in response to changes in the context such as weather patterns, fluctuations in consumer demands, and competition from the external industrial food system. The producers and processors gain quick feedback through the on-line system where the consumer has easy access to email the local food system supplier about production practices or queries about products being sold.

The online system supports autonomous management, a key characteristic of a social economy. Each supplier independently determines each week what products they have available and to which local food community food hubs they wish to distribute their produce. In this way, the online system is very democratic, another key characteristic of a social economy. The benefit to producers is that they have flexibility in what they offer. If they run out of a certain product in a given week, they simply do not have to list it. Producers can offer what is in season and adapt to weekly demands. Because producers decide how much of their product they want to make available each week, there is no pressure for them to meet specific quotas or quantities. This means they can adapt to things like changing seasons or test out new products to see how well they will sell. The online system enables a prompt feedback loop mechanism to get direct feedback from their consumers. This flexibility is one of the main reasons that CLFC has grown so significantly in such a short time. Finally, without a physical storefront, there are no additional expenses for storage or inventory. Moreover, the on-line way of operating is appealing to young producers.

CLFC's on-line system reinforces autonomous management from choice of products, to writing their own on-line information about their farm or process facility and setting weekly the prices on their products. There is no central administrative control over what one should say about their farm or processing facility nor are there any regulations on pricing of products. Instead, a complexity approach demonstrates how the processors and producers are independent and unpredictable in what they may offer each week. However, they are actively interdependent in reaching out to community consumers across Northwestern Ontario. Thus, when one supplier

changes the pricing it changes the pricing context for others. Thus, the suppliers adapt to changes either up or down in pricing.

Sharing is exemplified by encouraging support networks among producers and between producers and suppliers. In order to support this collaboration of producers and processors, CLFC began a Regional Food Mapping and Distribution Project which pinpoints the locations of local food contributors in NWO on an interactive online map[2] , including producers, distribution centres, processing facilities, and restaurants serving local food, along with a description and the contact information of each. Having all this information in one place allows consumers to know exactly where their food comes from and means that producers can see restaurants nearby to whom they might sell their products, as well as other producers with whom they might share transport, storage, or equipment. The map can also be used to plan transportation routes. New producers or those looking to expand their production can use the map to identify what types of products are not currently available and where there may be potential markets. As CLFC operates primarily online, it can be difficult for members to connect. The map helps to overcome this challenge. There is also significant potential for the map to be used in the future to establish hubs in new communities, including remote, fly-in First-Nations communities. CLFC's Regional Food Map is prefaced by a statement that prioritizes social benefit over profit. Each time a consumer, producer, processor or restaurant uses the map, they are reminded of the priority placed on CLFC as a vibrant component of community and the regional area.

Interdependence is exemplified through the community partners and other sponsors that have played an immense role in CLFC's expansion and success. These networks of individuals and organizations have supported CLFC, helped get the online co-op off the ground, and continue to work alongside it. These partnerships across the NWO region are essential for the co-op's continued success. Connections with organizations that prioritize social values drive a stronger local food movement.

As of 2018, what started with just 85 members in the Dryden community has now grown to a membership of 1,749 in nine communities across NWO, with expansion to more communities currently under way. As hubs grow larger and demand increases, CLFC adapts to each location's needs. Some hubs currently only operate once a month, but this structure is not rigid and allows for expansion along with sales. This adaptability is imperative for sustainability.

CLFC helps to strengthen the economy and social relationships within communities, increasing each community's ability to adapt to challenges, but it also strengthens ties between communities, increasing the adaptive resilience of NWO. Prioritizing social benefits over profits is a pivotal characteristic of a social economy. Previously, much of the produce in these communities was brought in from other places such as Southern Ontario and Manitoba, and the economic and social benefits of food production would leave the area. But people are starting to realize that they know their local strengths and demands better than anyone else, and producers

[2] http://www.nwofoodmap.com

can capitalize on this for their own economic benefit and more importantly the community's overall benefit. With more local producers, there is the opportunity for more facilities for processing, storage, grading eggs, etc., which in turn means more jobs, more capacity for local food, and the cycle continues. Local investments pay off.

The community greenhouse is invaluable to CLFC for a number of reasons. First, it allows the co-op to add to the amount and diversity of food that it produces, so that there are more options offered to consumers. It also lengthens the growing season, as the warm environment means that seeds can be planted earlier, and plants can continue to grow later into the fall. This is advantageous in a cool, northern climate and helps to ensure that local demand can be met. Second, the greenhouse acts as a visible structure for CLFC and for local food. Third, education is an integral part of CLFC; and the greenhouse offers a physical location for events and workshops to take place. A number of classes from local elementary schools are given tours and offered plots in the greenhouse each year, where they can learn about how their food is grown and get hands-on experience in growing themselves. Students learn about how far food in the grocery store travels to get to them and how it loses its nutritional value in the process; the advantages of growing and eating local food; and how easy it can be to do this. The food grown by the students has also been used in meal programs at the schools, so they directly benefit from the hard work they put in. Getting children interested in local food at a young age is the first step for some of these children to become the next generation of producers for the co-op. In this way the greenhouse supports not only the short-term growth of CLFC, but its long-term growth as well.

CLFC provides a self-organizing opportunity for people to start new businesses or expand their existing customer base; and there are a lot of producers whose main source of income is what they sell through CLFC. Other producers use it as a secondary source of income, or only sell at certain times of the year or when it is convenient to them. Overall, there is plenty of room for diverse economic activity; producers do what works best for them. Producers are able to share facilities, reduce costs and work together rather than compete. Although CLFC is still relatively young, it has already enhanced access to local food, supports events that encouraging consumer growth in understanding the health benefits of local food; and keeps money recycling in Northwestern Ontario. With an adaptive mindset, the co-op's growth can remain tenable, and it can continue to connect people, support them in doing what they love, educate them, and overall strengthen the NWO region.

Discussion

In this paper, we have explored four social economy of food case studies from Northwestern Ontario, demonstrating the key characteristics of the initiatives. The pursuit of social and

ecological benefits, such as enhancing access to local food or supporting community inclusion and well-being, is the prevailing purpose of each initiative, with profits re-invested in these activities. The four initiatives vary in their organizational structures, but in each one there is autonomy from government, and decision making is generally democratic. Two exceptions to this latter social economy characteristic are Algoma Highlands and Arthur Shupe Wild Foods, which are both social enterprise initiatives run by their owners. Thus, we argue that these initiatives are consistent with the defining characteristics of social economy. It is notable that not one of the people we interviewed in the case studies referred to their initiative as a social economy. This lack of self-identification with the concept of social economy has similarly been noted by Southcott (2009) in his study of Northern economies. This is an interesting finding for future research on the nature of social economies.

In addition to drawing these connections between the four case studies and the characteristics of social economy, we have demonstrated how the complexity science approach can illuminate the social economy initiatives in novel ways. As complex adaptive systems, each case study involves the interactions of a set of independent yet interdependent agents. For example, in CLFC, the producers, processors, consumers, and organizers are independent of each other but also interdependent in that their actions (e.g., how much of a given product to make available as a producer) collectively create the context to which the other agents respond with, for example, their amount of purchasing. This in turn creates the context to which the producers again adapt. Through these interdependencies, system-level properties emerge as patterns which adapt through feedback loops to the context. In these case studies, we have demonstrated that the social economy initiatives adapt continuously to aspects of their specific context. These aspects of context include the biophysical (e.g., conditions of the land favouring blueberries, changes to ice-road availability), technological (e.g., online platform enabling CLFC to form, use of social media for food trade in BLFN), social (e.g., the need for inclusive training opportunities for Willow Springs), and economic (e.g., rising demand for local food in the market for CLFC and the blueberry initiatives).

The adaptive cycle describes how system behaviour that is adaptive in context stabilizes with supporting structures until those structures reduce resilience, undermining the system's ability to adapt to changes in context (Gunderson & Holling, 2002). At this point the structure is released and a new round of experimentation and reorganization occur once again in adaptation to the context. Each of the studied initiatives has a structure that has formed through adaptation and supports stability and efficiency; some are more densely or formally structured (e.g., CLFC) than others (e.g., AYBI, BLFN), but none are deeply into the conservation phase. Indeed, there is evidence that each initiative is engaging actively in assessing and responding adaptively to their contexts, indicating that resilience is still high.

This complexity science approach allows us to view social economy initiatives as systems instead of as entities, as dynamic and adapting in context instead of as a list of features in categories. With the complexity science approach, we are able to describe how the nuances of context set the initial conditions from which uniquely patterned system properties emerge in

place. The complexity approach reveals how these social economy initiatives have emerged to re-spatialize and re-socialize the food system in Northwestern Ontario.

Conclusion

We discovered that all of our social economy initiatives have demonstrated their influence on re-spatializing and re-socializing conventional food system approaches as they provide social, economic and environmental benefits to their local and regional communities. We observed that our social economies of food systems did not simply enhance access to local foods but changed many social interchanges and relationships within each initiative. Likewise, these case studies provided unique ways to utilize the boreal forest land best to enhance access to local food. We conclude with a few examples of how each social economy has adapted within context to impact the conventional food system. The AYBI social economy at Aroland First Nation has re-socialized the food system through a social economy that brings all ages together in activities around blueberry foraging which is in stark contrast to other programs where food is accessed through strict criteria of eligibility. WSCC has re-spatialized by having a significant impact on helping local small-scale farms and processors learn how to market their produce so as to enhance access to local food. They also have drawn a strong connection between boreal forest plants and therapeutic well-being through their horticultural therapy program, providing another adaptive social benefit based on the unique context of Northwestern Ontario.

The Nipigon Blueberry Blast has re-socialized the community by adding opportunities to enhance relationships within the community and to reach out and attract tourism opportunities. In BLFN the desire to focus on an intra-trade food system among communities that can be reached by all-terrain vehicles and ice roads, in contrast to exporting to non-First Nation communities is heightening opportunities for building stronger relationships and to collectively engage in food celebrations such as the Hunter Festival. Through CLFC ‘s success in becoming the regional hub for production and distribution of local goods in Northwestern Ontario has resulted in a dramatic re-spatializing of how local foods are accessed. Arthur Schupe’s Wild Foods for decades has demonstrated the viability of a social enterprise focused on local boreal food sources of blueberries and mushrooms. Algoma Highlands has further demonstrated the viability of the local food system by initiating the first private enterprise for blueberries in Northern Ontario.

Feedback from the success of this initiative has re-socialized an area hit hard by forest and mine closures by providing new employment opportunities to expand to other native food sources such as raspberries and to expand innovative processes such as blueberry jams, wines and Mooseradish. Feedback from these successes has led to opening a store front on the TransCanada Highway that is attracting new community entrepreneurs that provides further adaptations that broaden the scope for new employment and artistic endeavours.

Through the use of a complexity science approach, we have illuminated the internal dynamics of social economy initiatives emerging and adapting within their contexts. The

initiatives described in our four case studies embody characteristics typical of social economies; yet also take on unique character elements as a result of their emergence in place. Collectively, these social economy initiatives have the effect of building a food system that re-introduces the social and spatial dimensions of the food system.

Acknowledgements: We are grateful for the support through the Northern Node of the Nourishing Communities Initiative funded by SSHRC Insight Grant *Social Economy of Food: Informal, Under-recognized Contributions to Community Prosperity and Resilience Project.* We are grateful to all the communities and individuals who shared their experiences with social economies in a northern context.

References

Amin, A., Cameron, A., & Hudson, R. (2002). *Placing the social economy*. London: Routledge.

Assembly of First Nations (2011). *Sacred Treaties – Sacred Trust: Working Together for Treaty Implementation and Advancing our Sovereignty as Nations*. AFN National Strategy on Treaty Implementation. Retrieved from https://www.afn.ca/uploads/files/archive/18.pdf.

Canadian Community Economic Development Network (CCEDNet Ontario). (2008). *A community's agenda for strengthening Ontario's communities*. Retrieved from https://www.ccednet-rcdec.ca/en/page/tools-publications.

Chantier de l'economie sociale. (2013). *Social economy reference guide*. Retrieved from http://chantier.qc.ca/wp-content/uploads/2017/08/guide-de-reference-sur-l-economie-sociale-anglais.pdf.

Charron, A. (2012). *The growth of the social economy in Quebec through the unification of the movement since 1996*. The Canadian CED Network. Retrieved from https://ccednet-rcdec.ca/sites/ccednet-rcdec.ca/files/ccednet/Alex_Quebec_paper.pdf.

Cummings & Associates. (October, 2009). *Thunder Bay district agriculture impact study*. Guelph, ON: Harry Cummings and Associates. Unpublished report. Retrieved from http://www.nodn.com/upload/documents/thunder-bay-district-agri-impact-report-final- oct.-26-2009.pdf

Dawson, K.C.A. (1983). Prehistory of the interior forest of Northern Ontario. In A.T. Steegmann Jr. (Ed.), *Boreal Forest Adaptations: The Northern Algonkians* (pp. 55-84). New York: Plenum Press.

Defourny, J., & Develterre, P. (1999). The social economy: The worldwide making of a third sector. In J. Defourny, P. Develtere, & B. Fonteneau (eds.), *L'économie sociale au Nord et au Sud* (pp 3-31). Hiva (Universiteit Leuven) et CES (Université de Liège).

Downing, R., McElroy, R., Tremblay, C., & Amyot, S. (2012). Converging agendas for the social economy and sustainable development. In R. Downing (ed), *Canadian Public Policy and the Social Economy* (pp. 329-374). Victoria, BC: University of Victoria.

Golob, U., Podnar, K., & Lah, M. (2009). Social economy and social responsibility: alternatives to global anarchy of neoliberalism?", *International Journal of Social Economics*, *38*(5): 626-640.

Gunderson, L.H., & Holling, C.S. (2002). Resilience and adaptive cycles. In L.H. Gunderson, & C.S. Holling (Eds.), *Panarchy: Understanding Transformations in Human and Natural Systems* (pp. 25-62). Washington, DC: Island Press.

Harring, S.L. (1998). *White man's law: Native people in nineteenth-century Canadian jurisprudence*. Osgoode Society for Canadian Legal History, Toronto: University of Toronto Press.

Heynan, N., McCarthy, J., Prudham, S., & Robbins, P. (Eds.) (2007). *Neoliberal environments: False Promises and Unnatural Consequences*. New York: Routledge.

Holland, J. H. (2006). Studying complex adaptive systems. *Journal of Systems Science and Complexity*, *19,* 1-8.

Holling, C.S. (1973). Resilience and stability of ecological systems. *Annual Review of Ecology and Systematic, 4*, 1-23.

Holling, C.S. (2001). Understanding the complexity of economic, ecological, and social systems. *Ecosystems, 4*(5). 390–405.

Hudson, R. (2009) 'Life on the edge: navigating the competitive tensions between the 'social' and the 'economic' in the social economy and in its relations to the mainstream.', *Journal of Economic Geography*, *9*(4), 493-510.

Hun, L.S., & Endo, C. (2016). The development of the social economy in the welfare mix: Political dynamics between the state and the third sector. *The Social Science Journal, 53*(4), 486-494.

Jennings, D. (2012). *Summary Report and Literature Review*. Auckland: New Zealand Community Economic Development Trust.

Kay, A. (2006). Social capital, the social economy and community development. *Community Development Journal*, *41*(2), 160-173.

Malloy, A., McFeely, C., & Connelly, E. (1999). *Building a social economy for the new millennium*. Derry: Guildhall Press/NICDA.

Manuel, A., & Derrickson, R.M. (2015). *Unsettling Canada: A national wake-up call*. Toronto: Between the Lines.

Matei, A., & Antonie, C. (2015). Complexity theory and the development of the social innovation. *Procedia – Social and Behavioural Sciences*, *185*, 61-66.

Mendell, M., & Neamtan, N. (2009). The social economy in Quebec: Towards a new political economy. In L. Mook, J. Quarter, & S. Ryan (Eds.), *Why the social economy matters* (pp. 32-58). Toronto: University of Toronto Press.

Mitchell, M. (2009). *Complexity a guided tour*. Toronto: Oxford University Press.

Morcol, G. (2014). Self-organization in collective action: Elinor Ostrom's contributions and complexity theory. *Complexity, Governance & Networks*, *1*(2), 9-22.

Moulaert, F., & Ailenei, O. (2005). Social economy, third sector and solidarity relations: A conceptual synthesis from history to present. *Urban Studies, 42*(11), 2037-205.

Myers, J. (2009). *In search of…Exploration of the boundaries, scope and definitions of the social economy: a discussion paper.* Social Economy and Sustainability Research Network. Mount St. Vincent University: Halifax, NS.

Nelson, C. H., & Stroink, M. L. (2014). Accessibility and viability: A complex adaptive systems approach to a wicked problem for the local food movement. *Journal of Agriculture, Food Systems, and Community Development.* (Advance online publication.)

Nelson, C. H., Stroink, M.L., & Kerk, K. (2015). *Northern Ontario: A resilient connected food hub: Case study*. Lakehead University: Food Security Research Network. Retrieved from http://casestudies.fsrn.ca/.

Nelson, C.H., & Stroink, M.L. (2019). Exploring the unique aspects of the northern social economy of food through a complexity lens**.** Submitted October, 2018 for publication in January issue of *Northern Review*.

Nokiiwin Tribal Council (nd). Retrieved from http://www.nokiiwin.com/robinson-superior-treaty.

Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action*.

Cambridge: Cambridge University Press.

Ostrom, E. (2010). Beyond markets and states: Polycentric governance of complex economic systems. *American Economic Review,* 100, 1-33.

Qian, B., Hayhoe, H., & Gameda, S. (2005). *Developing Daily Climate Scenarios for Agricultural Impact Studies*. Presented at the 16th Conference on Climate Variability and Change, January 9, San Diego, CA.

Randle, J., Stroink, M.L., & Nelson, C.H. (2014). Addiction and the Adaptive Cycle: A New Focus. *Addictions, Research and Theory, 23*(1), 1476-7392.

Restakis, J., (2006, January). *Defining the social economy – The B.C. context*. Prepared for the BC Social Economy Roundtable. Retrieved from http://www.msvu.ca/socialeconomyatlantic/pdfs/DefiningSocialEconomy_FnlJan1906.pdf.

Sims, R.A., & Baldwin, K.A. (1991). Landform features in Northwestern Ontario. *COFRDA Report 3312. NWOFTDU Technical Report 60*. Sault Ste. Marie, ON: Forestry Canada, Ontario Region.

Sonnino, R., & Griggs-Trevarthen, C. (2013). A resilient social economy? Insights from the community food sector in the UK. *Entrepreneurship and Regional Development*, *25*(304), 272-292.

Southcott, (2009). Introduction: The social economy and economic development in northern Canada. *The Northern Review, 30*, 3-11.

Stacey, R. D. (1996). *Complexity and creativity in organizations*. San Francisco: Berrett-Koehler Publishers.

Stolz, W. (2018). Coming to know through story: exploring the social economy of blueberry foraging in Northwestern Ontario. Lakehead University, unpublished thesis.

Stroink, M.L., & Nelson, C.H. (2013). Complexity and food hubs: Five case studies from Northern Ontario. *Local Environment: International Journal of Justice and Sustainability, 18*(5), 620-635.

Stroink, M., & Nelson, C.H. (2009). Aboriginal health learning in the forest and cultivated gardens: Building a nutritious and sustainable food system. *Journal of Agromedicine*, *14*, 263-269.

Walker, B., & Salt, D. (2006). *Resilience thinking: Sustaining ecosystems and people in a changing world*. Washington: Island Press.

Vol. 6 No. 3, pp. 60–87 November 2019

Canadian Food Studies La Revue canadienne des études sur l'alimentation

Original Research Article

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

Phoebe Stephens[a*], Irena Knezevic[b], Linda Best[c]

[a] University of Waterloo
[b] Carleton University
[c] Farmworks

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

*Corresponding author: phoebe.stephens@uwaterloo.ca
DOI: 10.15353/cfs-rcea.v6i3.353
ISSN: 2292-3071

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 systems[2] 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 stymy 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 13[5] 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 CEIDF 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

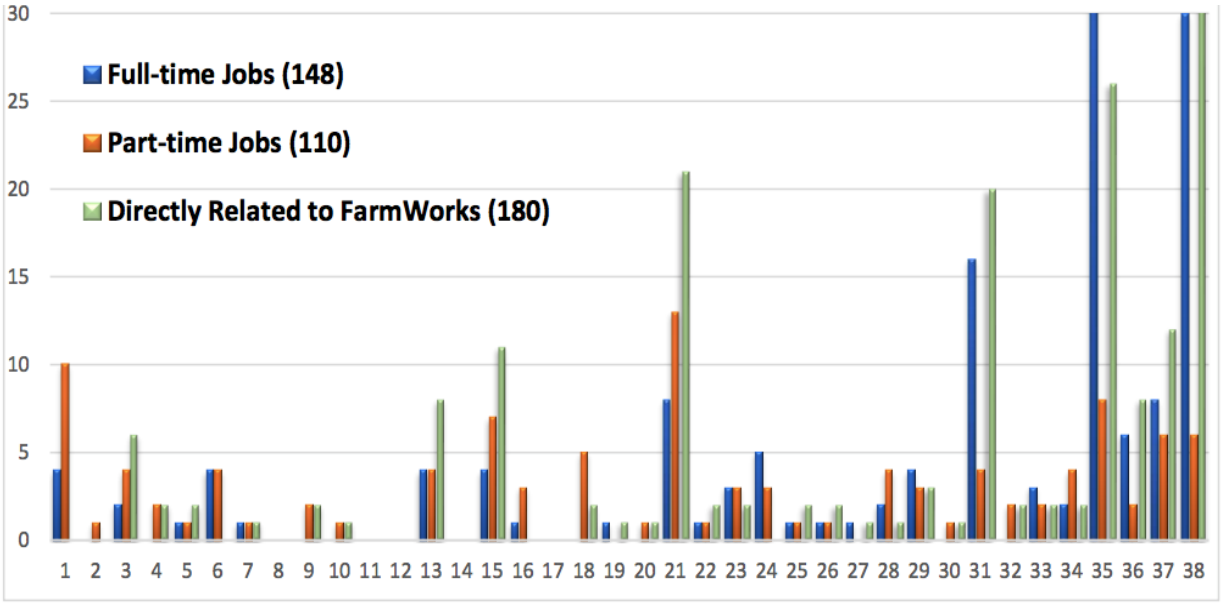
[6] Linda Best, a FarmWorks founding Board Member (and co-author of this article) has presented on FarmWorks across the country as well as in the United States. She has also brought her FarmWorks expertise to consult on numerous projects such as Vancity's Knives and Forks Community Investment co-operative.

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 province[7]. 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 ascendency 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.* Chelenham: 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.* Communique 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.

Vol. 6 No. 3, pp. 88–107 November 2019

Canadian Food Studies La Revue canadienne des études sur l'alimentation

Original Research Article

Digging through urban agriculture with feminist theoretical implements

Mary Anne Martin*

Trent University

Abstract

This article considers the value of using tools from feminist theory to explore the efforts of urban agriculture initiatives that practice to some extent outside the formal economy. Such a lens looks beyond the presence of women in specific projects to the value, extent, purpose, and principles of these projects' efforts. These community-based food initiatives strive to provide alternatives to dominant food production practices, but their efforts are often constrained by limited access to financial, labour, time, and political resources. Despite parallels between their work and what has traditionally been dubbed "women's work," the feminization of urban agriculture initiatives in Canada has received little attention in the academic literature. In this article, I consider Durham Integrated Growers (DIG), an umbrella organization supporting urban agriculture projects, practices, and values across Durham Region, Ontario. DIG is one organization studied by Nourishing Communities Research Group's *Social Economy of Food* project, which explored the potential of food systems groups working in the social economy to benefit local communities and the environment. This earlier research on DIG revealed themes involving the need for community expertise to be recognized, the role of public policy, the effects of relying on unpaid labour, and the centrality of building community. By using feminist framings to reconsider the ways DIG approaches identity, knowledge, work, and relationship, I find many areas where the organization's work could be better understood. Although more study is required on a broader range of urban agriculture initiatives, this research suggests that feminist theoretical tools such as intersectionality, social reproduction, and ethics of care may provide useful resources for illuminating and revaluating their practical, educational, and relational impacts.

*Corresponding author: marymartin2@trentu.ca
DOI: 10.15353/cfs-rcea.v6i3.356
ISSN: 2292-3071

Keywords: urban agriculture; social economy; feminist theory; community food initiatives

Introduction

From 2015 to 2016, I investigated Durham Integrated Growers for a Sustainable Community (DIG) as one of several case studies in the Social Economy of Food project undertaken by the Nourishing Communities Sustainable Local Food Systems Research Group (Nourishing).[1] DIG focuses on promoting healthier, more sustainable communities through its support of urban agriculture or "the growing of plants and the raising of animals within and around cities" (RUAF Foundation, 2019) for the purpose of food. Nourishing researchers worked with a range of food initiatives that operate in the social economy and involve informal economic activities. That is, these initiatives' goals extend beyond economic ones to include social and environmental ones and their economic activities include under-recognized ones, such as forms of bartering, unpaid labour, and self-provisioning. The case studies explored the ways in which these social economy initiatives contribute to marginalized groups and the environment, with specific regard to fostering community resilience, social capital, prosperity, innovation, and connections across difference. This Nourishing research has brought more attention to and met some of the needs of food initiatives in the social economy through the development of case study reports, participatory action research projects, webinars, articles, videos, a visioning workshop, related follow-up report, and conference panel.

Up to now, however, this collection of work within the project subtitled "Informal, under-recognized contributions to community prosperity and resilience" (Nourishing Communities, n.d.) has largely neglected gender dynamics and the broad feminist literature regarding informal work and its impacts. I contend that using feminist theoretical tools to study urban agriculture initiatives like DIG may deepen an understanding of them and how they interact with actors in their "ecosystems" such as government and funding institutions. In the following pages I consider the applicability of such tools to DIG, more as a cohesive, multi-layered organization and less as a collection of gendered individuals. One reason for this reading is to respond to a shortage of scholarly material on the feminization of urban agriculture organizations, especially in Canada and North America. Moreover, I wanted to investigate what I suspect is an implicit, under-articulated feminine coding of urban agriculture that may contribute to these forms of food production being undervalued, underfunded, and marginalized. A feminist, organization-focused reading of DIG considers the "what" of feminization to be at least as important as the "who". Vosko (2000) illustrates that feminization pertains to more than the presence of women when she

[1] The case study reports are available at: http://nourishingontario.ca/the-social-economy-of-food/case-studies-subversions-from-the-informal-and-social-economy/

describes the feminization of paid work as requiring consideration of men's increasing position in it. Swanson (2015) has also given much thought to exploring the feminine without essentializing people, dualizing genders, or dividing groups. She determines that, "it is practical to acknowledge and celebrate the feminine both in traditional meanings and through a contemporary understanding of feminine as characteristics that are not the sole domain of women" (Swanson, 2015, p. 99). Here I use the term feminization in two overlapping ways, to refer to: 1) an association with traits that have been broadly seen as feminine or attributed to women, and 2) social positioning that traditionally or enduringly affects women disproportionately.

This article begins with an overview of DIG and the literature on intersections of food-growing and gender. I proceed to introduce my methodology including the theoretical frames I draw on from feminist theory, namely intersectionality, social reproduction, and ethics of care. From there, I consider DIG's approaches to issues of identity, knowledge, work, and relationship in the light of these feminist lenses. Through this article, I seek to demonstrate how considering their application to the study of urban agriculture may constitute a worthwhile project for illuminating and revaluating urban agriculture's social and environmental impacts.

Durham Integrated Growers for a Sustainable Community (DIG)

DIG works as an umbrella organization supporting urban agriculture projects, practices, values, and policies across Durham Region in southern Ontario, Canada. Its mission states that it "supports local community food production and food security" (DIG, n.d.). DIG's work traverses municipal and urban-rural boundaries, extending to all eight of Durham's local municipalities while also focusing on the region as a whole. This broad geographic scope shapes DIG's view of urban agriculture. Although urban agriculture is often simply equated with the establishment of community gardens in cities, DIG views it as encompassing all parts of the food system (producing, processing, and distributing local food) both in and around cities and towns. Indeed, DIG supports projects like community gardens as well as urban farms, urban orchards, pollinator gardens, and local food entrepreneurs throughout Durham's urban and rural landscape.

DIG's purpose is to contribute to a healthier, more resilient community through a stronger, more sustainable food system. Towards this goal, the organization shares knowledge and skills, offers technical assistance to local urban agriculture projects, helps projects develop partnerships and funding, promotes sustainable practices and the value of local food, conducts research and policy analysis, and advocates with government. Its programs include yearly garden tours, trips designed to educate people about the food system, "Table Talk" community workshops, the "You Grow Durham Fund" for new community projects, and community presentations. Any urban agriculture project in Durham Region can become a member of DIG although member projects operate independently, seeking DIG's assistance as necessary.

Overall, main themes revealed in the Nourishing DIG case study include: "the [need for] recognition of community expertise, the role of supportive and restrictive municipal policies, the benefits and pitfalls of relying on unpaid labour, [and] a focus on fostering community" (Martin, 2016, p.4). Among social economy organizations, which emphasize human relationships and non-mainstream economic activity (McMurtry, 2004), such themes may be predictable. However, I believe that, in conjunction with other materials about DIG, they also suggest a current flowing through social economy work, particularly urban agriculture, that lends itself to a feminist analysis.

Gender and the who of food production

While my intent is not to emphasize the ways in which urban agriculture plays out differently along gender lines among individuals, the following short overview of literature on gender in food production provides a backdrop for my analysis. Although some authors have explored the ways in which gender dynamics transpire within urban agriculture projects (e.g. Buckingham, 2005; DeLind & Ferguson, 1999; Parry, Glover, & Shinew, 2005), less scholarly material has applied a feminist lens to these initiatives at a project or organizational level.

Agriculture in general continues its longstanding reputation as the domain of men regardless of the roles that women have occupied on the farm and in the farm home (Brandth & Haugen, 2010; Chiappe & Butler Flora, 1998; Moyles, 2018). On a global scale, women's farming produces about 40 percent of all food (Sachs & Patel-Campillo, 2014). Moyles (2018) contends that it feeds most of the world's population and contributes to families, communities, and "the public good" (p. 253) while, like women's work more generally, remaining largely invisible, undervalued, and missing from statistical accounting. In fact, according to Brandth & Haugen (2010), "conventional rural masculinities are rarely dismantled" (p. 426) and in fact, "no matter what [farm] women do, their discursive placement as the farmer's wife is dominant and overshadows other definitions of woman" (p. 426).

Moyles (2018) provides an example from Canadian history of this gendering of food production: during World War ll, the federal government encouraged more women into farm work by using the term "farmerettes" (p. XVII) to soften this labour's masculine coding. While their sisters headed to the factories, over a million women moved into the fields. Similarly, in urban areas, women were encouraged to grow victory gardens for their households' sustenance. However, the reluctance to identify women as actual farmers persisted, and their massive contributions, both rural and urban, to the nation's wartime food production remains absent from most historical records (Moyles, 2018).

Today, women worldwide face disproportionate barriers to material and educational agricultural resources (Sachs & Patel-Campillo, 2014). In Canada, even as women constitute an increasing proportion (28.7 percent) of farm operators (Statistics Canada, 2017), they face

continued challenges, such as general lack of faith in their abilities and a shortage of family land, equipment, and knowledge handed down to daughters (Moyles, 2018).

From an urban agriculture perspective, the findings of Parry et al. (2005) on gendered divisions of labour in community gardens strongly resemble such divisions found in the domestic realm. That is, domestic labour also relies heavily on women's cognitive work, project oversight, and delegation to men (DeVault, 1991; Fox, 2009; Miller, 2011) and those involved tend to still discount gender as a factor in such divisions (Beagan, Chapman, D'Sylva, & Bassett, 2008; Brady, Gingras, & Power, 2012; DeVault, 1991; Tronto, 2013). Brandth et al. (2010) found a similar arrangement of "catering, cleaning and caring" (p. 434) work among heterosexual couples who had transitioned from farm operations to farm tourism businesses. In fact, these couples were encouraged by their guests to demonstrate traditional gender divisions. At the same time, urban agriculture may exhibit more flexibility in gender relations than conventional agriculture does. For instance, community gardens highlight not only traditional gender roles but also the initiation by and leadership of women (Parry et al., 2005; Schmelzkopf, 1995).

Gender and the how of food production

Who grows food can significantly affect *how* food production occurs. Exclusion from farming resources and support has led women in Canada to turn to certain practices such as agricultural education, small-scale and less physically demanding farming methods, the support of other aspiring young or female farmers, creative means to secure land and to produce food, and production-centred political change efforts (Moyles, 2018). Small-scale farming tends to be a practice of women, particularly marginalized women, on a global scale as well (Sachs & Patel-Campillo, 2014).

A gendered organization is also revealed in the philosophies underlying production. For instance, Moyles (2018) asserts that, "The efforts of women farmers tend to be localized: feed the family, feed the community, and steward the land" (p. 254). She finds that these women are generally guided by a love of the land, animals, plants, seeds, and agricultural tasks, as well as the desire to create better futures and greater financial security for their families. Chiappe et al. (1998) trace a male tendency to assume control over agricultural resources and a female tendency to focus more on the needs of family and the common good back to women's naturalization as nurturers and men's separate naturalization as strong and rational beings. In particular, these authors notice women farmers prioritizing "quality family life" (p. 387) which focuses on health and time with family, something the women said was facilitated through alternative agricultural methods. These farmers also valued "spirituality/religiousity" (p. 390) and "honouring of nature" (p. 390) shown through incorporating a holistic approach and caring for the earth.

Within the context of Community Supported Agriculture (CSA),[2] DeLind and Ferguson (1999) discovered a tendency for men to focus on new friendships, skill development, and self-improvement while the women in their study centred more on tranquillity, holistic approaches, responsibility to the farm, and opportunities for community-building, especially through social responsibility and democratic approaches. Generally, the women "were less willing to isolate issues, separate functions, and minimize feelings" (p. 196), focusing instead beyond, often broadly beyond, their own needs. This collective and other-focused orientation may constitute not only an alternative approach to food production, but a necessary one. Indeed, through investigating a CSA farm, Sumner, Mair, and Nelson (2010) discovered that culture and the relationships built with the community not only *contribute to* alternative agriculture initiatives, but also help *to sustain* those initiatives and their ability to provide people with food. "Culture" here was evidenced through "civic engagement, community and the celebration of local food" (p. 58).

Overall, the literature reveals that women continue to play a substantial role in agriculture but to experience barriers there to access and recognition. The response by many women to these gendered exclusions has been to approach agriculture in more traditionally feminine ways, essentially bringing it closer to the smaller, holistic, and relationship-focused approaches of urban agriculture.

Methodology

Through this research, I set out to explore the value of feminist lenses for exploring urban agriculture organizations. To do so, I conducted a close review of the *Social Economy of Food* project's outputs related to DIG. These include a case study, participatory action research project, webinar, and video. I also draw on my own direct participation with DIG as a volunteer board member. I proceed to reconsider DIG as an organization through the lens of feminist theoretical tools that provide ways to elucidate under-represented perspectives. These overlapping tools, described below, include intersectionality, social reproduction, and ethics of care. This process responds in part to calls for greater feminist analysis of foodwork and food activism (Allen & Sachs, 2007; Brady, Parker, Belyea, & Power, 2018; Brady et al., 2012).

[2] Community Supported Agriculture (CSA) refers to a farm marketing strategy whereby farmers share both the bounty and risks of an upcoming growing season with their customers by selling them produce shares at the beginning of the season. The farmers then distribute their harvests to their customers in the form of weekly or bi-weekly produce boxes during the growing season. Because CSAs may be located in rural or urban settings, and may incorporate both conventional and alternative farming practices, as a category they straddle the boundary between general agriculture and urban agriculture.

Intersectionality

From a home in feminist theory, the concept of intersectionality has traveled across disciplines and sectors well beyond gender studies and activism. Simply put, an intersectional lens examines the ways in which differences among people and among structures of inequality interconnect and shape individual perspectives and experiences (Hesse-Biber & Leckenby, 2004; Hill Collins, 2009). According to Cho, Crenshaw and McCall (2013), it is "inextricably linked to an analysis of power" (p. 797). The academic development of intersectionality stems back to the 1980s and the identified need "to focus attention on the vexed dynamics of difference and the solidarities of sameness in the context of antidiscrimination and social movement politics" (Cho et al, 2013, p. 787). Early understandings of intersectionality were more mechanistic, focusing primarily on intersecting factors in isolation. In time, these "additive" (Yuval-Davis, 2006, p.173) approaches were largely dismissed in favour of more "mutually constitutive" (p.173) approaches that explore the specific *ways* in which forms of difference and structures of inequality influence each other. For instance, Hill Collins (2009) uses the term "matrix of domination" (p. 18) to conceptualize the ways that power is used to organize multiple systems of inequality and their varying significance depending on situation, time, and place. Critiques of intersectionality concern an overemphasis on identity and related de-politicization (Collins & Bilge, 2016) and a neglect of both transnational interrelatedness and interscalar connections such as those between local and global scales (Patil, 2013).

Social reproduction

Social reproduction constitutes another way that feminist scholars, especially feminist political economists, conceive of power relations and make visible underrepresented experiences and perspectives. According to Bezanson (2006), social reproduction "encompasses the work that must be done in order to ensure that people at least survive and ideally thrive and develop, as well as to ensure that the economic system is perpetuated" (p. 26). This form of labour goes largely unrecognized in both social policy (McKeen, 2004) and capitalist systems (Acker, 2006), although it is foundational to the functioning of both. Instead, it often remains unpaid or underpaid, women-performed, and devalued (Bezanson, 2006; Luxton, 2006). Although a central struggle has regarded how to reconcile the materiality, political analysis, and market focus of a social reproductive lens with the affective nature of the caring work involved (Dowling, 2016; Duffy, 2011), conceptions of social reproduction have over time expanded to include cognitive and emotional labour, along with practical labour (Luxton, 2006).

Ethics of care

If a social reproduction lens concerns itself with the bread of materiality, an ethics of care approach addresses the just-as-essential roses of connection. Although both perspectives are concerned with caring labour, social reproduction focuses more on the labour itself and its positioning and function within economic and political structures, while an ethics of care considers the interrelatedness of and interdependencies within broadly defined communities (Neysmith, Reitsma-Street, Baker-Collins, & Porter, 2012). For instance, Tronto's (2013) "feminist democratic ethics of care" (p. 29) views people not only as existing within relationships, but also as all providing and receiving care in their lifetimes. Swanson's (2015) "ecofeminist ethics of care" (p. 96) expands the circle to reveal the interdependence of all life on Earth. Although adversarial and economy-preoccupied political climates leave little space for discussions of care, essentially relocating it even further from what Smith (1999) refers to as the "main business" (p. 37) of capitalism, a focus on care is necessary in all forms of leadership (Swanson, 2015; Tronto, 2013). Tronto (2013) cautions against conceptualizing care as the natural purview of women, based in women's love, commodifiable, or beyond the scope of politics. Instead, she contends that determining how to care for society's members is crucial for solving obdurate global problems like terrorism. Swanson (2015) likewise contends that, "Only in caring is there hope for humanity, and a healthy future on this planet" (p.101).

Results: Uses of feminist theoretical tools

A close review of DIG materials revealed four terrains on which the organization is feminized. These include identity, knowledge, work, and relationship. Here I consider each of them, how they function through DIG, and what feminist lenses may reveal about them.

Identity

Before considering DIG specifically in this section, I look at the relationship between rural and urban food growing. Even if sites of urban food production carry a sense of novelty today, food-growing in cities is far from new. Despite this, the position of the term *urban agriculture* at the intersection of what is conceived to be urban and what is conceived to be agricultural continues to constitute a conceptual dissonance, an unimaginable entity. However, an intersectional analysis may provoke questions about what it means to both produce food and exist in urban spaces. The popular Grain Farmers Ontario-initiated campaign "Farmers Feed Cities" which ran for about a decade until 2014 provides a useful illustration (Brodhagen, 2014). The campaign title highlights a crucial relationship between rural agriculture and urban eaters, but it also serves to keep them conceptually separate by distinguishing food producers from city dwellers, many of

whom feed cities in diverse ways. However, an intersectional lens can consider food growing along multiple axes of power. It can challenge assumptions of rurality in food-growing by reconsidering, not only the location of food production, but also entrenched assumptions of White, settler, masculinized, and for-profit profiles of food-growing associated with the concept of "farmer."

Despite its city-associated nomenclature, urban agriculture is regarded by DIG as "the growing, raising, processing and distribution of food and food-related products within towns, cities and urban centres (intra-urban) or around them (peri-urban) in an environmentally responsible manner" (Martin, 2016, p.1). One of DIG's goals has been to encourage its local municipal governments to adopt such a definition that similarly extends beyond strictly urban sites and into more rural areas. Indeed, one successful small-town Durham community garden borders both an elementary school and many acres of farmers' fields. DIG's goal is not to resituate conventional agriculture into rural spaces but to show how the practices of and lessons learned from urban agriculture are replicated across communities of all sizes.

Beyond overlooking the occurrence of urban agriculture in rural spaces, some municipal leaders do not see the value of projects like community gardens in rural areas. Instead of considering the multiple possible social and environmental benefits (Levkoe, 2006; Santo, Palmer, & Brent, 2016; Urban Agriculture Working Group, 2013; Winne, 2008), some municipal staff have stated that they see these projects' food-producing roles as redundant in areas where agriculture is so close by (Martin, Drummond, & Znajda, 2016). Considering the social reproductive identity of urban agriculture could raise questions about the prioritization of production through food-growing operations that are large, for-profit, only sometimes produce for local consumption and, as described earlier, traditionally seen as a masculine endeavour. Expanding the definition of urban agriculture is necessary for raising the visibility, validation, and ultimately the support of projects outside urban areas, such as those in Durham's hamlets and villages.

A problem with narrower municipal definitions of urban agriculture is that they can impede policy support of, for example, emergent rooftop gardens or projects in small towns. Supportive policies can attest to the value of projects and help to make their work possible and fruitful while restrictive policies may challenge the feasibility of some of these projects. Likewise, the absence of relevant policies, such as those around edible front yard gardens, greenhouses, rooftop gardens, and urban farms, can leave community groups uncertain of their rights and leave their work unvalidated and decisions about it subject to municipal staff discretion (Martin, 2016). Importantly, the usage of an intersectional lens may reveal the differential effects that such policy contexts can have on people and projects. For instance, insurance requirements and sale prohibitions can compromise projects that already have few financial resources, while zoning by-laws can disproportionately affect food generation and community-building in lower income, marginalized, or isolated communities that need them. Notably, DIG has advocated for local small entrepreneurs who are prevented from growing microgreens in warehouses on industrial land not zoned for food growing. Using feminist

intersectional and social reproduction lenses to consider the issue of identity in the work of DIG reveals that many of the barriers it faces derive from an overly simplified rural/urban binary.

Knowledge

Applying both an intersectional and ethics of care lens to DIG's deployment of knowledge reveals the extent to which DIG is nurturing marginalized knowledges. Within DIG, as with many urban agriculture groups, knowledge is developed on the ground (often literally) as people work together to determine the best paths to address their communities' own food-related health, social, and environmental priorities. Through experience, members develop understandings, not only of food production, but also of project-building and the specific needs and strengths of their communities. DIG encourages this process by providing support and guidance as needed while respecting each group's need to guide itself and make its own decisions and mistakes along the way. Furthermore, the organization acts as an intermediary by exploring, gathering, and synthesizing projects' concerns and transmitting them to municipal governments and conversely, sharing municipal policy with DIG members.

Nonetheless, DIG has struggled to have the community-based expertise of urban agriculture recognized and valued. In general, the organization has found that local governments have overlooked knowledge developed at the community level by, for example, favouring the presumed expertise of municipal staff or inviting only authorities from areas outside the region such as Toronto to events to share knowledge about urban agriculture. However, knowledge from the ground is crucial for interrupting a cycle whereby that which is not imaginable, understood, or valued by policy makers is not protected in policy, and that which is not supported in policy remains difficult to realize on the ground.

The legitimacy and value of diverse origins of knowledge, especially those rooted in lived experience, have a long history of attention in feminist theory. Not only have feminists challenged assumptions of knowledge as singular, discoverable, and disembodied, they have also contextualized knowledge and reassigned expert status to those who live closest to the effects of uneven relationships (Haraway, 1988; Hill Collins, 2009; Scott, 1991; Smith, 1999).

An intersectional lens can bring to light multiple legitimate knowledge sources by prompting questions about whose knowledge matters. By interrogating bases of assumed knowledge such as formal education, experience, geographical positioning, financial resources, and political capital, an intersectional lens may point to exclusions of knowledge types and knowledge holders. At the same time, it could bring into focus the *similarities* between urban agricultural and political actors- and in doing so might illuminate knowledge sources, such as traditional Indigenous, low-income, or newcomer voices, that may be underrepresented in both groups. As Allen (2010) argues, local food initiatives can interrupt inequalities and exclusions but, without critical analysis, they can also reproduce them. For instance, recognizing its need for

greater understanding of Indigenous food production, in recent years DIG has organized trips to learn about Anishinaabeg relationship with wild rice.

In some ways DIG is shaping its knowledge to be recognizable to the "main business" (Smith, 1999, p. 37). The president of DIG's board of directors is clear on wanting DIG's work to be taken seriously, as she shows in discussing a draft of promotional materials for the organization:

> We are not a network of gardens, we are a collaboration of urban ag and food related projects. […] References to gardens will not help us get funding for the kinds of things we want to do – like support trips to educate, develop new experts through Table Talks, fund new garden start up and renewal projects at established gardens, mentor, develop materials and offer workshops, find funding for commercial urban ag projects, advocate with municipalities, partner with municipalities, organizations, individuals and entrepreneurs, symposiums etc. I think it [the promotional material] might paint us a little too much as just nice people with gardens not people out to make a difference." (Mary Drummond, personal communication, July 9, 2018)

This quote shows a funding-driven translation that, while highlighting DIG's educational and advocacy roles, also shifts focus from "being" to "doing" by downplaying the relationship-focus of "nice people" and instead highlighting actions that "develop," "fund," "advocate," and "partner." DIG is practicing such translation by introducing an annual member project survey to collect metrics around project members, food production, and distribution to various organizations. By starting to quantify the impacts of local projects, DIG is attempting to make the effects of urban agriculture intelligible to funders and policy makers. In addition, DIG's[3] urban agriculture policy scan research provided the organization with opportunities to collaborate with municipal staff but it also largely omitted the relational benefits that occur within urban agriculture projects.

Work

The use of social reproductive and intersectional lenses to consider the work of urban agriculture can reveal distinct parallels with the ways in which domestic labour is performed and the extent to which it is supported in society. DIG's substantially unpaid labour is a valuable and constrained resource that makes possible almost all of what the organization does. Nearly all of the work that occurs at the board, project coordination, and project participation levels is unpaid. On the one hand, the choice to avoid hiring staff has allowed DIG to operate on a smaller budget and to avoid investing much time and effort into grant proposals or employment-related

[3] This research occurred in partnership with the Durham Food Policy Council and Nourishing Communities.

administration. This choice may also contribute to a more intentional workforce where workers participate for reasons other than income. However, recognizing the need for projects to have the resources to sustain themselves and members to have compensation and validation for the work they do, DIG is looking at ways that projects and their members can earn money from the food that they produce or process. To that end, it has advocated for greater flexibility in home production regulations so that growers may process and sell their own food.

The actual option for individuals to engage in unpaid labour in the community can, in fact, be both constrained by and produced through one's own or one's family members' paid work. For example, participating in a garden project for no pay requires time free from other obligations and made available through income from elsewhere. As an example, DIG's president traces her own allocation of substantial volunteer time back to the opportunity provided through the income from her partner's full-time job. Conversely, individuals' own employment, like her part-time employment since her partner's retirement, can leave them with less time to devote to such endeavours.

DIG's work to nourish individuals, families, communities, and eco-systems constitutes a form of social reproduction. It provides ways of meeting nutritional, relational, physical, and educational needs while, in some ways, upholding the dominant political-economic apparatus.[4] The organization's patchwork of unpaid labour, donations, memberships fees, grants, and fundraising evokes feminist political economy scholars' observation of women's social reproductive role as household "shock absorbers" (Bakan & Stasiulis, 2005, p. 24) for resource shortages. That is, over time women have used resourceful, often informal, methods to ensure that household members' needs are met (Little, 1998; Luxton, 1980; Luxton & Corman, 2001), a responsibility that has increased as neoliberal policies and logics have emerged (Bezanson, 2006; Neysmith et al., 2012). Projects like community gardens similarly make inventive use of available resources, in the attempt to provide participants and their households with some padding against household food insecurity and social exclusion.

Still, DIG member projects experience pressure from municipalities to expand the number of community garden plots, reduce garden waitlists, and contribute more produce to food banks. In a similar vein, feminist scholars have found women's unpaid caring labour to be treated within and outside the home as infinitely expandable (Bakan & Stasiulis, 2005; Bezanson, 2006; Braedley, 2006; DeVault, 1991; Luxton & Corman, 2001). Furthermore, the combination of limited organizational resources and boundless commitment by some in the organization can lead them to overextend themselves, similar to what is observed in the domestic realm where women "often fail to take care of their own nutritional needs" (Allen & Sachs,

[4] In fact, McClintock (2018) sees urban agriculture work as a form of social reproduction performed primarily by women for household benefit. However, he contends that this labour generates "sustainability capital," the benefits of which are reaped by municipal governments, developers, businesses, and other organizations who each promote and profit from the comparative greenness of their communities, especially city centres. He also sees urban agriculture as contributing to an "ecogentrification" (p. 580) that draws more White and privileged residents.

2007, p. 10). For example, coordinators of community gardens, especially those gardens that are on municipal land or are the only ones in their communities, experience much pressure to create additional plots, which creates additional work. For the goals of organizations like DIG to be realized, their social reproduction must be supported. As Dowling (2016) asserts, "Having the means, time and capacity to engage in social reproduction is the key to the task of social and ecological transformation towards a socially and ecologically sustainable society" (p. 463).

Intersectional analysis may be a valuable tool here for exploring the social reproductive work of urban agriculture. The profile of any urban agriculture initiative reflects a blend of characteristics such as gender, age, ability, caregiving responsibilities, ethno-racial-cultural background, employment status, and income. It suggests, for example, who is available, who can afford to participate, who can participate unencumbered by other caring responsibilities or by unmet accessibility needs, who feels welcome, who cares to participate, and sometimes who is expected to devote more time and effort. Consideration of the intersections that affect participation may enrich understandings of urban agriculture by offsetting uncritical and ideological readings of participation or non-participation. That is, it can serve as a reminder that participating in urban agriculture activities may not be practical, feasible, or expected for everyone. In doing so, it may not only lead to recommendations for making urban agriculture projects more inclusive, but it may also help to guard against sweeping assertions about the potential of urban agriculture projects. Instead it may reveal the necessity for greater state- and other structurally-based interventions around issues such as food insecurity, biodiversity, and social inclusion.

Relationship

A final area that lends itself to a feminist analysis is DIG's focus on relationship. While urban agriculture constitutes a site of labour and social reproduction, it also reveals a collective ethic of care which focuses on interrelationships and interdependencies. Feminists have long argued for recognizing the significance of care. According to Duffy (2011), "We should be able to value relationship without reducing care to the warm and fuzzy" (p. 140). An ethics of care lens reveals both the existence and the power of relationship nurtured through urban agriculture.

Some of the well-documented value of urban agriculture projects in general includes community dimensions such as the promotion of social capital, community building, social inclusion, and civic engagement (Levkoe, 2006; McClintock, 2018; Santo, Palmer, & Brent, 2016; Winne, 2008). Some authors even assert that community gardens centre more on growing community than growing food (Parry et al., 2005; Winne, 2008). Through its emphasis on care and relationship-building, urban agriculture may even have more in common with the home kitchen than with conventional agriculture. For example, community gardens have been found to take on many of the caring functions of the domestic space (Hondagneu-Sortelo, 2017;

Schmelzkopf, 1995). In fact, Hondagneu-Sortelo (2017) contends that, for the Latino immigrants she studied in Los Angeles, community gardens formed versions of:

> hybrid-domestic places where basic social reproductive activities of food production, meal preparation, and eating occur, where children are nurtured and protected, where the sick are healed and as sites providing inviting places for moments of leisure, socializing and for quiet individual reflection (p. 26).

Relationships develop throughout DIG in many ways. For instance, in community garden settings, they grow informally out of the exchange of knowledge, skills, seeds, and plants. DIG and its member projects also actively cultivate opportunities for relationships to develop across differences such as gender, age, culture, income, and ability, through means such as low or sliding membership fees, children's projects, free public workshops, and accessible garden plots and pathways. Some gardens even use benches, large shade trees and gardener gatherings to promote connection between people. Overall, across DIG's member projects, working together in the gardens helps people to develop "understanding, mutual aid, and friendship across difference" (Martin, 2016).

An ethics of care perspective serves as a reminder of the value of growing relationships and community, that which lies beyond Smith's (1999) "main business" (p.37) of capitalism. As Gibson-Graham (2006) similarly point out,

> While some types of economic activity are seen as essential to social survival, and therefore necessitous of intervention, others are viewed as frosting on the social cake. Though it may be widely recognized and lamented that child-care and its low wage providers are in difficult economic straits, policymakers will remind us that unless we take care of manufacturing, we are all up the creek." (p. 107).

DIG also shows how urban agriculture's potential for community-building extends beyond its own circles in its own place and time. Care is shown through the provision of food for growers' families, local schools, food banks, community centres, churches, local businesses, and other groups. In addition, through activities such as awareness raising, orchard growing, pollinator support, and composting, the organization helps to provide for human and non-human entities today as well as into future seasons and generations. Overall, DIG reveals a focus on building relationships among individuals, communities, and nature.

There is more to this relationship building than what Duffy (2011) calls the "warm and fuzzy" (p. 140). DeVault (1991), in her research on domestic caring and food work, contends that care is undertaken partly an expression of love, identity, and creativity, partly as a (subservient) duty, and partly as a response to recognizing that this is what is needed to ensure the survival and cohesion of the group. DIG is particularly motivated by this third aspect. It operates on the conviction that addressing critical problems of survival like food insecurity and

climate change requires "all hands on deck" working together—and that this collective action is facilitated through the meeting of both material and relational needs. This ethos is represented in DIG's vision, "Growing Food and Community" (DIG, 2019).

Using an ethics of care perspective for urban agriculture projects also exposes interdependencies that extend beyond the interpersonal. It reveals webs of dependence that tie gardens' success to the personalities of their membership as well as factors such as weather, pests, and regulations. As DIG's president points out, urban agriculture projects by their very nature help to level unequal playing fields since, for example, everyone in a garden is affected by rain, droughts, pests, or frost (Mary Drummond, personal communication, 2016). I would argue that the illumination of such interdependencies cultivates a key to addressing one of this generation's toughest problems: humility. Duffy states (2011), "At its most theoretical level, care has been presented as a practice or ethic that encompasses interdependence, nurturance, and relationship, in contrast to the dominant US values of competition, individualism, and rationality" (p. 12). In an era of hyper-individualism, intensified anthropocentrism, and adversarial politics, it may prove useful to build relationships, recognize interdependencies, and proceed with humility in approaching the daunting tasks of mending damages to environmental, political, and social systems.

Discussion and conclusion

Food production has a long history of being painted as a male endeavour regardless of women's significant efforts in it. As described earlier, a look into how women grow food has found them to focus more on developing community, engaging in small-scale production, caring for the land, and feeding those around them, all of which are consistent with practices and priorities of urban agriculture. Urban agriculture organizations like DIG form a part of 1) the social economy where their social and environmental goals surpass their economic ones, which overlaps with 2) the informal economy where much of what they do occurs outside of formal economic practices. Such goals and practices often bear a feminine coding that may leave these organizations undervalued, underfunded, and marginalized. However, little scholarly work addresses the feminization of urban agriculture organizations themselves in Canada and North America. I refer to feminization as 1) an association with traits that have been broadly seen as feminine or attributed to women and 2) social positioning that traditionally or enduringly affects women disproportionately.

This article reflects an attempt to address this gap in the literature. It considers the applicability of feminist theory tools such as intersectional, social reproduction, and ethics of care lenses for exploring urban agriculture organizations such as DIG. By venturing beyond an emphasis on gendered divisions of labour or philosophies *among individuals* in such initiatives, I have tried to shine more light on the social positioning and impact of these organizations

themselves. Overall, a review of DIG-related materials demonstrates a certain feminization of the organization in the areas of identity, knowledge, work, and relationship.

First, DIG has needed to advocate for policy makers to more accurately consider the multi-faceted identity of urban agriculture in Durham Region. McKeen (2004) contends that political activity is about changing *meaning* since policy both provides language and creates actors. In this case, DIG is attempting to change meaning by helping to ensure that local policy language is informed by an understanding of the complexity and potential of local urban agriculture. The challenge of asserting identity bears a resemblance to the challenge of women and marginalized people to be recognized—and valued—in their complexity. In DIG's case, an intersectional analysis can challenge all involved to reconsider assumptions about who feeds whom, who produces food, and where they do so - because these considerations in turn determine the language that works to determine, through policy, who produces food and who benefits from it.

Second, the community-based knowledge of urban agriculture projects and their members may be overpowered by knowledge grounded in assumptions about, for example, progress and productivity. An intersectional lens can reveal multiple sources of valid knowledge and the power structures that allow some of them to be voiced above others. The feminizing inaudibility of women's voices and women's resulting need to translate into the language of louder voices can be seen in DIG's need to translate community-based knowledge for policy and funding audiences in order to be understood and valued.

Third, the work of DIG demonstrates a heavy reliance on unpaid labour, patterns of shock absorbing, and perceived expandability, all of which feminists identify in domestic social reproductive work. DIG's work can benefit from intersectional and social reproductive lenses which demand attention to who is doing and who is affected by the work to meet urban agriculture goals. Specifically, these lenses encourage the exploration of who does, who can, and who should take responsibility for sustaining individuals, communities, and ecosystems.

Finally, DIG's focus on care through relationship building and community building lends itself to an ethics of care perspective which raises questions about interrelatedness, interdependence, vulnerability, and humility- and the various webs of connection that urban agriculture helps to support. Far from a sentimental concept, care as perceived through an ethics of care lens views connection as essential for addressing today's most intractable dilemmas. Once again, feminization is visible with DIG through its provision of and reasons for providing care. DeVault (1991) explains this feminization by saying,

> Through caring work, women have participated in the activities that structure their subordination in society. They have participated not only because of social coercion, but also because of deeply-held beliefs about connection and people's responsibilities to one another, and commitments to fostering growth and relationship (p. 2).

In the end, this article suggests that feminist theoretical tools may provide useful resources for illuminating and revaluating the impacts of urban agriculture organizations. However, it represents an exploration of just one set of feminist theoretical tools as they pertain to the themes of one organization. Understandings of urban agriculture could benefit from a deeper dive into feminist theory, its approaches, history, and debates, and how they apply to a range of urban agriculture organizations. In doing so, it will be important to go beyond feminization to consider how urban agriculture and food production are also racialized, classed, and colonized.

It is not DIG's association with feminine coding—through complex identities, knowledge from the ground, social reproduction, and relationship—that is problematic. Instead it is the way in which these matters are all feminized in their social positioning. That is, they are all lamentably undervalued and marginalized. If organizations like DIG are to help build healthier, more resilient communities through stronger, more sustainable food systems, these matters will need shift into the "main business" of our economic, social, and political systems. Through awareness building, reframing, and advocacy, urban agriculture organization like DIG work to prompt this shift.

Acknowledgements: Special thanks for the helpful guidance from my anonymous reviewers, the board members of DIG, Stephanie Dotto, and the special edition editorial team.

References

Acker, J. (2006). *Class questions, feminist answers*. Lanham, Maryland: Rowan & Littlefield Publishers Inc.

Allen, P. (2010). Realizing justice in local food systems. *Cambridge Journal of Regions, Economy, and Society*, *3*(2), 295-308.

Allen, P., & Sachs, C. (2007). Women and food chains: The gendered politics of food. *International Journal of Sociology of Food and Agriculture*, *15*(1), 1-23.

Bakan, A., & Stasiulis, D. (2005). *Negotiating citizenship: Migrant women in Canada and the global system*. Toronto: University of Toronto Press.

Beagan, B., Chapman, G., D'Sylva, A., & Bassett, B.R. (2008). 'It's just easier for me to do it': Rationalizing the family division of foodwork. *Sociology*, *42*(4), 653-671.

Bezanson, K. (2006). *Gender, the state, and social reproduction: Household insecurity in neo-liberal times.* Toronto: University of Toronto Press.

Brady, J., Gingras, J., & Power, E. (2012). Still hungry: A feminist perspective on food, foodwork, the body and food studies. In M. Koc, J. Sumner & A. Winson (Eds.), *Critical perspectives in food studies* (pp. 122-135). Don Mills, Ontario: Oxford University Press.

Brady, J., Parker, B., Belyea, S., & Power, E. (2018). Filling our plate: A spotlight on feminist food studies. *Canadian Food Studies*, *5*(1), 1-7.

Braedley, S. (2006). Someone to watch over you: Gender, class, and social reproduction. In K. Bezanson & M. Luxton (Eds.), *Social reproduction: Feminist political economy challenges neo-liberalism* (pp. 215-230). Montreal: McGill-Queen's University Press.

Brandth, B., & Haugen, M.S. (2010). Doing farm tourism: The intertwining practices of gender and work. *Signs: Journal of Women in Culture and Society, 35*(2), 426–446.

Brodhagen, A. (2014). Farmers feed cities campaign has been retired. Retrieved from: https://www.farms.com/ag-industry-news/farmers-feed-cities-campaign-has-been-retired-316.aspx

Buckingham, S. (2005). Women (re)construct the plot: The regen(d)eration of urban food growing. *Area, 37*(2), 171-179.

Chiappe, M.B., & Butler Flora, C. (1998). Gendered elements of the alternative agriculture paradigm. *Rural Sociology 63*(3), 372-393.

Cho, S., Crenshaw, K. W., & McCall, L. (2013). Toward a field of intersectionality studies: Theory, applications, and praxis. *Signs, 38*(4), 785-810.

Collins, P., & Bilge, S. (2016). *Intersectionality*. Cambridge: Polity Press.

DeLind, L.B., & Ferguson, A.E. (1999). Is this a women's movement? *Human Organization*. *58*(2), 190-200.

DeVault, M.L. (1991). *Feeding the family: The social organization of caring as gendered work.* Chicago: University of Chicago Press.

DIG. (n.d.). *What we do*. Retrieved from: http://www.durhamdigs.ca/what-we-do/.

DIG (2019). DIG: Durham Integrated Growers for a Sustainable Community [Brochure].

Dowling, E. (2016). Valorised but not valued? Affective remuneration, social reproduction and feminist politics beyond the recovery. *British Politics*, *11*(4). pp. 452-468.

Duffy, M. (2011). *Making care count: A century of gender, race, and paid care work.* Piscataway, New Jersey: Rutgers University Press.

Fox, B. (2009). *When couples become parents: The creation of gender in the transition to parenthood.* Toronto: University of Toronto Press.

Gibson-Graham, J. K. (2006). *The end of capitalism (as we knew it): A feminist critique of political economy.* Minneapolis: University of Minnesota Press.

Haraway, D. (1988). Situated knowledges: The science question in feminism and the privilege of partial perspective. *Feminist Studies*, *14*(3), 575-599.

Hesse-Biber, S., & Leckenby, D. (2004). How feminists practice social research. In S.N. Hesse-Biber and M.L. Yaiser (Eds.) *Feminist perspectives on social research* (pp. 209-226). New York: Oxford University Press.

Hill Collins, P. (2009). *Black feminist thought: Knowledge, consciousness, and the politics of empowerment.* New York: Routledge.

Hondagneu-Sortelo, P. (2017). At home in inner-city immigrant community gardens. *Journal of Housing and the Built Environment, 32*, 13–28.

Levkoe, C. (2006). Learning democracy through food justice movements. *Agriculture and Human Values*, *23*(1), 89-98.

Little, M. (1998). *No car, no radio, no liquor permit: The moral regulation of single mothers in Ontario, 1920-1997*. Toronto: Oxford University Press.

Luxton, M. (1980). *More than a labour of love: Three generations of women's work in the home.* Toronto: Women's Educational Press.

Luxton, M. (2006). Feminist political economy in Canada and the politics of social reproduction. In K. Bezanson & M. Luxton (Eds.) *Social reproduction: Feminist political economy challenges neo-liberalism* (pp. 11-44). Montreal: McGill-Queen's University Press.

Luxton, M., & Corman, J. (2001). *Getting by in hard times: Gendered labour at home and on the job.* Toronto: University of Toronto Press.

Martin, M.A. (2016). *DIG (Durham Integrated Growers for a Sustainable Community): A Case Study*. Centre for Sustainable Food Systems, Wilfrid Laurier University.

McClintock, N. (2018). Cultivating (a) sustainability capital: Urban agriculture, ecogentrification, and the uneven valorization of social reproduction, *Annals of the American Association of Geographers*, *108*(2), 579-590.

McKeen, W. (2004). *Money in their own name: The feminist voice in poverty debate in Canada, 1970-1995.* Toronto: University of Toronto Press Incorporated

McMurtry, J.J. (2004). Social economy as political practice. *International Journal of Social Economics, 31*(9/10), 868-878.

Miller, T. (2011). *Making sense of fatherhood: Gender, caring and wor*k. Cambridge: Cambridge University Press.

Moyles, T. (2018). *Women who dig: Farming, feminism, and the fight to feed the world.* Regina: University of Regina Press.

Neysmith, S., Reitsma-Street, M., Baker-Collins, S., & Porter, E. (2012). *Beyond caring labour to provisioning work.* Toronto: University of Toronto Press.

Nourishing Communities. (n.d.). *The social economy of food*. Retrieved from: http://nourishingontario.ca/the-social-economy-of-food/.

Parry, D.C., Glover, T.D., & Shinew, K.J. (2005). 'Mary, Mary quite contrary, how does your garden grow?': Examining gender roles and relations in community gardens, *Leisure Studies*, *24*(2), 177-192.

Patil, V. (2013). From patriarchy to intersectionality: A transnational assessment of how far we've really come. *Signs*, *38*(4), 785.

RUAF Foundation. (2019). *Urban agriculture: what and why?* Retrieved from: https://www.ruaf.org/urban-agriculture-what-and-why

Sachs, C., & Patel-Campillo, A. (2014). Feminist food justice: Crafting a new vision, *Feminist Studies, 40*(2), 396-410.

Santo, R., Palmer, A., & Brent, K. (2016). *Vacant lots to vibrant plots: A review of the benefits and limitations of urban agriculture.* Retrieved from Johns Hopkins Centre for a Livable Future website: http://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-a-livable-future/_pdf/research/clf_reports/urban-ag-literature-review.pdf.

Schmelzkopf, K. (1995). Urban community gardens as contested space, *Geographical Review*, *85*(3), 364-381.

Scott, J. (1991). The evidence of experience, *Critical Inquiry, 17*(4), 773-797.

Smith, D. E. (1999). *Writing the social: Critique, theory, and investigations*. Toronto: University of Toronto Press.

Statistics Canada (2017). *2016 Census of Agriculture*. Retrieved from: https://www150.statcan.gc.ca/n1/daily-quotidien/170510/dq170510a-eng.htm?HPA=1.

Sumner, J., Mair, H., & Nelson, E. (2010) Putting the culture back into agriculture: civic engagement, community and the celebration of local food*, International Journal of Agricultural Sustainability*, *8*(1-2), 54-61.

Swanson, L.J. (2015). A feminist ethic that binds us to Mother Earth. *Ethics & the Environment*, *20*(2), 83-103. Indiana University Press.

Tronto, J. (2013). *Caring Democracy: Markets, equality and justice*. New York: New York University Press.

Urban Agriculture Working Group. (2013). Urban agriculture policy, planning and practice: A report for the City of Hamilton, Ontario. Commissioned by the Neighbourhood Development Strategy Office. Retrieved from: https://www.hamilton.ca/sites/default/files/media/browser/2015-03-06/urbanagriculturepolicyplanningandpractice.pdf.

Vosko, L. F. (2000). *Temporary work: The gendered rise of a precarious employment relationship.* Toronto: University of Toronto Press

Winne, M. (2008). *Closing the food gap: Resetting the table in the land of plenty*. Boston: Beacon Press.

Yuval-Davis, N. (2006). Intersectionality and feminist politics. *The European Journal of Women's Studies*, *13*(3), 193-209.

Canadian Food Studies La Revue canadienne des études sur l'alimentation

Original Research Article

Seed saving in Atlantic Canada: Sustainable food through sharing and education

Norma Jean Worden-Rogers[a*], Kathleen Glasgow[b], Irena Knezevic[a], Stephanie Hughes[c]

[a] Carleton University
[b] St Francis Xavier University
[c] Atlantic Canada Program Coordinator for the Bauta Family Initiative on Canadian Seed Security, SeedChange

Abstract

Seed saving can support seed security, biodiversity, nourish food systems, facilitate environmental education, and enable the creation of networks that support food sovereignty. Public interest in seed security is on the rise, but local resources and funding to support seed activities is limited. The survival of seed collections, libraries, banks, and farms depends on personal relationships within the seed community. While Atlantic Canada's seed saving community is scattered geographically, it is tightly knit. Seed savers share knowledge, information, and tools, sometimes between competitor businesses. At times, information is shared between those with commercial interests, such as seed companies, and public events such as seed swaps, because an individual seed-saver's success is contingent on the overall health of the seed system. In this paper, we synthesize findings from three case studies on seed saving in Atlantic Canada, which map regional seed activities, and detail the opportunities and challenges that such initiatives face. While Atlantic Canada has seen growth in the number and scale of both public and private seed saving initiatives, much work remains to be done. Nevertheless, the initiatives constitute a critical mass that can benefit from this assessment upon which future actions can be based.

In conjunction with this article, we produced a video that highlights the work of seed-savers in Atlantic Canada. You can find this video, Supporting Seed Saving and Farmers in Atlantic Canada, at https://www.youtube.com/watch?v=7jAmS-jX0Ys

*Corresponding author: normajeanwr@gmail.com
DOI: 10.15353/cfs-rcea.v6i3.352
ISSN: 2292-3071

Keywords: seeds; seed saving; seed conservation; seed security; Atlantic Canada; sustainable food systems; social economy; informal economy

Introduction

Seed saving "should be understood to encompass the myriad of activities… including the growing, collection, storage, reuse, and/or exchange of seeds (and/or other propagating material)" as well as "the generation and maintenance of the necessary knowledge and networks for seed saving practices to occur" (Phillips, 2005, p. 39). Although the vast majority of food comes from seed[1], this paper aims to contribute to broader literature that considers the social life of seed—the role that human networks, relationships and cultural practices play in the selection, transmission, and conservation[2] of seeds (Ellen & Platten, 2011).

The research synthesized in this paper comprised three case studies that explored seed saving in Atlantic Canada[3]. Each of the authors was involved with the development of at least one of the case studies. The three studies document seed activities in the region to identify how those activities contribute to food production, and also to food system resilience, the well-being of rural communities, and regional social capital. While the case studies were based on different research questions and varied geographic focus, many of their findings were strikingly similar. Hence, we reflect on what we learned through those three studies and go beyond the original, mostly descriptive, reports to offer a more analytical view of how these activities align with the economic, environmental, and social contributions of sustainable food systems.

The resulting paper offers a portrait of regional seed activities and links seed saving to key aspects of social economy of food and its contribution to community development and resilience. We demonstrate that despite the environmental heterogeneity of Atlantic Canada, the seed community in this region is characterized by relationships that facilitate sharing of knowledge, information, and tools—in many cases with competitor businesses, because individual success is linked to the health of the seed system as a whole. Our findings further

[1] About three-quarters of the human energy intake comes from some 120 plants that are cultivated for food (UNFAO, n.d.).

[2] "Seed conservation" is commonly used by those who work in more technical settings, like seed libraries, and it can imply a more complex and deliberate approach than just "saving" seed. Though some in the seed world distinguish saving from conservation, other use the terms interchangeably as both approaches contribute to seed security.

[3] The case studies were funded by the Social Sciences and Humanities Research Council through two grants administered by the Laurier Centre for Sustainable Food Systems. Whereas this funding played a crucial role in enabling the research activities, these studies are a result of numerous partnerships, and are also a product of support (both financial and in-kind) from Seeds of Diversity Canada, Atlantic Canada Organic Regional Network, and The Bauta Family Initiative on Canadian Seed Security.

suggest that seed conservation can contribute to the key elements of social economy, namely: bridging divides, building adaptive capacity, increasing prosperity, increasing social capital, and fostering innovation and entrepreneurship (Blay-Palmer et al., 2019).

We conclude that the diversity and quality of seeds are challenged by a variety of factors that are often place-specific and therefore require place-specific solutions. Existing solutions tend to be grass-roots and, in Atlantic Canada, are characterized by an enthusiastic, diverse seed-saving community; nevertheless, to continue the seed-savers contributions to community, organized and institutional support is necessary to sustain them in the long term, through continuous funding, research, facilities, and seed literacy.

Background: The art of seed-saving

Seed saving is fundamental to achieving local and global seed security, which can be defined as having access to adequate quantities of good quality seed and planting materials of preferred crop varieties at all times (UNFAO, 2015).

Since the introduction of commercial hybrid seeds in the 1930s, plant breeding and seed production have become commodified, which has had an impact on the diversity of seeds that are favoured by the agri-food industry, and has had social consequences (Kloppenburg, 2004). Through extensive international "development" projects in the mid-20th century, the process often referred to as the "Green Revolution", a concerted effort was led by plant scientists and development agencies in the United States to promote technological solutions (including hybridized seed) at the expense of local knowledge and practices (Esteva, 1996). The technologies of Green Revolution also encouraged constant enlargement of farm-size and management of the farm as a business (Kneen, 1995). Concurrently, public plant breeding programs started to erode and the private sector came to dominate the development of new seed (Kuyek, 2004), which has undermined seed sovereignty – understood to include "rights to save, breed and exchange seeds, to have access to diverse open source seeds which can be saved" (Gopalan, 2018, p. 257). The resulting commercial varieties came to rule the seed economy, with troubling consequences to local food production and rural economies in both the global South and the global North (Kloppenburg, 2004). Over the past century 75 percent of the global agricultural biodiversity has disappeared and this means seed security is at risk (UNFAO, 1999). This threat is compounded by climate change; without diverse genetics underlying seed systems there is a reduced ability for crop varieties to respond to novel climatic conditions (Agriculture and Agri-Food Canada, 2016).

Still, parallel practices of seed saving have continued (Carolan, 2011; Phillips, 2013) in ways that "may offer ways of living that are vitally different from those presented through neoliberal, corporate orderings" (Phillips, 2013, p. 5). Global seed conglomerates like Syngenta, DowDupont, Bayer, and BASF dominate the commercial markets, especially for patented seed (Howard, 2015), but tend to do so with a focus on a selection of cash-crops with limited genetic

diversity emphasizing just a handful of traits—USC Canada suggests that "95 percent of the seeds that grow our major food crops are bred for uniformity, performance under controlled conditions and routine application of synthetic inputs" (2017, para. 5). Most smaller actors in the seed sector, however, display an impressive diversity in practices and variety of seed, as will become apparent in the rest of this report.

Collaborative or cooperative seed distribution models (e.g., the Organic Seed Alliance in the United States, BC Eco Seed Co-op in Canada) are becoming more common in the sector. Consequently, some researchers identify seed saving as part of social economy of food (Nelson & Stroink, 2011), where social economy refers to collective economic activities for which economic benefits are only one of, and often not the primary, set of motives. In other words, social economy is an organizing principle that encompasses a wide range of activities and values (McMurtry, 2008) and seed saving is among those activities. Moreover, many seed saving interactions take place in the informal economy realm (where there is no monetary exchange) and are explicitly positioned as a resistance to the commodification of seed—a "repossession" that relocates seeds in the commons (Patnaik, Jongerden and Ruivenkamp, 2017). Seed exchange networks are vibrant around the world and "help to conserve agricultural, social, cultural diversity, and identity as well as enhance resilience against environmental and economic shocks" (Helicke, 2015, p. 638). In non-industrialized countries, reliance on commercial seed is minimal, and farmers procure upwards of 90 percent of all their seed through such networks (Coomes et al., 2015; McGuire & Sperling, 2016). Seed exchange remains an "important, yet poorly understood, factor shaping agrobiodiversity and helping its dynamic conservation" (Pautasso et al., 2013). The informal nature of much seed exchange is not in itself unproblematic; Coomes et al. (2015) detail the various ways in which social relations can create friction and suggest that although there is no monetary transaction in informal seed exchanges, those who exchange seed still recognize that the seed has economic value. Still, seed exchange networks are persistent and are likely to remain so (Coomes et al., 2015) and they can greatly facilitate social relationships within networks (Ellen & Platten, 2011).

As we discovered in Atlantic Canada, these informal relationships can further be promoted by research and community projects that encourage seed saving, exchange, and development of seed collections. Various organizations play a role here including seed banks, seed libraries and seed companies (see Table 1).

Table 1: Seed organization types

Organization type	**Organization function**
Seed banks (and gene banks)	Plant material is placed in short- and long-term storage with the intention of preserving the genetics of the species or variety.
Seed libraries	Focused on seed education and awareness where anyone can "borrow" small quantities of seed, grow them out and return them to the library if successful.

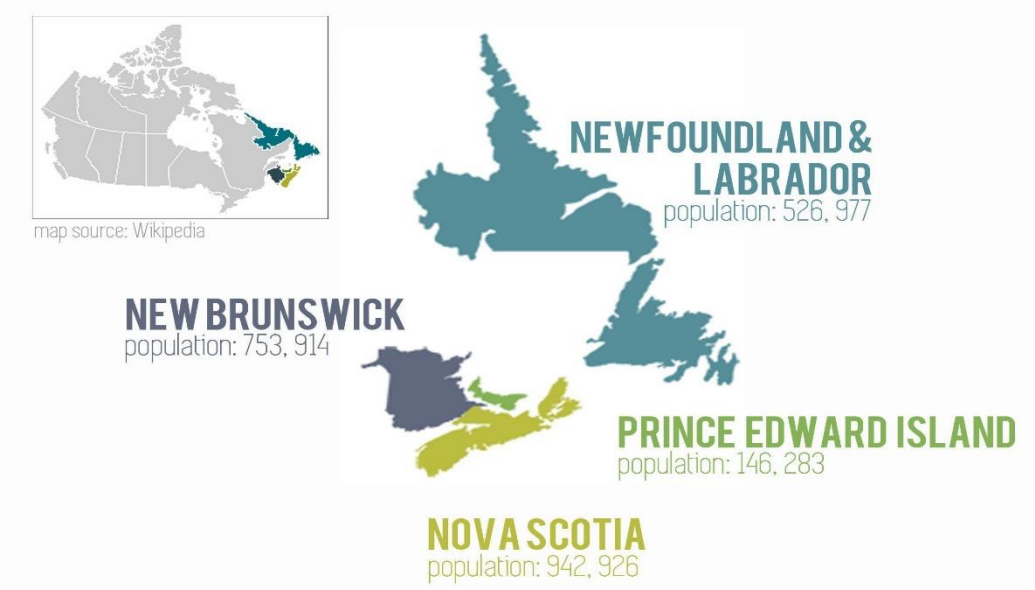
Local (or regional) seed companies	Commercial entities that provide larger quantities of seed predominantly grown in the region, but are significantly smaller than the conglomerates that dominate the commercial seed market; the companies identified in our case studies provide varieties of that are non-hybridized, and are locally and sustainably grown; they sell seed they grow themselves, contract from local growers, or utilize some combination of this; occasionally they source seed further afield to fill out a catalogue.

Unique microclimates throughout Atlantic Canada make locally adapted seed important but unique challenges for seed security are presented by the geographic, economic and social landscape as is further discussed in our analysis. Despite being geographically disparate, seed savers in Atlantic Canada remain a tightly knit community working to educate and engage the public, and to save and exchange seed.

Methods

This paper synthesizes three related qualitative case studies that were conducted in Atlantic Canada in 2015 and 2016 and each resulted in a published report (Glasgow, Hughes & Knezevic, 2016; Jamieson, Hughes & Knezevic, 2016; Worden-Rogers, 2015). These studies explored aspects of seed saving such as project models, relationships between stakeholders, successes and challenges, and gaps in existing activities. Each case study was developed by drawing on literature reviews (of grey and scholarly publications), environmental scans, and interviews.

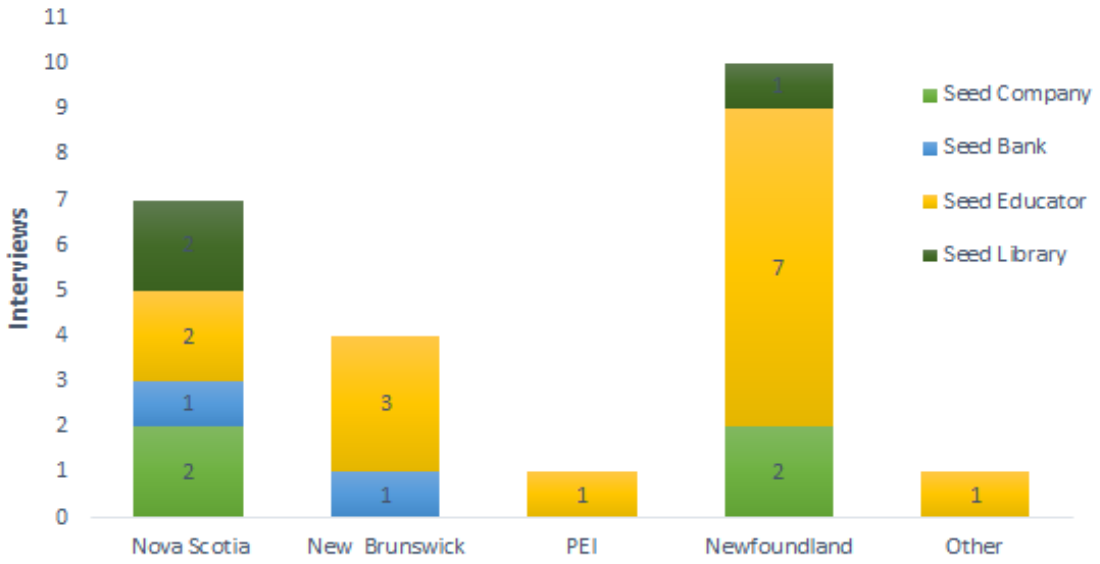
Figure 1: The geographic context and populations of each province in Atlantic Canada. Population estimates from census data (2014)



Source: Worden-Rogers, 2015

The research team encompassed community and academic researchers. Two community researchers were already working on regional seed saving initiatives and were regularly conducting research for their organizations. Academic researchers comprised both faculty (two faculty members, one in sciences and one in social sciences) and three students. The literature reviews included non-scholarly reports published by governments and non-profit organizations. The environmental scans involved searches for relevant organizations and initiatives in the region; simple web searches formed the basis of each scan, and then scans were expanded using information found in organizational directories, identified in local media reports, and—later on in the projects—provided by interviewees. Both the literature reviews and environmental scans were guided by the researchers' prior knowledge of regional seed conservation activities, and advice from regional seed experts. The interviews supplemented this information and assisted in interpreting the findings. A total of 26 interviews were conducted across the studies[4]. Interview participants included seed savers, seed producers, and representatives from seed organizations including seed company owners, seed researchers, and community organizers involved with seed activities. Obviously, some participants fall into more than one of these categories. Interviews were semi-structured, conducted by phone or in person, and lasted between 30 and 90 minutes. The case studies' findings were reported in narrative form, accompanied by maps, tables and images (Glasgow, Hughes & Knezevic, 2016; Jamieson, Hughes & Knezevic, 2016; Worden-Rogers, 2015).

Figure 2: Interviews by province and respondent type



[4] All research methods were approved by the Carleton University Research Ethics Board.

Those findings were analyzed for commonalities as we revisited the case study reports and discussed our observations to decide on the key conclusions. Original transcripts and field notes were also revisited to guide our analysis. The observations were organized thematically and then analyzed against the guiding questions of the larger project on the social and informal economy of food (Stephens et al., 2019) to assess if and how the seed activities contributed to food system sustainability (see Discussion).

Findings

Our findings provide insights into the regional seed conservation context, key motivations for seed saving, adaptive capacity, seed literacy, scale, infrastructure, and collaboration. We describe these findings below.

Context

The momentum of seed saving is recently on the upswing in Atlantic Canada. Seeds of Diversity (SOD) is the key national organization supporting seed saving; it has representatives in every province, and provides organizational support by hosting events, workshops, organizing seed viability maintenance (grow-outs) and funding. The Bauta Family Initiative on Canadian Seed Security (The BFICSS) is a national initiative to increase the diversity, quantity and quality of seeds grown in Canada and is delivered in the region by the Atlantic Canada Organic Regional Network (ACORN). The BFICSS also supports seed saving in a variety of ways, including funding, organizational, and educational capacities as well as funding and physical infrastructure. In 2014, the Dalhousie University Faculty of Agriculture in Truro, Nova Scotia, partnered with The BFICSS and SOD to host Atlantic Canada's first Regional Seed Bank. Storage, maintenance of quality and distribution can be the most expensive aspect of seed conservation and by having a central seed bank, with lab facilities required to test seed quality, accessibility and capacity to save seed is significantly increased.

Key motivations

Since the three studies engaged a breadth of individuals involved in the seed saving sector (Figure 2), the reasons that individuals saved seed varied; however, there were several commonly repeated reasons, as summarized in Table 2.

Table 2: The reasons for seed saving cited by interviewees

Reasons	Number of respondents
Promote education through skill sharing	9
Assurance of viability of seed	4
Save 'tried and true' varieties	9
Increase/maintain biodiversity	11
Cost-effectiveness	7

The key motivations for seed saving loosely map onto the relationship the interviewee had with seed saving. For example, the educational programs cited seed education as paramount; community gardens and seed companies are interested in the value of seed with more weight given to the ecological and economic aspects of regional seed saving. Participants also identified local issues of seed security (especially in Newfoundland, where growing conditions are harsher). The most commonly cited motivation was the desire to maintain and increase biodiversity.

Participants generally did not believe each province studied here needed seed banks, suggesting that the single existing seed bank Truro, Nova Scotia, is sufficient as a central repository, as long as it is accompanied by a healthy number of seed libraries and seed-exchange events. While the interaction of seed and gene banks with other seed entities could be expanded to develop a stronger relationship (e.g., with seed companies to better preserve seeds of lower commercial interest), the concurrent proliferation of seed libraries seemed to compensate for that gap.

Bob Wildfong, Executive Director of Seeds of Diversity Canada, confirmed the notion that seed banks collect small quantities of many varieties, while the role of seed libraries was to

> …fulfill the desire [of] communities to take control of their seed sources. They're not efficient at providing large quantities of high quality seed, tested seed like seed companies are, but they are much more accessible to people and give a way for people to get actively involved in their community, and connects seed savers (Glasgow, Hughes & Knezevic, 2016).

Adaptive capacity and place-specific seed varieties

> Every seed is the family bible and history of the plant - the amount of information that's packaged in a single seed is extremely significant.
>
> -Will Bonsall, The Scatterseed Project (Worden-Rogers, 2015)

Seed saving in Atlantic Canada is treated as an art -- mindfully passed from individual to individual and motivated largely by biodiversity preservation. Genetic diversity is one of the first factors in biological adaptive capacity, and given the diverse growing conditions in Atlantic

Canada, is one of the most heavily referenced seed saving benefits. Building adaptive capacity has both social and biological dimensions. A community's ability to recover from natural disasters or shifting markets is a form of adaptive capacity. The term is also a key concept in environmental science and evolutionary biology, where it refers to the ability of an organism or system to modify to suit a new environment (McCouch et al., 2013). This is particularly relevant with the loss of agricultural biodiversity cited above, amplified here by the many microclimates in Atlantic Canada and impending climate change.

Across the Atlantic region, stakeholders acknowledged the need to rebuild adaptive capacity to promote seed resilience and biodiversity, but this theme was most prominent in Newfoundland. Seeds are saved because most commercial seed is not adapted to excel in Newfoundland's unique and harsh climate. The majority of mainstream (eg. industrial) seed distributors are located in mainland Canada and they distribute seed produced all over the globe. They tend to see high-production regions as their target market, paying less attention to marginal production areas.

While a seed that is produced in southern Ontario may not thrive in New Brunswick, it should still grow and produce. This is not always the case for Newfoundland. Due to the harsh winters, short growing season, and climatic differences, Newfoundland-specific varieties are much favoured over imported varieties, but they are in short supply as one entire generation had virtually stopped cultivating Newfoundland-specific varieties. Contemporary seed saving runs counter to this loss of seed literacy and proliferation of hybrid seeds of the past few decades and is both a necessity and an act of self-sufficiency and resilience.

Seed literacy

For a plant to adapt to a new environment a wide variety of traits must be present in the plant's genes, even if they are not expressed or useful in the conditions under which it has historically grown. For the purpose of this paper, a plant includes both annual and perennial seeds. The majority of grow outs were intended to be organic, however due to the lack of education amongst growers, it could not be guaranteed that seed saving would yield "true" types. Some participants suggested that with genetic erosion of place-based seed varieties, traits that were previously irrelevant, but may become desirable in novel conditions, are lost.

Some participants questioned if seed libraries were sometimes compromising the genetic integrity of varieties. Within the context of seed libraries and seed banks, perhaps the most stringent guidelines for seed production (that specify distance between individual plants in grow outs, for example) care are used by the Atlantic Canada's Regional Seed Bank, developed by SOD. The guidelines and continued documentation of seed saving are prioritised to preserve genes for future research and use. But not all seed entities are as stringent about the seeds they accept. Since education is crucial to seed security, inconsistencies can lead to barriers in both seed quality and education. Some more experienced seed savers expressed concern about

"scruffy" seed that is produced by new seed savers and is exchanged in organizations like seed libraries, viewing their contribution to Atlantic Canada's seed security as minimal. This perspective was offset by recognition of learning as a process and the view that the contribution of these "scruffy" seeds goes far beyond just their genetics. The community building and seed literacy that develop within groups of new seed savers are also valuable, though efforts to ensure seed quality should not be dismissed.

> Seed libraries tend to be largely community run and ... are springing up all over the place, and I think that's just fine, they are educational tools and we are not expecting them to change the seed system. What we are expecting them to do is improve people's understanding and engagement with the seed system.
> Michelle Smith, seed saver and educator (Glasgow, Hughes & Knezevic, 2016)

As Smith's statement suggest, the concern about "scruffy" seeds and the conviction that seed-saving can contribute to food security are not necessarily contradictory. Instead, these comments point out that the more experienced seed savers appreciate the ongoing seed saving efforts, and also see areas where those efforts can be improved.

Infrastructure

> Every movement with food has an analogous movement with seed; people started talking about food security, then five years later began to talk about seed security. Local food movements lead to the local seed movements.
> Bob Wildfong, seed educator (Glasgow, Hughes & Knezevic, 2016)

Fuelled by a bottom-up approach, seed education gives individuals the knowledge required to save seed and has resulted in a blossoming of such activities in the region. It is common to learn about informed individuals sharing knowledge and facilitating activities in the form of a summer program or a seasonal plot at a community garden. The growth of regional seed activities can thus be credited to the growing community participation, however, there are both strengths and limitations of a seed system built from the bottom up as seed communities depend heavily on personal relationships. These relationships mean recruitment and training of new seed savers often occurs in an informal and place-based manner, allowing newcomers to learn to save seed as a part of a community. This place-and people-based system is also consistent with the motivations for seed saving in Atlantic Canada and demonstrates an appreciation for the uniqueness of communities, in both climate and culture. The relationships among and between individuals and organizations give the seed movement resilience.

However, these relationships alone are insufficient to maintain the momentum required for regional seed security. There is a point where the demands on the most active community

members become too great and require a larger organization to take on some of the administrative burden and retain momentum. Seed educators tend to wear several hats and are often involved in various projects with different funding sources. These individuals become the driving forces behind their regional seed saving practices. As with other forms of community food work (see, for example, Knezevic, Mount & Clement, 2016), there is also significant pressure on the committed seed "champions" who become victims of their own success. The more they share their knowledge and passion, the greater the pressure on them to maintain momentum. When seed programs are underfunded, these champions risk burnout.

Moreover, as is often the case with grassroots initiatives, when seed saving activities grow, seed programs encounter funding limitations. The current funding landscape has facilitated growth, but it often means numerous funding applications must be completed throughout the calendar year, each requiring many hours of labour. The challenge to find resources for seed projects is compounded by the highly seasonal nature of the allotted funding. While there are a few funding opportunities, they tend to be for short-term projects and the monetary value is generally not enough to support even a part-time or seasonal employee. Though seed saving may be considered a seasonal activity, the associated institutional work of supporting regional seed security—such as, establishing and nourishing partnerships and delivering education—is year-round work. Many projects are only able to hire during the peak season, and during this time finding future funding, or planning future years are not priorities—the seeds themselves are, and this can cause instability in projects. Without the funding to support this development many of the groups within the seed saving community are barely making it season to season, let alone planning ahead for the longer term.

Formal entities such as the Atlantic Canada Regional Seed Bank, SOD, ACORN, and partners such as The BFICSS have played a critical role in growing the momentum and overcoming the cited barriers of the bottom-up approach. In fact, this was a primary motivation of The BFICSS to inject energy and resources into the national seed movement to give it a boost toward self-sustainability. In complementing the grassroots movement, the organizations facilitate seed activities without being disruptive to the wider movement. In other words, the organizations support activities that are complementary to ongoing efforts of the movement, while ensuring they are not competing with pre-existing initiatives and events. The barriers are addressed through actors in seed conservation connecting with larger institutions and organizations to provide coordinated support. Examples of this are the Regional Program Coordinator position with ACORN[5] that connects the various stakeholders in the sector; the Atlantic Canada Regional Seed Bank provides a well-equipped physical space for saved seed; Salem Elementary School Coordinator is a paid position which utilises outdoor space on a pilot outdoor education program, and so on. These roles also bridge the rural-urban divide to promote seed security through a variety of means, despite their success being limited by the

[5] This position is also a result of organizational collaboration, as the position is with ACORN, and supported by the BFICSS and SOD.

available funding.

This integration of grassroots activities within the institutional framework works well, although it requires entities to play different roles. Seed banks can archive, protect and maintain diverse seed stocks as well as document the progression of the wider seed-saving efforts through communication and events. The contribution of unstructured seed saving, and sharing is significant to the overall seed security of a region and may often be more attainable. Enhancing communication pathways can streamline conservation efforts while ensuring that at-risk varieties are not missed, and that new varieties that thrive under specific climatic conditions are developed. All of these observations suggest that incorporating seed saving activities into work of larger organizations can be beneficial for grassroots work too, as long as the organizations are willing to collaborate and support ongoing initiatives, rather than compete with or replace them.

Collaborative approach

Despite the potential of commercial gain, seed savers in this region generally tend to act in partnership with one another, favouring collaboration over competition -- even in cases where they own a seed company or sell seed from their farm. In addition to the grassroot-institutional collaboration noted above, partnerships permeate, and make possible, the seed conservation in the region. A consistent theme of seed saving is to retain local varieties of seed—place-based varieties adapted to local environmental and social conditions. This is an activity that must be collectively supported to be successful.

This collaborative culture is reinforced by the deeply embedded tradition of co-operatives in the region (MacPherson, 1975). The Cumberland County Ecological Seed Growers Co-operative (CCESGC) is one example of a cooperative that came together informally in 2014 to share local knowledge and assist one another in the provision of seed security—a collaboration between famers who rely on seeds to support their livelihoods. The farmers were located in one geographic region, so the growing conditions were similar. In sharing their knowledge, the farmers not only supported one another but also created equipment to assist in the gleaning of the seed harvest. This instrument, created by observation and innovation, was then shared between the farmers to increase their efficiency.

> [T]he partnerships with these organizations and colleague seed savers from the area [were essential]. It was helpful in terms of providing training and networking, personalized guidance and motivation ([from] the two coordinators. My colleague seed savers from the Amherst shore have been helpful in testing my seeds and giving me feedback.
> Silvana Castillo, La Finquita Seeds and member of CCESGC (Worden-Rogers, 2015)

The groups that see environmental education as their core purpose act as a kind of cooperative as these groups tend to have land. The availability of land is the biggest asset and the first requirement for conducting seed saving activities. Whether that be as a school and they have

excess land, or a community garden allowed district land to be used for community growing. One example of this is Salem Elementary School in Sackville, New Brunswick. The school now has a year-round environmental education class that integrates food growing into the curriculum, a forerunner in this aspect of environmental education. During the school closure over the summer, the school partners with the Sackville Community Garden and their coordinator (typically funded by a summer government grant), provides weekly sessions to continue the education-based learning. Previously, in the months leading up to the summer holiday, the children would be exposed to the planting and growing of the seed but would return in the autumn to find the food was already harvested or had decomposed to the point that saving the seed would not be possible. This partnership allows the children to have an opportunity to understand the entire lifecycle of a plant and makes a contribution -- small, but not negligible— to the community's social, economic and environmental wellbeing.

> Many students were excited to bring these activities home and seed save with their parents/families. The students have now saved their own seeds which we will plant next spring in the school gardens ...they can observe the entire lifecycle of a plant.
> Josette MacIssac, Outdoor Education Teacher, Salem Elementary School (Worden-Rogers, 2015)

Discussion: Seed saving as social economy of food

> My own interest in saving seeds [links] a sustainable system, and [my] interest in local food for a long time...the seeds are kind of like the missing link [in food security]. You can grow all your own food, but if your seeds are coming from somewhere you don't even know...that's kind of a link in the food security chain that's slowly become in the public awareness. And with the interest in local food, there is a growing interest in local seeds as well. That movement is already in the works in NS.
> Chris Sanford, Representative, Bridgetown seed library (Glasgow, Hughes and Knezevic, 2016)

Seed saving activities in Atlantic Canada offer unique insights into the social and informal dimensions of food systems. These activities demonstrate that productive collaborations can and do exist among private, public and community sectors. They connect local initiatives with regional, and even national, efforts—from local seed exchange events to SOD. Each province is faced with similar issues surrounding regional food security and the popularity of local food as a route to sustainability is growing. As communities adopt a bottom-up approach, with grassroots efforts to build seed security, larger organizations serve as the linchpin to provide infrastructure and funding, maintain seed stocks, and document seed activities over a long-term period. As identified in these studies, though communication pathways could be enhanced between entities

like the seed bank and seed libraries/savers, all actors play integral roles in the Atlantic Canadian seed and food system.

The case studies suggest that the momentum of regional seed saving has the potential to transgress social divides, as such activities don't have to be limited by income or rural/urban location. Of course, like any activity, seed saving requires resources (time, knowledge, space), but access to seed libraries is free, and there is no money exchanged at seed exchange events. Moreover, the rise in urban and peri-urban agriculture is slowly challenging the long-standing position of food production as an exclusively rural practice. That said, it remains unclear how inclusive the current seed work in this region has been. We know, for instance, that community seed gardens in Cumberland County, Nova Scotia, have been explicitly involving low-income neighbourhoods, seniors' residences, and other marginalized groups, but it is difficult to know how sustainable these initiatives will be in the long run.

We also know that there are efforts on the ground to revive "three sisters" gardens—where corn, beans, and squash grow together—as an Indigenous practice in this region, and these efforts are taking place in First Nations communities and other public places (for example, the University of Prince Edward Island campus). These efforts acknowledge the seed saving tradition among the region's First Nations, but otherwise little has been documented about this practice, and further research on this topic would be beneficial.

The case studies show that seed savers wish to maintain and improve biological diversity through seed saving by building the adaptive capacity of the regional food system. Despite small disparate populations, unfavourable growing conditions and accessibility of services that can support seed saving (e.g. due to geographic distance), Atlantic Canada's seed saving community appears to have an extensive adaptive capacity based on the development of a network that values the conservation of seed.

Regional seed saving offers the ability to strengthen social prosperity—through seed education at various institutional levels (e.g., from kids' day camps to universities)—and ecological prosperity, by saving seed from varieties that may otherwise be lost. The case studies indicate that saving seed that thrives in a particular area supports the ecological suitability of the variety, and it creates an economic niche if the seed saver has a commercial enterprise. Several case study participants indicated that, while economical, the cost efficiency is not the overall determining factor for saving seed. The physical availability and viability of the seed is the resounding benefit, fostering a material manifestation of intertwined social, environmental and economic prosperity.

The very nature of seed saving is to preserve biodiversity, save local seed varieties and share skills (thus fostering community). However, at the core of each of these themes is social interaction, which educates and then drives the participants to continue seed saving activities in a perpetual resource and skill sharing. The activities documented here encourage collaboration over competition, adding to social capital. Social capital, which refers to "the set of norms, networks, and organizations through which people gain access to power and resources" (Grootaert, 1998, p. 2) can be "bonding" (within social groups) and "bridging" (across social

groups). Whereas both are seen as crucial to community development (Woodhouse, 2006) the case studies in question document that seed conservation can contribute to bridging social capital by connecting a variety of actors across public and private sectors.

While seeds are owned by the various actors in this network (savers, companies, libraries, etc.) they also contribute to the shared benefits of biodiversity. Communities can and do manage resources in the common interest and to their common benefit (Ostrom, 2010). If actors communicate with and/or know each other, their desire to preserve the common resources is greater and encourages cooperation and sustainability, as opposed to competition and resource exploitation (Ostrom, 2010).

Finally, the case studies suggest that seed saving can play a role in fostering innovation and entrepreneurship. Sharing knowledge can stimulate innovative seed saving methods and allow for solutions to be found more quickly than if activities were done in a competitive context. Cooperation is key to this sharing. While there were formal cooperatives in this sector (e.g., CCESGC), community groups such as community gardens or educational gardens also offer a platform for cooperation.

Conclusions

Seed conservation is a critical component of food security and biodiversity. Atlantic Canada boasts a growing number of seed initiatives, which tend to be grass-roots, and characterized by an enthusiastic, diverse seed-saving community. The sector is propped up by motivated individuals, supportive institutions and funding entities, and a collaborative approach to pursuing common goals of seed diversity and adaptive capacity. Our analysis confirms what other studies have found—that community seed networks can make significant contributions to biodiversity conservation (Coomes et al., 2015) and at the same time both facilitate and are facilitated by social interaction (Ellen & Platten, 2011).

The vitality of this sector, along with the diversity and quality of seeds it conserves, is challenged by a variety of factors that are often place-specific and therefore require place-specific solutions. To ensure that seed-savers continue to contribute to the overall community well-being, it is necessary to strengthen organized, institutional support through continuous funding, research, facilities, and seed literacy. Improved communication pathways (e.g., between the seed banks and seed savers) are also critical to avoid redundancy and determine what seeds are important to maintain or even develop.

Acknowledgements: We wish to thank research participants and community partners who helped with these projects, and to Shelby Jamieson for her assistance with this research. We are also indebted to the late Su Morin who was the driving force behind much of this work.

References

Agriculture and Agri-Food Canada. (2016). *Canada's seed industry.* Retrieved from http://www.agr.gc.ca/eng/industry-markets-and-trade/statistics-and-market-information/by-product-sector/crops/pulses-and-special-crops-canadian-industry/canada-s-seed-industry/?id=1174596024742

Blay-Palmer, A., Knezevic, I., Levkoe, C.Z., Mount, P., & Nelson, C. (2019). Introduction to the special issue on the social and informal economy of food. *Canadian Food Studies*, this issue.

Carolan, M. (2011). Saving Seeds, Saving Culture: A Case Study of a Heritage Seed Bank. *Society and Natural Resources, 20*(8), 739-750.

Coomes, O.T., McGuire, S.J., Garine, E., Caillon, S., McKey, D., Demeulenaere, E… Wencélius, J. (2015). Farmer seed networks make a limited contribution to agriculture? Four common misconceptions. *Food Policy, 56*, 41-50.

Ellen, R., & Platten, S. (2011). The social life of seeds: the role of networks of relationships in the dispersal and cultural selection of plant germplasm. *Journal of the Royal Anthropological Institute, 17*(3), 563-584.

Glasgow, K., Hughes, S., & Knezevic, I. (2016). *Mapping Nova Scotia's seed collection systems.* Waterloo, ON: Centre for Sustainable Food Systems. Retrieved from https://fledgeresearch.ca/resources-results/mapping-nova-scotias-seed-collections-system.

Esteva, G. (1996) Hosting the otherness of the other: The case of the Green Revolution. In F. Apffel-Marglin, & S.A. Marglin, (Eds.), *Decolonizing Knowledge* (pp. 249-278). Oxford: Oxford Press Online.

Gopalan, R. (2018). Food sovereignty: The future of food. In K. Bhushi (Ed.), *Farm to fingers: The culture and politics of food in contemporary India* (pp. 236-268). Cambridge: Cambridge University Press.

Grootaert, C. (1998). *Social capital: The missing link?* Social Capital Initiative Working Paper, Washington: World Bank Social Development Program. Retrieved from http://siteresources.worldbank.org/INTSOCIALCAPITAL/Resources/Social-Capital-Initiative-Working-Paper-Series/SCI-WPS-03.pdf

Helicke, N.A. (2015), Seed exchange networks and food system resilience in the United States, *Journal of Environmental Studies and Sciences, 5*, 636-649.

Howard, P. H. (2015). Intellectual property and consolidation in the seed industry. *Crop Science, 55,* 1-7.

Jamieson, S., Hughes, S., & Knezevic, I. (2016). *Considerations for seed security and biodiversity conservation in Newfoundland.* Waterloo, ON: Centre for Sustainable Food Systems. Retrieved from https://fledgeresearch.ca/resources-results/considerations-for-seed-security-and-biodiversity-conversation-in-newfoundland/

Kloppenburg, J. R. (2004). *First the seed: The political economy of plant biotechnology.* Madison: University of Wisconsin Press.

Kneen, B. (1995). *From land to mouth: Understanding the food system* (2nd ed.). Toronto: NC Press Ltd.

Knezevic, I., Mount, P., & Clement, C. (2016). Shared opportunities on institutional land: Improving health care environments through on-site food production. *HERD: Health Environments Research & Design Journal*, *10*(1), 144-154.

Kuyek, D. (2004). *Stolen seeds: the privatization of Canada's agricultural biodiversity.* Sorrento, BC: Ram's Horn.

MacPherson, I. (1975). Patterns in the maritime co-operative movement 1900–1945. *Acadiensis, 5*(1), 67–83.

McCouch, S., Baute, G. J., Bradeen, J., Bramel, P., Bretting, P. K., Buckler, E., & Zamir, D. (2013). Feeding the future. *Nature*, *499*, 23-24.

McGuire, S., & Sperling, L. (2011) The links between food security and seed security: facts and fiction that guide response. *Development in Practice, 21* (4-5), 493-508.

McMurtry, J.J. (Ed.). (2008). *Living economies: Perspectives on Canada's social economy.* Toronto: Edmond Montgomery Publications.

Nelson, C., & Stroink, M. (2011). *Working paper: Food security and sovereignty.* Montreal: Chantier de l'économie sociale. Retrieved from https://idl-bnc-idrc.dspacedirect.org/.

Ostrom, E. (2010). Beyond markets and states: Polycentric governance of complex economic systems. *American Economic Review, 100*, 1-33.

Patnaik, A., Jongerden, J., & Ruivenkamp, G. (2017). Repossession through sharing of and access to seeds: different cases and practices. *International Review of Sociology, 27*(1), 179-201.

Pautasso, M., Aistara, G., Barnaud, A., Barnaud, A., Caillon, S., Clouvel, P.,… Tramontini, S. (2013). Seed exchange networks for agrobiodiversity conservation. A review. *Agronomy for Sustainable Development, 33,* 151-175.

Phillips, C. (2005). Cultivating practices: Saving seed as green citizenship? *Environments, 33*(3), 37-49.

Phillips, C. (2013). *Saving more than seeds: Practices and politics of seed saving.* New York: Routledge.

Stephens, P., Knezevic, I., & Best, L. (2019). Community financing for sustainable food systems: The case of FarmWorks Investment Co-operative. *Canadian Food Studies, this issue*.

Stephens, P., Nelson, C., Levkoe, C.Z., Mount, P., Knezevic, I., & 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*.

.UNFAO. (1999). What is happening to agrobiodiversity. *Food and Agriculture Organization of the United Nations*. Retrieved from http://www.fao.org/docrep/007/y5609e/y5609e02.html.

UNFAO. (2015). Household seed security concepts and indicators. *Food and Agriculture Organization of the United Nations.* Retrieved from http://www.fao.org/fileadmin/user_upload/food-security-capacity-building/docs/Seeds/SSCF/Seed_security_concepts_and_indicators_FINAL.pdf

UNFAO. (n.d.). *Seeds of life.* Retrieved from http://www.fao.org/3/x0262e/x0262e02.htm

USC Canada. (2017). *The Bauta family initiative on Canadian seed security.* Retrieved from https://www.usc-canada.org/what-we-do/the-bauta-family-initiative-on-canadian-seed-security

Woodhouse, A. (2006). Social capital and economic development in regional Australia: A case study. *Journal of Rural Studies,* 22, 83-94.

Worden-Rogers, N. J. (2015). *Seed saving in Atlantic Canada.* Waterloo, ON: Centre for Sustainable Food Systems. Retrieved from http://nourishingontario.ca/the-social-economy-of-food/seed-saving-in-atlantic-canada/

Vol. 6 No. 3, pp. 126–147 November 2019

Canadian Food Studies La Revue canadienne des études sur l'alimentation

Original Research Article

Community orchards and Hyde's theory of the gift

Jennie K. Barron

Selkirk College

Abstract

Food scholars and advocates have long asserted that commodification is one of the fundamental injustices of our dominant, industrial food system, as it stands in direct opposition to the notion of food as a human right. The informal social economy, with its concerns for solidarity, participation, service, and community building, offers examples of what de-commodification—that holy grail of food justice—might look like. This article reports on one particular informal social economy manifestation of decommodification, the community orchard. The author argues that decommodification must be seen not only as the absence of commodity production but as the presence of a different economy and underlying ethos – that of the gift. Lewis Hyde's theory of the gift provides a lens through which to understand the profound ways that gifting changes community orchardists' relationships to land, to food, to labour, and to those who co-produce and enjoy the fruit with them. Gift theory also furthers our understanding of food commons (of which the community orchard is but one example) as decommodified spaces. The author suggests that theorizing community orchards through the lens of gift theory provides insight into the values and mindsets that characterize non-commodity-oriented food production, which is a necessary step in the direction of innovation and the development of models that are more ecological, community-oriented, and just.

Keywords: community orchard; decommodification; commons; community garden; food sovereignty; urban space

*Corresponding author: jbarron@selkirk.ca
DOI: 10.15353/cfs-rcea.v6i3.358
ISSN: 2292-3071

Introduction

In his 2012 book, *Rebel Cities*, David Harvey describes "liminal social spaces of possibility where 'something different' is not only possible, but foundational for the defining of revolutionary trajectories" (xvii). The social economy (particularly in its informal manifestations) seems as good a place as any to seek out such spaces of possibility, where concerns for solidarity, participation, service, and community building are *as* important, if not *more* important, than profit or revenue generation (Canadian Social Economy Research Partnership, n.d., p. 3). In the realm of food, one quintessential expression of the social economy may be found in the community orchard, a novel variant of the community garden that aims not only to embody these pro-social values, but to operationalize them in a most radical form—*de-commodified collective self-provisioning on publicly accessible land*—in other words, fruit grown by volunteers for sharing, often as a gift to the community at large. In this article, I present the view that the seemingly idealistic model of community orchards may well contain the seeds of a revolutionary trajectory, founded on the decommodification of food.

What follows is drawn from a larger work of doctoral research conducted in 2016 and 2017 at nine community orchards in three Canadian cities—Vancouver, Victoria, and Toronto—in which I explored the meaning and purpose of community orchards to those who create and maintain them (Barron, 2018). Research involved site visits, document review, and extended semi-structured interviews with 32 very involved community orchardists, several of whom I have remained engaged with in ongoing conversation. I also interviewed two people within the City administrations in Vancouver and Victoria whose work involves supporting community gardens and orchards, and the Toronto city councilor who represents the ward that includes Ben Nobleman Community Orchard.

I wanted to study orchards that were relatively well established—at minimum, five years old—and where there was a solid core group of people who were actively and regularly using the space and/or contributing to its upkeep. In the end, the sites I chose included Copley Community Orchard, Strathcona Community Garden, Jonathan Rogers Park, and Norquay Learning Orchard (all in Vancouver); Spring Ridge Commons, Fernwood Community Orchard, and Banfield Community Orchard (Victoria); Welland Community Orchard (View Royal/Greater Victoria); and Ben Nobleman Community Orchard (Toronto).

It was not my aim to identify or comprehensively survey every single community orchard in these three cities. Rather, following an extensive environmental scan and preliminary site visits, I chose to take a case study approach, focusing on a limited number of orchards through in-depth exploration of the perspectives of those most intimately involved. As cases are "neither entirely unique nor entirely representative of a phenomenon" (Baxter, 2010, p. 86), I chose to look at a moderate number of cases to balance the particular and that which might be generalizable. My goal was to bring together a mix of different narratives that collectively illustrate the complexity—and possible ambiguity—of community *orcharding* as a social

phenomenon. To ensure diverse perspectives, I chose to study orchards of varying sizes, some very established and others quite new, some thriving and some struggling, those located both within and outside of city parks, with varying degrees of tenure security and incorporation into city operations. My sites also included one food forest; one orchard that seems more like a botanical garden because it aims to demonstrate and propagate as many different varieties of fruit trees as possible; one orchard that is part of a community garden; one that doesn't call itself an orchard but a commons; some orchards that are overseen by non-profits; and others that are completely community-run.

In the dissertation, I forward the view that community orchards are much less about the fruits produced within them and more about the production of urban space as a new kind of commons. I also argue that one of the ways community orchards are instantiating or reviving the commoning ideal is by decommodifying exchange—that is, by demonstrating that food, and the labour necessary for its production, can be procured without the direct exchange of money.[1] In so doing, community orchards end up having less to do with what volunteer orchardists *get* (i.e., free fruit) and more to do with what they *give* through the medium of the orchards – to themselves, to each other, to the land, and to their communities. The article that follows is adapted from my chapter on decommodification. As such, it represents only a small piece of a much bigger puzzle and may prompt questions that cannot be answered satisfactorily in the space available. Nonetheless, I will attempt to flag some important issues, to be taken up in future publications.

First, let me clarify that I do not suggest that all our food *can* or *should* be produced by volunteers. I *do*, however, believe that understanding economies that move us away from commodification is important and that looking at examples—even micro-scale—might be instructive. For twenty years or more, food scholars have been asserting that commodification is one of the fundamental injustices of our dominant, industrial food system, as it stands in direct opposition to the notion of food as a human right (Magdoff, 2012; Rosset, 2006) and is a major driver of price volatility and hunger (Alkon & Mares, 2012; Hassanein, 2003; Johnston, 2008; Welsh & MacRae, 1998). Consequently, both food scholars and activists (e.g., Heynen, 2012; Vivero Pol, 2013) have advocated for basic life goods like food to be met through non-commodity channels, "insulated from the values and ethics of the conventional food system" (Wilson, 2013, p. 730-731).

Many authors (e.g., Eizenberg, 2012; Follmann & Viehoff, 2015; Johnston, 2008; Linn, 2007; Tornaghi, 2014) have identified the potential of community gardens to function as de-commodified spaces, due to the qualities that make them inherently subversive of the commodity

[1] To be clear, there are some costs associated with community orcharding – e.g., for tools, seedlings, mulch, compost; sometimes these are donated by local businesses or the City. The land for community orchards is public, and occasionally, groups incur costs to lease it (usually very minimal). Sometimes municipalities offer a stipend for a very part-time volunteer coordinator. But there is no direct exchange of either fruit or services for money, and the bulk of the labour, sometimes all of it, is performed by volunteers.

form—namely, the way they view food as a public good and prioritize its equitable distribution over profit (McClintock, 2014, p. 148).[2] Few scholars, however, have explored the decommodified nature of community gardens (or orchards) in depth, to articulate what a decommodified space *is*, rather than just what it is *not* and why exactly that matters. If we want to foster innovation and aid the development of models that are more sustainable and more just, it might help to understand the values and mindsets that characterize non-commodity-oriented food production. In this article, I argue that the decommodified spaces of community orchards are illuminating in this regard because of the profound ways in which decommodification alters participants' relationships to land, to labour, and to those who co-produce and enjoy the fruit with them.

An invitation to community orchards

A community orchard is an orchard that is cared for, cooperatively, by some community of people, and that is managed for the benefit of members and/or the community at large, rather than for private profit (Ames, 2013). Community orchards are similar in some ways to the concept of public produce, popularized by Darrin Nordahl (2009, 2014). But where public produce is essentially edible urban landscaping, in which fruit and nut-bearing trees, bushes, and herbs are provided and maintained by municipal staff, and/or individuals or private businesses operating in an ad hoc manner as individuals or disconnected entities, community orchards are foremost the products of community members taking initiative and acting collectively (corralling varying degrees of municipal support). This difference is significant because self-organized collective action is what characterizes the commons as a realm beyond both market and state (Bollier & Helfrich, 2012).

The community orcharding movement began in the United Kingdom (UK) in 1992 as an initiative of citizens who were concerned about abandoned orchards, and orchards that had already been lost to development, and who wished to preserve them out of concern for reviving heritage fruit varieties and their related historical community identities, as much as for enhancing green space and promoting healthy eating (Ames, 2013; Department for Communities and Local

[2] Others—e.g., Guthman, 2008, and Pudup, 2008—have criticized community gardens for buttressing capitalism, a critique that prompts us to ask whether commoning should be seen as an emancipatory development or an acquiescence to the neoliberal state's withdrawal from responsibilities for social welfare. I believe this argument would make sense if the primary purpose of community orchards were to improve household food security. While this may have been originally the intention of *some* orchard initiators, interviewees made it clear to me that community orchards serve ends and fulfill needs that go well beyond those we might expect, or want, the state to fulfill. Intangible benefits include community building, skill building, shared governance of urban space, and the revival of the concept of the commons. Food production is undoubtedly still at the core of these endeavours, but not in a productivist way. Instead, it is embedded in the larger social and ecological contexts of these very multifunctional spaces.

Government (DCLG), 2011; King & Clifford, 2011). In North America, community orchards have developed somewhat differently. They tend to be located in cities and to have been planted anew, rather than being reclaimed older commercial orchards in rural areas, as many are in the UK. They tend to reflect a concern for food security and sovereignty, either at the community level or at the systems level, though heritage preservation is also important to many advocates. Most community orchards are located in municipal parks or on other publicly owned lands, but they may also be found on the grounds of housing co-ops, churches, group homes, food banks, and schools. North American cities with significant community orchards include Vancouver, Victoria, Toronto, Bloomington, Chicago, Philadelphia, Portland, and Seattle (Ames, 2013; Betz, 2014); other Canadian cities with community orchards planted in the last 5-10 years include Winnipeg, Halifax/Dartmouth, Kamloops, Guelph, Airdrie, Sackville, and Yellowknife. The community orchards I studied, and which are referred to in this article, are Ben Nobleman (Toronto); Strathcona, Copley, Norquay, and Jonathan Rogers (Vancouver); and Banfield, Fernwood, Welland, and Spring Ridge Commons (Greater Victoria) (see Table 1).

Community orchards typically consist of fruit trees—not only the familiar apple, plum, and pear (usually heirloom varieties, since they are less susceptible to pests and often taste better) but also less common fruits like persimmon, fig, and paw-paw, which grow in the relatively mild climate of Vancouver Island—as well as berry bushes, raspberry canes, grapevines, hardy kiwi, and the like. Organizationally, community orchards may involve two or three parties: a local community group, which assumes responsibility for maintenance and for harvesting the fruit and distributing it; a landowner, which in most cases is a municipality; and sometimes a non-profit organization, which may provide training and/or technical support.

Community orcharding in Canada and the U.S. can be characterized as an outgrowth or evolution of the community gardening movement. However, unlike community gardens, which are typically divided into individually maintained plots or allotments, community orchards are typically maintained through group effort and harvested in a cooperative manner; they are not easily subdivided. Growing community orchards tends, then, to be much more of a collective endeavour. People in community orchards regularly share materials, tasks, meals, and expertise—and the fruits of their labours, of course. As an orchardist I will call Joanne[3] (of Banfield Community Orchard) explained, "We all planted it. We all work in it. We all harvest it, and it's not always the same people, the same time. And we share. Sharing is the big thing."

Like community gardens, community orchards have many functions and even more meanings. They are at once a form of urban agriculture, a claim to public space, a site of therapeutic recreation, socialization, and beautification; and, at least for some participants, a demonstration of radical democratic potential and environmentalist, socialist, and/or anarchist ideals. I have come to understand community orchards as forms of *political gardening* (Certomá & Tornaghi, 2015) through which participants seek to bring about social change. Specifically, I

[3] Hereafter, interviewees I quote will be introduced by name (pseudonym) followed by the (shortened) name of the community orchard with which they are affiliated.

see community orchards as experiments in *reclaiming the commons*—those natural and cultural resources (or gifts) we inherit (or create) and collectively enjoy, to which we all have access, and for which we share a responsibility to maintain and hold in trust for future generations (Barnes, 2006; Quilligan, 2012).

Table 1: Community Orchards by Physical & Organizational Characteristics

Orchard (Year of inception)	**Location (size)**	**Leaseholder**	**Varieties grown**
Copley Community Orchard (2011)	3590 Copley St., Vancouver (1.2) acres)	Environmental Youth Alliance (to 2016); Copley Community Orchard Society (as of 2017)	apples, cherries, pears, plums, walnuts and figs, as well as strawberries, raspberries, blueberries, currants, honeyberry, jujubes and kiwi vines
Strathcona Community Gardens (1985)	857 Malkin Ave., Vancouver (1 acre)	Strathcona Community Gardens Society	Over 130 varieties of apple and 14 varieties of pear; plus walnut, persimmon, plum, cherry, paw-paw, Asian pear, peach, olive, sea berry, nectarine, Chinese date, salmonberry, fig, currant, mulberry, goumi, quince, crabapple, hazelnut, grape, loquat, chestnut, boysenberry
Jonathan Rogers Park (2010)	110 West 7th Ave, Vancouver (n/a*)	Elizabeth Rogers Community Gardens	Apple, plum, and pear
Norquay Learning Orchard (2006)	2732 Horley St., Vancouver (0.14 acre)	Renfrew-Collingwood Food Security Institute	2 heritage varieties of apple, 5 varieties of pear, 2 plum, cherry, blackberry, laurel, fig, blueberry, kiwi, kiwiberry, read and white grapes, black and white currants, and a dozen varieties of edible berries native to Western Canada
Spring Ridge Commons (1999)	Corner of Chambers ST. & Gladstone Ave., Victoria (0.5 acre)	Fernwood Neighbourhood Resource Group	Apple, pear, figs, buckthorn, goumi berries, mulberries, goji berries, kale, arugula, lima beans, herbs, miners' lettuce
Banfield Park (2013)	521 Craigflower Road, Victoria (0.04 acre)	Vic West Food Security Collective	Apples (about half of total), figs, mulberries, plum, pear, nuts
Fernwood Community Orchard (2013)	1240 Gladstone Ave., Victoria (0.12 acre)	Fernwood Neighbourhood Resource Group	Fruit and nuts
Welland Legacy Park (2013)	1215 Stancil Lane, View Royal (0.75 acre)	LifeCycles	Over 100 varieties of heritage apples as well as a selection of: pears, plums, figs, paw-paw, hazelnut, medlar, quince, cherry, grapes, kiwi, persimmon
Ben Nobleman Orchard (2009)	1075 Eglinton Ave., West Toronto (n/a*)	Informal	Apples, plums, apricot, sweet cherries, paw-paw, Asian pear

*Size is not applicable to trees planted within City parks because the area is not simply an orchard; the fruit trees are part of multi-functional space and it is not meaningful to calculate what proportion of the area of the park they occupy.

The commons represent a realm outside of both market and state, in which members of civil society engage in collective self-governance around the management of a shared resource or space. The goal is to protect and enable the access of all community members to basic life goods (Johnston, 2003; Linebaugh, 2009), life goods being distinguished from commodities on the basis of two criteria: 1) freedom from price barrier (while markets can be used for distribution, these goods cannot be restricted to those with resources), and 2) the property of enabling vital life-capabilities (McMurtry, 2001, p. 827, 837). In other words, commons typically operate outside systems of commodification. They express a social order based on cooperation and reciprocity, not competition, where the borders between particular and collective interest(s) are blurred and fluid (Bollier, 2012). Consequently, it is helpful to think of commons as *relations* more than *things* (Huron, 2015).[4]

Commodification vs. the Gift in Community Orchards

Commodification involves the transformation of goods, services, ideas, and people into objects to be bought and sold. A commodity can be thought of as "anything intended for exchange" (Appadurai, 2005, p. 35); its exchange value is prized over its use value. A decommodified space is therefore one in which goods, services, ideas and people (through their labour) are *not* exchanged for money (if they are exchanged at all), but instead are freely given. Community orchards are easily recognized as decommodified spaces insofar as they are spaces characterized by creation, production, and regeneration, not purchase or sale. In a broader sense as well, as they are decommodified spaces insofar as access and belonging are not dependent upon a person's ability to purchase or consume. Instead, interactions in the garden are predicated on a social and economic practice Crouch and Ward (1988) term "the gift relationship". This relationship owes itself *in part* to the fact that community gardeners are typically prohibited from selling their produce (City of Victoria, 2016; McKay, 2011).[5] Consequently, gardeners tend to share their surplus produce with each other and also just give it away (e.g., by donating it to a food bank).

[4] I acknowledge that there is a risk that the term 'commons', being associated with English history, might seem a colonial one, and even come across as tone-deaf in this day and age. We need to openly discuss whether or not the concept is compatible with decolonization imperatives. I believe that the concept of the commons is very much in keeping with Indigenous orientations to land, and agree with Sharma & Wright who argue for an understanding of colonialism as the theft of the commons (other people's commons) and decolonization as a struggle against historical relations of expropriation and exploitation, leading to the gaining of a global commons (2008-9, p. 132-3).

[5] Interestingly, this characteristic does not seem to be shared with community orchards in the UK, where selling the produce – as well as value-added items such as jams, jellies, pies, and ciders – is encouraged, through green grocers, farmers' markets, and road-side stands (King & Clifford, 2011).

It is this idea of the gift that provides a tangible counterpoint to the commodity. Consequently, if we are to really understand decommodification, we need to understand gift theory. Here, I turn to the work of Lewis Hyde, whose 1983 book, *The Gift*, counter-posed the selflessness of creative works to the culture of capitalism and offered a mediation on what it means to be an artist in the modern world (Hyde, 2007). It is following Hyde's work that Crouch and Ward (1988) made their oft-quoted observation that social and economic behaviour in UK allotment gardens is predicated on the "gift relationship"—i.e., sharing of produce, mutual aid, and a general refusal to exchange produce for money.[6] Hyde's book has come to be regarded as a modern classic and a touchstone for understanding the workings of gift economies generally.

According to Hyde, the difference between a gift and a commodity is profound. The gift is offered freely, with no expectation of return to the giver; it functions to establish a feeling-bond between people. Gifts function as covenants, symbolizing an understanding and a desire regarding relationship. This is most evident in gifts of incorporation (as in wedding rings), gifts of peace (to abolish division), and gifts of atonement (to re-establish broken bonds). Sometimes gift exchange is circular, meaning that the giver gives to someone from whom they will not receive, though they will eventually receive from someone else. In large groups, gifts act not so much to consolidate bonds of affection between individuals as to constitute and affirm group membership—to make one body out of many (Hyde, 2007, p. 97). In community orchard and community garden circles, this is evident in the long-established ritual of the potluck (*de rigeur* after a work party) where labourers come together and share the edible gifts each has brought to the community table. Gifts bring with them a sense of cohesion, providing "a kind of anarchist stability"; gifts act to make one body out of many (Hyde, 2007, p. 97).

The commodity, on the other hand, is exchanged either for money or for an equivalently valued trade item; the exchange leaves no lasting connection between the individuals involved. In other words, a commodity becomes a commodity by moving between two separate spheres without abolishing their separation. For that reason, says Hyde, "we do not deal in commodities when we wish to initiate or preserve ties of affection" (2007, p. 85). Writes Hyde,

> Because of the bonding power of gifts and the detached nature of commodity exchange, gifts have become associated with community and with being obliged to others, while commodities are associated with alienation and freedom. (2007, p. 85-86)

The freedom of commodity exchange has to do with the lack of any lasting obligations between people that are created as a result. Commodity exchange is concerned only with paying to balance the scale. Gift exchange, on the other hand, creates an obligation, not necessarily to

[6] Hyde's work was in turn based on that of anthropologist Marcel Mauss, whose influential book, *The Gift: The form and reason for exchange in archaic societies*, was originally penned in French in 1923 and first translated into English in 1954 (Mauss, 1923-24 as cited in Hyde, 2007).

return the gift directly, but more often to pay it forward, producing a sense of momentum, of weight shifting from body to body so as to keep the gift in motion. (Hyde, 2007, p.11).

For these reasons, when a thing—be it fruit, labour, service, or idea—is not bought but received; not sold but given, the consequences can be profound. From my interviews with community orchardists, I learned that the ethos of the gift changes the ways orchardists view the fruit they produce, the land they work, and the other elements of nature that support the orchard; as well as their own labour, and their relationships to each other and to those to whom they offer their gifts.

Fruit as gift

Community orchardists tend to view the fruit trees as gifts, not resources or commodities. The apples, cherries and quinces are gifts of nature; so are the bees, and the pollination services they perform. This point was made clear to me when I asked interviewees how they would feel about *selling* the fruit that the question was simply a non-starter. Some interviewees did float ideas like selling tree cuttings or value-added fruit products (e.g., jam) to help sustain their projects, but all seemed to reject the model of producing the fruit itself for profit. Said Ariel (Copley),

> I don't like that idea. I don't see it that way… If the members can sell the fruit, then why can't somebody else take the fruit and sell it? In a way, it just introduces the notion of commodifying property… We communally own [it, but] not so much in the commodified sense. We "own" it in that we're responsible to it, but not in that we get to sell it.

Ariel's idea of communally owning as being responsible to something is significant. Orchardists recognize that gifts of fruit come through their labours (insofar as they assist nature), but these gifts don't belong to them. Consequently, Ariel rejects selling the fruit for profit, and wants instead to give it away. In the words of Lewis Hyde, such a view "makes evident the true structure of our relationship to the sources of our wealth…To accept the fruits of these things as gifts is to acknowledge that we are not their owners or masters, that we are, if anything, their servants, their ministers" (2007, p. 191). Such a view is clearly more aligned with a stewardship ethic than is a view of fruit (or nature) as property. In this way, the idea of the gift may be one key to the paradigm shift that long-term sustainability requires.

Because they see the fruit as a gift of nature, community orchardists are less inclined to feel proprietary about it. If they do not own it, the labour they contribute to maintaining it must be regarded as a gift to beneficiaries whom they may never see. As Gwynne (Spring Ridge Commons) put it,

> When you grow food here it's with the understanding that you may not be harvesting it, somebody else might. So, it's sort of gift giving, in that it's like Christmas or a potlatch or

> something like that, where the emphasis is on the giving, and so much abundance is generated out of that.

This idea that abundance is generated from giving is a point that Hyde makes too. He uses the example of creative gifts, noting that we frequently speak of talent as a gift.

> To have painted a painting does not empty the vessel out of which the paintings come. On the contrary, it is the talent which is not in use that is lost or atrophies, and to bestow one of our creations is the surest way to invoke the next. (2007, p. 189)

The paradox of the gift is that it is *use* that ensures plenty:

> Gifts are a class of property whose value lies only in their use and which literally cease to exist as gifts if they are not constantly consumed…What is given away feeds again and again, while what is kept feeds only once and leaves us hungry (Hyde, 2007, p. 26).

Thus, the concept of the gift has the potential to profoundly challenge deep-seated notions of scarcity in capitalist societies. But it's not an easy challenge to embrace, either for orchardists or for the general public. Most community orchards are located in public spaces—many of them city parks—open to everyone. Challenges arise, however, when others do not understand or respect the orchardists' view of the fruit as a gift for sharing. Of course, orchardists recognize that because they do not own the land, nor control access to it, they cannot claim exclusive rights to the fruits produced within the orchard, either legally or morally. But nor do they want to. In these orchards, the long-term vision has always been an enlarged circle of abundance and sharing[7]. Says Yuki (Copley), "The intention really is to make [the orchard] a community resource." Community orchardists do this by inviting the general public to join in on work parties, and to help themselves to fruit when it is ripe. They also host community food-sharing events like harvest parties, cider-making, even a traditional wassail at Banfield, in Victoria. Consequently, most orchardists aren't comfortable characterizing over-taking by the public as theft. But they do experience distress when members of the public take fruit in ways other than those intended. I believe this is because doing so violates the spirit of the gift, in at least three distinct ways.

[7] Orchards that are inside community gardens are different because community gardens operate on a clear membership basis, meaning that the fruit should, by rights, accrue just to members, rather than the broader community. Here, the experience of having large amounts of fruit taken can produce sharp divisions among members. Some desire *not* to be insular or exclusive, like a club, and express resignation about their losses. Others, who regard their garden plots or the orchard as a form of (pseudo) private property, are "up in arms about it, to the point of wanting to take photographs of perpetrators and post them" (Cecilia, Strathcona).

First, orchardists can become frustrated with people who take fruit before it is ripe, and/or who take a bite and then throw it on the ground. Not only is this wasteful, it also thwarts the givers' intentions, depriving them of the fulfillment of giving a fully-formed gift that will offer pleasure to its recipient. As one orchardist lamented, "If only that person had waited until the fig was ripe, they would have discovered how incredible a ripe fig tastes!" In the scenario in which people take too much fruit, the giving is undermined in a different way. Ideally, when one gives, one does so knowingly and deliberately; giving is a choice made by the giver, even if the recipients of one's gift remain largely unknown. It is a very different matter when all the cherries are raked from your trees the night before a planned harvest celebration (as happened at Ben Nobleman Community Orchard in Toronto). It is not just the fruit but the givers' agency that has been stolen. And when community orchardists imagine that someone might be taking the fruit to sell, the disappointment is profound because such acts represent a violation of this understanding of the fruit as a gift—an understanding the orchardists had hoped would be shared. Turning the fruit into a commodity profoundly alters the meaning of their labour and the phenomenon with which they are engaged, or wish to be.

Second, more than the loss of the fruit, what community orchardists seem most disappointed about is the lack of consideration such acts show for others; theft is wrong because it denies others their gifts, effectively excluding them from the circle.

The third problem is that people who take but don't work to maintain the orchard aren't contributing gifts of their own. This is known in the commons literature as the "free-rider" problem. This may be the hardest problem to solve, especially for community orchards that are located within public parks. As a commons, especially one characterized by a gift economy, a community orchard needs clear boundaries to establish where and for whom its norms apply.[8] Yet a public park is, by definition, open-access—not bounded at all, but contiguous with the social and economic space that makes up the rest of the city, in which decidedly different norms prevail. Taking from the commons without contributing in some way represents a third kind of violation of the spirit of the gift—a failure to reciprocate and help keep the gift in motion.

Labour as gift

> "Labor should not be sold like merchandise but offered as a gift to the community"
> - Che Guevara (as cited in Hyde, 2007, p. 87)

Community orchardists are engaged in reciprocal giving with nature when they offer the gifts of their own labours and time. Shannon (Ben Nobleman) described "the deal" between the orchard stewards and the trees this way: "We will care for them and they will give us great fruit, but if

[8] Clear boundaries – around both the resource and the community of commoners – is the first and most important principle for ensuring the sustainability of a workable commons, one of eight originally identified by Elinor Ostrom (1990) and later corroborated by extensive transdisciplinary research.

we don't care for them, they will give us crappy fruit or none at all." Orchardists like Shannon give of their own labour not only to produce fruit, but also to cultivate *relationship* with the trees. This is evident in the way she speaks about pruning:

> It's the most special time. It's when you create a relationship with your tree… if you're pruning correctly…It's not just hacking limbs off. The tree, with its buds, sort of shows you where it needs to be cut…You watch how the tree works with you. It's a very beautiful time.

Giving of one's labour creates a relationship not just to one or more living things, but to natural cycles. As Lewis Hyde writes, "[T]he circle of gifts enters the cycles of nature and, in so doing, manages not to interrupt them and not to put man [sic] on the outside" (2007, p. 23-24). Labour as relationship-building thus acts to heal the alienation that characterizes dominant agro-industrial food systems, and to which many interviewees referred.[9]

Giving of one's labour also builds relationship with others in the community. Community orchardists devote countless hours to their projects and make the orchards a very significant focus of their lives, sometimes for years on end. In this way, spearheading a significant transformation of a public space is like giving a gift to the whole community. Orchardists labour to give the gift of knowledge—particularly to neighbourhood children, who will benefit from seeing how food grows and tasting it right off the tree—and the gift of enjoyment that others will get out of being in an improved space where they interact in beautiful ways. Miles (Copley) spoke of "removing [food] from this commodity-based economic system and putting it into more of a social, community-based context", observing that

> It has a different meaning. It has a different feeling to it, too. It's nourishing both for you individually, and your health, but it also nourishes the spiritual and social side of us that commodity agriculture-industrial food system doesn't nourish in the same way.

Orchardists gift their labour to planning, organizing, tending, and problem-solving when things go sideways – as when irrigation lines or standpipes break and it is up to the orchardists to fix them. Because the orchardists feel it is their project, their "baby", they are motivated to contribute. Tim (Welland) exemplified this spirit of giving when he said, "Ask not what the orchard can do for me; ask what I can do for the orchard." In fact, though, gifts are never unidirectional. As Walt Whitman famously observed, "The gift is to the giver, and comes back most to him—it cannot fail…" (as cited in Hyde, 2007, p.13). Hyde describes gifts as "an emanation of *Eros*" (2007, p. 357), understood in the Jungian sense of a desire for connection

[9] Alienation is, of course, a well-known Marxian concept pertaining to labour under capitalism. In the food realm, McClintock (2010) conceptualizes alienation as one of three dimensions of "metabolic rift" – the ecological, the social, and the individual – that have come about because of the industrialization of agriculture under capitalism.

and wholeness, in contrast with *Logos*, which is associated with objectivity and rational calculation. This sense of connection and wholeness is deeply satisfying, such that there may be no other return necessary for the giver; the act of giving is self-reciprocating.

Again, the theory fits what I observed. When asked about what motivates them to contribute to community orchards, interviewees sometimes mentioned therapeutic benefits such as relaxation and enhanced mental health, and a sense of connection with others. But more often they talked about the rewards of giving itself. Said Dorothy (Welland), "It's so fulfilling, absolutely so fulfilling. I look forward to it. I had to miss one day and it was... It didn't feel right!" As Dorothy's fellow orchardist, Jake, observed,

> It's almost like when you work. If you just work for a pay cheque, the extrinsic rewards, then the job isn't that important. But with the intrinsic rewards and self-fulfillment and community contribution, then it becomes a lot more valuable. That's what Welland Park is providing for us. It's a really great place to be.

Perhaps no quote better exemplifies Whitman's idea that the gift is to the giver than this one from Gwynne (Spring Ridge Commons):

> It's not necessarily me giving, I am being given to at the same time…I am not thinking, 'Oh, I am giving this to this person'. It's like I am receiving. I always feel that it's a privilege.

The desire on the part of community orchardists to give of themselves is also in large part a response to the gifts they have received from those who came before, and from each other. At Welland, orchardists frequently refer to the altruistic efforts of the orchard's namesake, Rex Welland, whose generosity and public spiritedness continue to inspire others to give of themselves for the community. Jasmine (Welland) reflected on Rex's contribution with awe, "Somebody, not that different from you and me, did this, in their retirement, in their spare time, and look at how it's transforming this community!" Orchardists also see the voluntary labour of their fellow workers as a gift that contributes to realizing the vision community orchardists share. And at Toronto's Ben Nobleman, there is evidence that the work of the orchardists and their enthusiasm for improving their park has influenced City workers, who, in response, have gone above and beyond, giving gifts of their own to support the orchardists' efforts to improve the park. Shannon outlines this dynamic as she has experienced it:

> Parks and Rec, when they know how much we care about our park, I think they spend more time there. And if I have a problem, I can call the head gardener of our area, and he's so happy to come out and help us out…because he knows that we care.

There is an infectiousness to the gift—the way it inspires others to give in kind, producing that sense of momentum or weight-shift from body to body that keeps the gift in motion.

That is not to deny the difficulties many community orchardists experience in getting others on-side with such a radical vision, or in ensuring that work is shared equitably within the community orchard. There are invariably leaders, or super-volunteers, who do immense amounts of work because they make the orchard their passion; they give of themselves selflessly to benefit others whom they may never meet, hoping fervently that others will continue to join in, to give, to show up, to stay with the project, to follow through on what they said they'd do. As Joanne (Banfield) candidly observes,

> It's exhausting. And we've gone through these things where we're like 'To hell with it. I just can't do it. I'm tired of asking and being the only one.' And then something amazing happens, like ten people turn up, absolutely bizarrely, and you're just filled with this energy that takes you a little bit further…

That organizers like Joanne can be re-energized in this way suggests that it is not just the labour itself, but the reciprocity (or lack thereof) that makes the difference between continuing and burning out. When orchardists feel that others are keeping the gift in motion, they are motivated to continue, even when the work is hard, as it often is. Hyde writes, "When the gift passes out of sight and then returns, we are enlivened…each gift is an act of social faith" (2007, p. 20).

One challenge that follows from conceptualizing labour as gift is that those who volunteer their labours typically want to give their time and efforts freely, without coercion. To some, this can mean a desire for very little structure or rules—e.g., regarding commitments to work parties—which can pose difficulties for grassroots organizations working in the social economy. These difficulties may well be unavoidable in decommodified spaces governed by the ethos of the gift, but understanding the theory behind why this is so may help to manage expectations.

According to Hyde, the gift economy is governed by two ethical directives: 1) that each participant should determine their own contribution within vaguely specified expectations; and 2) that the equivalence of two persons' contributions is not to be discussed. Instead, the equivalence of the counter-gift is left to the giver. Consistent with this ethos, community orchardists I spoke with described their work as wholly voluntary, and frequently expressed how much they enjoy freely giving of their time. Gwynne (Spring Ridge Commons) commented,

> You're working in a way that isn't bound in the same way that other work is. In volunteering your work, it's like you still own your labour, right? It's the difference between work that is done for remuneration or that becomes a kind of slave labour, 'cause that's labour that's being taken from you. This is labour that you give but you're getting so much in return. It gives it a certain power when you give your labour freely... labour is the only thing that you actually possess as a poor person.

Of course, it is a privilege to be able to *choose* to give freely of one's time; not everyone can do that. As Allen points out, "those with the greatest need often have the least ability to exercise individual choice" precisely because "allocations of choices are shaped by the historical demographics of inequality" (2010, p. 300). Indeed, many authors have voiced important critiques of volunteerism, saying that it may also promote conditional citizenship (Lepofsky & Fraser, 2003; Perkins, 2010), and "discipline citizens to accommodate rather than confront the state" (Ghose & Pettygrove, 2014, p. 1107). Rosol (2011 and 2018) also articulates critical debates around volunteering and neoliberal municipal land management; admittedly, the line that separates community empowerment and cooptation by the state may indeed be a fine one (Perkins, 2009, 2010; Rosol, 2010). At the same time, I would assert that there is a world of difference between the City conscripting volunteers to do the City's work for them and the phenomenon of community orchards, which are grassroots-driven and in fact making demands of the state (for access to vacant land, for materials, for funding etc.)—not the other way around.

The larger point here is not that food production by unpaid volunteers represents an ideal or a panacea, but that decommodification of food entails changes above and beyond the way we approach exchange, and that any effort to sketch out workable food-as-commons models will need to appreciate the ways that labour, motivation, reward, and social relationships may also need to be reconceived in a system founded on decommodification.

Community orchardists also told me that having the autonomy to be able to determine the nature and extent of their own contribution is very important to them. Said Bill, of his extensive work championing and supporting native pollinators at Welland Community Orchard,

> I'm 80 years old and I want to do my thing when I want to do it. And this fits in perfectly. I enjoy doing this…but nobody puts any pressure on me. I don't come to many of their Sunday pruning gatherings…but they just leave me alone to do my thing, because they know I'm doing it.

Successful community orchard leaders and initiators understand the importance of allowing volunteers the freedom to choose how and when to labour in the orchard, and they respect it. As Zsófia (Ben Nobleman) explained,

> It's never like, 'You didn't come last time. I was looking for you!' When you give people a choice – you can come or not – people choose to go. But if they tell you to go, you'll be like, 'I'm not going!' It takes away your freedom.

Interviewees also indicated that when the giving is free and not at all coerced or imposed, people often do much more than they need to. Carolina (Strathcona) gave a good example:

> We have a gardener who goes to church every Sunday so he doesn't come to work parties but he's here at least three times a week and he does all the mowing of the grass and cuts stuff. And he paints tables and uses his own money.

From these quotes, it seems that it is not obligation per se that people chafe at, but imposition. In a gift economy, the obligation to give, and to reciprocate, is understood and accepted. When people feel an obligation to the orchard and to each other that arises from within, it compels them to give in ways they typically feel good about. But when the shape, form, timing, quantity, or value of the gift is externally dictated, or seems to come from "above", people will tend to resist.

The second ethical directive in a gift economy, as mentioned above, is that the equivalence of two persons' contributions is not to be discussed. I found this to be very true in that community orchardists seemed very reticent to link the amount of work done to any worker's entitlement to a particular quantity of fruits, or proportion of the harvest. The reasons for de-linking inputs and outputs are many and include, admittedly, the difficulty of quantifying, measuring and monitoring members' labour, as well as the acknowledgement that each member brings different abilities to contribute. Some who are older or physically less fit may not be able to contribute in ways that require heavy lifting or bending over or sustained vigorous activity, while some who have young children might be time-strapped and unable to consistently show up as planned. Instead, the ethos in the community orchard tends more towards Marx's oft-quoted maxim, *from each according to ability and to each according to need*. This, too, illustrates the gift orientation of community orchardists. When asked his views on correlating orchardists' hours worked to numbers of apples or other fruit they might take home, John (Strathcona) said, "I don't know if anybody'd really be too keen on that. It would be like commodification."

The avoidance of equivalences can also be traced to the effects this might have on relationships within the orchard. Specifically, the lack of trust that is suggested by any members' felt need to measure and monitor others tends to work against the establishment or nurturance of social bonds. As Hyde says, "emotional connection tends to preclude quantitative evaluation" (2007, p. 85). And for those who understand themselves to be engaging in a gift economy, and who see their labour as a gift, the very idea of measurement is alienating and de-motivating. Community orchardists understand intuitively what Hyde meant when he wrote that "[W]ealth ceases to move freely when all things are counted and priced." (Hyde, 2007, p. 28). Most of the time, members are entrusted to be self-monitoring and to do their part with little, if any, external verification. That is not to say that it always works, just that autonomy and self-direction (with loose oversight) seems to bring out the greatest commitment and initiative in members.

Conclusion: Decommodification in the social economy

To summarize, I've asserted that interactions in community orchards are predicated on the gift relationship. This includes interactions between orchardists and the trees (land, soil, pollinators, nature…) as well as interactions among orchardists and between orchardists and the public. The gift relationship shapes and informs the way community orchardists feel about the space, the fruit, and the ways they give of themselves to make both available to others. This gift orientation is evidenced in the resistance interviewees feel toward commodification, in the nature of the joys and disappointments they report, and in the conditions under which they offer their labour. Specifically, they take joy in building relationships, both with the trees and with their fellow orchardists; in connecting with the seasons, the pollinators, and the soil; and in giving of themselves in ways that generate intrinsic rewards. They feel disappointment when others do not understand the nature of the gift, or violate it in spirit by taking too much, by wasting fruit, or by turning fruit into a commodity.

Naturally, questions arise about the sustainability of these projects long-term. Community orchards have very porous boundaries, both spatially and socially, which can make them harder to maintain[10]; turnover in some community orchards is high; organizationally, many are fragile. At most community orchards, distribution of the harvest is not highly organized, and the harvest itself is almost impossible to monitor. As these are public spaces, open to everyone, it is nigh impossible to know to whom orchardists are ultimately giving their efforts, and the fruit. Beyond the sharing they do together in harvest parties, beyond distribution within their own self-organized groups, the beneficiaries may be unknown. Certainly, there are countless anonymous passers-by who benefit from a piece of fruit here or there (or sometimes, quite a lot of fruit). In most community orchards, this is all part of the design and the orchardists' shared vision. It is therefore quite difficult to evaluate how equitable the end result may be. Still, community orchards represent something all too rare and in need of promotion: a living, working manifestation of the belief that food can be conceived of as a public good, and a demonstration of what Stavros Stavrides calls "the emancipatory potentialities of sharing" (2016, p. 74).

What, then, can we learn from community orchards and/or from gift theory that might be of value to the development of novel models of food production that might one day actualize decommodification on a larger scale? One take-away might be simply that it *is* important to think of what a space (or model or system) is, instead of just what it is *not*. The term "decommodified" tells us only that goods, services, idea and people's labour are not being bought and sold. If we accept Hyde's premise that the opposite of the commodity is the gift, then we have something more constructive to work with—namely, the question of how to promote giving.

[10] On the other hand, porous boundaries can help ensure that commons do not become new forms of enclosure. The concept of porosity and "expanding commoning" is promoted by Stavrides as "a step towards a culture of mutual involvement and negotiation" (2016, p. 72).

Some might be tempted to think of other ways to use money as an enticement to people to give or volunteer more. But as Michael Carolan (2017) reports, the introduction of money into charitable initiatives is well known to deter and reduce giving. Economists call it the "crowding-out effect" whereby intrinsic motivations are crowded out by external rewards (2017, p. 111). As far back as the 1970s, researchers looking at the phenomenon of blood donation were reporting that programs that paid people a nominal sum to donate actually had lower rates of participation (Carolan, 2017, p. 111). Offering financial compensation changed the meaning of the donation from being a selfless act to one motivated by self-interest; their donation was no longer a gift. This suggests that the absence of money is an important part of what brings people together in mutual aid, in a spirit of generosity, and with feelings of commonality.

Moreover, community orchards show us that a decommodified space is not just a space marked by an absence of monetary transactions, but one in which even the notion of equivalence in exchange is challenged. A de-commodified space is one that evinces a sense of obligation to give or reciprocate that arises from within rather than being imposed from without. A de-commodified space is one in which volunteering is so much more than doing unpaid work; the *voluntariness* of it is paramount—i.e., the autonomy, the agency, the gift. This understanding is especially important when we consider that many community orchardists are driven to heal a sense of alienation they feel from the land; labour can only be thought of as de-alienating to the extent to which it is freely given.[11]

In sum, if we want to promote a gift economy, we need to trust in the different logic and ethos that guides it. I have suggested that this more helpful ethos may be one that promotes autonomy, non-coercion, and the sense of belonging that generates an intrinsic felt obligation to accept and to keep the gift in motion. It is an ethos that reflects very different conceptions of scarcity and abundance. Hyde quotes the anthropologist Marshall Sahlins, who famously claimed that hunters and gatherers "have affluent economies, their absolute poverty notwithstanding." This is because they do not arrange production and distribution through the behaviour of prices, nor allow an "insufficiency of material means [to] become the explicit, calculable starting point of all economic activity" (Sahlins as cited in Hyde, 2007, p. 28). Following both Sahlins and Hyde, we can see that the gift economy is in fact a rebellion against scarcity, or its centrality as an organizing principle in modern economies: "In the world of gift…you not only can have your

[11] That said, I want to acknowledge that there are many who work the land in ways that are healing and not completely outside of a cash economy, Community-Supported Agriculture (CSA) being one of them. I would suggest that insofar as ethical and sustainable farmers are rarely compensated adequately for what they do, and are instead driven by higher ideals, many *are* already engaging in the spirit of the gift (and sacrifice). Also, in the case of CSA's, we can see aspects of decommodification in the de-linking of precise volume/quantity of produce and money, and in the non-monetary forms of reciprocity involved: consumers give the farmers a gift of trust and risk-mitigation, and the farmers give the consumers not only healthy food but assurances that their social, environmental and spiritual values are being upheld.

cake and eat it too, you can't have your cake unless you eat it." (Hyde, 2007, p. 27). Where use assures plenty, and to possess is to give, new ways of seeing and sharing open up to ensure the continuation of "this abundance that we share" (Gwynne, Spring Ridge Commons).

But surely I am not saying that all food provision can be organized this way – produced by volunteers and given away for free? I am not. We all know that there are realms of human need that are not well supported in a market-centred economy. And as a society, we do sometimes find non-market ways to organize around the provision of things we value—if we value them enough. I see in the efforts of community orchardists, and in the broader social economy, a recognition that food may fall in this category, and a desire to organize in non-market ways around its provision. However, there are limits of scale when it comes to gift economies. Moreover, it is evident that those who produce food have expenses that must be paid in cash and that they need to make a living. Even voluntary organizations need financial support. Consequently, some degree of gift and commodity co-existence must be expected in even the most progressive food systems.

Still, I take the existence of community orchards as a sign that at least some among us are starting to point in the direction of food as a commons more generally, even if the eventual shape of such a thing might exist only in embryonic form today. Markets are ubiquitous in our lives and will undoubtedly be for some time to come, but non-commodified spaces like community orchards, where the gift relationship predominates, signal a hopeful opening of our collective imagination to the potential for something radically different to emerge.

While there are many facets of community orchards that could be discussed in relation to the social economy of food—including their contributions to multi-functionality and participatory democracy in food systems; the increased opportunities they represent for collective action and collaboration; and their relationship to post-neoliberalism – in this article, I have focused on decommodification because I think it represents a sort of "holy grail" in critical food scholarship, a quality that many scholars have suggested aspiring to, but that still largely eludes understanding, given the paucity of operational models available for emulating. There are many steps yet to be imagined in order to scaffold new, more just and sustainable (and scaled-up) models of food production onto what currently exists. But if this description of the gift economy in community orchards can spark some new ideas or fertilize others' thinking about the place of decommodification in the social economy of food, I would be most content to set that gift in motion.

Acknowledgements: This research was supported by the Canadian Social Sciences and Humanities Research Council (SSHRC) and Carleton University (Ottawa). The author gratefully acknowledges the contributions of all those interviewed, and the helpful constructive insights provided by Dr. Trish Ballamingie, Dr. Charles Levkoe, and Dr. Irena Knezevic, as well as those of two anonymous reviewers. Any errors and misinterpretations are mine alone.

References

Alkon, A.H., & Mares, T. (2012). Food sovereignty in US food movements: Radical visions and neo-liberal constraints. *Agriculture and Human Values*, *29(3),* 347–359.

Allen, E. (2010). Growing community food systems. In R. Heinberg, & D. Lerch (Eds.). *The Post Carbon Reader: Managing the 21st Century's Sustainability.* Post Carbon Institute. Retrieved from http://library.uniteddiversity.coop/Cooperatives/Food/Growing_Community_Food_Systems-Post_Carbon_Reader.pdf

Ames, G.K. (2013). *Community orchards*. National Sustainable Agriculture Information Service (ATTRA). Retrieved from http://www.attra.ncat.org.

Appadurai, A. (2005). Definitions: Commodity and commodification. In M. Ertman, & J. C. Williams (Eds.), *Rethinking commodification: Cases and readings in law and culture* (p. 35). New York: University Press.

Barnes, P. (2006). *Capitalism 3.0: A guide to reclaiming the commons.* San Francisco: Berrett-Koehler Publishers.

Barron, J. (2018). The giving trees: Community orchards as new urban commons. (Doctoral dissertation). Carleton University. Ottawa, Canada. Retrieved from https://curve.carleton.ca/fa95641c-0825-4724-a3a7-6e75d0ddb926.

Baxter, J. (2010). Case studies in qualitative research. In I. Hay (Ed.), *Qualitative Research Methods in Human Geography* (3rd ed.) (pp. 81-97). Oxford University Press: Don Mills.

Betz, M. (2014). *Governance of community orchards: A case study* (Unpublished graduate paper written for Y673 Seminar, The Vincent and Elinor Ostrom Workshop in Political Theory and Policy Analysis). Indiana University, Bloomington, IN.

Bollier, D. (2012, June 5). *The commons emerges as a theme at the People's Summit in Rio* [Blog post]. Retrieved from http://bollier.org/blog/commons-emerges-theme-people%E2%80%99s-summit-rio.

Bollier D., & Helfrich, S. (Eds.) (2012). *The wealth of the commons: A world beyond market and state.* Amherst, MA: Levellers Press.

Canadian Social Economy Research Partnership. (n.d.). *Building and Strengthening Communities through the Social Economy*. Victoria, BC: University of Victoria. Retrieved from http://socialeconomyhub.ca/sites/socialeconomyhub.ca/files/socialeconomybookletenfinal.pdf.

Carolan, M. (2017). *No one eats alone: Food as a social enterprise.* Washington: Island Press.

Certomà, C., & Tornaghi, C. (2015). Political gardening. Transforming cities and political agency. *Local Environment: The International Journal of Justice and Sustainability, 20(10),* 1123-1131.

City of Victoria. (2016). *Community gardens policy.* Retrieved from http://www.victoria.ca/assets/Community/Growing~in~the~City/Community%20Gardens%20Policy_Revised%202016.pdf

Crouch, D., & Ward, C. (1988). *The allotment: Its landscape and culture*. London: Faber and Faber.

Department for Communities and Local Government, UK (2011). *Community orchards case studies.* Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/5908/19732401.pdf.

Eizenberg, E. (2012). Actually existing commons: Three moments of space of community gardens in New York City. *Antipode, 44*(3)*,* 764-782.

Follmann, A., & Viehoff, V. (2015). A green garden on red clay: Creating a new urban common as a form of political gardening in Cologne, Germany. *Local Environment: The International Journal of Justice and Sustainability, 20*(10)*,* 1148-1174.

Ghose, R., & Pettygrove, M. (2014). Urban community gardens as spaces of citizenship. *Antipode, 46*(4)*,*1092-1112.

Guthman, J. (2008). Neoliberalism and the making of food politics in California. *Geoforum, 39*(3*),* 1171–1183.

Harvey, D. (2012). *Rebel cities.* New York: Verso.

Hassanein, N. (2003). Practicing food democracy: A pragmatic politics of transformation. *Journal of Rural Studies*, *19*(1)*,* 77–86.

Heynen, N. (2012). Food justice, hunger and the city. *Geography Compass, 6*(5)*,* 304-311.

Huron, A. (2015). Working with strangers in saturated space: Reclaiming and maintaining the urban commons. *Antipode, 47*(4)*,* 963-979.

Hyde, L. (2007). *The gift: Creativity and the artist in the modern world* (2nd ed.). Toronto: Random House.

Johnston, J. (2008). Counterhegemony or bourgeois piggery? Food politics and the case of FoodShare. In W. Wright & G. Middendorf (Eds.), *The fight over food: producers, consumers, and activists challenge the global food system* (pp. 93–120). University Park: Pennsylvania State University Press.

King, A., & Clifford. S. (2011). *Community orchards handbook.* Dorset, England: Green Books.

Linebaugh, P. (2008). *The Magna Carta manifesto: Liberties and commons for All.* Berkeley and Los Angeles: University of California Press.

Linn, K. (2007). *Building commons and community.* Oakland, CA: New Village Press.

Magdoff, F. (2012). Food as a commodity. *Monthly Review*, *63*(8*).* Retrieved from http://monthlyreview.org/2012/01/01/food-as-a-commodity

McClintock, N. (2010). Why farm the city? Theorizing urban agriculture through a lens of metabolic rift. *Cambridge Journal of Regions, Economy and Society, 3,* 191–207.

McClintock, N. (2014). Radical, reformist, and garden-variety neoliberal: Coming to terms with urban agriculture's contradictions. *Local Environment: The International Journal of Justice and Sustainability, 19*(2)*,* 147-171.

McKay, G. (2011b, May 2). Radical plots: The politics of gardening. *The Independent*. Retrieved from http://www.independent.co.uk/property/gardening/radical-plots-the-politics-of-gardening-2277631.html.

McMurtry, J. (2001). The life-ground, the civil commons and the corporate male gang. *Canadian Journal of Development Studies*, *22,* 819-854.

Nordahl, D. (2009). *Public produce: The new urban agriculture.* Washington, Covelo, London: Island Press.

Nordahl, D. (2014). *Public produce: Cultivating our parks, plazas, and streets for healthier cities.* Washington, Covelo, London: Island Press.

Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action.* Cambridge, UK: Cambridge University Press.

Perkins, H. (2009). Out from the (green) shadow? Neoliberal hegemony through the market logic of shared urban environmental governance. *Political Geography*, *28*(7)*,* 395–405.

Pudup, M. B. (2008). It takes a garden: Cultivating citizen-subjects in organized garden projects. *Geoforum*, *39,* 1228–1240.

Quilligan, J. (2012). Why distinguish common goods from public goods? In D. Bollier & S. Helfrich (Eds.), *The wealth of the commons. A world beyond market and state* (pp. 73-81)*.* Amherst, MA: Levellers Press.

Rosset, P.M. (2006). *Food is different: Why the WTO should get out of agriculture (Global issues*). London, UK: Zed Books.

Rosol, M. (2011). Community volunteering as neoliberal strategy? Green space production in Berlin. *Antipode, 44*(1)*,* 239–257.

Rosol, M. (2018). Politics of urban gardening. In K. Ward, Andrew, E.G. Jonas, B. Miller, & David Wilson (Eds.), *The Routledge Handbook on Spaces of Urban Politics* (pp. 134–145). New York: Routledge.

Stavrides, S. (2016) *Common space: The city as commons*. London: Zed Books.

Tornaghi, C. (2014). Critical geography of urban agriculture. *Progress in Human Geography, 38*(4)*,* 551-567.

Vivero Pol, J.L. (2013). *Food as a commons: Reframing the narrative of the food system*. SSRN Working paper series. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=22555447

Welsh, J., & MacRae, R. (1998). Food citizenship and community food security: lessons from Toronto, Canada. *Canadian Journal of Development Studies/Revue Canadienne d'Etudes du Développement, 19*(4)*,* 237–255.

Wilson, A.D., (2013). Beyond alternative: Exploring the potential for autonomous food spaces. *Antipode, 45*(3)*,* 719-737.

Vol. 6 No. 3, pp. 148–169 November 2019

Canadian Food Studies La Revue canadienne des études sur l'alimentation

Original Research Article

Social economy of food initiatives that are nourishing communities through "power-with" practices

Mary Anne Martin[a*], Irena Knezevic[b], Patricia Ballamingie[b]

[a] Trent University
[b] Carleton University

Abstract

From 2014 to 2019, Nourishing Communities: Sustainable Local Food Systems Research Group explored food initiatives in the social economy, many of which use practices like bartering, gifting, and self-provisioning, that remain under-recognized for their economic value. Nourishing Communities considered how these organizations may contribute to food security, community development, and environmental remediation, especially for marginalized groups. Its researchers collaborated with such organizations to complete participatory action projects and a range of products to communicate the initiatives' impacts. As three of those researchers, we subsequently synthesized the material from these outputs to show the resources, barriers, and impacts of the respective initiatives. This meta-analysis reveals that these initiatives not only produce economic, social, and environmental benefits, but also work to organize human relations. Beyond considering how initiatives in the social economy of food interact with the market economy, we use Karlberg's schema of power to illustrate their potential to reconceptualize human relations. Here we find them gravitating towards "power with" practices that emphasize cooperation over competition. Throughout, we employ the concept of framing to propose ways in which that re-conceptualization might "grow legs" and extend further into larger social discourses. In so doing, we find the initiatives strategically invoking alternative framings of work, knowledge, social relations, and value in order to explain the impact of their own work. Although further research is needed regarding the meaning that impact and power hold for social

*Corresponding author: marymartin2@trentu.ca
DOI: 10.15353/cfs-rcea.v6i3.362
ISSN: 2292-3071

economy initiatives, this research contributes to scholarly debates surrounding the potential of food initiatives in the social economy.

Keywords: social economy; framing; neoliberalism; impact; power

Introduction

From 2014 to 2019, Nourishing Communities: Sustainable Local Food Systems Research Group (hereafter referred to as Nourishing Communities) has explored how food initiatives in the social economy function and contribute to food security, community development, and environmental impacts, especially for marginalized groups. Social economy has received greater attention from governments (Stephens et al., 2019), granting some community food initiatives greater legitimacy, but leaving others out of discussions, particularly those whose activities fall more under the informal economy umbrella. Activities like bartering, gifting, food sharing, seed exchanging, and self-provisioning are rarely seen as economic activities, though they are typically characterized by the same values and motivations as social economy. Consequently, Nourishing Communities works with both social and informal economy initiatives (see Table 1) and sees the lines between the two as blurred at times.

Throughout this work, we were cognizant of the importance of context in understanding social and informal economy. Geographical location, policy landscape, cultural context, and the purpose that drives each of these initiatives, all influence how they contribute to their communities. For instance, Canada's policy environment is different from that of some jurisdictions (e.g., Belgium, Portugal, Spain) that have laws to protect social economy. In addition, traditional forms of food sharing may be common in Indigenous communities, and rural and remote areas, but newer forms, such as those mediated through information and communications technology have begun to develop in urban environments (Davies, 2019). Moreover, a social enterprise that pursues social goals alongside profit may have to prioritize economic sustainability, whereas this is less of a concern for a community group that relies exclusively on volunteer labour. Nevertheless, as we demonstrate below, the commonalities across these initiatives are many. We blur the lines among the initiatives not to erase their specificities, but to highlight the collective value of their work.

Researchers within Nourishing Community's Social Economy of Food (SEOF) project worked closely with community organizations to develop case study reports, webinars, videos, an impact-focused workshop[1], and scholarly articles, including the ones featured in this *Canadian Food Studies* journal special issue. Nourishing Communities' engagement in

[1] All available at Nourishing Communities (2018). The videos can also be viewed on the Laurier Centre for Sustainable Food Systems' YouTube Channel, at https://www.youtube.com/playlist?list=PLdtZB0Q09A3Ctrj5kAISVqugEX44QtXqx

participatory action research projects with each community partner provided a deeper level of understanding while helping to support the goals of these organizations. Recently, the findings from this body of work have been summarized through a set of infographics.[2]

Overall, Nourishing Communities (2017a) set out to determine the mechanisms through which social economies:

1) increase prosperity for marginalized groups;
2) build adaptive capacity to increase community resilience;
3) bridge divides between elite consumers of alternative food products and more marginalized groups;
4) increase social capital; and
5) foster social innovation, entrepreneurship, and economic diversification.

This research agenda arose from numerous consultations among the research team members, and with existing community partners who had expressed interest in further collaborating with Nourishing Communities. Using terms like *prosperity, products, entrepreneurship,* and *diversification*, these questions evoke the priorities of capitalist economics and the dialect of a funding audience. They proved a pertinent line of inquiry, however, given that our community partners went on to emphasize their need to measure and communicate impact in ways that can be understood and valued by those who support the financial viability of projects. As we demonstrate across our research outputs, the SEOF initiatives have, in fact, demonstrated very real effects on their communities, local economies, and ecosystems, even if these effects are often challenging to quantify.

Conversely, as one community partner stated: "The measurements that we use don't measure the things that define the world that we live in" (Nourishing Communities, 2017b, p. 8). Simply stated, social economy initiatives struggled to communicate their other-than-monetary value(s) in monetary terms. At the same time, these partners sought to speak their truth in their own words (and to see it valued). They reiterated their need to articulate their less tangible and more complex impacts and goals, such as social capital, community building, and the experience of sharing food (Nourishing Communities, 2017b). Community partners and researchers alike recognize that such self-expression can seem a bit luxurious when insufficient funds threaten the very viability of many projects. However, they also recognize the importance of initiatives not losing their raisons d'être while trying to respond to funding constraints. Amidst such constraints, alternative food initiatives such as these must also endure scholarly charges of failing to transform prevailing economic and political systems (Allen, 2010; Guthman, 2008).

Given that monetary and non-monetary activity are interconnected, we first consider the monetary impacts of the social economy of food initiatives and then the challenges they face in measuring other forms of impact. We proceed to explore the less quantifiable significance that community partners were eager to illuminate. In so doing, we consider the multiple ways in

[2] Available at Nourishing Communities (2018)

which the initiatives deploy power and shift dominant frames as they foster empowerment within and outside lines of equality, reinvest resources, use the power of naming, and choose pro-social and pro-environmental values over a need for control. Overall, the SEOF project suggests that, while much of the work of food initiatives in the social economy *could* and *should* be assigned monetary value and market importance, their greater contribution lies in the process of reconceptualizing human relations, a transformative pursuit that we will explore through the lens of power. In particular, we find the initiatives employing what Karlberg (2005) refers to as "power with" (p. 9) practices, those which encourage cooperation over competition. Our goal in this paper is to trouble the distinction between these seemingly competing economic and social goals and imagine how value can be reframed to better communicate the diverse contributions that social and informal economy initiatives make to their communities.

The social economy of food initiatives

A collection of 13 community partner organizations operating in the social economy of food sphere form the core of the SEOF project. They include cooperatives, not-for-profits, and social enterprises. Together their food activities span land preservation, seed saving, food production, harvest, processing, distribution, education, and advocacy. Table 1, below, provides context by briefly describing each of these organizations.

Table 1: Community Partner Organizations in the Social Economy of Food Project

Name (in article)	**Description**
Algoma Highlands Wild Blueberry Farm & Winery, (*Algoma Highlands*) Wawa, Ontario	commercial wild blueberry farm that sells blueberries and value-added blueberry products in its storefront, through Cloverbelt co-op & in various stores locally and out of area
Alternative Land Use Services *(ALUS)*, Eastern Ontario	non-profit program that supports farmers in dedicating portions of their land to nature by retiring ecologically-sensitive land or land not suitable for farming
Aroland Youth Blueberry Initiative (*AYBI*), Aroland First Nation, Ontario	self-organized initiative that buys excess wild blueberries from local people and then sells them to raise money to support local youth programs
Arthur Shupe Wild Foods, Dryden, Ontario	family business that hires workers (including occasional passing hitchhikers) to harvest wild blueberries and then sells them in bulk and at roadsides
Atlantic Canada Seed Saving Projects, Atlantic Canada	multiple initiatives and groups including farmers, non-profits, and social enterprises who all save seeds for the protection of culture, heritage, biodiversity, and food security, with focus on Atlantic Canada
Black Duck Wild Rice (Black Duck), Curve Lake, Ontario	social enterprise dedicated to growing, harvesting, distributing, and teaching about wild rice ("manoomin") as a fundamental food of Anishinaabeg people

Cloverbelt Local Food Co-op (*Cloverbelt*), Dryden, Ontario	online food distribution network emphasizing fresh, local food, connections among/between producers and consumers, and environmental sustainability
Durham Integrated Growers for a Sustainable Community (*DIG)*, Durham Region, Ontario	not-for-profit organization that supports, promotes, and advocates for local urban agriculture practices and values
FarmWorks Investment Co-operative Limited (*FarmWorks*), Nova Scotia	for-profit cooperative that provides small loans to local food businesses through the Nova Scotia government's Community Economic Development Investment Fund (CEDIF) program in order to improve agricultural and food system sustainability
Guelph Centre for Urban Organic Farming (*GCOUF*), Guelph, Ontario	certified organic university teaching farm of Ontario Agricultural College at University of Guelph that is focused on sustainable agriculture
Hidden Harvest, Ottawa, Ontario	for-profit social enterprise that works to organize and normalize the harvest of urban fruits and nuts while contributing to local food access, connections, and skills
Nipigon Blueberry Blast, Township of Nipigon, Red Rock Indian Band and Lake Helen Reserve, Ontario	festival to raise community awareness of, respect for, and opportunities to pick wild blueberries
Willow Springs Creative Centre (*Willow Springs*), Lappe, Ontario	social purpose, community-development centered enterprise offering arts, gardening, and food programs and training. Includes horticultural therapy, local venders' market, and CSA-style freshly prepared-food programs

Conceptualizing social economy

Before analyzing findings from the SEOF project, we briefly consider ways in which social economy, power, and frame analysis have been conceived. There is a variety of scholarly definitions of social economy, sometimes also referred to as the "third" sector (as distinct from private and public sectors). Many have identified the social economy's prioritization of social goals over or alongside market ones (Canadian CED Network, n.d.; McMurtry, 2010; Quarter & Mook, 2010; Uluorta, 2009). Researchers have also debated the extent to which these initiatives interact with both the market economy and government. In the process, social economy is often defined by its contrast to the market economy. For instance, these organizations may represent a "non-capitalist form of production" (Uluorta, 2009, p. 170) or be understood as "economic activity neither controlled directly by the state nor by the profit logic of the market" (McMurtry, 2010, p. 4). Quarter and Mook (2010) argue, however, that social economy organizations are not, in fact, separate from the public and private sectors, but rather, show a shifting relationship with them, working sometimes in ways that are consistent with them and sometimes in ways that challenge them. Although social economies often emerge in response to the shortcomings of a market economy, McMurtry (2010) stresses that the genesis of this form in fact predates capitalism and can perhaps be best understood today by cultures that have retained a pre-capitalist worldview. He asserts, "Simply put, the idea of economic activity separate from social concerns is not one that is comprehendible to pre-market societies" (p. 19).

Some authors have questioned the sheer utility of defining social economy initiatives through their adherence with discreet organizational forms. For example, while acknowledging that form is still important, McMurtry (2010) contends that, "the social economy is fundamentally a normative concept, then, and its practice should be defined as such, not by applying taxonomic definitions to it" (p. 29).[3] Furthermore, Mount and Andrée (2013) find "community-based food projects" (p. 579)[4] to a large extent exist as hybrids "that often blur the lines between governmental, public, non-profit, cooperative, multi-stakeholder and private" (p. 578). They suggest that this hybridity may operate as a strength, possibly representing "what works, an example of what might be termed "post-neoliberal" food governance" (p. 588).

Initiatives in the social economy are assessed in a variety of ways. For example, to demonstrate their impact to funding and oversight bodies, they apply metrics such as number of people fed, amount of food grown, or number of people acquiring specific skills. McMurtry (2010) recommends a more pointed assessment of social economy initiatives based on their ability to fulfill ethical imperatives of meeting "life-needs" (p. 29). On a broader scale, however, they are also assessed for their ability to effect political, societal and economic transformation and to contribute to state accountability (Allen, 2010; Delind, 2011; Guthman, 2008; Wakefield, Fleming, Klassen, & Skinner, 2013).

Perspectives on power

Meeting human needs and effecting transformation inherently require attention to the power dynamics in which organizations play a role. Feminist post-structuralists regard power as ubiquitous, relational, and dynamic rather than held in the custody of particular entities (Gannon & Davies, 2012). This dynamic perspective of power-in-motion (rather than power possessed) opens the possibility of agency from even the most vulnerable and of change from seemingly intractable conditions. However, feminist scholars such as Hartsock (1989) and Kruks (2001) caution against the potential they see in post-structural perspectives such as those of Michel Foucault and Richard Rorty to dissolve institutional structures, and to render political analysis difficult and power dynamics such as women's subordination invisible.

Karlberg (2005) also considers power to be relational and active by considering it in terms of the equality of parties involved and their way of relating to each other. He has recognized deleterious social, political, and environmental effects emerging from a narrow,

[3] By "normative," McMurtry is referring to "the belief that economic, philosophical, or social norms (standards or rules of behaviour or practice, whether conscious or unconscious) should exist. To argue that a particular idea or behaviour is normative is to argue that it is good or proper—that one ought to behave in [a] particular way" (p. 31).
[4] Mount & Andreé (2013) regard community-based food projects as one form of alternative food networks that focus on food distribution as well and social, community and environmental goals.

hegemonic definition of power as rooted in conflict and exhibited in domination or "power over." In fact, he says,

> What I am suggesting is that conflict should not continue to serve indefinitely as the normative principle upon which we construct our governing institutions and conduct our affairs, as it currently does in Western-liberal societies, where democracy is confused with partisanship, where justice tends to be confused with legal contestation, and where economy is confused with competitive material acquisition (Karlberg, 2005, p. 15).

Table 2. Power: A Unified Schema (Source: Karlberg, 2005, p. 10)

POWER AS CAPACITY "power to"			
ADVERSARIAL RELATIONS "power against/competition"		MUTUALISTIC RELATIONS "power with/cooperation"	
INEQUALITY	EQUALITY	INEQUALITY	EQUALITY
"power over"	"balance of power"	"assisted empowerment"	"mutual empowerment"
coercion domination oppression win/lose	stalemate compromise frustration lose/lose	education nurturance assistance (win)win	synergy collaboration coordination win/win

Karlberg (2005) has developed a schema based on the view of power as a form of capacity or "power to" (see Table 2). He then organizes power along two axes. First, he sees a continuum of relations that extends from working *against* each other in competition to working *with* each other in cooperation. Second, within each category of relations, he sees a continuum of resource distribution, from inequality to equality. The application of both axes results in four forms of power. The first, competitive and unequal ("power over"), is visible through "coercion, domination, oppression, and a win/lose dynamic." The second, competitive and equal ("balance of power"), results in forms of resignation through "stalemate, compromise, frustration, and a lose/lose dynamic." The third, cooperative and unequal ("assisted empowerment") can be seen in helping people with fewer resources through "education, nurturance, assistance" and positive, though perhaps differentially so, outcomes for both parties. The fourth, cooperative and equal ("mutual empowerment"), can be seen in "synergy, collaboration, coordination," and positive outcomes for both parties. Karlberg's schema demonstrates that "power over" constitutes only one of several forms of power. As such, it dispels assumptions of human nature as innately competitive/adversarial and instead opens possibilities for more pro-social ways of exercising

power and benefitting from these practices. We see Karlberg's schema as a useful framework for considering the mobilization of power among the SEOF initiatives.[5]

Framing and power

The mobilization of power is facilitated or impeded through the framing of concepts. Frame analysis considers the ways in which social issues are framed, or socially constructed. Frames are "principles of selection, emphasis and presentation composed of little tacit theories about what exists, what happens, and what matters" (Gitlin, 1980, p. 7). Framing makes certain aspects of social reality more salient than others, emphasizing particular interpretations of an issue over others (Entman, 1993, p. 52). As a social process, framing is greatly shaped by those who control or influence the discourse surrounding the issue at hand. That discourse can take shape in complex forms (providing context for an issue) or simple word choices that subtly imply values (e.g., using "gray economy" to refer to informal economy). Frame analysis allows for a deconstruction of frames, including an examination of how frames come into existence and to what effect. If we understand frames as "the result of socially situated articulations between particular issues, individual and collective differences, experiential knowledge, popular wisdom and media discourse" (Vliegenthart & van Zoonen, 2011, p. 105) and thus greatly shaped by social dynamics, we can see that frame analysis permits tracing of the patterns of power and how they are reflected in discourse. While we focus on power relations, our investigation is partly informed by frame analysis in order to uncover the potential of social economy initiatives to influence more than just their immediate environments.

Methodology

This research involved a meta-analysis of the case studies, videos, webinars, and reports from the Social Economy of Food project. We organized the material from these outputs to examine the resources, barriers, and impacts of the respective initiatives. Throughout this process, the most salient categories to emerge included:

- Description of the initiative
- Focus of the initiative
- Philosophy/Approach
- Resources- Human
- Resources- Partnerships
- Resources- Financial
- Resources- Physical

[5] For an exploration of another model of power and how it relates to governance processes in food movements, see Andrée, Clark, Levkoe, Lowitt, & Johnston (2019).

- Resources- Knowledge
- Resources- Social
- Products
- Impacts- Economic
- Impacts- Social
- Impacts- Knowledge
- Impacts- Environmental
- Impacts- Others
- Barriers to meeting goals
- Goals

As the categories were defined, all materials were reviewed for content corresponding to these categories. They were also reviewed for information around existing, expected, and desired forms of evaluation. Although some content was found for existing evaluation, only one initiative spoke of desired evaluation and none spoke to expected evaluation.

We teased out themes across the case studies which we illustrated through a set of infographics (see footnote 2)—and then solicited feedback on these images from our Nourishing Communities community of scholars and partners. Throughout this process, the organization of human relations emerged as a central theme. We consider how the social economy of food initiatives impact the market economy and then use Karlberg's schema of power as a guide to illustrate their potential to reconceptualize human relations. Throughout, we draw on the concept of framing to propose some ways in which that reconceptualization might "grow legs" and extend further into larger social discourses.

Results

While the meta-analysis of the SEOF project generates insights into the monetary impacts of the initiatives and the challenges of assessing non-monetary impacts, it more importantly reveals the ways that initiatives reframe human relations through mobilizing *power with*. By fostering mutual empowerment, assisted empowerment, reinvestment of resources, naming practices, and the choosing of pro-social/pro-environmental values over control, the initiatives reconceptualize the ways that humans relate to each other and ecosystems.

Assessing market impact: Valuing what is undervalued

To begin, we consider a major lens through which initiatives in the social economy of food are assessed: their monetary significance in a market economy. Mainstream neoliberal framing of value as principally monetary often requires social economy endeavours to demonstrate their

value in those terms, particularly when speaking to funders, investors, and various levels of government.

The monetary contribution of some initiatives is evident. For example, FarmWorks draws on community investments and the provincial government's Community Economic Development Investment Fund program to provide loans to local food businesses across Nova Scotia. Similarly, Cloverbelt facilitates an online producers' market in Northern Ontario through a co-op model, while Algoma Highlands operates a commercial wild blueberry farm – both with clearly quantifiable benefits. Some of the initiatives, like Hidden Harvest and Cloverbelt, generate profits, but overall, the movement of financial capital in all these initiatives is visible to varying extents.

In addition, some initiatives assign a monetary value to that which has previously been under/unvalued, to demonstrate that even without financial capital their activities have economic value. For instance, Hidden Harvest has developed ways of assigning monetary value to previously untapped urban fruit and nut yields—spinning gold from straw, so to speak, while ALUS provides compensation to farmers for their land stewardship. Furthermore, some initiatives raise money for marginalized groups (AYBI for youth programming; DIG for new urban agriculture projects) or provide incomes for marginalized groups (Willow Springs for people with employment barriers).

Social economy initiatives' contributions to the market economy may also be less visible, but no less real. For instance, their value may be found in the ways that they provide otherwise publicly-funded services by addressing issues of, for example, food security/health (all of the initiatives), waste management (GCUOF, Hidden Harvest), environmental restoration (ALUS, Black Duck, DIG, GCUOF), or public policy analysis (DIG). Some initiatives help to boost local economic development by, for instance, creating local jobs or income sources (Algoma, ALUS, Arthur Shupe, AYBI, Cloverbelt, FarmWorks, GCUOF, Hidden Harvest, Willow Springs), partnering with value-added processors (Cloverbelt, Hidden Harvest), paying living wages (Hidden Harvest), and promoting tourism (Algoma Highlands, Nipigon Blueberry Blast). Many also buy local goods and services and some pay municipal taxes. They also raise the visibility, recognition, and trust of producers and their products leading to increased sales and higher incomes for producers.

Finally, some initiatives work to remove resources from a commoditized framework and return them to the commons. For example, Black Duck Wild Rice reclaims cottage-front segments of local lakes for First Nations community food production (though not without controversy). Overall such impacts may prove challenging to calculate but organizations like Hidden Harvest are developing means such as Social Return on Investment (SROI) tools to provide monetary proxies, as a strategy to redefine (and re-frame) what is deemed to be economically valuable.

The challenges of measuring (extra-market) impact

As discussed, various initiatives find it challenging to measure and articulate their extra-market impact(s) in ways that can be appreciated and supported, especially by funders. As reported in the Black Duck Wild Rice case study,

> Black Duck is not just about generating money, although that is part of it. It is also about creating collective prosperity and wealth through enriching the social, cultural, spiritual and environmental aspects of the community (Anderson & Whetung, 2018, p. 31).

When impacts extend beyond market value to factors like food sovereignty, self-determination, cultural resurgence, and community relations, this challenge is heightened. Most of the case studies revealed few or no measurements of collective impact. The Hidden Harvest case study report was one of the few to share quantified impacts such as: number of harvest events over time; number of active volunteers; and pounds of produce harvested, processed, donated and distributed. Nonetheless, "Hidden Harvest's aim to enhance local economies remains a long-term project, and their impacts are not easily measured through conventional conceptualizations of economic values" (Poitevin-DesRivières, 2018, p. 18).

We suspect that the case studies' relative absence of quantitative measures of impact is unsurprising, given four conditions. First, social economy organizations by their very nature focus heavily on social and environmental impacts, which are inherently more difficult to capture and quantify than economic ones. For example, as identified in the GCUOF case study:

> Another employee at GCUOF noted that one thing often missing from the measure of a healthy economy is the value of mental health. While many believe that the Canadian economy should be focused on the quantity of production or the amount of money being generated, it is often the quality of one's work or what employees spend their time doing that contributes to positive mental health. Working on an organic farm and interacting with the natural world can help one feel more connected. Being outside and doing physical labour can be both emotionally and physically beneficial. Although those things are not generally accounted for in the measure of a healthy economy, they should be taken into consideration (Thomas, 2015, p. 13).

Second, the tasks of defining, collecting, organizing, analyzing, and disseminating measures of impact requires human labour, something that is scarce and undercompensated among many of the social economy organizations. This results in a chicken-and-egg situation: many organizations must prove their impact to merit necessary funding, but they often have limited resources to devote to this work.

Third, for some initiatives the collection of impact measurement can seem meaningless. For example, GCUOF's affiliation with the University of Guelph limits the initiative's eligibility

for many grants (personal communication, Jan. 23, 2019). For some, like DIG, who do not have registered charitable status (or the goal of applying for grants), the effort of collecting such data may seem to serve little purpose. The labour of collecting measurements and then using them to complete grant applications also needs to be weighed against the likelihood and value of being awarded those grants.

Finally, aside from the impracticalities of measuring impact, it seems that some organizations resist it based on competing principles. For instance, DIG's commitment to the autonomy of its projects makes the organization reluctant to ask the projects to collect a standard set of data. Similarly, a member of GCOUF notes: "[impact measurement is] not something I've had the time to do, or maybe even the desire to do because MY impact is one-on-one at the farm. That impact I guess could be measured but isn't. It's measured through the sharing of knowledge" (personal communication, Jan. 23, 2019).

The initiatives make certain assumptions about basic human rights, positing, for example, that people should: have access to sufficient nutritious food; be able to participate in community life; and be able to look to a future with healthy land, air, and waterways. They re-center the fulfillment of basic physical, social, economic, and environmental needs through the use of seldom-contested and time-honoured values such as respect, reciprocity, and cooperation. This normative position corresponds with McMurtry's (2010) view that the social economy decentres market goals and normalizes activities that demonstrate how people *ought* to engage with one another and the environment to fulfil their "life-needs" (p. 29).

Given such frames for their work, we suspect that the absence of substantial impact measurements may at times be less reflective of limited capacity and more reflective of a rejection of neoliberal framings of value. In other words, we wonder if the organizations not only grapple with the *means* of measuring impact but also with the *meaning* of measuring impact as obliging them to prove the indisputable or to counter other, *damaging* impacts (e.g. of colonization, privatization, pollution, or austerity politics). In this way, we wonder if initiatives may resist such measurement as an affront to their sensibilities and values. When organizations regard their goals as fundamental and morally legitimate, it is unsurprising if they sometimes balk at having to prove the value of pursuing them.

Towards power as capacity

Part of the struggle to articulate impact may emerge from initiatives' emphasis on process over product. According to McMurtry (2010), "the defining feature of capitalism is its constant de-linking of the economic from the social" (p. 19) through a focus on individualism, self-interest in the market, and profit maximization. While the social economy initiatives certainly demonstrate value in the dominant economic system, they also re-signify what is *deemed* economic by re-framing people as social beings who are interconnected with each other and the natural world. It can be challenging to measure the impacts of social processes such as the quality of relationships

or the feelings of connection and well-being. But much more than monetary value, these initiatives' contributions to such harder-to-quantify social impacts reveal their acuity for reshaping human relations and the ways in which power is organized through them.

If power is understood only as domination, then the initiatives, given their challenges in accessing established forms of financial, human, and political capital, may seem to experience a lack of power. However, if power is reframed as capacity, and particularly the potential to ameliorate the conditions in which humans live, then the power of these initiatives is much more evident. Clearly, they operate primarily on the cooperative, or "power with," side of Karlberg's (2005) schema (Table 2). That is, they promote "mutual empowerment" in their work with groups of similar social standing and "assisted empowerment" in their work with more marginalized groups. Beyond Karlberg's typology, however, we suggest that they also exercise power by advocating on behalf of themselves and groups of various social statuses to actors with decision-making abilities, such as government bodies. In so doing, they extend their impact beyond their own surroundings and aim to shift the discourse around value.

Cooperative power across equality: "mutual empowerment."

A sense of connection constitutes one of the most visible characteristics of the initiatives. Karlberg's "mutual empowerment" can be seen in the ways in which they promote social capital by fostering bonds between similarly situated actors and bridges between differently situated actors (Putnam, 2000). This sense of connection corresponds well with Uluorta's (2009) contention that social economy activities are focused on "being-in-the-world-with-others" (p. 170) and Sonnino and Trevarthen-Griggs' (2013) findings that building social capital can itself be a central goal and a key resource for social economy initiatives. The social economy organizations we studied develop social capital through using pro-social values such as inclusion, respect, reciprocity, reconciliation, accountability, collectivity, and cooperation. As an example, the Black Duck Wild Rice case study notes, "Responsibility and reciprocity is the foundation on which Black Duck bases its ecosystem and therefore cultural restoration work" (Anderson & Whetung, 2018, p. 22). Organizations bring together farmers (ALUS, GCUOF), gardeners (DIG, Willow Springs), harvesters (Arthur Shupe, Hidden Harvest, Nipigon Blueberry Blast), entrepreneurs (AYBI, Cloverbelt, Nipigon Blueberry Blast, Willow Springs), seed savers (Seed Saving), and local community members (most initiatives). As examples of bridging, the SEOF initiatives bring people together across axes of difference such as: age (GCUOF works with university students, high school students, and daycare children); Indigenous and settler communities (Black Duck); and role (farmers, staff, advisors at ALUS). Both Cloverbelt and seed saving initiatives also foster relationships among different geographical communities.

Notably, we found evidence that initiatives subvert the capitalist principle of competition in favour of principles of cooperation and respect. For instance, Atlantic seed savers value healthy seed systems enough to share their knowledge with competing groups; Cloverbelt

encourages cooperation rather than competition between vendors and avoids imposing itself in individual communities to preclude competing with local producers, and Arthur Shupe carefully respects the areas of competing blueberry picking initiatives (Stolz, Levkoe, & Nelson, 2017; Streuker, Levkoe, & Nelson, 2017; Worden-Rogers, 2015).

Not only do the initiatives bring people together across difference, fostering inclusion and *social diversity,* but they also go beyond an anthropocentric perspective to promote *biodiversity* and more resilient ecologies by creating healthier soil, conserving resources, reducing waste, contributing to cleaner air/water/soil/land, and saving seeds that are adapted to place and climate (ALUS, Black Duck, DIG, Seed Saving). In other words, they are re-framing people's relationships as responsible to "others"—both human and non-human.

Cooperative power across inequality: "assisted empowerment"

Among the social economy initiatives, assisted empowerment, Karlberg's second form of power, is evident in the origins of knowledge and decision-making, the distribution of knowledge, and efforts to meet people's needs. While the reciprocal nature of relationships is apparent in mutual empowerment discussed above, it is less apparent in assisted empowerment. However, the initiatives regard benefits as extending far beyond those who are ostensibly assisted.

In many cases, decision making and knowledge gathering derive from those most affected. For example, the case studies show ALUS to be "community-developed, farmer-delivered" (Allen, 2015, p. 5); AYBI to be "self-organized" (Stolz et al., 2017, p. 8) and "community-based and community-driven" (p. 10); and DIG to be "citizen-driven" (Martin, 2016, p. 17). Organizations prioritize the voices of farmers, gardeners, vendors, and community members—in essence, those who not only have the most lived experience and intimate understanding of the issues, but also have the most at stake. They challenge the assumption that "expert" or "evidence-based" knowledge(s) reside only within institutions, bringing to the fore other knowledge(s) that are experiential, shared, and community-based. For some, like Black Duck Wild Rice, knowledge gathering is a process of reclaiming what has been lost over generations through, for example, the effects of Canada's residential school system. Furthermore, initiatives make knowledge accessible through such means as workshops, trainings, publications, websites, videos, social media, and opportunities for hands-on experiences (ALUS, Black Duck, DIG, Cloverbelt, GCUOF, Hidden Harvest, Nipigon Blueberry Blast, Seed Saving, Willow Springs).

Community partners in this project offered multiple reasons for sharing knowledge. For Black Duck Wild Rice, it is a matter of not losing what is left of traditional knowledge: "knowledge just slips away if it's not being used and engaged with" (Anderson & Whetung,

2018, p. 32). Patrick Kelly at GCUOF links knowledge dissemination with skill-building and broader transformation: "to teach people that they are able to grow their own food…that in a way is a form of quiet social and political change" (Thomas, 2015, p. 19). Part of Hidden Harvest's reason for sharing knowledge is to help support local producers by cultivating "more appreciation for what it takes to grow and harvest food, and many would consequently pay more for local foods" (Poitevin-DesRivières, 2018, p. 17). Through knowledge sharing, DIG hopes "to build a policy landscape that is representative and supportive of local urban agriculture projects" (Martin, 2016, p. 25) while the Atlantic seed savers endeavour to connect people and develop resilience at the community level.

Assisted empowerment also emerges in the initiatives' efforts to meet human needs such as sufficient income (ALUS, Cloverbelt, FarmWorks, Hidden Harvest, Willow Springs), household food security (Arthur Shupe, Black Duck, DIG, Hidden Harvest), skill-building (ALUS, AYBI, Black Duck, DIG, GCUOF, Hidden Harvest, Seed Saving, Willow Springs), and self-expression (Willow Springs). DIG and its member projects provide an example by assisting people's empowerment through open memberships, sliding fees, food donations, help for inexperienced gardeners, and culturally diverse produce. By emphasizing assisted empowerment, these initiatives recentre an ethic of human care for each other and reframe value as inclusion. Finally, assisted empowerment is evident in the representation of the needs and concerns of residents to governmental authorities regarding issues such as urban agriculture policy (DIG) and Ministry of Natural Resources herbicide spraying (Nipigon Blueberry Blast). Through the empowerment of people, these practices reframe the dominant views of "power over" as "emanating from the ground up".

By sharing knowledge with community members, helping to address their basic needs, and advocating for them, all the while drawing on the community expertise and decision-making, social economy initiatives work to revalue human agency and an ethic of care. They help to create stronger, more sustainable communities, and ultimately reveal that assisting individuals has ripple effects.

Power as cyclical (versus linear)

In addition to Karlberg's forms of power-with, we find other conceptualizations of power among the initiatives that counter capitalist logics. For instance, a capitalist preoccupation with linear trajectories of increased profit conceals the human and environmental sacrifices or 'externalities' that fuel them. Decades of capitalist social organization have framed human activities as self-interested actions aimed at amassing material capital. However, through a social economy perspective that prioritizes social and environmental goals over profit, the organizations protect and nourish their inputs and redistribute their surpluses. For instance, the organizations return organic materials back to the soil (DIG, GCUOF) and redistribute harvested food back to the

community (Black Duck, DIG, Hidden Harvest). They also return proceeds back into gardens (DIG), community groups (AYBI), education (Black Duck, DIG, Nipigon Blueberry Blast), training (Hidden Harvest, Willow Spring), and living wages (Hidden Harvest).

As an example, Cloverbelt producers pay 5 percent of their profits and consumers pay 10 percent of the purchase price towards operations, external funding for projects, and growth (CLFC webinar). Indeed, the Hidden Harvest case study states, "as a social enterprise, Hidden Harvest generates profits that are intended to benefit as many people as possible. Harvest events and outreach activities aim to enhance community food security and sovereignty, local ecologies and economies" (Poitevin-DesRivières, 2018, p. 3). Such activities re-frame human communities as complex entities that are motivated by much more than just self-interest.

Power through language/the ability to name

Language is another site where the initiatives mobilize power in ways that counter capitalist logics. The language of capitalism, like any regime, serves to reinforce itself. For instance, the business of destroying forests and meadows to construct buildings is commonly referred to as "development." That framing has greatly shaped and justified policy and political agendas, and the resulting relationships among human communities, and between humans and ecosystems. Feminist scholars (e.g. DeVault, 1990; hooks, 1991) have long identified the power of naming to illuminate underrepresented people, work, actions, and ideologies – and, in the process, shape their realities. Social economy initiatives also exert power through their use of language. They playfully promote social inclusion through team member titles such as Willow Spring's "Souper Heroes" (Kakegamic, Nelson, & Levkoe, 2017) and Hidden Harvest's "Lead Squirrel" (Poitevin-DesRivières, C., 2018). They insist on using traditional terms (Black Duck Wild Rice's *manoomin* for wild rice) to resituate food in social and natural systems. In addition, they demand definitions that reflect their communities' realities, such as DIG's expansive and regionally-specific definitions of urban agriculture. As discussed earlier, they also name some resources as having monetary value and name others as uncommodifiable—belonging to the commons.

Such re-framing by initiatives does not only work to legitimize their own actions, but also encourages us to think of economy as much more complex than monetary exchanges. Their efforts to attach monetary value to some of their contributions challenge us to see mainstream economic accounts as both limited and limiting—as neglecting a broad range of initiatives and, in so doing, hindering their ability to prove their worth and worthiness of support. The insistence of initiatives on valuing what cannot be monetized demands consideration of the broader range of informal activities that cannot be measured in dollars but undeniably contribute to community well-being.

Power as seemingly waived

A final approach to power by the initiatives may not seem to resemble power mobilization at all. Contrary to the popular perception of power as possessing or exerting control over, we observe that the organizations often exercise power when they seemingly relinquish it. Their work remains vulnerable to myriad forces beyond their control: weather, pests, funding, government policy and practices (such as herbicide spraying), and the personalities and capacities of their members—and yet, they persist. As the Black Duck Wild Rice experience shows, power can seem to be relinquished through deciding to trust in people, values, and process: "It is a lot of responsibility and quite exhausting to trust in, maintain and expand relationships in a good way, while engaging the community and communicating goals and aspirations" (Anderson & Whetung, 2018, p. 37). By being responsive to their members and communities, adaptable to prevailing conditions, and resolved to pursue social impacts over profit, project proponents illuminate their priorities and their choice to embody specific values and ways of being in the world. In so doing, they choose trust and hope over despair and, in the process, may create new imaginaries/realities.

Power through vulnerability is shown when Black Duck rejects the pursuit of immediate security that a neoliberal discourse of scarcity might encourage. Instead Black Duck's owner-operator leaves more wild rice behind in the lakes for wildlife than he harvests, and forgoes his own living wages for the greater purpose of re-establishing a traditional food supply. Likewise, Guelph Centre for Urban Organic Farming cuts the ostensible life lines of oil, pesticides, and machinery to bring the idea of urban organic farming into reality (GCUOF). Similarly, DIG does not build gardens but supports community groups who ask for that help. The organization prioritizes the messiness of supporting self-determination for community garden groups to help projects become more sustainable. By seemingly relinquishing control, initiatives speak loudly about their choice to trade in central frames of self-interest, power-over, and immediate gratification for collectivity, power-with, and sustainability.

Discussion and conclusion

Food initiatives in the social economy and the informal practices that they use, such as bartering, gifting, and self-provisioning, exist in spaces of varying and debated distance from the private and public sectors. As such, their economic nature goes underrecognized. Nourishing Communities researchers have worked with several such initiatives in Canada to identify and illuminate their economic, environmental, and social impacts through participatory action research projects, case study reports, articles, webinars, and videos. This paper draws on a meta-

analysis of these outputs to consider what these initiatives collectively say about the impacts of the social economy of food in a neoliberal era.

Neoliberalizing discourses shape human relations through frames such as self-interest, profit obsession, market reliance, scarcity, and the absence of alternative ways of structuring society. They are fortified by their "self-evident" and "self-actualizing" (Peck & Tickell, 2002, p. 382) harmony with politically and economically dominant forces. This context can make impact assessment a challenging endeavour for organizations that prioritize social impacts over profit. Nonetheless we found clear indications that these initiatives in the social economy of food contribute in multiple direct and indirect ways to the market economy.

However, we observe that the initiatives contribute more substantially to broadening social imaginaries by challenging neoliberal interpretations of the ways humans relate with each other and the natural world. The application of Karlberg's typology of power, informed by frame analysis helps to make this visible. For instance, by cultivating both mutual and assisted empowerment, these organizations discursively re-centre an ethic of care, agency, inclusion, interconnection, recognition of multiple sources of expertise, and people's collective responsibility to each other and the natural world. By reinvesting their surpluses, the organizations challenge assumptions of self-interest and profit motives. By exercising the power to name, they reassign worth to that which is not normally monetized or valued. And, in their apparent surrender of control to their members, their communities, and the environment, they call attention to a range of values that neoliberal logics have abandoned.

All these efforts show human motivations that extend well beyond the self and the here-and-now. Overall, through a lens of power, we see that these initiatives are not only deliberately choosing to engage through "power with" rather than "power against" but in so doing are also actively demonstrating how social, economic, and ecological relations can be discursively reframed.

The broad uptake of these re-framings may help to renormalize meeting all basic needs and the policy evolution required for it. Indeed, Classens, McMurtry, and Sumner (2014) state, "Taken together, initiatives of the social economy provide a patchwork that may, when stitched together, create a means of overcoming the one-rule economy and lead towards a more just and sustainable food system" (p. 231).

However, the path between offering re-framings of human relations and effecting broad-based change is not automatic. Sonnino and Trevarthen-Griggs (2013) contend that, because social economy of food initiatives are centred in place-based relationships and work primarily through their communities, their potential for growth is limited mainly to replicability and knowledge sharing. Others identify various preconditions for social change. For example, social economy initiatives "must take into account the nuts and bolts of social economic organizing. In other words, the fundamental mechanics of social change initiatives must be sound" (Classens et al., 2014, p. 231). For Dordoy & Mellor (2000) "a democratic provisioning system" (p. 60) requires an existing political basis to be in place first so that democracy can thrive. For McMurtry (2010), the social economy needs to define itself as a social and economic movement,

not just a set of unrelated activities. Moving forward from the current research, it will be important to continue to explore the most effective routes that link the everyday activities and discourses of social economy projects to broader social change.

Our theoretical intervention is empirically grounded, but we recognize that our data originated from sources about a limited selection of social economy initiatives. Future research could also draw on and compare a wider range of initiatives embracing different worldviews and regional specificities. It could also engage with them directly about their relationship with impact assessment and what measurement means to them. The results of such inquiry might further illuminate impacts that fly under the (monetized) radar.

According to Guthman (2008), the effect of neoliberalization on agro-food activists (broadly defined), is to place "limits [on] the conceivable because it limits the arguable, the fundable, the organizable, the scale of effective action, and compels activists to focus on putting out fires" (p. 1180). While we agree that neoliberalization can work to constrain project capacity, we also see social economy initiatives not only fighting fires but also *broadening* the conceivable by sparking possibility and shedding light on more socially and environmentally sustainable worlds. Overall, we found that the SEOF initiatives work discursively not only to explain their own work, but also to offer up models of alternative framing of work, social relations, and value. Indeed, like local sustainable food projects in other studies (Andrée, Ballamingie, & Sinclair-Waters, 2015; Sumner, 2012), they are not waiting for the state or corporations to move towards greater sustainability but are attempting to create the systems they want to see. In the process, they are going beyond their own environments to expand social imaginaries by providing models for what is possible.

References

Andrée, P., Ballamingie P., & Sinclair-Waters, B. (2015). Neoliberalism and the making of food politics in Eastern Ontario. *Local Environment*, *20*(12), 1452–1472

Andrée, P. Clark, J.K. Levkoe, C.Z. Lowitt, K., & Johnston, C. (2019). The governance engagement continuum: Food movement mobilization and the execution of power through governance arrangements. In P. Andrée, J.K. Clark, C.Z. Levkoe, & K. Lowitt (Eds.) *Civil society and social movements in food system governance*. New York: Routledge.

Allen, P. (2010). Realizing justice in local food systems. *Cambridge Journal of Regions, Economy, and Society*, *3*(2), 295-308.

Allen, L. (2015). *Ontario east alternative land use services program: A case study.* Retrieved from http://nourishingontario.ca/the-social-economy-of-food/case-studies-subversions-from-the-informal-and-social-economy/

Anderson, P., & Whetung, J. (2018). *Black duck wild rice: A case study*. Retrieved from http://nourishingontario.ca/the-social-economy-of-food/case-studies-subversions-from-the-informal-and-social-economy/.

Canadian CED Network. (n.d). The social economy. Retrieved from https://ccednet-rcdec.ca/en/page/social-economy-0.

Classens, M., McMurtry, J.J., & Sumner, J. (2014). Doing markets differently- FoodShare's Good Food Markets. In J. Quarter, S. Ryan, & A. Chan (Eds.) *Social purpose enterprises: Case studies for social change.* University of Toronto Press.

Davies, A. (2019). *Urban food sharing: Rules, tools and networks*. Bristol: Policy Press.

Delind, L. (2011). Are local food and the local food movement taking us where we want to go? Or are we hitching our wagons to the wrong stars? *Agriculture and Human Values*, *28*, 273–283.

DeVault, M. (1990). Talking and listening from women's standpoint: Feminist strategies for interviewing and analysis. *Social Problems*, *37*(1), 96-116.

Dordoy, A., & Mellor, M. (2000). Ecosocialism and feminism: Deep materialism and the contradictions of capitalism. *Capitalism, Nature, Socialism, 11*(3), 41-61.

Entman, Robert M. (1993). Framing: Towards clarification of a fractured paradigm. *Journal of Communication, 43*(4): 51–58.

Gannon, S., & Davies, B. (2012). Postmodern, post-structural and critical theories. In S.N. Hesse-Biber (Ed.) *The handbook of feminist research: Theory and praxis* (2nd ed.). Los Angeles: Sage Publications.

Gitlin, T. (1980). *The whole world is watching: Mass media in the making and unmaking of the new left.* Berkeley: University of California Press.

Guthman, J. (2008). Neoliberalism and the making of food politics in California. *Geoforum*, *39*(3), 1171-1183.

Harstock, N. (1989). Postmodernism and political change: Issues for feminist theory. *Cultural Critique*, *14*(1), 15-33.

Hooks, B. (1991). Theory as liberatory practice. *Yale Journal of Law & Feminism, 4*(1), 1-12.

Kakegamic, R., Nelson, C., & Levkoe, C.Z. (2017). *Willow Springs Creative Centre: A case study*. Retrieved from http://nourishingontario.ca/the-social-economy-of-food/case-studies-subversions-from-the-informal-and-social-economy/

Karlberg, M. (2005). The power of discourse and the discourse of power: Pursuing peace through discourse intervention. *International Journal of Peace Studies*, *10*(1), 1-23.

Kruks, S. (2001). *Retrieving Experience: Subjectivity and Recognition in Feminist Politics*. Ithaca, NY: Cornell University Press.

Martin, M.A. (2016). *DIG (Durham Integrated Growers for a Sustainable Community): A case study.* Retrieved from: http://nourishingontario.ca/dig-durham-integrated-growers-for-a-sustainable-community/.

McMurtry, J.J. (2010). Introducing the social economy in theory and practice. In J.J. McMurtry (Ed.) *Living Economies: Perspectives on Canada's Social Economy*. Toronto: Edmond Montgomery Publications.

Mount, P., & Andrée, P. (2013). Visualising community-based food projects in Ontario. *Local Environment*, *18*(5), 578–591.

Nourishing Communities. (2018). *The social economy of food: Informal, under-recognized contributions to community prosperity and resilience.* Retrieved from http://nourishingontario.ca/the-social-economy-of-food/.

Nourishing Communities. (2017a). *Workshop – Subversions from the informal and social economy*. Retrieved from http://nourishingontario.ca/the-social-economy-of-food/workshop-subversions-from-the-informal-and-social-economy/.

Nourishing Communities. (2017b). *Subversions from the informal and social economy: A workshop report*. Retrieved from http://nourishingontario.ca/the-social-economy-offood/subversions-from-the-informal-and-socialeconomy-workshop-report/.

Peck, J., & Tickell, A. (2002). Neoliberalizing space. *Antipode, 34*(3), 380-404.

Poitevin-Des Rivières, C. (2018). *Hidden Harvest: A case study.* Retrieved from http://nourishingontario.ca/the-social-economy-of-food/case-studies-subversions-from-the-informal-and-social-economy/

Putnam, R. D. (2000). *Bowling alone: Collapse and revival of American community.* New York: Simon & Schuster.

Quarter, J., & Mook, L. (2010). An interactive view of the social economy. *Canadian Journal of Nonprofit and Social Economy Research, 1*(1), 8-22.

Sonnino, R., & Trevarthen-Griggs, C. (2013). A resilient social economy? Insights from the community food sector in the UK. *Entrepreneurship and Regional Development*, *25*, 272–292.

Stephens, P., Nelson, C.H., Levkoe, C.Z., Mount, P., Knezevic, I., Blay-Palmer, A., & Martin, M.A. (2019). A perspective on social economy and food systems: Key insights and thoughts on future research. *Canadian Food Studies*. This issue.

Stolz, W., Levkoe, C.Z., & Nelson, C. (2017). *Blueberry foraging as a social economy in Northern Ontario: A case study of Aroland First Nation, Arthur Shupe Wild Foods, Nipigon Blueberry Blast Festival, and the Algoma Highlands Wild Blueberry Farm and Winery*. Retrieved from http://nourishingontario.ca/the-social-economy-of-food/case-studies-subversions-from-the-informal-and-social-economy/

Streuker, A., Levkoe, C., & Nelson, C. (2017). *The Cloverbelt local food co-op: A case study.* Retrieved from http://nourishingontario.ca/the-social-economy-of-food/case-studies-subversions-from-the-informal-and-social-economy/

Sumner, J. (2012). Dining on the social economy: Local, sustainable food systems and policy development. *Canadian Review of Social Policy*, *67*, 30-43).

Thomas, M. (2015). *Guelph Centre for Urban Organic Farming: A case study*. Retrieved from http://nourishingontario.ca/the-social-economy-of-food/case-studies-subversions-from-the-informal-and-social-economy/

Uluorta, H.M. (2009). *The social economy: Working alternatives in a globalizing era*. New York: Routledge

Vliegenthart, R., & van Zoonen, L. (2011). Power to the frame: Bringing sociology back to frame analysis. *European Journal of Communication, 26*(2). 101–115.

Wakefield, S., Fleming, J., Klassen, C., & Skinner, A. (2013). Sweet Charity, revisited: Organizational responses to food insecurity in Hamilton and Toronto, Canada. *Critical Social Policy, 33*(3), 427-450.

Worden-Rogers, N.J. (2015). *Seed saving in Atlantic Canada: A case study*. Centre for Sustainable Food Systems, Wilfrid Laurier University. Retrieved from http://nourishingontario.ca/the-social-economy-of-food/case-studies-subversions-from-the-informal-and-social-economy/

Canadian Food Studies

La Revue canadienne des études sur l'alimentation

c/o Department of Health Sciences
Lakehead University
955 Oliver Road
Thunder Bay (ON) P7B 5E1

ISSN: 2292-3071

canadianfoodstudies.ca