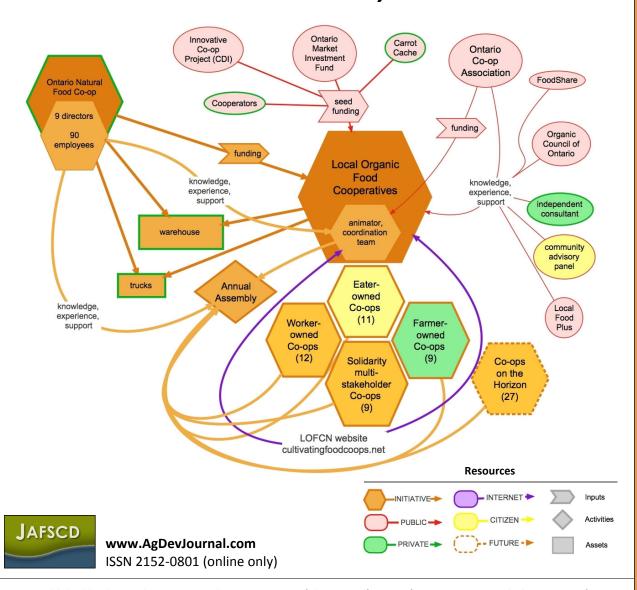
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Special Topic:

Cooperatives and Alternative Food Systems Initiatives



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In This Issue
Duncan L. Hilchey

Cooperatives and alternative food systems initiatives — and more



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In the late 1990s I worked on a project to study small-scale grower cooperatives in the northeastern United States. The existing data on co-ops with annual sales of US\$5 million or less suggested that they were growing in number, but also that their market share was just a tiny fraction of the growing fruit and vegetable sales in the U.S. We wanted to know more about their challenges and opportunities and to see if they were interested in creating a federation — a co-op of cooperatives. In the study, which included surveys of co-op members, managers, and board members, we found there are many barriers to growth, especially the managers' ability to juggle multiple interests of different types and scales of members, the quality and quantity standards of buyers, and the difficulty of operating in a high cost/low price business. Many small-scale grower co-op managers reported feeling caught between a rock and a hard place; those who reported satisfaction were essentially very gifted at multitasking, managing staff and farmers, and building relationships with buyers.

There was interest in creating a co-op support group — the Northeast Federation of Family-Farm Cooperatives (NEFFCO) — and we discussed ways to achieve as a group of co-ops what was difficult as individual co-ops (such as developing a shared set of operating metrics). We also produced a study report (available at http://www.rurdev.usda.gov/supportdocuments/RR210.pdf). Unfortunately, NEFFCO did not last much beyond the grant period. I wish we had the social networking tools that emerging communities of practice have today that allow them to be lean but productive.

Two people we worked with back then are editors of this issue. Thomas (Tom) Gray, with the USDA

On this issue's cover: This community food system map captures the complex relationships and resources required in a cooperative network. The map was created with the collaboration of the Local Organic Food Co-ops Network coordinator, the paper lead author, and Nourishing Communities researchers, using open-source Visual Understanding Environment software from Tufts University (http://vue.tufts.edu/). See its use in the paper in this issue, https://vue.tufts.edu/). See its use in the paper in this issue, https://vue.tufts.edu/). (Image courtesy of Phil Mount)

Rural Development-Cooperative Programs, arranged a cooperative research agreement that supported the project back in 1998, and Lynda Brushett, with the Cooperative Development Institute, helped us think through the federation concept. In this issue, they provided an American perspective to the papers submitted for the focus on cooperatives and alternative food systems initiatives (AFIs). Tom's editorial on the need for multistakeholder cooperatives is particularly relevant to our North American readership. Rounding out the editorial team are Colin Anderson of the Centre for Agroecology at Coventry University (UK) and Henk Renting of RUAF, the International Network of Resource Centres on Urban Agriculture and Food Security headquartered in the Netherlands. Henk, a noted authority on AFIs, and Colin, a freshly minted PhD (University of Manitoba), ensured that we had a sufficient international diversity in our submissions. This was a great group of leaders to work with and the results, as evident in their cogent group editorial entitled "Working Together to Build Cooperative Food Systems," are superlative.

I want to express my appreciation for Colin's leadership. His energy and enthusiasm for cooperative enterprises and his dedication to producing this issue were essential to its completion. We wish him well in his current position at Coventry.

In addition to the nine published papers on the special issue topic, we also offer three columns and an additional open-call paper. In his Metrics from the Field column, **Ken Meter** discusses a recent study of the co-op community in the U.S. Midwest metropolis of Minneapolis—St. Paul, and the co-ops' collective impact locally. **John Ikerd** treats us to a very instructive examination of the limits to economic growth in his Economic Pamphleteer column. **Rami Zurayk** provides a grim but thought-provoking assessment of the new green revolution and its impact on and possible responses from the broad food movement.

We offer one open call paper in this issue, a case study of the Baltimore Food Policy Initiative, by **Raychel Santo, Rachel Yong,** and **Anne Palmer** entitled "Collaboration Meets Opportunity: The Baltimore Food Policy Initiative." Baltimore's thoughtful approaches to addressing some common food security challenges provide an interesting model for other midsized cities to consider.

We round out this issue with two book reviews: **Deirdre Helfferich** reviews *Saving More Than Seeds: Practices and Politics of Seed Saving* by Catherine Phillips (Ashgate) in "Seeding a Culture of Remembering." In "Voices of Peasant Farmers from the Margins of the Global Food Crisis," **Breann Maxwell** and **Zulfiya Tursunova** review *Hungry for Change: Farmers, Food Justice and the Agrarian Question*, by A. Haroon Akram-Lodhi (Fernwood Publishing).

Finally, I want to take this opportunity to announce the launch of our JAFSCD Food Systems Brief series. Food Systems Briefs summarize particularly practical JAFSCD papers into two pages that encapsulate their critical points for quick reference. Papers chosen to be summarized into Food Systems Briefs are ones that practitioners and policy-makers can benefit from on the local or regional level. Food Systems Briefs are **free** and help fulfill our mission to be a practical publication and, in fact, to effect change in the trenches of the food movement. The first three briefs are available at http://www.agdevjournal.com/jafscd-food-systems-briefs.html. Individuals interested in preparing a brief will find information on that page as well.

Publisher and Editor in Chief



GROUP EDITORIAL FOR SPECIAL ISSUE ON COOPERATIVES AND ALTERNATIVE FOOD SYSTEMS INITIATIVES

Working together to build cooperative food systems

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The combined challenges of food insecurity, agriculture-related environmental decline, corporate concentration, and the decline of community resilience are being met by growing societal interest in developing more just and sustainable food systems. A recent emphasis on cooperation and innovative forms of collective action within the food movement invokes a

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community-centered approach to food provisioning where collective problem-solving and democracy take center place in the development agenda (Ikerd, 2012). Cooperative alternative food networks are becoming powerful tools for community development and important vehicles for cultivating democratically controlled food systems at multiple scales. The papers in this special issue provide an important contribution to our understanding of the function, the challenges, and the potential of collective action in enabling more just and resilient food systems.

Cooperative alternative food networks represent a break from the competitive productivism¹ of

¹ Productivism is the belief that the main purpose of agriculture is to maximize the production of food and fiber. The productivist agriculture paradigm has been criticized for externalizing considerations of environment, community, and social justice.

the dominant food economy and create new relational spaces that hold promise for overcoming the pragmatic and political limits of some of the more individualistic approaches in the local/ sustainable food movement. These include cooperative forms of: food hubs, local food networks, farmers' markets, CSAs, box schemes, buying clubs, and value chains, along with a range of agriculture and food cooperatives owned by farmers, consumers, workers, and in emerging multistakeholder cooperative structures. With a renewed emphasis on civic governance, the resulting food-provisioning systems are based on principles of participatory democracy, solidarity, and reciprocity (Renting, Schermer, & Rossi, 2012) and provide spaces to nurture collective subjectivities required for transformative food practice and politics (Levkoe, 2011).

Organized formally through cooperative legal structures or through cooperative governance approaches in informal groups, associative economic networks, nonprofit organizations, or other entities, cooperative alternative food networks provide an alternative to the dominant or conventional food system by (a) reconnecting farmers and consumers in more direct and meaningful ways; (b) selling direct to local, regional, and global (fairtrade) markets; (c) creating alternative market channels such as CSAs, farm-to-school programs, buying clubs, and farmers' markets; and (d) promoting food production, distribution, and consumption processes that are environmentally sound and produce healthier food.

Cooperation is at the heart of a transition beyond the more individualistic and inward focused "first generation" localization efforts in the food movement to second-generation ones that involve practical and political mobilization at larger scales of organization (Goodman, Goodman, & DuPuis, 2011). These can be contrasted with the large-scale, profit-oriented marketing cooperatives that have developed in some countries (most notably in Europe), which have lost much of their dynamism and emancipatory potential. Rather, cooperative alternative food networks involve emergent forms of collective action that are reoriented toward democratic principles and are more explicitly located within a social movement agenda. As a

whole, cooperative alternative food networks combine the principles of the cooperative institution (Gray, 2008) with the politics of the food movement (Levkoe & Wakefield, 2014) through experiments in democratic socio-economic interdependence in a vision of a more resilient and just food system.

The nine peer-reviewed papers plus one commentary in this special issue of JAFSCD explore the state of the art in cooperative alternative food networks and exemplify the diversity and dynamism of the field. Three of the papers discuss the role of cooperative support organizations in enabling the development of cooperative regional food systems. Greg Cameron and Louise Hanavan chart the state of regional cooperative development and the policy context of agriculture cooperatives in the Canadian Maritimes. Their analysis suggests that state support for cooperative development is being eroded as provincial and federal governments increasingly turn toward neoliberal modes of governance. In this context, grassroots innovations such as cooperative alternative food networks tend to be poorly supported by governments that narrowly couch economic progress in terms of large-scale development projects and commodity agriculture (Anderson & McLachlan, 2012).

This policy context creates a challenging climate for cooperatives pursuing a more holistic community development model and those promoting multifunctional agriculture. In this gap, Cameron suggests that agriculture cooperatives would be better positioned with a coordinated approach to developing a regional cooperative economy through a tertiary organizational structure. This paper also raises important questions about the role of conventional agricultural cooperatives in this transition and whether this turn toward a more regionally focused food system is viewed as compatible with, or as a viable alternative for, these larger cooperatives. Indeed it may be possible that the organizational structures and norms of larger cooperatives are incompatible with the values and flexibility required by these participatory and civic socio-economic forms, which may be better developed from the bottom up (Cleveland, Müller, Tranovich, Mazaroli, & Hinson, 2014).

Cameron's emphasis on regional coordination among cooperatives is also illustrated in the paper offered by Jennifer Sumner, J.J. McMurtry, and Hannah Renglich. This Canadian case study of the Ontario Local Organic Food Network exemplifies how the cooperative advantage can be leveraged through support structures that intentionally create linkages and synergies between cooperatives in the fast-growing local, organic agrifood sector. Here, the principle of cooperation among cooperatives becomes embodied institutionally through a cooperative support network. The paper provides a promising model and analytical framework that can inform the development of more integrated regional food systems in other geographic localities. The further development of cooperative networks and federations at regional, national, and international scales will provide important opportunities to enable social learning, the diffusion of innovation between cooperatives, and the development of cooperative business relationships within and between sectors of the cooperative alternative food system.

Kathi Beratan, Pamela Jackson, and Sherrie Godette provide insight into cooperative development challenges among small, socially disadvantaged producers through a case study of four farmer groups in North Carolina. Their cautionary narrative shows how a one-size-fits-all development approach can undermine the potential of cooperatives for rural development. The paper underscores how the economistic and asset-based approaches often taken by cooperative developers are too narrow in focus and are unlikely to provide appropriate support without careful consideration of the modes by which social and cultural factors mediate capacity-building and cooperation among diverse cooperators.

These social and cultural dynamics are examined in the case study presented by Colin Anderson, Wayne McDonald, Jo-Lene Gardiner, and Stephane McLachlan, who chronicle the development of a farmer-driven civic food network in the Canadian Prairies. The case study suggests that democratic and open cooperative alternative food networks will inevitably draw together participants with diverging priorities,

values, and needs that must be both recognized and negotiated if civic food networks are to reach their full potential. The experience of this farmer collective also highlights how the entrenchment of individualistic subjectivities in the farming community may be particularly salient among direct farm marketers who have built brands and businesses based on an individual farm identity – an important consideration in any strategy aimed at scaling up local food through collective action.

Phil Mount and John Smithers' paper presents a bifurcated typology of "local beef" groups in Ontario. The first, a farmer-owned cooperative type, focused on direct marketing to consumers. The second local beef group was led by intermediaries that sold wholesale but involved little farmer participation in the governance of the group. Mount and Smithers found that farmers were more satisfied with and committed to the farmer-owned direct marketing model, which better reflected the principles of cooperative ownership and control. Farmers involved in the intermediary-led chains felt these groups reproduced the negative experiences of selling to commodity chains and large packers. However, farmers in the cooperative direct marketing model were dissatisfied with low volumes, which threatened the viability of these groups. One possible future direction for the farmer-owned cooperative model is to develop a hybrid marketing approach (as per Anderson et al., this issue) where wholesale relationships are developed to complement the direct marketing channel. These cooperatively owned and controlled groups may also be well positioned to tap into cooperative support networks (Sumner et al., this issue) to explore linkages with cooperative intermediaries who could facilitate volume sales yet would be more attuned to the needs and values of participating farmers.

Thomas Gray's commentary identifies the need for developing multistakeholder cooperatives where, rather than being pitted in competitive market relations, farmers, consumers, and other food-system actors cooperate as co-owners. These multistakeholder organizational structures resonate strongly with the literature on civic food networks

that has emerged out of Europe² (Renting et al., 2012) that emphasize the importance of civic governance (especially cooperation between farmers and consumers in the development of new modes of food provisioning) and of political action, both of which are based on civic and democratic principles rather than strictly on market considerations. There is a need for further research on the relationship between cooperation and competition between different actors and cooperative types in multistakeholder cooperatives, cooperative support networks and civic food networks. Such analysis would provide a better understanding of both the potential and the limits of cross-stakeholder cooperation, and could identify best practices for creating synergies and navigating tensions.

Jacqueline R. LeBlanc, David Conner, Glenn McRae, and Heather Darby's study found that nonprofit food hubs in Vermont were vulnerable in part due to their reliance on external (state and/or charitable) funding and their related failure to adopt conventional business principles. This paper raises two important questions. First, what level and type of state support is appropriate to most effectively enable cooperative alternative food networks without creating dependence or vulnerability? More controversially, we might reconsider the tendency of commentators to uncritically lament the dependency of the social economy on the state. These nonprofit and cooperative initiatives may both require and warrant ongoing support because they offer a public good by supporting the development of healthy, environmentally friendly food systems or contributing to social inclusion and cohesion — a much longer-term project of social change that may never be accomplished within the limits of the current market logic. This perspective would require cooperators and researchers to shift focus from intervening in individual initiatives to engaging in analysis and actions to affect the wider political economic context, and thus to complement internal pragmatic strategies (e.g., business

development) with external political ones (e.g., advocacy).

Second, LeBlanc et al.'s conclusion speaks to the inherent paradox of the social economy that is clearly woven through most of the papers in this issue: to what extent should cooperative alternative food networks adopt the tools and logics of the market economy to achieve their goals and what impact will this have on sustaining their broader social, political and ecological rasions d'etre? Cooperators and cooperative developers must proceed with caution when applying economistic and bureaucratic strategies to these organizations. The incremental application of economic rationality risks undermining the multifunctional potential of these initiatives and can erase possibilities for more radical and oppositional forms of economic organizing and politics. If not approached reflexively, conventional business-planning tactics and strategies may contribute to the conventionalization of these initiatives (Cameron 2010) whereby they come to be virtually indistinguishable from profit-driven firms (see Gray, 2008, and Mooney, 2004, for related discussion in cooperative literature). Similar tendencies have been reported earlier with respect to conventionalization in the organic food market (Guthman, 2004).

In the short term, there is a great need to explore alternative development and planning strategies that increase the resilience of cooperative alternative food networks without compromising the non-economic values and goals embodied within these multifunctional initiatives. For example, Oliver Moore, Olive McCarthy, Noreen Byrne, and Michael Ward present a case study from Ireland that examines the "reflexive resilience" of a community supported agriculture initiative. When faced with economic hardship, rather than adopting conventional business practices, the CSA engaged in a participatory decisionmaking process and addressed its challenges through a commitment by members to provide more in-kind labor to operate and manage the initiative. In contrast to adopting the conventional market-oriented solutions of increasing efficiency, convenience, and competitive pricing, the CSA opted for an alternative development trajectory that emphasized participation, civic responsibility,

² See the special issue on civic food networks in the *International Journal of Sociology of Agriculture and Food* (2012; volume 19, issue 3), at http://ijsaf.org/

and volunteerism. The CSA profiled in this case study exemplifies reflexive governance processes (Marsden, 2012) that allow participants, at a local level, to intentionally and proactively contend with the paradoxes that arise when blending social, political, and economic enterprise.

Recommendations for struggling initiatives to become "better businesses" perhaps arise from an analytic framework that is too localized and narrow in focus, where more challenging questions related to the political-economic, social, cultural, and regulatory context are left unprobed. In addition to looking inward and critiquing management practice and organizational governance, there is more space for analyses that more thoroughly address how rules, norms, and regulations are preventing cooperative alternative food networks from effectively pursuing a more holistic community development agenda. Confronting these broader structures will require politicized solutions and collective action across multiple scales. The organizational spaces that are constructed within cooperative alternative food networks may provide an opportunity to encourage more politicized actors and actions (e.g., Lamine, Darolt and Brandenburg, 2012).

Marie-Josée Massicotte's paper examines the more political dimensions of cooperative alternative food networks. She examines two cooperatives of the landless rural workers movement, Movimento dos Trabalhadores Sem Terra (MST), in Brazil. The paper demonstrates how the participatory and democratic processes that characterize cooperative alternative food networks can allow citizens to contest and transform unjust norms and influences, thereby creating new spaces for agency and for both individual and collective transformation. Masicotte's paper suggests that the sociopolitical context of nation, place, and region are fundamentally important in understanding the possibilities for cooperation and for developing collective subjectivities. In her study, the harsh conditions of MST encampments necessitated intimate cooperative efforts to provide for their most basic needs. These prefigurative encounters provided a foundation of interdependence that was built upon through the development of cooperative enterprise and was found to be fundamental to their cooperative identity and practice. Although

the MST encampment experience arose in a specific national context, there are important lessons to learn for other initiatives in terms of strategies to foster what Massicotte refers to as "sociopolitical imaginaries, values, and norms that can foster and sustain greater cooperation" (p. 18).

Beyond economic and social innovation, Masicotte illustrates how cooperatives can be pivotal in consolidating and strengthening social movements. In her study, the MST cooperatives were embedded in a "permanent struggle that ultimately aims at dislodging capitalist markets to redistribute wealth more equitably in society" (p. 11). The politicized nature of the MST cooperatives is notably juxtaposed with the less politicized cooperative alternative food networks from the global north profiled in this issue. The efforts of many northern cooperatives focus on communitybuilding work that coexists quietly in parallel to or as a part of, rather than in opposition to, the dominant system. In this context, the broader structures that undermine the broader viability of these initiatives are often uncontested as co-op participants find ways to work around, rather than to confront, the dominant norms, regulations, and rules that constrain their development and any broader visions of social change.

Failing to collectively confront the regime-level rules and norms that contain these economic experiments in the margins as "niches" (Smith, 2007) limits their potential to replicate, grow, and contribute to broader food system or regime change. However, the seventh cooperative principle of "cooperation among cooperatives" (International Cooperative Association [ICA], n.d.) represents a powerful normative framework for developing and strengthening extra-local ties between cooperative alternative food initiatives and a potential mode of practical and political cooperation across scales. How and to what extent the political potential of these cooperatives and their intercooperative networks are being realized is an open question. Further research could explore the relationship between these economic experiments and more radical oppositional urban and agrarian organizations and movements (e.g., food justice, food sovereignty).

Shirley Thompson, Mohammad Rony,

Jennifer Temmer, and Darcy Wood's paper locates cooperatives within an indigenous worldview to explore their relationship to food sovereignty and sustainable livelihoods in First Nation communities. Their research approach was rooted in a process of collaborative community development, reflecting a simultaneous effort to understand cooperative alternative food networks while contributing to their development through participatory community development research processes. Through the application of a sustainable livelihoods approach, the co-researchers worked together to build multiple forms of capital (e.g., human, social) through the research process itself. This participatory approach to research was also exemplified in two of the other papers in this issue (Anderson et al., and Moore et al.); collectively these are a testament to the potential of collaborative research for furthering community development and social change.

The papers included in this special were all either single or multiple case studies. There are far fewer systematic, broad-scale and interregional investigations of cooperative alternative food networks that would provide insight into the prevalence, impact, and potential of cooperative alternative food networks. A European Union-funded research project, COFAMI (Encouraging Collective Farmers Marketing Initiatives), chronicled a new wave of European cooperatives that emerged in response to growing societal demands for organic, fair trade, and territorial-based foods (Knickel, Zerger, Jahn, & Renting, 2008). This network produced both in-depth case study research and also cross-national synthesis that mapped out the landscape of such new forms of collective action as well as the barriers and opportunities for innovation and growth. An important shared characteristic of these new cooperative initiatives is that they go beyond the conventional logic of large-scale marketing cooperatives by extending relevant networks from the traditional farming community to actively include consumers, downstream supply chain actors, public administrations, and/or other rural actors in territorial or community-based networks (Schermer, Renting, & Oostindie, 2010). Another Canadian research network, Nourishing Communities, provides a

promising example of a coordinated, provincial-level approach to evaluating food hubs and alternative food networks (Blay-Palmer et al., 2013). Finally, cross-national comparative research would generate important insight into the social, cultural, and political-economic context that supports and also limits the development of cooperative alternative food networks.

As these innovative models of cooperative and civic food provisioning emerge, replicate, and transform the foodscape, there is a need for a more systematic and cooperative research agenda. This approach should consolidate and support development strategies and tactics that strengthen democratic ideals, progressive social-environmental values, and enterprise resilience. Such research would be interdisciplinary in nature and create opportunities to further understand and contend with the tensions created when pursuing cooperativism in a hypercompetitive, neoliberal politicaleconomic context. Indeed, the papers represented in this issue shed light on the multiple tensions that define cooperative alternative food networks, including individualism/collectivism, centralization/decentralization, reconnection/disconnection, social/economic purpose, and also those related to gender and class. In order to productively contend with these tensions, the next wave of research on cooperative alternative food networks will be most effective if it is developed cooperatively with the multiple stakeholders involved. Fundamentally, this will involve research processes and extension practices that reflect the democratic values of the movement itself.

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METRICS FROM THE FIELD Blending insights from research with insights from practice KEN METER

Co-ops and collective impact

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The nonprofit Cooperative Development Services (CDS), a cooperative that offers business consulting services to co-ops, just released an incisive report showing how co-op groceries in the Minneapolis-St. Paul metro area grew over the past 40 years into a US\$180-million commercial cluster (Stockinger & Gutknecht, 2014). This is strong growth for an upstart sector amidst

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established competitors in an often-hostile economic climate. While they still represent only two percent of the region's grocery trade, food coops have built a solid membership base. Their stores define the cutting edge of grocery retailing in the Twin Cities (where I live), and have had a profound influence on the ways groceries are sold here.

The growth of this co-op sector offers important insights into collective impact — an approach that advances the notion that even discrete steps taken by a given initiative will have importance across sectors, creating synergy and larger impacts over time — now widely in use by food initiatives across the U.S.

Let's start with some basic facts from the CDS report. Today there are 15 food co-ops operating 17 stores in the Twin Cities region (with plans underway for adding three new outlets). These co-ops have enlisted 91,000 members and attract an estimated 50,000 additional shoppers annually. Combined, the stores offer food items from more

million of farmgate revenue by selling to the coops through various channels. About 60 percent of this revenue was earned by selling directly to each co-op store.

The current generation of Twin Cities food coops originated in 1969, when a small group of rural and urban youth met at a farm in western Wisconsin, seeking a way to both build a market for farmers who wanted to raise organic produce

and create healthier food choices for consumers (Meter, 2009). The founders were fully mindful of their predecessors who had launched similar endeavors in the 1800s and the 1930s. Within a few years more than a dozen coops had sprung up. Some ultimately failed as the nowdominant stores expanded.

Most of these stores were launched in low-income neighborhoods, in part because rents were cheaper, but also because hundreds of young people had made their homes in these communities, looking for ways to work alongside their neighbors to

improve conditions. Bringing healthier food options to low-income shoppers, it was believed, would help build the neighborhood economy. Yet co-op shopping turned out to elicit limited interest from low-income residents.

Moreover, market pressures persuaded the coop groceries to compete for the attention of more prosperous consumers. Today, CDS describes the co-ops' primary market niche as serving early adapters — those who are quick to embrace new food products and new consumer trends (Meter, 2009). Along the way, co-ops introduced several key innovations to the Twin Cities marketplace: selling organic produce; offering grains, nuts, fairtrade coffee, and other food items in bulk; encouraging the emergence of new growers; and preserving farm identity at the retail shelf. Co-ops also demonstrated that a medium-size store could flourish, when conventional wisdom suggested that only big boxes could be profitable due to economies of size. Co-ops were often first to adapt because they maintained a creative vision and could count on a core of members to invest in this vision (Meter, 2009); all of these pioneering strategies have since been adopted by larger grocery chains.

One of these co-op groceries, The Wedge, also owns the Twin Cities' regional produce wholesaler, Co-op Partners Warehouse. Launched in 1999, this has grown to a US\$20 million business (Stockinger & Gutknecht, 2014). CPW primarily conveys

> produce from organic farms, largely in Minnesota and Wisconsin, to co-op groceries. CPW also cross-docks shipments (that is, CPW handles logistics only, without purchasing the product) for these same growers who sell direct to many of the same stores. This preserves the farmers' ability to command the highest possible price by selling direct to the co-op grocery stores.

For those exploring produce aggregation in their own regions, CPW's history offers an important caution: It took 40

years to get to where these businesses stand today. Two previous warehouses floundered. CDS attributes their folding to the difficulties of competing in a market dominated by large-scale firms. At each stage of the journey, supply and demand had to be balanced, with emerging farms supplying emerging markets, growing somehow in concert with each other.

As someone who helped form several (nongrocery) co-ops40 years ago, I recall meeting with a potential funder and asking for support for one store on the basis that, while the returns from this initiative might be discrete, over time there would be a collective impact. The funder politely let us know that this was too intangible a return for the foundation to consider. Now, in part due to Kania and Kramer's (2011) work on collective impact, several key funders are insisting on a coordinated, collaborative approach.

This is certainly a step forward, and Kania and Kramer are to be congratulated for popularizing

Market pressures persuaded

marketplace.

this notion. Yet when I returned to their 2011 paper, I found that the Twin Cities history departed in several ways from the classic model.

Kania and Kramer identify five "conditions of collective impact" (2011):

- Common agenda
- Shared measurement
- Mutually reinforcing activities
- Continuous communication
- Backbone support

Certainly the early co-ops in the Twin Cities held a common vision: they had a sense that only by organizing a new grocery sector could residents actually exert influence over which foods were

available to them. Indeed, the profound influence co-ops have held, in my experience, is that local folks began to seize the initiative in making food choices, framing their own vision, in ways that privately owned stores could not accomplish. Cooperators knew instinctively that only if a cluster of cooperating businesses were formed, with supportive infrastructure, would any of the individual firms build a lasting presence.

Yet Kania and Kramer suggest that collective impact requires "a joint approach to solving [a problem] through agreed upon actions" (2013, p.

1). In fact, individual co-ops compete mightily with each other and often have distinct agendas, even if the broad elements of their vision are similar. Each seeks to attract the same customers to join as members, but each is also expanding into new territory. At the same time, membership, with its patronage refunds, also helps build loyalty to the store, reducing competitive pressures.

While the model of collective impact calls for shared measurement, Twin Cities co-ops have struck a more independent path, enjoying a common set of metrics only in the past few years, largely through Stockinger's efforts. Of course, each co-op has similar accounting practices, so business data is relatively comparable. Yet there has been only sparse mutual reporting of metrics.

Nor is it clear that the co-ops always have mutually reinforcing activities. Each differentiates itself from the others, and often their competitive bent reduces any potential synergy. Twin Cities co-ops are not necessarily in continuous communication, especially at the higher levels of management — though workers in each co-op may well feel a strong affinity for each other as cooperators and some sectorwide gatherings do create mutual awareness.

Co-ops in the Twin Cities do have several organizations to call upon for backbone support. Strong technical resources, including CDS, a

cooperative development fund, and a cooperative bank, have been solidified over the past 40 years. Foundations have recently invested in helping expand the co-op grocery sector nationally. Yet these support networks do not coordinate individual co-ops' activities as much as offer specialized assistance toward each store's own goals.

Despite these apparent departures from the model, coops have grown into a vibrant sector that has influenced the likes of Whole Foods and Trader Joe's. This is not to say that Kania and Kramer are wrong, since if one looks closely at their

approach, they understand that reality cannot be distilled down into terse statements. In a subsequent paper (2013), they reminded practitioners that their model was meant to foster effective work in emergent settings — when new outcomes emerge that could not have been predicted from initial conditions (definition of "emergence" from Meter, 2006).

I have seen the collective impact model simplified into bullet points and presented as if it were a gospel or a loyalty test. Often this depiction of collective impact looks like a recipe selected by a funder that sought highly predictable outcomes in a

Foundations have recently invested in helping expand the co-op grocery sector nationally. Yet these support networks do not coordinate individual co-ops' activities as much as offer specialized assistance toward each

store's own goals.

tightly controlled setting. At such times, once the mantra "collective impact" has been put forward, critical thought may grind to a halt. Kania and Kramer see this is a misuse: they understand theirs is a framework for collaborators to draw upon in order to think critically amidst rapidly changing systems, not a set prescription.

The most common dilutions of the collective impact paradigm, it seems to me, are to assume that one single organization needs to be the "backbone" of a planned effort to achieve collective impacts. Yet Kania and Kramer explicitly state that multiple organizations may share this role. The coop experience bears this out. A second dilution is to assume that collective impact cannot occur unless planned in advance from the top down; once again the co-op history shows otherwise. In the Twin Cities' case, independent boards built separate economic bases at times with conflicting agendas, but with a significant common vision of growing the co-op sector and mutual immersion in a grassroots culture that supported cooperative organizing. In Ontario, by contrast, cooperation among cooperatives was deemed essential (Sumner, et al).

I can imagine, looking back at the past 40 years of co-op groceries, that had funders understood the rich potential for cooperative business to flourish, they might have helped Twin Cities co-ops adhere more closely to their initial idealistic impulse of providing healthier food to low-income neighbors — a thrust that is unlikely to pay for itself from sales revenues when incomes are disparate. Twin Cities co-ops might have made even stronger impact than they have, but in different ways, and might now be viewed less as gentrifying forces in the very same neighborhoods where they got their start.

Yet this is basically to assert that funders, like scholars and cooperators, need to pay close

attention to what is emergent, and support positive steps to the greatest extent possible. This is more of a process of building mutual accountability and of thinking critically together —activities that Kania and Kramer support, yet that are not always part of their followers' actual practice.

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THE ECONOMIC PAMPHLETEER JOHN IKERD

Limits to economic growth

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This is the first of two columns dealing with questions of economic growth. See the second column in the summer 2014 issue.

I am often asked why so few agricultural economists seem interested in sustainable agriculture or sustainable community development. Perhaps it's because unlimited growth is one of the

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foundational assumptions of neoclassical economics. If there are no limits to economic growth, questions of sustainability are needless or pointless. Ecological economists challenge this assumption and call for a *steady-state economy*, meaning one "that develops qualitatively without growing quantitatively... maintained at a level that is both sufficient for a good life and within the

Why did I name my column "The Economic Pamphleteer"? Pamphlets historically were short, thoughtfully written opinion pieces and were at the center of every revolution in western history. Current ways of economic thinking aren't working and aren't going to work in the future. Nowhere are the negative consequences more apparent than in foods, farms, and communities. I know where today's economists are coming from; I have been there. I spent the first half of my 30-year academic career as a very conventional freemarket, bottom-line agricultural economist. I eventually became convinced that the economics I had been taught and was teaching wasn't good for farmers, wasn't good for rural communities, and didn't even produce food that was good for people. I have spent the 25 years since learning and teaching the principles of a new economics of sustainability. Hopefully my "pamphlets" will help spark a revolution in economic thinking.

assimilative and regenerative capacities of the [natural] ecosystem" (Daly, 2013). However, most economists seem to believe that human imagination and creativity is capable of finding a substitute for any natural resource we may deplete and finding a technological solution for any problem we might create — given adequate economic incentives.

One argument for unlimited economic growth is limitless *dematerialization*, meaning an infinite ability to extract more economic value from fewer

natural and human resources. As ecological economists point out, this conflicts directly with the law of entropy, which is the second law of thermodynamics. Everything of any use to us, including everything of economic value, ultimately depends on the usefulness of energy. According to the law of entropy, whenever energy is used to do anything useful, some of its usefulness is lost. Accepting the law of entropy, there are physical limits to dematerialization and thus limits to economic growth. Unlimited economic growth would require ephemeralization, a term coined by Buckminster Fuller, meaning

the ability of technological advancement to do "more and more with less and less until eventually you can do everything with nothing" (Ephemeralization, 2013, para. 1). It doesn't seem reasonable to bet the future of humanity on this possibility.

Another assumption seems to be that unlimited economic value could be created through reliance on renewable human intellect or personal services rather than nonrenewable natural resources — a service economy. However, the human processes of thinking, creating, or providing personal services are inherently dependent on biological energy. The human brain accounts for about one-fifth of the total energy needed to fuel the human body. Thus, the limits of dematerialization apply even to human imagination and creativ-

ity. The only remaining possibility for unlimited economic growth would be to rely on human imagination to create unlimited growth in the *non-material* economy — meaning *increases* in economic value that requires no *additional* physical materials or energy.

We need to keep in mind firstly that economic value is inherently *individual, instrumental,* and *impersonal* in nature. Thus, economic growth would need to be in things that are of perceived benefit to people as *individuals* that can be bought, sold, or traded

for something of greater instrumental value through impersonal markets. And then we need to remember secondly that the growth in economic value could not require additional human energy, which would violate the law of entropy. In other words, the unlimited increases in economic value would need to be achieved within the context of a "steady-state economy."

Nonmaterial production of economic value is quite possible. For example, when we participate in a fair trade, the additional or marginal increase in economic value is

nonmaterial in nature. The same physical products are just worth more to their new owners. Anytime a new product is created that has *greater* economic value than the product it replaces, without using more physical or energy resources, the marginal increase in economic value is nonmaterial. The challenge is to sustain *unlimited increases* in *economic value* by creating ever-larger quantities of *nonmaterial* economic value.

In order to sustain unlimited economic growth, there first must be limitless growth in consumer demand for nonmaterial products. The number of consumers cannot grow indefinitely because human population must respect the limited physical carrying capacity of the earth. This means *individual* consumers must be persuaded or convinced that they need, or at least want, infinite

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quantities of things of economic value that are nonmaterial in nature. In addition, these things cannot be purely *personal* or *non-instrumental* in nature, which would be of social and ethical value but of no economic value. An insatiable nonmaterial demand would require a relentless barrage of persuasive advertising, planned obsolescence, and conspicuous spending or hoarding of nonmaterial goods and services.

Second, to sustain this unlimited economic growth consumers must have the economic means of sustaining unlimited growth in demand. The creation of nonmaterial economic value would be the only source of the additional income needed to sustain unlimited growth in consumer demand. This means the increase in nonmaterial products would need to be consumed in large part, if not exclusively, by people who have an unlimited ability to produce nonmaterial products. In other words, there would need to be an infi-

nite supply of the intellectual talent capable of producing new nonmaterial products of ever-greater economic value.

All of this would need to be accomplished without increasing the use of energy or claims on the natural or human resources needed to sustain the steady-state material economy. The ability to sustain economic growth would still depend on sustaining an adequate throughput of physical energy to sustain the human resources needed to continually grow the nonmaterial economy. Although the material fraction or percentage of the total economy would grow ever smaller over time,

the nonmaterial growth in productivity would still be dependent on the material fraction of the economy. Even if all of this were possible, the fact that we could do something doesn't mean we should try to should do it or would even want to do it.

This discussion might seem a meaningless mental exercise if we were not already seeing signs of growing reliance on nonmaterial economic

> growth: persuasive advertising, planned obsolescence, and conspicuous spending and hoarding. Nonmaterial growth comes at a cost. For example, the prevalence of self-interest, narcissism, or greed would need to double every 25 years to sustain an annual growth rate of only 3 percent in nonmaterial demand. The wealth of those producing for the nonmaterial economy would grow exponentially in relation to those who support the steady-state material/ energy economy. Economic inequity, social isolation, and psychological depression, which are

logical depression, which are already problems, would grow without end. This seems a high price to pay to avoid limits to growth — even for economists.

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This discussion might seem a

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GLOBAL VIEWS OF LOCAL FOOD SYSTEMS Reflections on the growing worldwide local food movement RAMI ZURAYK

The agrarian limits of the food movement

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Pood was on the cover of the May 2014 issue of National Geographic magazine. Inside the glossy monthly's international edition, an attractively illustrated article entitled "A Five-Step Plan to Feed the World" by Jonathan Foley ran alongside a full-page commercial by giant multinational company Syngenta, famous for its sale of seeds and agrochemicals and for its biotechnology and genomic research. The advertisement depicted an African woman farmer in the middle of a (GMO?) corn field with the caption: "She can feed a hungry world. We are going to help her do it." Here was a poignant and graphic representation of the discourse of the Second Green Revolution (SGR):

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the corporate world claiming to be reaching out to help its historic victims, the smallholders in the Global South.

Indeed, the Second Green Revolution, which aims to bring Africa into the realm of the industrial food producing nations, is not happening in the same way as its predecessor. This time, transnational corporations (TNCs) have joined forces with academic research centers and with big philanthropy to bring to Africa the latest in industrial capitalist farming, including high-yielding varieties and the accompanying technological package (see for example Rockefeller Foundation, 2006) for which they hold intellectual property rights. The interests of the Neoliberal Triad (TNCs-big philanthropy-academia) have become so intertwined in terms of funding, research and development, epistemic dominance, corporate social responsibility, and tax evasion that it now acts like a single organism — a hydra of sorts. For the purpose of penetrating the African continent, where lands and resources are still plentiful, the Triad is harnessing all its capabilities. These include the projection of a positive media image.

The deleterious effects of the First Green Revolution include widespread social and ecological tragedies, the shockwaves of which can still be felt. For instance, it is widely believed that the First Green Revolution induced a suicide epidemic among Indian farmers. Although the voices of capital have attempted to blur the discourse with glib assertions (see for example *The Economist*, 2014), the evidence from meta studies as presented in a recent *Lancet* article by Patel et al. (2014) is compelling: suicide rates are highest among smallholders unable to eke out a living in a world dominated by cash cropping and global markets. The death toll reached 187,000 deaths in 2010 alone (Patel et al., 2014). Indian philosopher

and physicist Vandana Shiva has laid the blame directly on TNCs, and specifically on GMO giant Monsanto (Shiva, 2014).

Avoiding an African repeat of the Indian disaster will require more than good images made in bad faith. Beyond Syngenta's advertising looms the specter of an agrarian disaster associated with the demise of hundred of

millions of rural livelihoods. The situation has been concisely presented by economist Samir Amin in a timely article on the Agrarian Question in the South (2012), whose central argument I summarize below using some of Amin's words:

There exists in today's world two systems of food production, one based on capitalist farming (rich family farms and agribusinesses), located mostly in North American, Europe, the southern cone of Latin America, and Australia. It involves a few million farmers who are not peasants and whose labor displays very high productivity — between 1,000 and 2,000 tons cereal equivalents (CE) per person. The other group is located in the countries of the Global South. It is mainly composed of peasants who have much lower labor productivity: 0.1–0.5 tons CE for those who benefited from the Green Revolution and 0.01 tons CE for those who didn't. Their

number is 3 billion people. As productivity gains are brought into the agrarian societies of the Global South, billions of farmers must be reduced to millions who will benefit from these advances. What happens to the others? The surplus labor that is created is far beyond the absorption capacity of national economies. Thus the advance of global capital into the agrarian South is bound to create an agrarian question that can only be resolved by a human and environmental genocide.

This is a rather disquieting assessment that places the Indian farmers' suicides into its real context.

To my mind, this is today the most crucial issue facing humanity. It has now become evident

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that most of the crises shaking the South, including ecological crises, can be traced to agrarian collapses. My recent work on the Arab uprisings shows that the demise of rural livelihoods and the inability of rent-based economies to absorb surplus labor were a main driver of the recent waves of violent revolutions and revolts (Zurayk, 2014).

The failings of the Green Revolution were made public chiefly through the grassroots efforts of organized civil society concerned with food and farming issues known as "the food movement." The success of the movement's grassroots campaigns in exposing the nefarious impacts of the First Green Revolution has prompted the Triad to borrow from the vocabulary of the food movement for its African project. Livelihoods, smallholders, localism, cooperatives, organic, and fair trade are terms that have become part of the corporate social responsibility drive that has bloomed in the past decade. Concurrently, the world of nongovernmental organizations (NGOs) has dug into the corporate book and appropriated new practices such as results-based management, professionalization, efficiency, cost-benefit, return on investment, and hierarchism. This has blurred the lines to such an extent that it has become difficult to distinguish between yesterday's foes - who now meet regularly in roundtables convened by the United

Nations. A classic example is in the endless rounds of negotiations around the voluntary guidelines for land tenure convened by the FAO, which bring together civil society representatives from the South and the North along with official representatives of states, who often double up as corporate

agents. No wonder the meetings lead nowhere.1

Confronted with today's disturbing agrarian reality and enriched by its experience of the first Green Revolution, can the food movement do anything to steer the agrarian world in the South away from its collision course? To properly address this issue, one first needs to understand the limits of action of the food movement. We chiefly need to remember that it is in fact a loose assemblage of international, national, and local movements that share often illdefined values. Chief among these is the belief that the

world would be a better place if it adopted "alternative food systems." These food systems would foster food security and environmental conservation, as well as democracy and community integrity. This creates sufficient political space to include organizations as disparate as local farmers' markets and the Movement de San Terra. Selfdeclared members of the food movement do not need to agree on all the central tenets. More importantly, challenging the neoliberal project is not a requirement.

In a recent thought-provoking article, Alkon (2013) addressed the issue of the neoliberal ramifications of the food movement. The author presents a very useful typology of food movement organizations and identifies four distinct discourses: local and organic food, community food security, local food systems, and food sovereignty. Alkon argues convincingly that only the food sovereignty

movement directly challenges neoliberalism, while activism in the other three discourses in effect relies on the dynamics of the market and on commodity relations ("the consumers voting with their forks"). Focusing specifically on fair trade, Goodman (2004) notes that while it provides the

> reflexive Northern consumer with a moral alternative to conventional trade, it fails to truly challenge the neoliberal ethos. Moreover, he adds that the adoption by giant corporations, such as Starbucks, of fair trade as part of their procurement and marketing campaigns poses seemingly unsolvable dilemmas to food justice activists who are now lost between the urge to boycott corporate coffee and that of supporting small, ecological coffee producers.

> This cursory assessment of the situation may seem bleak. Seen from the South, it looks unfortunately far too realistic.

Many among us are bracing ourselves for the neoliberal cyclone that will continue to devastate land and people. The seemingly unstoppable land grabs, now euphemistically termed "overseas foreign investments," are only the tip of the iceberg. And while we believe that a just solution for the agrarians of the South can only be born out of global solidarity, we also know that it will not come in the shape of a tall organic shade-grown fair-trade cappuccino.

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GUEST EDITOR COMMENTARY ON AGRICULTURAL COOPERATIVES

Historical tensions, institutionalization, and the need for multistakeholder cooperatives

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In "Democratizing a Rural Economy," Mooney (2004) suggests that for future generations, social scientists may need to give some greater emphasis to bequeathing not only a sustainable environment, but also institutions that can set a forum for democratic struggle and voice. As economic entities, agricultural cooperatives may be among the few institutions in rural areas retaining a semblance of economic democratic governance. However, institutionalization processes have left many of these co-ops in a challenged position to sustain their own democratic ethos. The nature of

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these losses is difficult to understand without historical texture and outside a tension frame of reference. This essay will define co-op structure in a manner that specifies some of these tensions and their historical context and pressures, and make suggestions for a more inclusive and possibly more resilient cooperative alternative in the form of multistakeholder cooperatives. This latter organizational form may be able to set a community development template for addressing various social, economic, and ecological needs, with a more inclusive and hopefully enduring democratic organization.

Definition

Historically, agricultural cooperatives have been structured around at least three principles:

(1) *The User-Owner Principle:* Those who own and finance the cooperative are those who

- use the cooperative;
- (2) *The User-Control Principle:* Those who control the cooperative are those who use the cooperative; and
- (3) The User-Benefits Principle: The purpose of the cooperative is to provide and distribute benefits to its users on the basis of their use. (Dunn, 1986, p. 85)

Other versions of these principles exist, particularly those of the International Cooperative Alliance, though the above three perhaps best highlight cooperative distinctiveness from their main organizational competitor, investment-oriented firms (IOFs).

Cooperative Difference from IOFs

In linear logic, if somewhat simplistically, investors with money seek to make a return on that money by investing in an activity that will return a profit, thereby (hopefully) ending up with more money. Members (or potential members) of a cooperative need a service or a product. They collectively organize to provide that product and/or service. The organization must achieve some financial margin over costs in order to continue to finance and provide a flow of services through time. In investment firms, the investor-owners have little connection to the business activity of the firm. If use is made of the activity, it is only on an incidental basis. For cooperative patrons, the activity of the organization and their use of that activity are central to their relationship with the organization (Gray, 2004). In an investment firm the internal logic is not use (as in a cooperative) but return on investment (roi).

Historical Context, Tensions, and Losses to Democratic Ethos

The core of the agricultural cooperative community was formed in the late 19th and early 20th centuries as an offset to investment capital interests, both externally to oppose monopoly/oligopoly (seller) and monopsony/oligopsony (buyer) power, and internally to strike an organizational form oriented to (1) "use" rather than short-term "return on investment" (roi); and (2) governance by "one member, one vote" rather

than aggregative stock ownership. The opposition of these two organizational forms, as played out in market dynamics, produces a series of tensions akin to a see-saw that can be tipped in one direction or another, given the nature of external pressures on cooperatives (e.g., concentration and centralization of farming and agribusiness firms, global sourcing and selling of products). Three of these tensions will be discussed here: (1) participation and democracy versus efficiency and capitalism, (2) localism versus globalism, and (3) production versus consumption (Gray, 2013). How cooperatives lose democratic character as well as local embeddedness will be highlighted, followed by a comment on the possible advantages of a multistakeholder structure in creating an organization-community template for broader democratization. Tensions here are to be understood as opposing but simultaneously existing tendencies, and not as either/or, or mutually exclusive categories.

Participation and Democracy/ Efficiency and Capitalism

As the predominant business form in the larger socio-political economy, IOFs create a context of pressure on cooperatives that privileges the needs of capital and short-term roi, rather than the needs of people as articulated in cooperative use (i.e., user-ownership, user-democratic control, and userbenefits). From an IOF perspective and for continuing corporate survival, capital is managed in as fluid or "unencumbered" a manner as possible. Intense competition and resultant needs for investment, returns on investment, and growth are central to continuing operations, and become manifest in, among other factors, strategies of industrialization, global sourcing and selling, corporate consolidation, market concentration, and technological intensification. Complex bureaucratic organizations (as a secondary logic) emerge out of these dynamics for controlling and directing capital among multiple locations and products, with resultant emphases given to centralized decision-making and top-down flows of authority.

Fairbairn (1999) argues that in the face of these larger dynamics, many cooperatives have sought to survive by "expanding, merging, rationalizing" (p.

95), becoming large bureaucratic organizations in their own right. These processes have resulted in tendencies that can shift cooperatives away from economic democracy rationales and toward IOF models that emphasize the needs of capital. Such pressures have various impacts, including:

- (1) There may be bureaucratization and organizational shifts away from a grounded cooperative logic, or a logic that emphasizes local responsiveness, decentralized decision-making, and local participation, to one that favors centralized decision-making and top-down lines of authority that have the effect of distancing cooperative members from decision-making centers of the organization.
- (2) Due to the added complexities of operating in a global economy as well as managing bureaucratic organizations, management frequently holds more information in such areas as marketing, finance, and law than members and directors. This can result in an asymmetry of information between managers versus members and directors, creating potentials for management to privilege their own performance expectations for "grand visions," various perks, job security, and high salaries as well as management strategies that parallel IOF strategies. These strategies are often accompanied by a de-emphasis, or displacement, of grass-roots member needs and member voice (Sousa & Herman, 2012).
- (3) Pressures also occur to shift the organization away from the equality of one-member, one-vote governance in favor of proportional voting, such that each member holds one vote for their membership, and proportionately more votes based on the amount of business they transact with the cooperative (similar to aggregative capital ownership in IOFs).
- (4) A fourth area of de-democratization involves the organizational conversion of cooperatives from firms organized around the logic of "use" to investment oriented

firms organized around the logic of roi. This has been the case with California Olive Growers, Calavo Avocados, Goldkist, Capital Milk, America Rice, Dakota Growers Pasta Company, Saskatchewan, and Manitoba, and Alberta wheat pools, among others. Each of these firms once functioned as an agricultural cooperative and was later converted to an IOF.

Earnings are necessary to meet the financial needs of a cooperative organization (as with any economic organization). To continue through time to provide service to members organized around use values, the cooperative must not only provide a democratic member institution but an earnings institution. Both are needed. However, care must be taken to prevent a predominant tipping toward roi-like imperatives (as reviewed above). To do otherwise is to render impotent the participatory and democratic aspects of the organization (Gray, 2013).

Local Embeddedness/Geographic Expansion Given their user-ownership structure, cooperatives are as geographically embedded as their membership. In the case of farm cooperatives, since ownership is held by farmers, most have a strong element of local geographic embeddedness. However it cannot be overemphasized that the predominant organizational and competing form in the larger economy is the IOF. While geographic embeddedness can serve a long-term function of protecting member-users and their communities from the impacts of recessions and capital flight from a region, from the standpoint of roi logic, local embeddedness is an unnecessary constraint that interferes with mobility and the efficient application of capital (Mooney, 2004). In response to competition with roi multinationals and in pursuing growth and profitability, many cooperatives have expanded geographically — even globally in the case of such cooperatives as Cenex-Harvest States and Land O'Lakes. While this expansion may add markets, it can also result in a loss of local uniqueness. Both globalization and bureaucratization tend to require standardization of product and therefore often a loss of locally identified attributes and local

identity. Further, geographic expansion itself adds another layer of distance — physical distance — between members, member governance, and cooperative decision-making. This distance can then tip a member/ management tension toward management prerogatives and possibly the needs of capital, even at times precipitating rationales for the closing of local facilities.

While cooperative character results in a certain natural embeddedness connected to membership, the various demands of IOF competition, globalization, bureaucratic complexity, the "efficient" application of capital, and CEO managerial culture often call for a "freeing-up" and "disencumbering" of capital from locally "constrained" attachments. Many agricultural cooperatives have tended to adopt growth strategies that parallel these investment models. Like the tensions between efficiency and participation and democracy and capitalism, cooperatives need some degree of both localism and globalism in terms of market development; but globalist approaches are advised to be taken with caution since an overemphasis on marketing and sales expansion can result in a loss of local voice and local identity, attributes nearly impossible to obtain without geographic embeddedness.

Production/Consumption

The current organization of agriculture tends to treat human and environmental costs as externalities. As organized predominantly around IOF logic, there is little opportunity to bring these costs inside business decision-making, beyond direct government regulation. This is due in part to the severe separation of production and consumption interests, which function at competitive and antagonistic poles in the market place. Yet they are functions that presuppose and anticipate each other. There is no consumption without production, and no economic production without consumption.

Historically there has been consideration of combining both these functions within single organizational arrangements. In Voorhis's (1961) concepts of a cooperative commonwealth, he stated "...if a considerable proportion of farm crops [and food] could be sold directly by farmerowned enterprises to consumer-owned ones, the

spread between what farmers receive and what consumers pay would amount simply to the costs of processing, transportation, and sale" (as cited in Mooney, 2004, p. 86). Improved returns for farmers and lower prices to consumers might be a possibility.

However, perhaps more importantly, a cooperative commonwealth arrangement (i.e., collaboration between agricultural and consumer cooperatives) might provide a platform for internalizing various human and environmental costs. This would be different from the predominant system that insistently externalizes these costs in struggles over price and market advantage within an organizational context that requires a maximization of short-term roi. These latter competitive and investment logics are of singular interests, shaped by the voices of aggregative ownership capital.

Member-users of collaborative agricultural and consumer cooperatives hold potential to internalize what is externalized under a roi rationality, via a broadening of democratic voice possibilities (Friedmann, 1995, 2005; Mooney, 2004). Land use, environmental, and health concerns might no longer be externalized by the default of organizational design, but rather internalized with a more inclusive structure. The emergence of community supported agriculture, farm-to-school, and farm-toinstitution agriculture, farmers' markets, and cooperative farm stores, though on an incipient level, demonstrates the viability of this linking. Their development also anticipates the possible viability of multistakeholder cooperatives as an alternative organizational form.

Multistakeholder Cooperatives

Historians and political economists Gar Alperovitz (2013) and Richard Wolff (2012 in their respective books What Then Must We Do and Capitalism Hits the Fan both suggest the formation of cooperatives to address larger systemic problems of unemployment, economic stagnation, and environmental degradation. Their critiques are profound though undeveloped when considering the institutionalization processes of cooperatives as outlined in this commentary. Competition with IOF multinationals and various tendencies toward organizational complexity, asymmetry of information between

management and members, globalization and accretion of local embeddedness, pressures for shifts toward proportional voting and away from one-member, one-vote governance, and sheer conversion of cooperatives to IOFs are some of the factors that thin out the vitality of a cooperative economic democracy, and democracy in rural areas. (This writer, however, suggests that even with the institutionalization processes that have occurred, if one compares cooperatives to IOFs, cooperatives look better — particularly when considering the embeddedness of respective ownership structures and the benefits and services that flow back to a local membership, relative to the absentee stock ownership and concentrated structures typical of IOFs (Craig, 1993)).

Both Alperovitz and Wolff argue for a greater economic democratization. Multistakeholder cooperatives offer potential for broadening democratic voice beyond the immediate memberusers of cooperatives. A stakeholder is anyone who affects and/or is affected by the organization and may include such interests as owners, investors, managers, customers, users, employees, lenders, community residents, and community organizations. Any organization has multiple stakeholders, and even firms predominantly organized to make a return on investment cannot totally ignore these interest groups (Freeman, 1984).

A multistakeholder cooperative typically has at least two classes of members, with each group allotted a set number of seats on a board of directors. Boards of directors are elected by their constituencies typically to participate in policymaking, strategic planning, and direction. The number of board seats held by each group may vary by the centrality of their respective functions in the organization (Lund, 2011). These activities can involve deciding what products and services to be involved in, what markets to sell to and buy from, what major capital outlays to make, whether the organization should expand, close, or move from the local area, as well as what general manager or CEO to hire or fire (Leviten-Reid & Fairbairn, 2011).

They are prevalent in Quebec and Ontario as well as Italy, and are growing in number in the U.S. (see Margaret Lund's 2011 work, *A Multi-stakeholder*

Cooperatives Manual); they are not free of criticism, however (Lindsay & Hems, 2004; Munkner, 2004). These latter authors predict that decision-making will be so cumbersome due to having so many selfinterested actors that it will either convert to a single stakeholder model (an IOF firm) or it will close. However, Leviten-Reid and Fairbairn provide evidence that this has not been the case. Often members join for larger community reasons that involve not only their own particular job interests or access to a market or a product, but also issues of unemployment, rural outmigration, environmental quality, and the well-being of the larger community. These larger socio-economic and ecological goals often produce greater involvement, participation, commitment, and trust, with resultant organizational resilience. Leviten-Reid and Fairbairn report from two case studies that "difference in opinion served to enrich discussions during meetings and that divergent opinions were 'assets that kept the organization moving along" (2011, p. 30).

The broadening of democratic voice to different stakeholders, with their involvement in the organization, may provide a sufficient populist voice to offset the institutionalizing processes described in this paper. Unlike the singular rationality of IOF firms, multistakeholder cooperatives may be able to better address various human and environmental costs by internalizing the various relations of use in terms of production, ownership, investment, consumption, and benefits as well as costs (from a broader community perspective).

Alperovitz speaks of alternative forms of ownership, e.g. credit unions and various forms of cooperatives, as representing a possible "prehistory." He suggests that while some cooperative forms may currently be in fragile or early stages of development, they may gain much greater ascendance if current socio-economic and ecological conditions continue or worsen. The incipient but rapidly growing initiatives of farm-to-school and farm-to-institution agriculture, community supported agriculture, cooperative farm stores, and farmers' markets may provide a methodology that brings production and consumption together in a more collaborative way. If they come together in a context of multistakeholder cooperatives, they

could bring larger community energies and commitments as well. If we design organizations with use and democratic characteristics, we might be better positioned as a society to bequeath to future generations both organizational models and organizations themselves that can realize longer-term sustainability imperatives (Gray, 2013).

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Re-imagining rural cooperation in Atlantic Canada

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Abstract

As they struggle to be competitive in a global market economy, agricultural cooperatives in Atlantic Canada appear to be in overall decline, shrinking in both numbers and members. This strategic policy analysis looks at what new role the remaining agricultural cooperatives might play in a more regionalized marketplace. Using a mixed methods approach we gathered secondary data and interviewed key leaders and managers in the agricultural cooperative community in Atlantic

Canada. Results suggest that while progress is being made to decommodify and develop new value-added products and regionally oriented supply chains, a transition to a more sustainable regional economic cooperative model is elusive and not likely to come about without a more localized rural cooperative system uniting all agricultural cooperatives, together with greater unity between the provincial cooperative councils.

Keywords

agricultural cooperatives, cooperative councils, marketing cooperatives, supply cooperatives, service cooperatives, production cooperatives, traditional and new cooperatives, Atlantic Canada

Introduction

Speakers at Quebec City's 2012 marquee cooperative summit, celebrating the UN's International Year of the Co-operative, widely critiqued the conventional market-driven economic model intrinsic to the West, and instead called for a new sustain-

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able economic paradigm (Novkovic, 2012). This call for economic sustainability aptly applies to the rural world of Organisation for Economic Cooperation and Development (OECD) countries where family farms and domestic food systems are increasingly exposed to the vagaries of the global economy. Canada, an OECD country, is no exception, caught as it is in the paradox of being an agricultural superpower while losing its family-farm sector.

Canada's rural regions (officially defined as being areas with fewer than 1,000 inhabitants and a population density below 400 people per square kilometer (1,041 per square mile), and in which 6.3 million Canadians live, making up 18.9 percent of the national population) (Statistics Canada, 2012a) are undergoing dramatic changes, including low rates of business creation; boom-bust natural resource cycles; out-migration; loss of agricultural land; fewer and more capital-intensive farms; the decline of domestic food production; growing concentration and consolidation in supply, processing, and food retail distribution networks; depressed farm product prices induced by global commodity pricing and trade issues; consumer demand for the cheapest food regardless of its origin or cost or conditions of production; chronic under- and unemployment nationally; government fiscal deficits; and the increasing competitiveness of the emergent economies of the "Global South" (Canadian Cooperative Association [CCA], 2011; Nova Scotia Federation of Agriculture, n.d.; Scott & Colman, 2008; Senate Committee on Agriculture and Forestry, 2006; Senate Committee on Agriculture and Forestry, 2008; United Nations Department of Economic and Social Affairs, 2013).

As a concurrently shared power in the Canadian federal system, the current federal/provincial agriculture policy for 2013 to 2018, "Growing Forward 2" (henceforth referred to as GF2) — built on a legacy of similar agricultural policy frameworks — focuses on competition, innovation, export markets, and free trade (Agriculture and Agri-Food Canada, n.d.). This indicates a shift in policy away from state-supported agriculture to one based on neoliberal market principles. In cooperative leadership circles there is growing disquiet over the potential implications of GF2 for

agricultural cooperatives (Canadian Co-operative Association [CCA], 2011). In earlier times the core principles of the world cooperative movement voluntary and open membership, democratic member control, member economic participation, autonomy and independence, continual education, cooperation among cooperatives, and concern for community (International Co-operative Alliance [ICA], 2013) — paid real dividends in the tight and vibrant rural communities of 20th century Canada (MacPherson, 1979). Today, however, is a different era. Agricultural cooperatives face the loss of farmland, stable memberships, and critical rural infrastructure like railways, marketing centers, food retail outlets, tractor dealerships, processing plants, and institutional price supports for domestic food production (CCA, 2011).

These trends apply to all of Canada's regions and provinces including Atlantic Canada, where the authors are based. Atlantic Canada comprises the four provinces of Nova Scotia, New Brunswick, Prince Edward Island, and Newfoundland and Labrador, and is home to approximately 2.3 million people. Less industrialized than central and western Canada, the region has traditionally been dependent on industries such as coal, steel, and shipbuilding, and on resource sectors including fishery and forestry. In recent years, regional economic policy has shifted to new knowledge sectors (e.g., call centers) and "gateway" initiatives into the global economy (Fredericton Daily Gleaner, 2005; Johnson, Hodgett, & Royle, 2007). Atlantic Canada's agriculture varies by province but is generally characterized by mixed farming such as dairy, beef, potatoes, and blueberries. Regionally speaking, there are fewer farms in Atlantic Canada than elsewhere in Canada (Canadian Geographic, n.d.; Statistics Canada, 2012b).

Although Atlantic Canada has a storied cooperative tradition, the extent to which these wider trends in agriculture have affected Atlantic Canada's agricultural cooperatives (both the traditional cooperatives emanating from 20th century social movements, and the more recent grassroots local food cooperatives) is not clear. The crucial issue we wished to explore in this study is the views of the Atlantic Canadian cooperative community on the economic and policy trends facing

contemporary agricultural cooperatives and the possibilities for a more sustainable rural cooperative architecture.

Objectives and Methodology
This research had two related objectives:

- To seek the evaluation of the Atlantic Cooperative Councils on whether agricultural cooperatives could affect food security (reviving domestic food production) at the local and regional levels as a measure of their resilience; and
- To identify political, social, and economic challenges and opportunities for the success of local-scale agricultural cooperatives in Atlantic Canada.

This interviewed-based case study employed semistructured phone interviews conducted in April and May 2011 with a cooperative council representative in each Atlantic province: The Nova Scotia (NS) Co-operative Council, the Newfoundland and Labrador (Nfld. & Lab.) Federation of Co-operatives, the Prince Edward Island (PEI) Cooperative Council, and the Co-operative Enterprise Council of New Brunswick (NB). We contacted representatives in senior leadership positions from each of the provincial cooperative councils. (See the interview guide in the appendix.) Due to differences in organizational structures among the councils, some interviewees were staff directors, and some were volunteer board directors. All were able to speak from experience about specific cooperatives as well as about wider policy trends in their respective provincial cooperative sector. Two interviews were also conducted with federal and provincial government farm loan specialists. We also attended cooperative public events and accessed the "grey" policy literature that is listed in the reference section.

This research builds on the findings of targeted consultations, known as "Foundations Sessions," that were conducted by the Rural Research Centre, Dalhousie University, in every province between 2008 and 2011 with government, industry, and civil society representatives connected to agriculture and rural development in Atlantic Canada. A total of

six Foundation Sessions were held, generally with six in attendance per session. The Foundation Sessions frame some of the context to this paper and, in certain instances, offer direct insights on the region's cooperatives.

The paper is organized as follows. Part 1 has set the policy context framing the agricultural cooperatives, together with the methodology of the paper. Part 2 addresses the concerns and recommendations of the cooperative community toward federal and provincial agricultural policy, followed by a national and regional overview of the agricultural cooperatives. Parts 3 through 6 break down the agricultural cooperatives into their marketing, supply, service, and production subsectors. The interview results are generally organized according to the opportunities and constraints facing each subsector in light of the GF2 policy context, while delineating their differing trajectories. Part 7 calls for a more localized rural cooperative model uniting all of its segments, and backed by an interprovincial co-operative council agricultural entity.

National and Regional Overview of Cooperative Policy and Agricultural Cooperatives

Cooperative Views of Federal and Provincial Agricultural Policy

The CCA secretariat, cooperative specialists, Atlantic Co-operative Council representatives, regional roundtables, and Foundation Sessions all unanimously called for agricultural policy to support a diversity of farm sizes and production approaches that focus on domestic markets, appropriate regulations, adequate provincial funding, tax breaks, research, and technical support. Also urged was a greater diversity of partnerships with regional organizations, local municipalities, economic development organizations, food security and community groups, and cooperatives.

However, the commitments of the provincial and federal governments to the long-term growth of a strong agricultural cooperative movement are at best unsteady. While our research did identify some positive examples of collaboration with provincial departments (e.g., the Department of Innovation, Business and Rural Development of Nfld.& Lab. stands out), Atlantic provincial governments, by and large, continue to embrace large-scale natural resource projects, or capital projects (e.g., "fracking" and governmentprocured ship-building), or commodity agriculture (provincial agricultural departments received few accolades here), as the primary drivers of provincial economic growth rather

than community economic development. Cooperative affairs are invariably lodged in less than prominent departments (e.g., Service Nova Scotia and Municipal Relations) and there is a lack of awareness about cooperatives among government staff in other departments (e.g., economic development, regional development) and the wider public in general. At the federal level, austerity measures implemented since 2008 — staff cuts, the shuffling of the federal secretariat, and the discontinuation of the Co-operative Development Initiative in 2012 (Canadian Worker Co-op Federation, n.d.) — are indicative of the low priority of the cooperative file in the national capital, Ottawa.

Below we provide an overview of the national and regional agricultural cooperatives before turning to a more detailed look at the implications of this emerging policy environment for Atlantic Canada's agricultural subsectors.

National and Regional Overview of Agricultural Cooperatives

Agricultural cooperatives have been a major component of the Canadian cooperative movement since the 19th century. Today, as a result of this legacy, agricultural cooperatives (generally a provincial jurisdiction)¹ are the largest sector among

Table 1. Registered Agricultural Cooperatives by Subsector in Atlantic Canada

Province	Marketing Coops	Supply Coops	Service Coops	Production Coops	Total Number
Prince Edward Island	9	3	10	7	29
Newfoundland and Labrador	2	2	2	3	9
Nova Scotia	10	3	28	9	50
New Brunswick	10	3	6	6	25
Atlantic Canada	31	11	46	25	113

Sources: Registry of Joint Stock Companies Nova Scotia Government, retrieved November 6, 2013, from http://novascotia.ca/snsmr/access/business/registry-joint-stock-companies/cooperatives.asp;; Nova Scotia Co-operative Council, retrieved November 6, 2013, from http://www.novascotia.coop/; T. MacEwen, PEI Co-operative Council, personal communication, November 7, 2013; A. Barter, Nfld. & Lab. Co-operative Council, personal communication, November 8, 2013; J. Bretts, New Brunswick Financial and Consumer Services Commission, personal communication, November 20, 2013. Note: This chart is a rough approximation because of the difficulty of accessing fully up-to-date lists in any one organization. Also, some of the lists did not indicate the type of agricultural business, making the matching of some of the societies to the CCA schema difficult. Note, too, that supply cooperative data does not include consumer-owned grocery retailers.

nonfinancial cooperatives in Canada, representing a greater share of employees (37.4 percent of the total) and a larger share of revenues (46.1 percent) than any other cooperative sector (CCA, 2011). Of the 5,679 nonfinancial cooperatives in Canada, there are 1,309 agricultural cooperatives. In 2007, agricultural cooperatives had over CA\$8.9 billion in sales, across a range of different sectors. Canada's cooperative "powerhouse" is the French-speaking province of Quebec. The total revenue of its 231 agricultural cooperatives was over CA\$8.3 billion in 2007, which is 81.9 percent of Quebec's total cooperative revenues (personal communication from Rural and Co-operative Secretariat, 2007).

Atlantic Canada's cooperative sectors are smaller compared to those of the rest of the provinces. Within Atlantic Canada, Nova Scotia has the greatest number of registered cooperatives, while New Brunswick has the largest number of members, greatest asset base (as percentage of population), and most employees. PEI's strong agricultural base is reflected in the revenues of its agricultural cooperatives, which accounted for CA\$143 million (61 percent) of total cooperative revenues (personal communication from Rural and Cooperative Secretariat, 2007). Newfoundland and Labrador has the smallest cooperative profile

¹ A cooperative wishing to incorporate under the federal legislation must have its business in two or more provinces

and/or have a fixed place of business in more than one province (Industry Canada, 2013).

nationally and regionally (see Table 1).

Our schema follows the functional definitions contained in the CCA's excellent document *Growing Forward Through Co-operation* (2011), which breaks down the agricultural cooperatives into the subsectors of marketing, supply, services, and production. The following sections address the differential impacts of policy on these four main segments of the agricultural cooperatives.

Agricultural Marketing Cooperatives

Overview

Agricultural marketing cooperatives market, distribute, process, and add value to the farm products of their members. Numbering 291 in Canada, they encompass diary (32), vegetables (35), fruit (51), fruit and vegetables (4), greenhouse vegetables (9), grains and oilseeds (18), livestock (63), poultry and eggs (11), honey and maple (12), and other marketing types (56) (CCA, 2011). Nationally, agricultural marketing cooperatives have over 39,000 members, with 25,000 employees in total (CCA, 2011). Dairy cooperatives account for almost half of all revenue from Canadian cooperatives, followed by hogs and poultry. Canadian dairy processing cooperatives have a market share of 42 percent of all sales in Canada. The dairy sector is bolstered by Canada's Supply Management (SM) system, introduced in 1970 by the federal government to provide price stability to dairy, eggs, and poultry farmers and processors, and a guaranteed supply of these commodities to consumers. SM has three pillars: the managing of production (quotas), import controls (tariffs and trade barriers), and cost of production pricing. The system normally does not require public subsidies (Dairy Commission of Canada, 2012). The next two sections cover the opportunities and challenges inside of the SM system in Atlantic Canada.

Secure Regional Markets
In Atlantic Canada, Scotsburn Co-operative
Services Ltd. (founded in 1900)² and Farmers Co-

operative Dairy Ltd. (merged in April 2013 with the Quebec dairy cooperative Agropur, founded in 1938) came in at eighth and tenth of the top ten agricultural cooperatives nationally (CCA, 2011). The dairy cooperatives gradually amalgamated over time, in line with the growing concentration in the farm sector. Scotsburn consists of approximately 94 dairy farmers in Atlantic Canada, while Farmers currently stands at 116. Seventy-five percent of Nova Scotia's agricultural production is processed in cooperatives, which are critical to value-adding (NS Co-operative Council interview, April 2011). With CA\$243 million in revenue, Scotsburn accounted for 42 percent of agricultural cooperative revenue in the province. PEI's dairy cooperatives have also thrived (PEI Co-operative Council interview, April 2011). In 2007, for example, Amalgamated Dairies Co-operative Ltd. reported the highest revenue of all PEI cooperatives with CA\$125 million, which is 87 percent of all agricultural revenues, and 53.4 percent of total cooperative revenue in the province.

The decline in the number of farms, however, also affects dairy farm cooperative numbers, although they are probably producing the same amount of milk. According to one informant, "You can't make a living anymore growing 100 acres of potatoes or milking 20 cows" (PEI Cooperative Council interview, April 2011). Newfoundland and Labrador's dairy cooperatives (Scotsburn, Agropur), based in the provinces of Nova Scotia and Quebec (see table 1), buy milk from Newfoundland-based dairy farmers, numbering around 34, who are not members of those cooperatives (Nfld. & Lab. Federation of Cooperatives interview, April 2011). SM has also served rural communities in New Brunswick well, as represented by Northumberland Dairy Cooperative, founded in 1942 (Co-operative Enterprise Council of NB interview, April 2011).

indicate further consolidation in the regional dairy industry. Scotsburn will continue its other activities, such as its frozen ice cream and frozen novelties business. Overall, the ownermember profile of the cooperative remains the same including in regards to the purchase of bulk milk by Scotsburn (personal communication with Scotsburn representative, February 7, 2014).

² Scotsburn recently sold its fluid milk division (two fluid milk processing facilities) and distribution network to the Quebecbased investor-owned business Saputo, which would appear to

Implications of "Free Trade" Agreements Informants said that many dairy farmers find it hard to believe that SM has not caved in due to lobbying pressure from U.S. dairy interests seeking access to the Canadian market. SM and cooperatives give farmers a chance to set the price (interviewees from Co-operative Enterprise Council of NB, 2011; and NS Co-operative Council, 2011). Our interviewees strongly supported an SM system that appears to be doing well for the moment. For the authors, however, a looming threat became clear when the current conservative government ended the Canadian Wheat Board's monopsony on August 1, 2012, as a result of Bill C-18 (a farmercontrolled single-desk federal grain marketing agency based in Western Canada) in favor of openmarket grain selling (Desmarais & Wittman, 2014).³ Supply Management policy subsequently faced a hostile and synchronized public-relations campaign orchestrated by the corporate media, right-wing think tanks, and Canadian "free trade" ideologues in industry who urged that SM be dismantled, ostensibly to lower prices for consumers (McKenna & Curry, 2012). The implicit view among some informants was that federal government policies pose a threat to the SM-supported cooperatives.

Innovation Outside of SM

The story is different for those marketing cooperatives outside SM who must intensify exports, innovate, or create local standards among members, to maintain or gain market share. The formation of a Christmas tree cooperative in Nova Scotia was cited as a good example of export market diversification. It developed a niche market for exporting Christmas trees to Dubai using the container pier in Halifax (the capital of Nova Scotia) (Powell, 2011). By developing common standards among its 40 or so member tree growers, it received higher margins for its trees and was able to take large lucrative contracts (NS Co-operative Council interview, 2011). Another informant cited the example of the Scotian Gold apple marketing cooperative a Nova Scotia—based cooperative of approximately 30 members with CA\$25 million in turnover. Scotian Gold commercialized its public and private research partnerships through the development of the "Sweetango" apple, which allowed it to get better prices and regular shelf space in the conventional grocery retailers. This was a significant success, since large retailers want a 12-month supply, not just supplies for part of the year from local farmers, and otherwise ship it in (NS Cooperative Council interview, 2011).

One informant said that farmers should develop export markets with overseas cooperatives to circumvent the large grocery retailers:

[International] partnerships could be taking place within the cooperative model (i.e., cooperatives of cooperatives in NS and Chile, etc.). There is a precedent for this type of activity in "Just Us!" [in Grand Pre, Nova Scotia], which is a worker-owned cooperative of cooperatives with global partners [fair trade coffee]. (NS Co-operative Council interview, 2011)

Other innovations noted were value-added cheese processing by Farmers Dairy Co-operative (now Agropur), a poultry processing cooperative known as ACA, cooperatively marketed blueberries, and the mink cooperatives (NS Co-operative Council interview, 2011).

The Creation of Community Standards

We asked if government-supported SM should be extended to other commodities, even though this seemed counterintuitive given "free market" trends. Our informants thought this unlikely but felt that perhaps the troubled pork industry would be in favor of it (NS Co-operative Council interview, 2011). This very issue is arising in Newfoundland: "Vegetable producers can't understand why the government can't set up regulatory pricing for vegetables, like for dairy, and the government keeps saying it can't do anything" (Nfld. & Lab. Federation of Co-operatives interview, 2011). Informants believed expanding SM to other commodities would be attractive to producers, but that Canadian taxpayers would resist funding such a system were it perceived to mean higher food prices.

³ This was preceded by the conventionalization of the major grain marketing cooperatives in western Canada.

Other producers have successfully initiated community-controlled regulatory systems. In Nova Scotia in the early 1980s, the Northumberland Lamb Marketing Co-operative (Brewster Kneen being one of its founders) established a voluntary supply management system, setting prices, controlling quality, negotiating delivery times and volumes with farmers, and supplying the major supermarkets in the province with local lamb year-round:

They are able to pay their producers a premium for off-season lamb and sell it year-round. They basically set local prices. Because it's a smaller market, there is much less imports competition than beef, for example, which is in decline locally. They benefit from efficiencies of scale and constant supply. Northumberland would be considered a small to midsize cooperative. (NS Co-operative Council interview, 2011).

Northumberland faces government regulatory issues, nonetheless, because provincial cross-border meat shipments must be federally inspected. Because Northumberland's abattoir is only provincially inspected, it would have to ship its meat first to PEI, where the nearest federally inspected abattoir is located, if it wished to provide lamb to Co-op Atlantic across the border in New Brunswick (NS Foundation Sessions, 2008).

The overall impression made by the interviews points to the SM marketing cooperatives remaining robust in regional and provincial markets. As for the non-SM marketing cooperatives, some successes have been achieved in export activities and innovation within the GF2 policy framework.

Agricultural Supply Cooperatives

Overview

Canada's 235 agricultural supply cooperatives focus on the provision of farm inputs, including fertilizer, chemicals, animal feed, seed, building materials, and petroleum (CCA, 2011). They have 419,000 members across the country, with the highest concentration being in Alberta and Saskatchewan (e.g., Federated Co-operatives), followed by Ontario and Quebec. Supply cooperatives have over 5 million

customers, including both farmers and households, with over CA\$14 billion in sales (CCA, 2011).

Co-op Atlantic a Robust Secondary Entity In Atlantic Canada and parts of Quebec (the Magdalen Islands), Co-op Atlantic is the main player for agricultural supply cooperatives. Founded in 1927 as the Maritime Livestock Board, and headquartered in Moncton, New Brunswick, Co-op Atlantic is a second-tier cooperative wholesaler of consumer goods, feed, petroleum, and farm inputs, and is owned by over 100 stores (Brown, 1995; NS Co-operative Council interview, 2011). Co-op Atlantic is the largest retail cooperative in New Brunswick and an example of a large cooperative that grew out of the agricultural sector. It is one of the investors in the Atlantic Beef Producers' Co-operative on PEI (Co-operative Enterprise Council of NB interview, 2011), demonstrating robust interprovincial cooperative linkages.

Farm Supply Cooperatives Are Vulnerable Cooperative farm and household retail stores, however, are in precarious business positions. In the words of one informant:

They can have hundreds of thousands of dollars of their business tied up in eight or 10 people due to aging and stagnant memberships. It makes it shaky, then, for a farm store that has its business so concentrated....It boils down to selling the cooperative message — telling farmers why it is important to buy from yourself: You have to find a balance between running it well and seeing that prices are good...but after 20 years or so, you're thinking, it would be really nice at the end of the year to receive a patronage dividend. They've got to be properly run. (PEI Co-operative Council interview, 2011)

Similarly, in Nfld. & Lab. 60 years ago, there were a lot more agricultural supply cooperatives, but they have been shutting down: "There used to be little cooperative stores that sold farm supplies in every little community. Now farmers tend to phone bigger dealers who are often able to offer better prices" (Nfld. & Lab. Federation of Co-operatives

interview, 2011). Agricultural inputs are increasingly produced outside the region, adding to the cost of production. This especially affects younger farmers, who find themselves caught between producing for local markets with inadequate infrastructure, and growing for export markets where commodity prices can fluctuate (Policy Working Group, 2011).

Some of these traditional supply cooperatives remain resilient nonetheless. Sussex, New Brunswick, is home to the world's oldest agricultural society, founded in 1841 (technically not a registered cooperative, according to the New Brunswick Financial and Consumer Services Commission), called Studholm Agriculture Society No. 21. Sussex farmers historically wanted to improve practices, cost-share, share breeding stock, etc. It is still primarily composed of farmers, but has a cooperative food store and other branches that have grown up over its history (Co-operative Enterprise Council of NB interview, 2011).

Cooperative Grocery Stores in Decline
The grocery cooperatives are facing real challenges.
One participant put it like this:

Most cooperatives arise to address a need in difficult times such as the grocery cooperatives, which were formed because it was hard to get good quality groceries for an affordable price. The market has changed hugely. But you have to question now whether we need grocery cooperatives. (NB Foundation Session, 2008)

This trend is going on across the region. In the industrial town of Truro in central Nova Scotia, one of the authors, a cooperative member, saw first-hand the collapse of a grocery cooperative serviced by Co-op Atlantic. During the dissolution meeting a ruffled membership directed a lot of second-guessing at the directors, who in turn pointed to the membership voting with their dollars for "S&S" (Sobeys & Super-Store, the main retail grocery stores in Nova Scotia). This cooperative grocery store had more liabilities (CA\$3.159 million) than its CA\$3.1 million in assets (Truro Daily News, 2010). Some members hoped that

local youth would carry forth the torch of cooperativization; others countered that youth do not even know what a cooperative is (Personal observation, December 17, 2009). The grocery cooperative's demise, which was followed by other highprofile closures of long-established family businesses in Truro, suggests a generalized hollowing-out of once embedded community businesses (e.g., hardware, grocery, restaurants, furniture) by large corporate chains such as Walmart.

Overall, the supply cooperatives are resilient but being squeezed by large-scale consolidations upstream (suppliers) and downstream (retailers). Co-op Atlantic is still a big player in the region, but facing hurdles in part because many of its consumer cooperative members are struggling.

Agricultural Service Cooperatives

Overview

There has been a surge in service cooperatives capitalizing on the growing interest in local food, organic produce, fairly traded products, feed mills, specialty foods, sustainable products, foodprocessing incubators, small-scale food businesses, branding programs, delivery systems, innovative agricultural production, and new forms of agricultural marketing (CCA, 2011). Agricultural service cooperatives in Canada stand at 223 and include seed cleaning (84), farmers' markets (75), soil conservation (4), and other (60) (CCA, 2011). Nationally, 15 percent more cooperatives came into existence between 2007 and 2010 in areas such as livestock, vegetables, and fruit. Some of these "new" cooperatives are multistakeholder, involving both community members and producers (CCA, 2011).

Many informants expressed the belief that although the market for agriculture has changed dramatically, the future remains uncertain. Policymakers should therefore prioritize having a locally owned and democratically controlled food system:

For early adopters, those of us who are paying attention, there's awareness that those kinds of systems become unsustainable in a post-peak oil era. For the minority of people who think seriously about oil dependence, climate change, and fair trade, the trajectory that agriculture is on now isn't seen as a good thing to tie yourself to in the long run...Smaller organic and alternative cooperatives offer alternatives to the oil-dependent industrial model. The viability depends on how long farmers are able to hold out. (NS Foundation Session, 2008)

Potential Growth Poles

The service cooperatives are the main growth poles of the agricultural sector in Atlantic Canada. Informants were very optimistic about the thriving farmers' markets, part-time organic farms, as well as community-supported agriculture ventures. For example, there has been significant growth in farmers' markets throughout Nova Scotia - in Sydney, Lunenburg, Tatamagouche, Halifax, Wolfville, and Antigonish (Farmers Markets of Nova Scotia Co-operative n.d.) overseen by a second tier of cooperative and certification bodies like the Maritimes Certified Organic Growers Co-operative Ltd. Farmers' markets range from 12 vendors in a parking lot to the Seaport Market in Halifax,⁴ and have robust sales (NS Co-operative Council interview, 2013). One informant said: "Clearly the farmers' markets address the producer-consumer connections - restaurants and institutions as well." (Co-operative Enterprise Council of NB interview, 2011). Local sourcing in private and public institutions is seen as a way to capture additional market share for local food groups.

Off the coast of Newfoundland, Fogo Island residents set up a cooperative to put old farmland back into production and to store the crops with root cellars. Their harvest is fed back into restaurants and hotels. The members do not want to become too large or corporate:

Members of the cooperative are small-scale farmers on Fogo Island. So, with this cooperative they're building a tourism industry on local food marketing. This is an example of how different linkages between tourism and agriculture can create better

opportunities for us to create small-scale, locally based opportunities (Nfld. & Lab. Federation of Co-operatives interview, 2011).

This informant added that there is a need for government, including the Department of Agriculture, to look at Nfld. & Lab. agriculture from the perspective of a small-scale production model populated by a new generation of farmer cooperators (age 20–30) imbued with a different kind of consciousness:

People used to think you needed 120 vegetable producers to form a cooperative, which is obviously a barrier in a province where there might not be 120 vegetable producers. A new, small organic cooperative leased a plot of land outside of St. John's [the capital of Nfld. & Lab.]. They're all very small-producing farmers, and they want it to be that way...It's a shift in thinking and a shift in views about whether or not you need to have a giant farm in order to contribute to the economy. (Nfld.& Lab. Federation of Cooperatives interview, 2011)

This "new" cooperative consciousness can also be seen in similar community innovation in PEI with the growth of organic, and the regeneration of a 40-member vegetable growers cooperative, founded in 1971, that grades, packages, and markets root crops (PEI Co-operative Council interview, 2011). The fastest growing agricultural sector in New Brunswick is also organic, together with specialty crops (Co-operative Enterprise Council of NB interview, 2011). This reflects national trends, with organic farms growing from 1.5 percent of all farms in 2006 to 1.8 percent of all farms in 2012 (Statistics Canada, 2012c). Another informant said that when conventional farm revenue in the province is about 2 percent (and even below zero), value-adding and direct marketing can increase revenue to closer to 10 percent (NS Co-operative Council interview, 2011).

Informants did note, however, that organic has been damaged by cheaper imports of organic products. For example, customers at Co-op Atlantic outlets did not buy locally produced organic

⁴ The Seaport Market went bankrupt in 2012 and was taken over by the Halifax Port Authority, a noncooperative.

produce in the volume anticipated despite Co-op Atlantic's "Eat Atlantic Challenge" (NB Foundation Sessions, 2008). Interestingly, the PEI Council representative connected the traditional to new farmers (and potentially new cooperators) in the following way: "I know some of the farm stores in PEI that had been hard-core farm suppliers are trying to diversify and cater to smaller-scale hobby farmers and lifestyle farmers" (PEI Co-operative Council interview, 2011). The potential linkages between the traditional and new cooperatives are explored in the final section.

Ad Hoc Government Support to Service Cooperatives Informants said that the provincial and federal policy bias toward larger-size farms has been at the expense of support for the new service cooperatives. Potential initiatives mentioned as needing support included renewable energy, governmentlegislated community investment programs (some provincial support has been forthcoming here), mentorship programs (e.g., youth, second-career farmers, aboriginal peoples, new Canadians), intersectoral mentorship (e.g., fishing, forestry), the institutionalized purchasing of local food, and an enhanced role for cooperatives as suppliers, processors, and marketers (NS Co-operative Council interview, 2011; NS Department of Community Affairs, 2013; PEI Co-operative Council interview, 2011; personal communication from Rural and Cooperative Secretariat, 2010). Foundation Session participants more ambitiously called for the exploration of the role of the region's cooperatives in developing larger-scale projects and managing strategic clusters of assets (Policy Working Group, 2011). Farmers' organizations in the region could possibly help the agricultural cooperatives to leverage larger-scale projects.

Relations with Farmers' Organizations

Both the Canadian Federation of Agriculture and the National Farmers Union (NFU) have called for more resources to help farmers learn about, plan, and start agricultural cooperatives (CCA, 2011). The Co-operative Enterprise Council of New Brunswick did say that it frequently interacted with farmers' organizations through industry consultations, but that the council did not have any formal

relationships with the farmers groups because they are neither council members nor cooperatives (Cooperative Enterprise Council of NB interview, 2011). It was acknowledged that more synergies could be built:

In a way, those organizations are subsets of the farms that are our members. The New Brunswick chair is a dairy farmer, for example. This council has a lot of involvement by Co-op Atlantic with overlapping membership. Many NFU members and dairy farmers are involved in cooperatives. There tends to be a natural overlap...I hadn't thought about working with them, but now that you mention it, they are our natural allies, and it would make sense. (Co-operative Enterprise Council of NB, 2011)

One stakeholder suggested farmers return to the cooperative practices of earlier generations:

We had those histories before in the different provinces. I mean I grew up on a farm myself and I just remember my grandparents and all of these people they all, all of their communities, had cooperatives... They had a threshing mill in common. They took turns, they could work out the days and the schedule and who could be there and the same when they bought a tractor together. (PEI Foundation Session, 2009)

Our research indicates that many farmers continue to see export platforms as the way to grow their businesses, which is not conducive to local level cooperation. The degree of unity within and between farmers' organizations on the accommodation of, or opposition to, the GF2 may shape the prospects for the region's agricultural cooperatives to build more locally grounded and sustainable rural cooperatives.

In general, the service cooperatives are community-driven with a new cooperative ethos, but require longer-term structural support by government in areas such as infrastructure, training, outreach, and broader policy shifts.

Agricultural Production Cooperatives

Overview

Agricultural production cooperatives assist farmers in undertaking agricultural activities in the production process. Totalling 560, Canada's national breakdown is animal reproduction (12), grazing (162), feeder finance (234), farm (34), machinery (77), tree farming (17), and other (24) (CCA, 2011). Production cooperatives were only infrequently brought up by our informants, although two examples of equipment-sharing cooperatives in Nova Scotia were mentioned: a successful one in Inverness County, and a less successful one in the Annapolis Valley (NS Farm Board representative interview, May 2011). Regionally, production cooperatives are primarily common pasture holdings.

Community Land Trusts and Farming Cooperatives Farming cooperatives, however, were mentioned in relation to the establishing of community land trusts for the protection of farmland (Co-operative Enterprise Council of NB interview, 2011; PEI Foundation Session, 2009; NS Foundation Session, 2008). One informant put the question of farmland use this way:

One of the key issues is the local ownership and governance that typify cooperatives. The federal government tends to emphasize competition and innovation. There's very little in agricultural policy, either federally or provincially, around food security, and very little attention paid to who owns the land or where the profits end up. I think cooperatives are part of the spectrum of solutions that you need in order to respond to food security concerns, and in order to ensure the resilience of the agricultural sector in the rural communities that it thrives in. (Cooperative Enterprise Council of NB, 2011)

A key component of community landownership is the community land trust (CLT) model. CLTs are private charitable organizations whose primary purpose is the preservation of land under stewardship agreement, covenants, and other restrictive legal tools (Reakes, 2007). CLTs are democratically run, with open membership, which

potentially allows residents of the local community in which they are located to participate in its governance and carry out external oversight. A combined land trust/farming cooperative would not only keep land affordable and under community control, but also pool resources, machinery, marketing, and labor where a prospective CLT's land could be farmed either communally or be divided into individual members' plots. This would give alternative farmers a greater voice politically. One stakeholder opined that cooperative landownership gives local people a shot at purchasing farmland from farmers rather than developers (NS Foundation Session, 2008). In Nova Scotia, CLTs typically have the goal of wilderness conservation. However, one agriculturally oriented CLT in Tatamagouche, Nova Scotia, has the aim of stewarding 60 acres (24 ha) of agricultural land and 40 acres (16 ha) of woodland (Hanavan, 2011).

Other Land Tenure Models for Farming Cooperatives The Co-operative Enterprise Council of New Brunswick representative said, "I'm not aware of any land cooperatives in New Brunswick that currently exist, but there are a number of groups that we're assisting that are interested in cooperatively owning land or leasing crown land" (Cooperative Enterprise Council of NB interview, 2011). One cooperative activist suggested that farming cooperatives are marginal because their revenue margins are very low, the work is very labor-intensive, and they offer little in the way of employment and pension benefits (Rural and Cooperative Secretariat, personal communication, 2010). In fact, the only concrete case of a largefarming cooperative cited, Ocean Spray, a traditional agricultural cooperative of growers of cranberries and grapefruit headquartered in Massachusetts, leased 850 acres (344 ha) of provincial crown land at nominal rates for 90 years near Rogersville, New Brunswick, on cranberry-producing bog and wetlands (Co-operative Enterprise Council of NB interview, 2011).

To address the decline of local food produc-

⁵ Case studies of a few agricultural land trusts in the U.S. are provided in Preservation of Agricultural Land in Nova Scotia (NS Agricultural Land Review Committee, 2010).

tion as well as the obstacles facing the possibilities inherent in large-scale farm cooperatives, a member of the Nova Scotia Co-operative Council is beginning to develop an innovative business concept based on a 100-member cooperative mixed farm (vegetables, livestock, blueberries etc.) with a land base of 10,000 acres (4,047 ha) called Fundy Farms. The business concept also envisions having centralized services (e.g., accounting, marketing) as well as pensions and benefits to stabilize the membership with long-term security. Although there were numerous dimensions to the business plan, a key question in the context of the proposed business is whether farm real estate markets could even support such a large-scale farm cooperative. This question led the authors to interview two government representatives specializing in farmland real estate markets. Our informants said that blocks of land frequently come up for sale in parcels of 2–3 acres (0.8-1.2 ha), 30 acres (12 ha), etc., but larger parcels are uncommon:

[Ten thousand] acres of woodland is possible, but it's hard to think of being able to get 10,000 acres of agricultural land. Some families have been building up land bases for six generations and haven't been able to achieve that. (NS Farm Board interview, 2011)

An incremental approach was deemed more feasible, whether through membership, equipment purchases, projects, or land base, and slowly growing through its successes (Farm Credit Canada representative, 2011; NS Farm Board representative, 2011).

Despite some initiatives among progressive circles, the production cooperatives remain peripheral and would require a sea change in public policy, or some kind of natural or human caused "shock" to the global economy, to take root.

Below we situate the discussion within the two broad objectives of this paper.

Toward A New Form of Rural Cooperation

Impact of Agricultural Cooperatives on Domestic Food Production

The reader is reminded that the first objective of

the paper was to evaluate whether agricultural cooperatives could revive domestic food production at the local and regional levels. The interviews elicited the hard choice facing agricultural cooperatives between working within the GF2 frame, or going beyond it to carve out new kinds of domestic markets. The interviews revealed that despite the notable successes in developing niche markets and spawning innovation, the region's agricultural cooperatives would be fortunate to hold onto their current overall market share of domestic food production. While the government-supported marketing cooperatives are the most economically secure, the service cooperatives are the most dynamic and community-driven. What all subsectors share in common, nonetheless, is an emerging globalized policy context that will further loosen the presence of government and community in the region's agricultural economy.

The general policy pattern vis-à-vis agricultural cooperatives suggests the following: the traditional cooperatives (marketing, supply) are lodged between the decline of the Keynesian-era (state supported) agricultural model and the current "getbig-or-get-out" neoliberal model, and are being incrementally disembedded from current agricultural policy. The newer service cooperatives remain largely unembedded in any agricultural policy framework whatsoever. The cooperative community in Atlantic Canada has registered some successes, but in general is not preparing itself for the dramatic changes coming its way. Federal and provincial policies will only compound the challenges facing agricultural cooperatives and continue the trends toward conventionalization and dissolution, and loss of focus on the social justice and community economic development that are essential components of rural cooperation.

John Jacobs (2006) critically notes that the SM marketing cooperatives have become too corporate and have lessened their progressive community roots to the point of being virtually indistinguishable from private companies. This begs the question as to whether the traditional cooperatives hold any future relevance for reviving the regional and local cooperative infrastructure. What is clear is that the SM marketing cooperatives still remain more democratic and community-centered than conventional

investor-owned businesses; their disappearance would accelerate family farm decline. The supply cooperatives, moreover, could still play a critical role in the distribution of affordable inputs to the new cooperatives. At the same time, the new service cooperatives remain small in number, and more evidence of their impact on local food production is required. Likewise, the farming production cooperatives lack a "champion" in government, the farming sector, or the cooperative sector, which does not bode well for their future given the high degree of cohesion and commitment whether religious, political, or social — required to make them work (Helm, 1968). Detailed business plans on scaling up farming cooperatives would also be requisite, requiring comparison pricing between foreign and domestic foodstuffs. All segments remain vulnerable to the vicissitudes of the world economy.

The second objective was to identify the political and economic challenges and opportunities for the success of local-scale agricultural cooperatives in Atlantic Canada. Below we identify these challenges and opportunities on two levels: first, those stemming from the two solitudes existing between the traditional and new cooperatives; and second, the interprovincial silos among the cooperative councils themselves.

The Relationship Between the Traditional and New Agricultural Cooperatives

What stood out from the interviews was how infrequently the traditional and new agricultural cooperatives in Atlantic Canada were interrelated. This perhaps confirms Vieta's (2010) observation of there being two co-existing cooperative solitudes: the ethos of a "new cooperativism" defined by food as a right; ecological sensitivity; redefined human/farm animal relationships; smallscale production for local markets; low-input agriculture; nontraditional gender roles in farming; and so forth — that largely bypasses the commodity orientation of the traditional, better-off marketing cooperatives wedded to the status quo. The challenge of bringing such a heterogeneous and yet vulnerable sector together is truly daunting. How can the disparate collection of agricultural cooperatives effect a more unified model that links its

marketing, supply, services, and production sections?

One step toward a fusion of the traditional and new segments would be to transition to a more domestically oriented decommoditized agricultural value chain. Helpful here in rethinking such a transition is to bring into relationship the advantages of the "cooperative effect" (the pooling of individual resources) — including handling of large volumes of products, reducing the costs of inputs, doing value-added processing, using common grading systems, strengthening market position, increasing technical specialization, reducing exposure to risk, obtaining needed products and services, and pooling land and capital for investment — with a "multifunctional" paradigm where Canadian agriculture's environmental and social roles are prioritized, instead of just the traditional commodity focus on "food, fuel and fiber" (CCA, 2011; Helm, 1968; Senate Committee, 2008). While the Senate Report does not detail the role of cooperatives, it does set an alterative agenda for new ways to structure the provision of agricultural goods and services. The possibilities for a renewed rural cooperative architecture are not difficult to imagine.

How can the conventional infrastructure of yesteryear be adapted to a rural cooperative policy that strengthens all segments of the agricultural cooperatives? Innumerable permutations are possible. Desmarais and Wittman (2014) suggest that the SM quota revert back to a marketing agency for affordable reallocation to new entrants when the original quota-holding producer leaves the industry, rather than being privately traded as at present. To take another example, non-SM marketing cooperatives could undertake value-added activities related to grains, vegetables, fruits, organic produce, and locally raised livestock, backed by common grading systems. So-called "lifestyle" farms could join supply cooperatives and purchase regionally produced, scale-appropriate inputs in niche industries such as breweries, wineries, and exotic animal wool. "New" non-SM marketing cooperatives could reduce transaction costs for community supported agriculture (CSA) groups through joint marketing. In the production sub sector, the pooling of capital and land for investment could be undertaken on a cooperative basis,

whether through machine sharing by conventional farmers, CLT formation by emergent farmers, or organic pasture initiatives by livestock farmers. Cooperatives could also be formed for wetland production and rural heritage (Senate Committee, 2008). Another issue raised in the research was intersector linkages (e.g., sustainable fisheries and forestry). Here, the formation of multipurpose/multistakeholder rural cooperatives could potentially tap these synergies and others, while simultaneously strengthening the rural communities in which they are embedded.

Scaling up the Interprovincial Cooperative Councils Our interviews further revealed that there is little in the way of alliance-building across the provincial jurisdictions. Our informants were certainly aware of the problem as indicated by the importance they placed on learning from, and networking with, other cutting-edge regions in Canada, especially Quebec (PEI Co-operative Council interview, 2011; CCA, 2011). But by all appearances, the councils do not see a strategy for turning things around in a collaborative manner that could capture lucrative decommoditized supply value chains. They need to adopt a more proactive strategy that disengages agricultural cooperatives from the current unstable status quo and instead reconnect to regional partners while striving for fairer trade relationships and networks internationally around key commodities. To simply compete to be the low-price leader in the contemporary global economy has become an unwinnable race to the bottom. What is really needed is a wholesale re-envisioning and restructuring of the current disparate collection of cooperatives into, say, a unified tertiary agricultural cooperative federation for Atlantic Canada (and eventually, nationally) that links marketing, supply, services, and production in a more localized and integrated value chain in which all see the benefit of nurturing its weakest parts.⁶

Such an entity could strengthen the membership profile of the councils by offering centralized services, including technical business specialization (brought up in the Fundy Farms concept), trainingof-trainers for community mobilization, IT services for brand promotion marketing, and a government- and industry-funded "co-op to co-op" extension system geared to community outreach and relocalization initiatives. Further, a tertiary entity supported by, or of, the Atlantic Canadian councils could lobby governments to reconsider the "one size fits all" approach to regulation raised repeatedly in the research process. This administrative hurdle (e.g., the provincial health and safety guidelines that hamstring cooperatives from more streamlined interprovincial trade) impacts the ability of cooperatives to ground value-added agriculture regionally.

Conclusion

This strategic policy analysis looked at what new role agricultural cooperatives might play in a more regionalized marketplace in Atlantic Canada. Using a mixed-methods approach we gathered secondary data and interviewed key leaders and managers in the agricultural cooperative community in Atlantic Canada. Results suggested that while progress is being made to decommodify and develop new value-added products and regionally oriented supply chains, a transition to a more sustainable regional economic cooperative model is not likely to come about without a more localized rural cooperative system uniting all agricultural cooperatives, and a greater unity between the provincial cooperative councils.

Looking to the medium term, a national food strategy with a cooperative lens, alluded to by several informants, could address the challenges facing the region's farmers and could achieve the elusive unity between agricultural cooperatives and farmers' organizations based on the shared goal of reversing the decline in regional food production. Atlantic Canada's smaller scale conventional family farms, and the not insignificant lifestyle farms, are less pathway-dependent on GF2 strategies than the larger more monocultural farms found in other regions of Canada, and could more easily transition into an alternative rural paradigm.⁷

⁶ Once again, Quebec is the leader, having the closest to an apex organization of agricultural cooperatives in Canada, known as *Co-op Fédérée* (CCA, 2011, p. 5).

⁷ Of Canada's 10 provinces, only Nova Scotia saw a growth in census farms. The growth was 2.9 percent between 2006 and

We have also seen the critical role government policy plays in both creating and breaking up domestic markets. A coalition of cooperatives and farmers' organizations, together with other organizations, could pressure federal and provincial governments to adapt a rural multifunctional strategy by lobbying for and demanding reforms in spheres such as enhancement of Supply Management, targeted and well-funded programs to new entrants, carbon pricing, and a critical policy review of the plethora of free-trade agreements wreaking havoc in rural communities. These and other reforms could see the agricultural cooperatives play their part in the broader transition called for at the Quebec summit.

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Appendix

Sample Semistructured Interview Guide

- How long has your cooperative/council been in operation? What were the motivations in its formation? How has it changed since its inception?
- What are the goals of your cooperative/organization?
- To what extent has the cooperative/organization succeeded in achieving its goals? Where has it encountered challenges?
- Do you see your cooperative/organization playing a role in changing agriculture? (Production models? includes Fundy case study; New entrants? Land availability? Buy-local?)
- Has your cooperative had any relationship with industry organizations (or vice versa) in your province (e.g., NSFA, NFU in NB and PEI)? If so, what have been the benefits and challenges of these relationships? Have you engaged in joint projects? If so, please give examples.
- What motivates people to participate in your cooperative/organization? What might deter people from participating? (Benefits? Drawbacks? Costs of involvement? Networking? Services provided?)
- Have you been able to engage the public in understanding the cooperative model? If so, how? What is
 the importance of this engagement? Do you have a strategy for monitoring public engagement? Which
 techniques have been most effective? Least effective?
- Has government policy had an impact on the success of your cooperative/organization? If so, how? (Benefits? Challenges? Which policies?)
- Anything you'd like to add?

Leveraging the local: Cooperative food systems and the Local Organic Food Co-ops Network in Ontario, Canada

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Abstract

Cooperative food systems are based in cooperation, encourage inclusion, reconnect farmers and consumers, champion the local, and support more environmentally sustainable food systems. This exploratory research proposes a new economic framework for strategizing how to

strengthen cooperative food systems. It also presents the example of a cooperative food system emerging in Ontario, Canada, the Local Organic Food Co-ops (LOFC) Network, to illustrate how to use the framework, drawing on the experience of the third author, who is the animator of the Network. Applying this analytical tool to the LOFC shows that the sixth cooperative principle — cooperation among cooperatives — is crucial for the viability of the Network, along with alliances and education. It also highlights the strength of horizontal linkages and the importance of leadership.

Keywords

cooperatives, cooperative food systems, economic theory of cooperative food systems, leakages, leveraging, linkages, local food, Local Organic Food Co-ops Network

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Introduction

Cooperative food systems involve a web of economic, social and environmental activities that focus on food. Unlike the dominant food system, which is based on competition and exclusion, cooperative food systems emphasize working together for mutual benefits based on democratically chosen goals. Although cooperative food systems encompass more than coop businesses, such enterprises have a strong claim to a central place in these food systems, in particular because of the cooperative principles that define their activities. There are four basic types of cooperative businesses involved in cooperative food systems at every point along the food chain from field to fork: producer, consumer, worker and multistakeholder.

One characteristic of cooperative food systems is an affinity for the local: local markets, local products, or local food hubs. This preference arises not only as a form of resistance to the placeless food associated with the dominant food system, but also as a conscious choice based on values beyond profit, such as democracy, community resilience, and environmental integrity. While it is true that some larger multinational cooperatives have become embedded in the dominant food system, other emerging and existing cooperatives remain central arteries for local food alternatives and the development of sustainable and democratic food systems.

One example of a cooperative food system is emerging in the province of Ontario. With the support of the Ontario Co-operative Association, the Local Organic Food Co-ops (LOFC) first convened in 2009. Now hosted and incubated by the Ontario Natural Food Co-op (ONFC), the LOFC Network (the term "Network" was added in 2011) includes over 40 member cooperatives. In this exploratory research, we will introduce this innovative enterprise to illustrate a new economic framework. We will also draw upon the experience of the third author, who is the animator of the LOFC Network, to show how this framework can be used for strategizing ways to strengthen cooperative food systems. We hope this framework will provide a practical analytical tool that is useful for the study of cooperative food systems in general and for practitioners who work in these systems in particular.

Contextualizing Our Approach

This paper is the first of a trilogy of papers on the future of cooperatives and alternative food systems. As such, it reflects the first stage of a longer project and represents exploratory research that can be built on. The second paper will entail an indepth case study of the Local Organic Food Coops Network; the third paper will address the larger question of the evolution of cooperatives.

In order to carry out this exploratory research, two scholars teamed up with a practitioner — the animator of the LOFC — who acted as a key informant. She provided information and knowledge that otherwise would have been difficult, if not impossible, to access. This close relationship with a practitioner was indispensable because it enabled us to use the LOFC to illustrate how to apply the new economic framework to strengthen cooperative food systems.

Cooperative Food Systems

A food system can be understood as an interdependent web of activities that include the production, processing, distribution, wholesaling, retailing, consumption, and disposal of food (Sumner, 2011). These activities can occur at a range of scales from the intensely local, as in the self-provisioning of small, isolated groups, to worldwide, as in the dominant food system. In the spirit of Born and Purcell (2006), no food system is inherently cooperative; the nature of a food system depends on the agenda of those who are empowered by the scalar strategy. In other words, both the local and global scales can be used to achieve certain goals, such as cooperation, but whatever is achieved will depend on the agenda of people who come to power because of a particular scale (e.g., global traders come to power in a global food system).

Following the definition of a food system, the dominant food system is the global corporate food system, which can be understood as an interdependent web of corporate-controlled activities at the global scale that include the production, processing, distribution, wholesaling, retailing, consumption, and disposal of food (Sumner, 2011). Based on intense competition, the global corporate food system has been described by Patel as a battlefield, where corporations "crack the supply

chain like a whip" (2007, p. 99).

In contrast, a cooperative food system involves an interdependent web of mutually beneficial activities that include the production, processing, distribution, wholesaling, retailing, consumption, and disposal of food. It is based on a fundamental commitment to cooperation and democratic processes, while avoiding the winner-take-all competitive ethos that drives the dominant food system. In essence, a cooperative food system has a wider agenda than the dominant food system; it is interested in such aims as community economic development, social capital formation, just livelihoods, food security, and environmental care as much as profits. And like other food systems, cooperative food systems can occur at any scale: they can be part of a local food system and operate within a particular place; they can be part of a regional or national food system and serve those needs and aspirations; or they can be part of a worldwide system of cooperation, much like the fair-trade movement.

Cooperative food systems are both an ideal to work toward and an actually emerging system: as an ideal, they provide a model to emulate and a vision of a different reality; as an emerging system, they represent working alternatives to the dominant system and concrete proof that another world is possible. The wider agenda of cooperative food systems can align them more easily with the tenets of sustainable food systems, which are based on an understanding of sustainability that moves us beyond short-term profitability in ways that are environmentally sensitive, socially inclusive, and economically constructive (Clark & Sumner, 2010) than with the tenets of the dominant food system, which is based on the exploitation of humans, animals, and the environment. This wider agenda, however, would be no guarantee of sustainability; that ultimately depends on the agenda of those empowered by the particular scale of the system.

Cooperative food systems can also be seen as a particular subset of alternative food networks (AFNs), which Sonnino & Marsden (2006) propose can be variously and loosely defined in terms of quality, transparency, and locality. Renting, Schermer, and Rossi describe AFNs as a comprehensive term to describe "newly emerging net-

works of producers, consumers, and other actors" (2003, p. 394). While AFNs can specialize in organics, fair trade, regional products, and/or artisanal products, Whatmore, Stassart and Renting argue that these networks share three commonalities: they redistribute value throughout the network; they reintroduce trust between producers and consumers; and they embody "new forms of political association and market governance" (2003, p. 389). The emergence of AFNs signals a shift from the industrialized and conventional food sector to a relocalized food and farming regime (Sonnino & Marsden, 2006), which in turn nourishes "new market, state, and civic practices and visions" (Whatmore et al, 2003, p. 389).

Cooperative food systems include components such as community shops, allotment gardens, and community orchards (Beecher, Cato & Weir 2012), as well as the social-economy organizations known as cooperatives.

Cooperatives and Cooperation Among Cooperatives

A cooperative is an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise (International Co-operative Alliance, 2008). Some of the earliest retail cooperatives were formed in England to counter adulteration of food, and in Canada they were first established to protect farmers and fishers against the predations of big business (Sumner, 2012). Whether in the past or the present, cooperatives offer people a voice in an economic climate where individuals tend to be easily dominated or overlooked by powerful corporate players.

Food is well represented across the three main ownership structures common to cooperatives. Producer coops such as marketing coops put control in the hands of those who produce the food, and may include dairy coops and meat coops, as well as other types of food producers such as beekeepers. Worker coops involve enterprises owned by their workers, such as coffee shops, farms, grocery stores, and bakeries. Consumer coops provide a retail food outlet, often with benefits for members who shop there. Multistakeholder (also

called solidarity or mixed) coops incorporate two or more of these classes of membership into one organization, in addition to other membership classes that may be relevant to the coop. Cooperative food hubs often utilize this model. Many coops are involved in the local food movement, as evidenced by research carried out by the Canadian Co-operative Association (CCA) that revealed that out of 2,300 local food initiatives in Canada in 2008, 227 (or 10 percent) were organized formally as cooperatives (Egbers, 2009).

For over a century cooperatives have followed the sixth principle of cooperation, "cooperation among cooperatives," and worked together in what Harter refers to as "nets of collective action" (2004, p. 96). These groupings can take different forms, such as federations, value chains, and networks (the focus of this paper). Whatever the form, these cooperative support organizations help their "constituent cooperatives survive by effectively consolidating resources in order to better intersect with organizations in a larger bureaucratic system" (Harter & Krone, 2001, p. 249).

Some coops join together to form federations in order to match economic trends and betterintegrated competitors (Fairbairn, 2004). Gray (2008) describes federations as a cooperative of local coops, with the local organizations owning the federation, providing capital for its operation and electing a board of directors, which in turn hires the regional federation management. Federations coalesce around common interests and are based on principles such as "shared goals, relations built on trust, operational interdependence, subsidiarity, relative equality in size, and dialogue and discussion of norms and goals" (Johnstad, 1997, p. 57). One interesting example is the Federation of Southern Cooperatives. Founded in 1967, it brought together 100 farmer's cooperatives, marketing coops, and credit unions from across the southern United States (Nembhard, 2006). In essence, it "provides assistance to cooperatives involved in agricultural marketing, supply purchasing, and credit assistance" (Gilbert, Sharp & Felin, 2002, p. 15), as well as foregrounding fair trade for farmers (Jaffee, Kloppenburg & Monroy, 2004). Other examples include the Fédération des unions industrielles du Québec, the Ontario

Natural Food Co-op, and Federated Co-operatives Limited.

Groups of coops can also become part of value chains, which have recently emerged "as strategies for differentiating farm products and opening new, more financially viable market channels for smaller farmers" (Diamond & Barham, 2011, p. 101). Stevenson, Clancy, King, Lev, Ostrom, and Smith argue that such value-chain business models emphasize the values associated not only with the food, but also the business relationships within the food supply chain. Within these relationships, they add, "farmers and ranchers are treated as strategic partners, not as interchangeable input suppliers" (2011, p. 27).

Some cooperatives — like the case described in this paper — have formed networks, which can be understood as a collection of relationships that connect groups and can both impose restraints that limit options and provide resources (Johnson, 2000). Unlike a federation, which is a cooperative owned by cooperatives, a network is a group of cooperatives that work together without establishing a lead coop. Birchall (1997) considers cooperative networks to be the first stage of developing a federation. Two examples include the Cooperative Network, an association committed to building cooperative businesses in Wisconsin and Minnesota (Co-operative Network, n.d.), and New York Cooperative Network, an organization for cooperative businesses and economic development (New York Cooperative Network, n.d.). While much has been written on coop federations (e.g., Birchall, 1997; MacPherson, 1979) and on value chains (e.g., Diamond & Barham, 2011; Stevenson et al., 2011), little has been written about coop networks (see, for example, Beecher et al., 2012). Hingley is one of the exceptions, but his definition of a network is "a co-operative, its members, customers, suppliers and the community as a whole" (2010, p. 111), not a network made up exclusively of coops. This paper aims to fill this gap in the literature by introducing the Local Organic Food Co-ops Network. This emerging cooperative network dovetails with Renting and colleagues' (2012) contention that new types of networks associated with food are of particular interest for two reasons. First, they potentially represent a shift from consumers as passive

end users toward more proactive citizen-consumers. Second, these new networks also point to potentially important changes with respect to the role and weight of different governance mechanisms within agri-food systems.

The Local Organic Food Co-ops Network

The burgeoning interest in local food in Ontario has spawned the Local Organic Food Co-ops Network. In February 2009 the Ontario Co-operative Association — a nonprofit organization that provides resources and a common voice for Ontario credit unions and cooperatives (On Co-op, n.d.) hosted a meeting in Toronto to bring together a number of new cooperatives with three established cooperatives to encourage information sharing and potential collaboration. The meeting had four objectives (Christianson, 2009). First, it aimed to help foster and maintain connections between cooperatives working in the areas of local and organic food and to provide sources of support for their work. Second, it planned to develop a strategy that would help coops grow by allowing them to share experiences and knowledge with each other. Third, it wanted to learn how the coop model was working in various communities, and how it could share those experiences with other communities across Ontario that are also interested in developing local organic food cooperatives. And fourth, it wished to provide board governance training and technical assistance. As a result of a follow-up meeting in April 2010, the Local Organic Food Coops initiative was born, to be housed and supported by the Ontario Natural Food Co-op (ONFC); the term "Network" was added at a 3rd Assembly of the involved coops in 2011. The ONFC hired Hannah Renglich as the network "animator" in March 2011, to coordinate and develop all areas related to the Network as well as its relationship to the ONFC. The animator champions the roles and needs of the cooperatives within the cooperative movement and the food system, organizes academic research, creates opportunities for member-based and public education, advocates for policy change, supports emerging and transitioning cooperatives, and facilitates connections and relationship-building among the coops as well as between individual coops and

partner organizations. The animator also builds the business, social, and environmental case for the continued existence of the Network within the ONFC (which now considers the LOFC as one of its strategic initiatives). In addition, the animator is responsible for ongoing contact with and animation of a growing network of cooperatives across Ontario, as well as sustained and reciprocal relationships with the Ontario Co-operative Association, Sustain Ontario, and multiple community partners.

In essence, the LOFC Network links cooperatively structured food and farming enterprises in the province of Ontario.

Through the sharing of information and exploration of innovations in food-based social enterprise, the co-ops are co-creating the network as a platform for internal strengthening and province-wide collaboration. (Renglich, 2012a)

This network of food and farming coops works toward "a co-operative and sustainable food system by strengthening the food co-op movement in Ontario" (Renglich, 2012a). From an initial group of 18 cooperatives, LOFC Network now includes over 40 active, incorporated, operating member coops in addition to 27 start-ups and potential members, and is still growing (see Figure 1).

The purpose of the Network is threefold: to educate about and advocate for local and organic agriculture and food coops; to facilitate and support the growth of existing coops; and to connect and scale up for regional food processing and distribution hubs (Renglich, 2012a). The values of the network are in keeping with the interests of the coop members: fair prices and income for farmers; fresh, healthy food for eaters; and fulfilling work and fair wages for workers (Renglich, 2012a). In spite of the variety of organizational models within the network — farmer-owned, eater-owned, worker-owned, and multistakeholder — all the coops have six common characteristics:

 Bringing local farmers and eaters closer together;

- 2. Growing and supplying fresh, healthy food locally;
- 3. Keeping money in the community;
- 4. Trading fairly, whether domestically or internationally;
- 5. Saving energy, building the soil, and protecting water; and
- 6. Celebrating good food, culture and community. (Renglich, 2012a)

How can we analyze cooperative food systems like the LOFC Network in a way that builds understanding and helps them to become viable alternatives to the dominant food system? To answer this question, we turn to the work of John Loxley.

An Economic Framework of Linkages, Leakages, and Leverages in Cooperative Food Systems

In his book *Transforming or Reforming Capitalism*, Loxley (2007) outlines some creative ways in which community economic development actors can conceptualize and develop their economic activity beyond isolated organizations operating in the market. In this section, we will explain some elements of Loxley's theory, and add to them, in order to place cooperative food systems within a larger economic framework. Such a framing is important because if cooperative food systems are going to "scale up" as well as "scale out" their role as an alternative to the unsustainable dominant food system, they need to be able to develop a

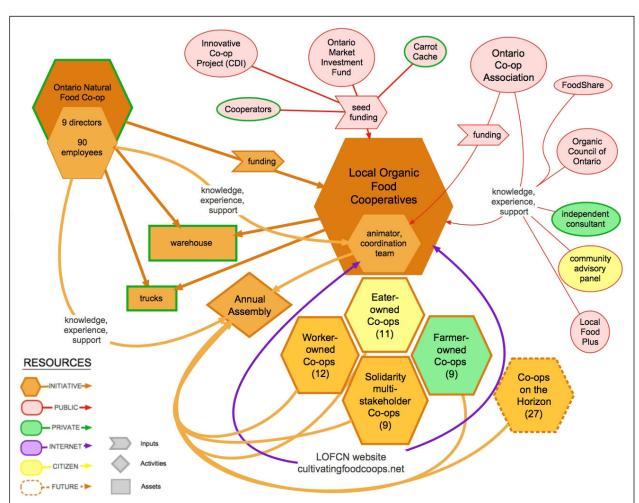


Figure 1. Community Food System Map of the Local Organic Food Co-ops Network

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clear understanding of how they operate in the market.

What Loxley is especially interested in adopting from this theory is the idea of linkages backward linkages, forward linkages, and final demand linkages. These concepts, Loxley argues, can be applied at a local rather than a global level to illustrate how organizations focused on community economic development can both understand and scale up their activity. For example, a backward linkage measures how the demands of one sector (or, in our case, organization) can create economic benefit, and therefore strengthen, another sector (or organization). In the case of local organic food this could be the demand created by a local cooperative health food store for the local products of food producers in a particular geographic area. This backward-linked demand would strengthen the economic activity of the local organic food sector by linking two actors. Similarly, forward linkages measure how the outputs of one sector (or organization) connect to other sectors. In the case of local organic food this could be how the health food cooperative sells its goods on to local restaurants or community groups. Again, using the health food cooperative as a point of analysis, we can see how local food organizations can "link" their activities forward and backward to create a stronger local food sector. A final demand linkage is where the forward linkage stops, for example within the community or region. "The greater the proportion of domestic production sold inside the community or region, rather than as exports, the larger the final demand linkage effect will be" (Loxley, 2007, p. 61). For example, a local health food coop that caters to local residents creates a final demand linkage. The overall key for linkages is that the richer they are the greater the impacts of this alternative food system on the overall food system. In short, linkages are a way in which an alternative food system can be built, measured, and identified within economic discourse.

Further, what linkages provide as an economic theory for cooperative food systems is the idea that the sixth principle of cooperation, "cooperation among cooperatives," can be realized in economic practice. For example, credit unions (which are financial consumer cooperatives) have played and can play a key role in financing local food coopera-

tives. Local food networks also provide an opportunity for other like-minded organizations to "link" together. The idea of local currency and the "multiplier effect" of local purchases (where dollars stay local rather than being sent to profit centers or investors) are two practical ways this happens. Finally, as some authors have argued (e.g., Restakis, 2010), "linked" cooperative economies are better able to withstand disasters — both human-made and natural.

Related to the concept of linkages is the concept of leakages. Just as linkages measure how sectors (or organizations) are connected, leakages measure how the opportunity for value capture by a sector (or organization) has been lost. In terms of cooperative food systems, it is where the dominant food system provides inputs into the local food system. While linkages indicate the strength of the local cooperative food system, leakages indicate its weakness. Such analysis can be crucial to the survival of a sector (or organization) because it shows where cooperative networks can intervene to transform leakages into linkages.

This concept however needs some refinement as we translate it from Loxley's (2007) community economic development focus to an analysis of cooperative food systems as we are moving from a consideration of a place to a consideration of a system. There may also be situations where apparent leakages would (or could) in fact be cooperative linkages. For example some fair trade goods produced by cooperatives (such as coffee, quinoa, or some teas and chocolate) are not available at the local or even regional level in many countries, but could be part of a richly linked and solidaristic international value chain of local cooperatives. The key here is to think of scaling-up and scaling-out cooperative food systems by linking smaller-scale producers, distributers and consumers in the cooperative world in order to facilitate a more sustainable, but diverse, global food system.

One final point on the re-articulated theory of linkages and leakages needs to be made. Loxley is clear that we cannot think of linkages or leakages solely in terms of products; we must also think in terms of "supply-side factors of production" (2007, p. 61) such as labor, capital, and even technology, and these can have either local or corporate pedi-

grees. When considering cooperative food systems, therefore, we must also be thinking in terms of local labor, local capital, and local technical capacity being nurtured and developed. This is an important conceptual move to make for the local cooperative food movement, as too often the focus is on the local nature of the *product*, and not on the factors of production that allow for that local food to work its way through the linked value chain.

The third concept that we think is valuable for an economic theory of cooperative food systems is the concept of leveraging. While this concept does not come directly from Loxley's work, it does have its roots in his idea that communities need both to articulate to government bodies at every level the value of "small-scale production to meet local need" in economic terms in order to secure support through subsidies, and also, crucially, to articulate these demands as a united movement with the capacity for "collective action" (Loxley, 2007, p. 81). In other words, the smaller-scale economic entities that Loxley called community economic development organizations (or local organic food coops for the purposes of this paper) have to realize their capacity to improve their impacts and role in transformative change in the global food system by leveraging their potential power to influence public policy as a social movement. This is the political dimension of sustainable local food, the logical extension of their critique of the dominant food system. Without recognizing the need for both linked activities and action in the political realm, economic, social, and environmental transformations of existing unsustainable food systems are not possible.

The interrelated concepts of linkages, leakages and leveraging — the Three Ls — provide a promising new framework for strategizing how to strengthen cooperative food systems. In the next section, we draw on the experience of the third author, the animator of the LOFC Network, to illustrate how to use this practical analytical tool.

Applying the Three Ls — Linkages, Leakages, and Leveraging — to the LOFC Network

Linkages

Linkages are fundamental to the LOFC Network:

the very name of the organization speaks to the value of linkages, with "network" as the resonant concept. This commitment, which reflects the sixth cooperative principle of cooperative solidarity, is evident in the LOFC Network's support of those member coops that wish to scale up their operations to the regional or national level. In addition to support in scaling up, the LOFC Network also supports coops that want to scale out by making important connections with other similarly values-driven actors (cooperatives). Scaling out involves increasing organizational capacity and building bridges both within and beyond the local community.

Even after four years of operation, the LOFC Network steering committee still places its greatest focus on networking, as it hears repeatedly from the membership that this function is paramount. These linkages enable learning in regional clusters, peer-to-peer skills sharing, mentorships, and reciprocal relationships throughout the cooperative supply chain, and collaboration between academics and the Network. For example, the LOFC Network has an academic constellation (Surman, 2006) — a loosely affiliated group of researchers, scholars, and educators who pursue studies in food and cooperation — which meets by phone semiregularly as well as at annual associational conferences. The importance of the linkages between community-driven cooperatives (practitioners) and academics cannot be overstated, and they often blend into leveraging. For example, as a result of these partnerships, the LOFC Network has collaboratively developed a list of priorities for research, as requested by the academic constellation, which in turn will help guide and generate research to push progressive policy forward to the benefit of the Network and its members.

The linkages at the LOFC Network facilitated through networking have created both physical and virtual spaces for connection that might not otherwise exist. The result is a complex system of cooperative organizations, with the animator working to draw the links between the nodes of the system, while facilitating and brokering dialogue. In terms of backward linkages, the host and incubator for the LOFC Network (and member of the Network), the Ontario Natural Food Co-op, provides a classic

example. The ONFC distributes natural, organic, and local food to buying clubs, coops, natural health food retailers, restaurants, and grocery stores throughout Ontario and eastern Canada, as well as Manitoba and Alberta. Its mission is to support a sustainable food system "by providing, with integrity, quality service in the distribution of organic and natural foods and products within a socially responsible, cooperative network" (ONFC, n.d.). The ONFC has created its own private label for a number of products, including canned tomatoes, sauerkraut, frozen fruit, fish, beef, and tofu. This initiative of the ONFC has created demand for these unique products, which are exclusively grown, processed, and distributed within Ontario, and the ONFC anticipates supporting and contracting cooperatives of growers to supply the label, thus creating strong backward linkages to the benefit of producers and consumers of local and organic food. The ONFC also illustrates forward linkages in its role as a distributor that sells its private label products to many of the cooperatives in the Network. In this way, developing new retail cooperatives means creating more opportunities for forward linkages. Final demand linkages are created by, for example, consumer recognition of the ONFC brand.

Another set of linkages implied but not directly mentioned by Loxley (2007) are horizontal linkages, which connect similar organizations, unlike the vertical linkages through the supply chain represented by forward and backward linkages. Because of the complexities of stakeholdership in the LOFC Network (where most of the newest wave of developing coops are multistakeholders), eaters/consumers, producers/farmers, workers, community partners, commercial partners, and financial supporters/investors/contributors all sit at the table together and indeed ethically engender demand for and create a supply of local organic food.

Leakages

Although not always a negative occurrence, most leakages allow value to seep out of a food system, thus preventing some sectors or organizations from benefitting from that value. For the foreseeable future, however, cooperative food systems will

have to work with and accommodate to (and even grow as a result of relationships with) the dominant food system; identifying leakages is a good way to highlight areas of potential cooperative food system development.

In terms of the LOFC Network, a number of leakages are evident. For example, the Ontario Food Terminal is "the 'stock exchange' for fruits and vegetables, where prices are determined by supply and demand and can change daily" (Ontario Food Terminal 2013). Food bought and sold through the Terminal represents both a leakage and a demand that the LOFC Network would like to fill. Recent power outages and flooding in Ontario have highlighted the fragility of having one central node through which most of the produce in the province moves. A more diffused and distributed mode of delivery with produce flowing directly from local farms to local retailers, as is the case for many of the local organic food coops, ensures diversity, redundancy and, thus, greater resilience in the local food system. A second example of leakages involves the high volume of goods from outside of Ontario sold by the ONFC. Such leakages could be mitigated by more linking within the province. A third example would include sales from non-cooperative entities such as grocery stores, which again could be addressed by more linkages.

A further leakage focuses on the loss of farmland in Ontario, which is being purchased for real estate or commercial development, often by foreign investors. This loss of an irreplaceable resource is compounded by the wave of retiring farmers. This means fewer farms and fewer farmers in the future. Coops like those in the Network can help to address the leakage of land, knowledge and skills for farming by being part of succession planning, thus providing opportunities for new entrants to farming to access land more affordably and cooperatively (On Co-op, 2013).

A final leakage centers on the loss of traditional knowledge as well as access to traditional land across communities in Ontario that rely on freshwater and forest foods for sustenance. This leakage is created by increasing governmental controls, regulations and legislation, which prevent access to traditional lands, create prohibitive costs

associated with hunting, fishing, trapping and foraging, and in general toxify forest and freshwater foods upon which First Nations and far Northern communities are so reliant. This leakage of control, self-determination, and autonomy is being addressed by the newest wave of coop development that the LOFC Network is supporting in Northern and First Nations communities (see, for example, Mackenzie, 2013).

Leveraging

Leveraging involves using a collective voice to articulate to all levels of government the importance of small-scale production to meet local needs, in order to garner material resources. As a young organization, the LOFC Network has not yet been able to engage in a great deal of leveraging on its own. However, it has made a number of strategic partnerships with other organizations that do have high leverage capacity. These organizations (Sustain Ontario, the Alliance for Healthy Food and Farming, and the Ontario Co-operative Association) help the LOFC Network with advocacy and engage in reciprocal and mutually beneficial leveraging. The Network has also made a strategic partnership with the Neighboring Food Co-op Association (NFCA), a group of 30 retail "food coops and start-up initiatives in New England that are working together toward a shared vision of a thriving regional economy, rooted in a healthy, just and sustainable food system and a vibrant community of co-operative enterprise" (NFCA, 2013, para. 1). The NFCA has been a collaborative partner in LOFC Network governance development, offering dialogue, documents, and its operational model for the Network's consideration and emulation, where applicable.

In essence, the linkages represented by such partnerships represent one of the strongest leveraging tools the LOFC Network uses. By participating in partnerships, the Network avoids "reinventing the wheel," performing the very value it promotes to its membership. Through collaboration, the Network gains awareness of new projects, leverages opportunities to meet, train, and educate its members through other events, supports others' work through letters of support, direct action, and collaborative grant proposals, develops a presence

at a variety of conferences, and partners in advocacy work and policy promotion.

The LOFC Network has also been able to use various forms of media, including social media, film, and its own website, to leverage its impact. In 2012, the Network made three short films with Sustain Ontario and Powerline Films, in collaboration with the Ontario Co-operative Association, the Canadian Co-operative Association and the Ontario Natural Food Co-op, to highlight the work and potential of the Network through conversation with members. In 2013, a cycling and cooperative food enthusiast made contact with LOFC Network after following its Twitter feed, attending the 4th Annual Assembly and embarking on a bicycle tour of many of the food coops in the network. His ride has brought coops closer together as he shares stories along the way and organizes to present a SWOT analysis (i.e., an analysis of strengths, weaknesses, opportunities and threats) and a webinar about his tour through the Ontario Co-operative Association. Finally, a ministry in the provincial government was so impressed by the LOFC Network website that it has strongly encouraged the Network to apply for funding for expansion and development.

The LOFC Network also engages in some mutual leveraging with the academic constellation in pursuit of a more just and localized food system. The constellation leverages LOFC Network resources to determine research priorities, and the LOFC Network leverages the constellation to appeal for small amounts of funding for such research, or for partnerships to carry out work that it deems important.

The linkages among the coops in the Network allow many of them to leverage one another's events. For example, if there is a film night at a coop in St. Catharines, coop members from Fort Erie and Niagara Falls will certainly be there in support. Additionally, when the LOFC Network seeks outside expertise, it always approaches those within the Network first before seeking outside cooperative expertise. For example, at the LOFC's 3rd Annual Assembly, it ran a farmer-training stream for developing organic businesses with Richard Wiswall, whose Cate Farm is a long-time member of Deep Root Organic Co-op.

Finally, the Network places a tremendous value on using its linkages to leverage common resources. For example, the Mustard Seed (a nascent coop in Hamilton) has been developing a local supplier list for its store opening, which has been freely shared with other coops in the region for their input and additions. The LOFC Network hopes to be able to eventually leverage shared benefits and insurance for all its members as it stabilizes and grows.

Discussion

The new economic framework of the Three Ls—linkages, leakages, and leveraging—represents an analytical tool that will be beneficial to both scholars and practitioners. Using the Local Organic Food Co-ops Network to illustrate how to apply it yields some instructive insights that could help to strengthen cooperative food systems.

First and foremost is the crucial importance of the sixth cooperative principle: cooperation among cooperatives. Without this spirit of solidarity, the LOFC Network would not be viable. As an antidote to the taken-for-granted competition that characterizes both local and global markets, cooperation helps cooperatives like those in the Network to "survive and meet the needs of members in an ever more competitive global economy" (Birchall, 1997, p. 70). An examination of the linkages involved in the LOFC Network illustrates the extent of the cooperation within the Network. The greater the strength and number of linkages, the greater the opportunities for establishing new cooperatives that will continue to build the Network. This is especially true for financing — an age-old problem for cooperatives — which could be substantively improved by cooperation among cooperatives using a variety of financial support vehicles, such as loans, investments, and expertise, in essence enabling access to the factors of production. It is interesting to note that Birchall maintains that the traditional way of achieving cooperation among cooperatives has been by forming federations, "but this model of organisation may now be too slow and inflexible to cope with a rapidly changing business environment, and a search is on for more effective ways in which coops can co-operate" (1997, p. 70). Networks such

as the LOFC Network may be one of the answers to this problem. Their lack of entrenched bureaucratic structures and fluidity of form can make them more nimble in a quickly changing market.

The second insight involves the importance of alliances — strategic partnerships between coops and other types of organizations, and how they promote leverage. The alliances the LOFC Network has forged with Sustain Ontario (an umbrella organization that includes the Alliance for Healthy Food and Farming and the Ontario Co-operative Association) have helped it to leverage its position as a new entrant on the local food scene, allowing it to achieve greater visibility and support transformative change in the food system. These alliances are facilitated by the fact that the LOFC Network is part of the flourishing local food and food sovereignty movements, made up of myriad actors who are interested in challenging the dominant food system and re-embedding food within local markets. Committed membership in these social movements enhances the Network's potential to influence public policy regarding the importance of small-scale production for local need, as well as encouraging agency and empowerment.

The third insight is the importance of education in terms of the supply-side factors of production — an essential aspect of linkages. The emphasis on networking has resulted in educational forums, skills-sharing, mentorships, and community-university relationships, all of which build the linkages that help local food move through the local value chain. This is also in keeping with the fifth cooperative principle: education, training, and information. Education is vital, not only for the local food movement, but also for cooperative organizations like the LOFC Network. For example, through various types of leakages, money and jobs flow out of the local economy, but this can be staunched by a cooperative food economy, which keeps greater value within the community, thus promoting an alternative food network. In terms of money, a recent study found that the value farmers receive for their products is higher from coops compared to the dominant retail system: Canada's farmers receive only twenty cents of every consumer food dollar, while local organic food coops

provide farmers with sixty cents or more of the consumer food dollar (see Renglich, 2012b). But many farmers do not realize this, which provides an educational opportunity for cooperative food systems. In terms of jobs, worker coops like those in the LOFC Network can offer a more just and dignified form of labor, which links them with another social movement — the food justice movement. Indeed, some coops are formed to create employment. In the midst of the so-called "jobless recovery," it is important that cooperative food systems spread the word about the employment benefits of coops.

Another interesting insight is the strength of horizontal linkages. As coops evolve and work together, these types of relationships will become more important, laying the ground for future linkages of all kinds. The explicit recognition of horizontal linkages also adds breadth to the economic framework, making it more robust and more representative of the realities within cooperative food systems.

The final insight involves the importance of leadership, both by the ONFC and the animator. As a potential factor of production, leadership provides the ability for the Network to incubate, coordinate, organize, communicate, and move forward. Following the Strawberry Patch model of cooperative development, which encourages the growth of satellite organizations, the LOFC Network is working hard to encourage leadership at the level of each cooperative, creating space for leaders to emerge and opportunities for leadership skills to develop. Cooperatives, especially emerging coops, grow organically and without a great deal of interaction with each other. As a result, they tend to "reinvent the wheel," at least in their early stages. Leadership from and for a coalescing sector is therefore central in leveraging the strengths of many disparate groups for a cooperatively agreedupon goal — in this case, the goal of establishing a cooperative food system. The LOFC Network is demonstrating this reality on the ground in Ontario.

Using the LOFC Network to illustrate how to use the economic framework has yielded instructive insights into the creation, maintenance, and expansion of cooperative food systems. Such alter-

natives are crucial to countering the negative economic, social, and environmental effects of the dominant food system, and help to address "the increased interest in non-competitive models disavowing the routine exploitation of resources and people" (Broadhead & Morrison, 2012, p. 1). Grounded in the local, cooperative food systems exhibit the potential depth, breadth, and reach to build a solidaristic international food economy that turns value chains into values chains and operates by the principle of cooperation.

Conclusion

This paper represents exploratory research that others can build on in the future. In essence, it develops a practical analytical tool and offers the example of the Local Organic Food Co-ops Network to illustrate how to use it. This tool could prove beneficial not only for scholars who study cooperative food systems, but also for practitioners in their day-to-day work.

In light of the insights we gleaned, we offer the following recommendations for further research and practice, all of which aim to strengthen cooperative food systems. In terms of research, cooperative food systems are a nascent academic interest and more studies in this interdisciplinary area would help to build the case for these alternatives to the dominant food system. In addition, investigations of other cooperative networks would help to build a more accurate picture of cooperative food systems. And finally, applying the Three Ls to other cooperative food systems would enhance the robustness of this new analytical tool, testing its ability to assess strengths and weaknesses, build understanding, and scale cooperative enterprises up and out.

In terms of practice, a number of recommendations can be made. First, although it may seem to entail more work for an already-overworked coop to join a network, being a member brings advantages to both the individual cooperative and the system as a whole. Second, alliances with likeminded entities are crucial, especially in terms of leveraging. Third, educating members helps to address the supply-side factors of production. Fourth, it is vital that a cooperative food system has strong, committed, and enlightened leadership,

whatever form it takes. And fifth, identifying the leakages in the cooperative enterprise and replacing them with linkages will help groups of coops to better understand their operations in the market and scale up or out, if desirable.

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Fostering capacity building among groups of disadvantaged farmers, southeastern North Carolina (USA)

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Abstract

We present preliminary results from a qualitative comparative case study involving small-scale and disadvantaged (predominantly African American)

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farmers in southeastern North Carolina. Agricultural assistance organizations have promoted development of farmer cooperatives as an adaptive strategy for these farmers, with only limited success. This research explores factors that contribute to or detract from the capacity of disadvantaged rural households to take advantage of new opportunities, and the role of both tangible intangible assets in shaping outcomes. We gained rich insights about these factors through the provision of tangible assets and business planning assistance to four small groups of disadvantaged farmers attempting to adopt the innovation of collaboration. Provision of tangible assets is insufficient to ensure success; our findings suggest that capacity-building efforts focused too narrowly on assets can lead assistance providers to neglect critical mediating factors that influence outcomes. A key mediating factor is the strength of trustbased relationships among group members and

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between groups and assistance providers; establishment of such relationships is a necessary precursor to cooperation and capacity development. One implication is that assistance organizations might improve outcomes of programs aimed at disadvantaged populations by focusing on trust-building interactions and by providing coaching and facilitation services.

Keywords

capacity building, cooperatives, disadvantaged farmers, extension, sustainable livelihoods

Introduction

Agriculture has experienced dramatic changes over several decades due to globalization and consolidation, leading to profound economic and social changes in rural communities (Drabenstott, 2003; Drabenstott & Smith, 1996; Lobao & Meyer, 2001; MacDonald, 2013). Particularly in the 1970s and 1980s, this structural shift contributed to lower incomes, higher levels of poverty, lower educational levels, and social and economic inequality between ethnic groups in rural communities (MacCannell, 1983). More recently, rural economies in many parts of the U.S. have benefited from increased economic diversification (Irwin, Isserman, Kilkenny, & Partridge, 2010) and blurring of the urban-rural boundary (Lichter & Brown, 2011). However, rural regions with large African American or American Indian populations do very poorly (Irwin et al., 2010), and the rural poor are spatially concentrated, geographically isolated, and seemingly resistant to effective policy interventions (Lichter & Brown, 2011).

According to the U.S. Department of Agriculture (USDA), local food and direct marketing opportunities are one of the fastest growing segments of agriculture (USDA, 2013). The 2007 Census of Agriculture documents a substantial increase in direct-to-consumer markets, with direct sales rising nationally from US\$812 million in 2002 to US\$1.2 billion in 2007. Farmers' markets are becoming more abundant; 8,161 farmers markets were listed in the USDA's National Farmers Market Directory in October 2013, up from about 5,000 in 2008. North Carolina has participated in this growth; in 2010, the state was tenth among

states with the most farmers' markets. In recognition of the economic opportunities provided by growing consumer demand for locally grown food, the North Carolina Sustainable Local Food Advisory Council was established by the North Carolina General Assembly in 2009 to recommend policies to benefit local food and farming.

Rapid expansion of market demand for locally and sustainably grown food is creating new opportunities for small-scale farms. However, adapting existing operations to serve these expanding markets can be very difficult and financially risky. In response, many state-level agencies and agricultural assistance organizations have expanded programs for small-scale farms selling through direct markets. These programs have benefitted farms located near metropolitan centers, but have had much less impact in rural areas.

Adaptation to changing market demand occurs through the adoption of new practices, including new ways of managing finances, natural resources, and markets (Kilpatrick & Falk, 2001), and then innovating to adapt them to fit the particularities of a farm operation. Such adaptation appears to be particularly difficult for disadvantaged farmers, including African American farmers and those with limited resources. These farmers have been hesitant to participate in direct-marketing ventures (Colverson, 2002). Only 13 percent of limitedresource farmers use government programs as compared to 30 percent of all small-scale farmers (Steele, 1997). Studies of forestry extension efforts found low participation in government conservation and forest management programs among limited-resource landowners (Onianwa, Wheelock, Gyawali, Gan, Dubois, & Schelhas, 2004). Disadvantaged farmers reportedly pose a particular outreach challenge for Cooperative Extension because of lack of interest, limited capital and other resources, programs not targeted to their needs, and ineffective outreach methods (Tubene & Holder, 2001).

Agricultural assistance providers have encouraged low-resource and minority farmers to form cooperatives and work together to adapt to changing markets. A cooperative strategy should be a good fit for rural African Americans, given their long and strong history of cooperative ownership

(Nembhard, 2004). However, few cooperative groups have been formed in North Carolina, and the success rate among those few examples has been low.

In general, there has been little recent research focused on rural communities in the U.S. Research is particularly lacking on livelihood activities of African Americans and other disadvantaged populations in rural regions (Aspaas, 2004). Thus, relatively little is known about the factors contributing to or detracting from success of African American farmers. This knowledge gap hinders efforts to assist these farmers to adapt to changes in the food system.

In this paper, we present preliminary results from research designed to address this knowledge gap. This research explores ways in which agricultural assistance organizations can more effectively help farmers from disadvantaged populations build the capacity to recognize and take advantage of new entrepreneurial opportunities and work together to overcome barriers to success.

Background

Discriminatory Lending

The history of discriminatory lending experienced by disadvantaged farmers, particularly Black farmers, is important context for our work. Ongoing access to credit is essential to farm operations, even those not seeking to expand; producers use shortterm operating credit to purchase production inputs (Carpenter, 2012). In general, Black entrepreneurs encounter more difficulties when attempting to access traditional bank loans and other sources of external finance (Chatterji & Seamans, 2012). In the agricultural sector, discrimination has been an ongoing problem at the USDA for decades (Carpenter, 2012). Such institutionalized racial discrimination within federally sponsored programs has seriously affected the employment of African Americans as farm agents, the information farmers received regarding farm technologies and techniques, and the quantity and quality of participation within farm programs and local farm committees (Grant, Wood, & Wright, 2012). Discriminatory lending is associated with farmland loss, such that the number of Black farmers in the U.S. has fallen at a much higher rate than that of White farmers (Balvanz et al., 2011). In recognition of this, a given proportion of guaranteed lending to farmers by the federal government is targeted to "socially disadvantaged applicants"; this category is defined by the USDA as those who have been subject to racial, ethnic, or gender prejudice because of their identity as members of a group without regard to their individual qualities.

Cooperatives

Cooperative enterprises are thought to enable small-scale farmers to better compete in the marketplace and to enhance their ability to observe market signals and respond to them (Ling, 2012). Cooperative development has been recommended increasingly as an economic development strategy for disadvantaged communities (Nembhard, 2004).

Despite the promise of agricultural cooperatives, many such groups in the Deep South¹ have been unsuccessful historically (Sullivan, Williams, & McLin, 2012). Development of a cooperative does not guarantee long-term success, and many cooperatives are organizationally fragile and strategically vulnerable businesses (Hilchey, Gillespie, & Henehan, 2006). Few scholars have explored how cooperative ownership actually creates and builds wealth (Nembhard, 2002, 2004).

The literature includes two different ways of thinking about cooperatives: as a business form, or as an expression of collective action that has an economic focus. The second framing is particularly relevant to African Americans, reflecting a history where formation of cooperatives was an adaptive response to systematic discrimination and persistent disadvantage (Nembhard, 2004). The potential nonmonetary value of farmer groups can be tied to social capital theory; social interactions link the individual to the wider community and affect access to opportunities and resources (Harper & Marcus, 2003).

¹ In their study of farmers in the Deep south, Sullivan, Williams, & McLin (2010) considered the Deep South to include Alabama, Georgia, Louisiana, Mississippi, and South Carolina, all states with high concentrations of historically disadvantaged farmers.

Intangible Assets

Many community and rural development organizations and researchers advocate an asset-based approach to community and rural development (Pender, Marré, & Reeder, 2012). Rather than focusing on incapacities, these approaches build on the capacities, skills, and assets of people within lower=- income communities (Kretzmann & McKnight, 1996; McKnight & Kretzmann, 1997). The sustainable livelihoods (SL) concept was developed by international development researchers in the early 1990s to provide a holistic approach to understanding and addressing poverty. A livelihood comprises the capabilities, assets (stores, resources, claims, and access) and activities required for a means of living (Chambers & Conway, 1992). In order to create livelihoods, people make use of the livelihood assets or "capital" endowments they have access to and control over. Scoones summarized the SL approach as follows: "Given a particular context, what combination of livelihood resources result in the ability to follow what combination of livelihood strategies with what outcomes? Of particular interest in this framework are the institutional processes which mediate the ability to carry out such strategies and achieve (or not) such outcomes" (1998, p. 3).

Drawing from sustainable livelihoods concepts, wealth creation has recently been proposed as a useful framework for guiding strategic planning for rural development. Pender, Weber, and Fawbush define wealth comprehensively as "the stock of all assets, net of liabilities, that can contribute to the well-being of an individual or a group" (2012, p. 2). Local actors' endowments of different types of wealth determine what opportunities are available and the attendant costs, returns, risks, and constraints. These decisions are also affected by the economic, institutional, and policy context. Although the "concepts of wealth and wealth creation apply to individuals, households, businesses, communities, regions, States, and nations" (Pender, Marré, & Reeder, 2012, p. 4), they have been most fully developed at the community level.

Both the sustainable livelihoods and rural wealth creation (RWC) frameworks posit that wealth creation and livelihood choices are shaped by an actor's asset portfolio, and that larger-scale

conditions and events form a context that influence the outcomes of the choices made by individuals and outcomes. The frameworks do not adequately explain, however, why different individuals are likely to have very different livelihood outcomes despite starting with similar portfolios of physical goods and financial assets. Asset-based development approaches try to deal with this by including human, social, and cultural factors as intangible assets within the asset portfolio.

Since poor households generally lack tangible assets, intangible assets of necessity form the basis of such households' livelihood strategies. A challenge for research and intervention design is that such intangible assets are notoriously difficult to measure.

Research Questions

To increase program effectiveness, agricultural assistance providers need a greater understanding of what aspects of current outreach and assistance approaches are not effective with disadvantaged populations, and why. Our research addresses two research questions relevant to this need:

- 1. What factors contribute to or detract from the capacity of disadvantaged rural households to adapt their practices to take advantage of new opportunities?
- 2. What role do intangible assets play in livelihood decisions and outcomes, and how can they be enhanced?

A Priori Research Hypotheses

The a priori hypotheses that shaped our research design were derived from social capital concepts. Social relations of cooperation and trust among suppliers, producers, workers, brokers, retailers, and consumers have been identified as a primary contributor to the viability of regional food business networks (Jarosz, 2000). Social capital is most simply defined as the norms and networks that enable people to act collectively (Woolcock & Narayan, 2000). In this network view, participation in and control of information diffusion plays a critical role in the formation and use of social capital, and networks are social-capital resources that are drawn upon in learning to manage change.

Networks are formed and maintained through interaction, and the isolation experienced by many living and working in rural areas reduces the opportunity to build information and support networks (Kilpatrick & Falk, 2001). In urban settings, members of disadvantaged communities have been found to have small, homophilic, and very tight-knit social networks, resulting in reduced size of discussion networks, increased social isolation, and reduced access to social resources via individuals' networks of close ties (Tigges, Browne, & Green, 1998). In general, dense bonding ties or horizontal, internal networks, combined with the absence of bridging and linking ties (external links), tend to have a negative effect on social capability (Knack & Keefer, 1997). We therefore hypothesized that a lack of connections to business and knowledge networks outside of their close-knit social networks may be an important factor limiting the capacity of members of disadvantaged rural populations to recognize opportunities and adapt to change.

Trust between network members has been suggested as a key determining factor for achieving viable network outcomes (Smith & Holmes, 1997). This implies that that the potential for outside intervention in the creation of groups or networks is limited in the absence of trust-based network ties (Lyon, 2000). The associational interfaces that make up any business network are vulnerable to internal and externally generated disruptions; where such interfaces do not exist or have broken down, it may take many years to rebuild relationships and trust to a point where actors across a supply chain can create the conditions necessary to interact effectively and efficiently (Marsden, Banks, & Bristow, 2000). A long history of discrimination against disadvantaged households by government agencies and business networks has deeply eroded their trust. For example, research on the working poor during the post-Hurricane Katrina diaspora showed that this group had the most difficulty recovering from the disaster; distrust of government due to past experience of discrimination caused them to shy away from official agencies offering disaster assistance (Olson, 2007).

Face-to-face interaction is fundamental to building trust that enables collective action (Warren, 2001). We therefore hypothesized that *interventions*

aimed at network expansion will be most effective if they emphasize interactive opportunities through which trust can be built.

The research team recognized that some level of trust was necessary to simply gain a hearing with potential participant groups. Our research design drew from research on social capital formation, which has found that the central roles of trust and information diffusion mean that brokerage opportunities are important (Burt, 2000). People filling brokerage roles can serve as access points for those seeking to provide information to a social network. We hypothesized that we could expedite the trust-building process by being introduced to potential study participants by assistance providers who had already earned trust by working with the groups; by "borrowing" trust, we could buy time to earn trust through a history of interaction.

Methods

Approach

The research follows a qualitative comparative case study approach aimed at building theory from empirical evidence (Eisenhardt, 1989; Eisenhardt & Graebner, 2007; Yin, 1994). The research design centered on providing tangible assets in the form of an enterprise development grant of US\$20,000 per group and technical assistance with business planning from the research team. In the course of a facilitated decision process, the research team introduced the groups to appropriate and potentially useful business contacts and information providers with the goal of expanding their business networks. By assisting the groups in this process, the research team has gained rich insights into the nature of innovation capacity and the factors shaping the groups' livelihood decisions and outcomes, including the roles of intangible assets and of social relationships and networks.

Methods

The selected cases were linked through a focus on the same innovation: individuals or households engaged in an effort to adopt the innovation of developing collective enterprises. We conducted exploratory key informant interviews with staff from governmental and nongovernmental assistance organizations with special expertise in working with limited-resource and minority rural households. Based on the key informant input, we recruited recently convened groups whose members are predominantly from disadvantaged populations, demonstrate strong interest in working together toward one or more common farm-related goals, and have a focus on fruit and/or vegetable production. Only a very few groups meeting these criteria were known to our key informants.

In keeping with our a priori hypotheses, the research team and the study were introduced to each selected group and endorsed by the key informant who had been working with that group. In this way, the research team was able to both respect and benefit from established relationships of trust and reciprocity.

Multiple qualitative data collection methods were used, including semistructured interviews, participant observation of group meetings, and site visits. A qualified individual who was not a member of the research team conducted baseline interviews with the participating group members while the research team focused on building sound working relationships with the groups. This "insider-outsider" structure was intended to insulate data collection from researcher bias while allowing the team to make use of the relationship-building window of opportunity provided by the introductions from trusted assistance providers.

Providing technical assistance as part of the intervention allowed the research team to participate in the groups' decision-making processes, thereby developing a rich understanding of the decision context as well as the groups' situations, concerns, values, and interactional dynamics. Frequent discussions among the members of the research team were used to share observations and for iterative formation and testing of working hypotheses, allowing for constant comparison. The use of multiple investigators provided some protection against confirmation bias (Eisenhardt, 1989). Within-case data analysis enabled the researchers to become familiar with members of each group, while cross-case comparisons provided insights into the similarities and differences between each group.

It is important to note that our groups may not

be representative of the larger population of disadvantaged rural households. Our study participants are members of groups in the process of developing cooperative arrangements. Since it appears to be rare for disadvantaged farmers to choose to work together cooperatively, our participants are likely to be more cooperative and more willing to innovate than is typical for the larger population. Our case selection therefore can be considered as having followed a 'critical case' strategy (Flyvbjerg, 2011), in that the individual participants have demonstrated a higher adaptive capacity than typical through their voluntary membership in a group. The higher-than-average potential for a positive outcome from the intervention increases the importance of negative results and identified barriers to success of participants' business enterprises.

Findings

Group Characteristics

The four groups included in this study are useful for a comparative case study approach as both differences and overlaps in a number of potentially important characteristics occur both within and between groups. These include geographic location of and spread among the members of each group; age; race; gender; past job experience including experience with farming; time spent living outside of the community in which they now reside; and amount of land owned, and in individual and group livelihood goals. Descriptive characteristics of the participating groups are summarized in Table 1.

The members of Groups 1, 2, and 4 are entirely or predominantly African American whereas the members of Group 3 are Caucasian. Groups 1 and 4 are most similar in terms of age, farm size, gender, and experience. Members of Groups 1 and 4 are male; there are many women in Groups 2 and 3. Group 2 includes mostly retirees, and Group 4 is the youngest. Groups 1 and 4 include some military veterans. Groups 1 and 2 are from the same geographic area and share similar soil and weather conditions. Members of Groups 2 and 3 share a particular interest in sustainable agricultural practices. The members of Groups 1, 2, and 3 are from counties classified as "rural" by the

Table 1. Summary of Group Characteristics

The "Number of group members" category shows change in membership between the start and the end of the second year of the research project. All other information was collected at the start of the project.

	Group 1	Group 2	Group 3	Group 4
Year group formed	2009	2010	2010	2011
Number of group members (Initial / Current)	6/3	10 / 10	3 / 1 original member with 2 new nonfarmer members	5/3
Age range	mid-50s to early 70s	mid-60s to early 70s	mid-40s to mid-50s	mid-50s to mid-60s
Composition	All are African Americans	7 African Americans, 1 Caucasian, 1 Hispanic	All are Caucasian	All are African Americans
Farm size range (Farmed acreage owned by household)	32-80 acres (13-32 ha) (avg. = 46 acres or 19 ha)	1–80 acres (0.4–32 ha) (avg. excluding one 80-acre farm = 4 acres or 2 ha)	<10 acres per farm (<4 ha)	2–22 acres (0.8–9 ha) (avg. = 12 acres or 5 ha)
Number of members with past farming experience	2 have farmed all their lives (row cropping); 2 others are from farming families	2 have farmed all their lives; 5 others are from farming families	None has more than a few years' experience	2 have extensive experience on small farms
Portion of income from farming	0%, 0%, 0%, 25%, 50%, 100%	Only 1 currently selling produce	100%	3 get little, 2 depend more on farming
Cooperative project	Commercial-scale production of specialty products	Chicken hatching and organic feed mix, refrigerated trailer	Farmers' market	Joint farmstand in nearby urban area

North Carolina Rural Economic Development Center. Groups 1, 2, and 4 are from counties in the "Black Belt" of the southeastern United States.²

The four groups had much in common with regard to motivations and capabilities; however, some differences were observed. The most notable of these are described below and summarized in Table 2. Technical assistance provided to each group is summarized in Table 3.

When asked to define what "success" means to them, all four groups focused on short-term economic survival. Expressions of this included, "It's if you can get from one year to the next without borrowing money" and "I'd like to be in a situation where I can pay the bills every month and have some left over to save."

Despite their desire for increased profitability, many of the study participants also described nonmonetary values that are import to them. In particular, those participants who have chosen to focus on sustainable agricultural practices are persisting in prioritizing these values despite the financial barriers they have encountered. For example, a participant in Group 2 explained that he would like to have more income from outside sales, but not at the expense of changing production methods to those that he sees as nonsustainable. He said he would not borrow any money from a bank or do contract farming with a company, and expressed concern about exploitation by "the big man." Members of Group 3 value self-reliance highly, and consider absence of obligations to corporations to be more important than increased income from product sales. Participants indicated that choices based on these values provided them with a sense of self-worth and control over their lives.

² The term "Black Belt" designates a band of 623 persistently poor, rural counties with large African American populations in the rural South, stretching across 11 states from eastern Texas through the deep South and into Virginia, roughly corresponding to the old Plantation South. Most of North Carolina's Black Belt counties are located in the Coastal Plain.

Table 2. Summary of Findings

-	Group 1	Group 2	Group 3	Group 4	
1. Business goals				•	
A. Monetary goals					
Short-term economic survival or "breaking even"	✓	✓	✓	✓	
More profitable activities permitting reduced workload	· ·			✓	
B. Nonmonetary goals					
Sustainable practices		✓	✓	_	
Self-sufficiency	✓	✓	√ *	✓	
Leaving something of value for their children	✓	✓	✓	✓	
2. Pre-existing social ties	Some contact, but not close ties	None	None	Some contact, but not close ties	
3. Reason for group formation	Identification of potential collective enterprise	Enjoyed collective learning and supportive interactions	Identification of potential collective enterprise	Identification of potential collective enterprise	
4. Leadership	None of the groups had a strong leader				
5. Group cohesion	Limited	High	Low	Limited	
6. Awareness of specialty products and markets	Focused on production of a specialty product matched to an identified market	Varied; awareness roughly correlated with proximity to major urban center	Produced specialty products not matched to an identified market	Focused on production of a specialty product matched to an identified market	
7. Business experience	Agricultural business experience	Limited business experience	Business experience	Business experience	
8. Computer skills	Some	Limited	Some**	Some	
9. Internet access	Adequate	Limited	Adequate	Adequate	
10. Aversion to debt	High	High	Moderate	High	
11. View of farm assistance organizations and programs	Generally negative	Generally negative	Somewhat negative	Generally negative	

^{*} Group 3 particularly emphasized self-sufficiency as an important goal.

Several members of Groups 1 and 4 told us that their motivation to join the group was a need to shift to more profitable farm activities:

"We have to think smaller, because you aren't going to row crop on 32 acres." (This statement followed a discussion of the low return per acre for row crops such as corn and soybeans.)

"I would like to get something that would get my kids back on the farm, I've been looking into some chicken houses. I don't expect them [the kids] to work for nothing."

Groups 1 and 4 had some pre-existing social ties among members, but not close ties. The groups formed in response to ideas for specific collective enterprises that were strongly influenced by outsiders and for which planning and implementation were relatively straightforward. These two groups experienced few interactional challenges, but also experienced attrition as projects progressed and the group members learned more about the cumulative costs and benefits of the specific enterprises.

The members of Groups 2 and 3 largely lacked

^{**} Group 3 was more comfortable than the other groups with the internet and with online communication.

Table 3. Technical Assistance Provided by the Research Team to the Participating Groups

Group 1	Business planning, marketing advice, information about relevant events and opportunities
Group 2	Strategic planning, business planning, grant writing, information about relevant events and opportunities, connection to organizational governance consultant
Group 3	Business planning, marketing and market expansion, information about relevant events and opportunities; connection to facilitation
Group 4	Business planning, marketing and market expansion, information about relevant events and opportunities

social ties prior to being brought together by an external convener. Group 2 formed around a general assumption that a cooperative arrangement would be beneficial to "farmers like them" rather than a particular collective venture. Contributing to planning challenges were the wide geographic distribution of the members and the diversity of the individual farm operations. Although lacking social ties prior to group convening, the members quickly developed ties and group cohesion. The planning challenges did introduce friction; the research team connected this group with a facilitative nonprofit specializing in helping disadvantaged individuals and groups with capacity building. This interaction is just getting underway, but it is notable that the group has already gained some interactional benefits through the process by which they recognized the problems and negotiated among themselves about what to do.

Group 3 came together around a collective enterprise idea that emerged from discussions of the individuals with the convener, a local assistance provider. This collective enterprise was inherently more interactional than the enterprises chosen by Groups 1 and 4, requiring much relationshipbuilding and network development. The enterprise also had a relatively high risk of failure as it involved adapting a standard business model developed for urban settings to a rural one. The group worked well with the research team during the first half of the research period, and did act on our recommendations. Results of the first selling season were discouraging to the group members, but the enterprise seemed to be on track. However, early discouragement coupled with the small size (three members) of the group led to increasing friction among the group members. Two new group members were recruited, and the research

team connected the group with a trained facilitator to help them set up a more productive interactional framework. Unfortunately, this intervention did not occur until after personality conflicts had become entrenched and much within-group trust had dissipated. Two of the three original group members recently resigned from the group, and the future of the enterprise is in doubt.

The participants also varied in their awareness of the specific types of products that sell well in established direct markets. When asked what they grow, many of the participants provided generic answers such as "squash" and "greens." Although aware of some specialty varieties, such as "rainbow" chard, they had never considered growing them, and were unfamiliar with less common varieties such as "dinosaur" kale. Although demonstrating considerable knowledge about the differences in growing requirements among types and varieties of the products they grow, these participants appeared to be less aware that the difference mattered from a marketing standpoint. The study participants who live closer to urban centers and those for whom farming has been a major livelihood strategy for most of their adult lives were most aware of the value of specialty products, even though they did not generally grow and consume these products themselves. These participants and a few others have some experience with selling produce at roadside stands and farmers' markets, and so have interacted with nonhomophilic customers. In contrast, other participants were less familiar with other communities, as indicated by their lack of knowledge about the types of products that sell best in direct markets.

All four groups needed assistance with basic business tasks, such as developing a business plan, record-keeping, and preparing loan or grant applications. The participants varied in these business skills as well as in their interest in and self-confidence regarding attainment of such skills. Factors influencing variation in this capacity include agerelated health issues, prior work experience, and both the availability of and comfort with computers and the Internet. For example, the research team observed some participants being dismissive of their own abilities with regard to business and computer skills, which reflected a lack of interest and/or lack of confidence. Comments like "Oh, I can't mess with that computer stuff" would be heard when a member of the research team would offer to help set up things like computer-based recordkeeping or web-based marketing. Some participants mentioned a lack of relevant and accessible training opportunities; few had up-todate computers or high-speed Internet connections.

None of the groups had a single strong leader. Instead, leadership appeared to be situational, with different individuals taking the lead on different projects and in different situations. In fact, we observed evidence that having too strong a leader may be counterproductive as the group members resist being pushed either by other group members or by people from outside the group. The fluidity in leadership may also contribute to the difficulty assistance providers have in working with the groups, since the appropriate point of contact may vary with circumstances.

All of the study participants were reluctant to take on debt, even when very favorable terms were offered. Two observations highlight this form of risk aversion particularly well. First, one group identified a major buyer for its product; meeting the buyer's needs would have required the group to spend approximately US\$5,000 on materials required to ramp up production. The research team arranged for the group to get a low-interest, guaranteed loan from a small business assistance program affiliated with Fayetteville (North Carolina) State University. However, despite the group's expressed interest in contracting with this customer, it did not apply for the loan and thereby lost the type of sales opportunity that had been the primary goal of the collective enterprise. Second, with the help of the research team, a member of another group became a Certified USDA Minority Farmer,

making him eligible to receive up to US\$350,000 in loan guarantees. It is apparent that he values the credibility and legitimacy this certification gives him as a farmer and is especially pleased because he achieved it with virtually no assistance from local Cooperative Extension agents: "For years the extension agents passed my farm to visit [neighboring nonminority farm]...now they HAVE to stop by here because I've been certified by the USDA." He also made it clear that he has no intentions of taking on debt by applying for the available loans. In contrast, a more moderate aversion to taking on debt among members of group 3 was consistent with observed levels of risk aversion in the general population of small-scale farmers, and appeared to derive from specific personal experience rather than a more general institutional bias.

Most of the study participants expressed some degree of negativity toward farm assistance organizations and programs established to help farmers. For example, one participant noted that although he is aware that the Farm Service Agency has programs and services that he could use, he is reluctant to register his farm with the agency because he is afraid they will tell him that he needs to spend money to do something. Other farmer participants pointed to experience-based expectations of discrimination:

"Farmers, they're a close-knit group of people, and if you're not in their safety net, they are not going to reach out to you; the minority farmers have gotten used to being screwed, so they won't reach out, if you're an outsider."

"Other farmers who have been around say it [lack of notification of opportunities] is because you are a minority so the only thing the farmers are worried about is crop insurance. Anything else about these programs, we're the last to know. They had money for fencing, money for wells, but we don't hear about it....It's really hard when you can't work with your resource programs....the guy came and said we needed to do a ditch, because our land was

holding water....I don't know if he didn't take us seriously, but we're not the only one he didn't help."

Not all agency personnel have been equally effective in connecting with these farmers. One of the more experienced farmers in our study said that he found the county extension office in his county to be very rude, "as if they don't want to be bothered." The farmer now goes out of his way to work with extension agents in another county "who are more in tune with the small local growers." Two factors appear to have contributed to this farmer's choice to go outside his county for extension services. First, this farmer lives in a more urban county than any of the others: "We need to go there [the other county] because they are more rural, and here is not rural." Second, the county extension office that this farmer now visits is home base for an Area Specialized Agent with North Carolina (NC) A&T State University, the state's 1890 Land Grant university (a historically Black college), who is himself African American. It is interesting to note that several of the participants referred to this agent as being affiliated with NC A&T State University but did not connect him with the Cooperative Extension Service, even though he works out of the county extension offices in the two counties he covers.

Evaluation of A Priori Research Hypotheses Our preliminary findings support our hypothesis that a lack of connections to business and knowledge networks outside their close-knit social networks is an important factor limiting the capacity of members of disadvantaged rural populations to recognize opportunities and adapt to change. Participants had difficulty answering the question "who do you get information from regarding agricultural practices and marketing?" The primary source of information about farm programs mentioned by several participants is one specialized extension agent affiliated with NCA&T University; however, it was notable that few of the participants remembered that this agent was affiliated with Cooperative Extension. The few participants who could readily list agencies and individuals from whom they get information were the participants who had been involved in farmrelated activities throughout their adult life. In general, participants who had lived in the same area for their whole lives or who had moved back to the area some time ago made more mention of family and neighbors as sources of information and assistance, mostly in the form of labor on an occasional basis.

A factor observed to limit progress in planning group collective enterprises is a slowness to initiate or respond to inquiries and notices of opportunities; this characteristic also negatively impacted network development. One of our key informants framed the problem thusly: "the farmers move slow they need to learn to pay attention to timing." He noted that this reluctance to interact was particularly pronounced when dealing with assistance providers and others from outside the farmers' immediate social circles and was negatively impacting the farmers' efforts to build their businesses. Our informant's comments suggest that this reluctance to reach across social boundaries may be exacerbated if assistance providers do not give adequate consideration to the settings and terminology used to provide information to these farmers:

"The farmers don't like paperwork or making phone calls....Minority and small farmers don't go to meetings. The timing doesn't work. But they also get intimidated by jargon; they don't get engaged, they listen but don't process."

Although we were struck by the similarities in the groups, the predominantly African American groups did differ from the Caucasian group in the rapidity in which they acted upon information. Relative to the Caucasian group, the African American groups communicated less frequently with the research team and were slow to follow up on information about potential opportunities. Members of the Caucasian group evidenced a higher comfort level with online communications. This likely contributed to differential response patterns but is an insufficient explanation since similar patterns were observed when information was provided in person or in letters send through the U.S. mail. It is reasonable to hypothesize that cultural factors, likely related to a history of discrimination, play a significant role in the observed "slowness" to act in the predominantly African American groups. We suggest that experience may have shown them that "looking before leaping" is smart. These groups described many experiences where they were given advice and offers of assistance but then were left "high and dry" midway through with little to show for the effort, or most of the benefits went to the advisor rather than to the group. One group in particular was slow to agree to participate in the study and to identify a collective enterprise. Throughout its short history as a group, assistance organizations and other outsiders have applied pressure on it to do particular things in particular ways rather than focusing on helping to build the group members' capacity to make their own decisions and strategic plans. It appears that groups of small-scale farmers, particularly those with minority memberships, present opportunities for other people and organizations that are not necessarily congruent with the groups' interests and needs. The groups have learned that they need to take time to evaluate advice they are given, as well as the motives or agenda of the person or organization providing the advice, in order to make informed and reasoned decisions. Habit and circumstances can certainly push this reasonable deliberateness too far, but it is unhelpful for assistance providers to jump to the conclusion that slowness of response is evidence of low motivation to succeed or lack of understanding.

Our experiences support the hypothesis that the trust-building process can be expedited through introductions to potential study participants by assistance providers who were working with the groups. The recommendation of the assistance provider clearly was a factor in Groups 1, 2, and 3's decision to participate in our study. It is important to note that "borrowed" trust expedited the initial stages of the project but did not eliminate the need for us to build relationships with the groups and the individual members; by "borrowing" trust, we gained time to *earn* trust through our actions.

These observations are consistent with previous research that has found a lack of knowledge regarding alternative production and marketing opportunities among African American farmers. This has been interpreted as reflecting a reluctance

to attend meetings and trainings conducted by traditional agricultural assistance organizations that are viewed as not treating African American farmers fairly (e.g., Grant, Wood, & Wright, 2012; Havard, 2001; Wood & Ragar, 2012). African American farmers in North Carolina who participated in a study by Balvanz and colleagues (2011) agreed that discrimination endured by African Americans in their community deteriorated self-confidence, which prevented them from seeking new opportunities for economic advancement since they expected further rejection.

Support was also found for the hypothesis that interventions aimed at network expansion will be most effective if they emphasize interactive opportunities through which trust can be built. The research team met with each group several times during the project's first year, most times playing an active role in the meeting but sometimes simply observing the proceedings. Each meeting served as an opportunity for the participants to assess the research team's abilities and attitudes. Mayer, Davis, and Schoorman (1995) showed how assessing partners' perceived abilities (competencies and skills); benevolence (genuine care); and integrity (principle compatibility) lays the foundation for expectations shaping trust levels. The research team understood that we needed to consistently demonstrate these three characteristics in our interactions with the groups in order to earn trust. Preliminary evidence suggests that the groups did form positive perceptions of the research team in the course of many interactions over two years. More specifically, we earned trust with the individual group members we interacted with, and that individual-level trust influenced and contributed to the collective attitude of the group toward the research team.

Members of the four groups we worked with had only limited social ties prior to group formation. There certainly was information exchange through social networks prior to the groups convening. However, limited evidence suggests that it may be rare for such informal social interactions to transition to more organized and formalized cooperative business arrangements among this population. Instead, assistance providers brought together people who expressed

some interest in cooperative enterprises, and then pushed the groups toward formalization as farmer cooperatives without exploring group members' shared goals and interests. Some degree of self-sorting did occur through each household's decision whether to work with the convener and the other participating households, and it is likely that some degree of trust and perceived homophily contributed to this decision.

Importantly, we found that the effectiveness of external interventions is limited if trust-based relationships are not present among group members, and there was more need than anticipated for deliberate efforts to strengthen within-group relationships. We interpret this as reflecting the fact that the formation of the groups was catalyzed by outside agents rather than occurring through a process of self-organization. Groups 1 and 4 were enterprise- rather than relationship-focused, and have experienced continued attrition as individuals decided that the enterprise was not a good fit for their farm or was not meeting their expectations. The members of Group 3 did not lose interest in their collective enterprise, but serious interactional difficulties developed as personality differences overcame weakly developed relationships. The group agreed to facilitation, but too late to repair damaged relationships. Relationship-building was an important goal for Group 2; members expressed frustration with how slowly they were progressing, and were open to the research team's suggestion that they get expert assistance with structuring interactional dynamics. Two of the participating groups required a lot of coaching-type facilitation from the research team before they were able to develop a plan for spending the funds made available to them. In retrospect it is clear that all of the groups would have benefited from coaching on within-group interactions.

Discussion

Our findings show that simply providing tangible assets is insufficient to ensure that individuals or groups will or can take advantage of those resources. The asset portfolio is certainly important, and lack of assets is a limiting factor in enterprise development for this population, but other factors mediate the use of assets. We observed similar

patterns with intangible assets such as trust (among group members, and between group members and assistance providers and business contacts) being also necessary but not sufficient to trigger action. Our findings echo those of Grim (1995), who found that African American farmers did not view farming as a business and lacked business connections necessary to develop their farm operations. We found that this is still true, and that it reflects a deep aversion to risk derived from a long history of institutional discrimination and resulting lack of trust. Our study participants want to expand their farm operations, but only to the extent that their personal finances can take them. They are comfortable with informal cooperative arrangements where they borrow each other's equipment and sell to each other at wholesale prices, but they are not interested in pooling resources or establishing more formal business arrangements. Notably, they do not want to assume debt even when loans are low-risk and are both appropriate and necessary for their business development. Lack of trust in formal institutions is a contributing factor; these farmers do not trust agricultural assistance programs or other programs designed to support the business community, and view participation in such programs as unacceptably risky.

An individual's business decisions are influenced by individual characteristics as well as community- or population-level factors. In addition to a particular combination of assets, each individual has a particular set of capacities and capacity gaps that reflect a unique life history and combination of personal attributes. Examples of personal characteristics that have previously been found to influence individual and household choices and outcomes include risk aversion and willingness to trust new acquaintances (e.g., Grothmann & Patt, 2005; Howard & Roe, 2011; Pyysiäinen, Anderson, McElwee, & Vesala, 2006; Shane, 2003; Sriram, Mersha, & Herron, 2007). Some researchers and practitioners in the fields of livelihoods and RWC have classified such characteristics as human or social assets, and thus included them within the asset portfolio. For purposes of assistance program design, we suggest that it is more useful to think of these characteristics as mediating factors that influence whether the individual's or household's

existing assets get turned into activities and outputs constituting a livelihood strategy. Definitions included in the foundational SL literature are consistent with this interpretation; for example, in Carney's definition, "a livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living" (1998, p. 4). What we refer to as personal characteristics contribute to "capabilities."

One significant limitation of both the SL concept and the RWC framework as guides for intervention design is that they focus insufficient attention to the role of individual capabilities in shaping livelihood decisions and implementation efforts. However, such personal characteristics are important mediating factors that lead to differential outcomes despite similar wealth assets and contextual factors. The individual participants in this study exhibited a range of personal traits and viewpoints that appear to be shaping their selection of livelihood strategies and the outcomes they achieve. These include individual willingness to reach out to people and organizations outside their immediate social circle for information, the intensity of their entrepreneurial ambition, and their willingness to seek out and adopt new practices and livelihood strategies. Farm assistance programs work directly with individual farmers and farmer groups with the goal of improving farm profitability and the well-being of farm families. These programs therefore are likely to fail to meet their objectives if they focus exclusively on assets during intervention design without consideration of mediating factors that influence outcomes. A balance is needed.

Our observations are consistent with Flora and Flora's (1993) concept of *entrepreneurial social infra-structure* as a necessary link between physical resources and leadership for community development, with social infrastructure defined as the group-level, interactive aspect of organizations or institutions. This concept has largely been subsumed into social capital research, with entrepreneurial social infrastructure included as a specific configuration of social capital (e.g., Emery & Flora, 2006); we suggest that the mediating role highlighted in the original concept is important and should not be discounted.

We developed the following recommendations based on our observations of and comparison among our four groups:

- Pre-existing social ties and/or opportunities for interaction prior to group formation permit individuals to evaluate compatibility of personalities, values, and goals. This can foster development of trust-based relationships necessary for group cohesion and effective cooperation.
- People differ in their goals and interests; individuals' continued willingness to participate in group activities will depend on the degree of overlap they perceive between their individual interests and those of the other group members.
- Few people have the natural skill or training to manage interactional dynamics effectively. Therefore most newly formed groups would benefit from expert facilitation as the members begin to share information, identify common goals, and develop interactional rules and organizational arrangements.
- Assistance providers should not adopt a
 one-size-fits-all approach to cooperative
 development. Individual group members
 can operate independently and yet productively engage in a wide array of shared
 activities that create synergy among group
 members and increase revenues.
- Each group of cooperating individuals will have a particular mix of interests, skills, and personalities. This means that groups will likely differ in the interactional styles and organizational arrangements with which they are most comfortable. Some groups will be more comfortable establishing a more purely business relationship, while others will place greater value on social support. Assistance providers need to be able to recognize such differences in order to conduct more effective needs assessments and provide the most useful advice and assistance to each group. The range of expertise required might best be provided

by multiple assistance providers working cooperatively. A holistic approach to assistance provision has the potential to be much more effective than the current practice in which one expert, in isolation, provides one type of service to disadvantaged farmers.

We plan to test the constructs underlying these recommendations in our future research.

Conclusion

Our preliminary results support a model in which an individual's capacity to innovate emerges dynamically from a complex interplay of personal characteristics, personal experience, the extent, structure, and nature of the linkages in his or her social and information networks, culture (collective experience), and chance opportunities (serendipity). When several individuals work cooperatively toward a common goal, that group will have a collective set of capabilities and capacity gaps. Capacity-sharing occurs through interaction, and so the nature of the interactions among group members will mediate the capacity exchange. Collective capacity, therefore, is not simply the sum of the individual capacities but is emergent from and dependent upon the complex interactions among group members. An important consequence of this for assistance organizations is that any effort to build the capacity of cooperative groups to improve wealth creation outcomes will need to take into account not only the capacities and capacity gaps of the individual group members, but also the nature of the interactions among group members.

We suggest that capacity-building efforts focused too narrowly on assets can lead assistance providers to neglect human factors that are critical in overcoming cultural and societal barriers to success, even with the inclusion of "human capital" into frameworks used for program planning. Assistance organizations might improve outcomes of programs aimed at disadvantaged populations by focusing on trust-building interactions and by providing coaching and facilitation services. In our future work, we plan to draw from the entrepreneurship and teamwork literatures to further explore these mediating factors.

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Navigating the fault lines in civic food networks

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Abstract

Civic food networks have emerged as a civil society—driven response to the social, economic, and environmental shortcomings of the industrial

food system. They are differentiated from other forms of alternative food networks in that they emphasize cooperation over independence, focus on participatory democratic governance over hierarchy, and serve both social and economic functions for participants. Yet there is little understanding of the processes of cooperation, particularly among farmers, in civic food networks. In this five-year action research project we documented the development of a farmer-driven civic food network in southern Manitoba on the Canadian Prairies. We explore the relations among farmers to better understand the potential of civic food networks to contribute to a more resilient and locally controlled food system. Our findings highlight the tensions and power dynamics that arise through the processes of re-embedding farmers in more interdependent relations. Fractures occurred in the group when negotiating the diverse needs and values of participants, which manifested in disputes over the balance of economic and extra-economic organizational pursuits, over the nature of the

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cooperative distribution model, and over quality standards. Asymmetrical power relations also emerged related to gender and generational differences. Although social embeddedness and civic governance did lead to enhanced relations and trust, these positive outcomes were unevenly distributed and coexisted with feelings of distrust and acrimony. In order to realize their full potential, proponents of civic food networks must confront difference in order to embrace the strength that comes from diversity in the process of building more resilient, and civic, food networks.

Keywords

alternative food networks, civic agriculture, civic food networks, community development, conflict, cooperatives, local food, participatory action research, quality standards, social embeddedness

Civic Food Networks: A Subset of Alternative Food Networks that Emphasize Civic Governance Mechanisms

The processes of agro-industrial intensification has generally destabilized the livelihoods of small and medium-sized farms and eroded the social, economic, and environmental capital that underpins the resilience of rural communities around the world (Wilson, 2010). Growing concerns over the human and environmental impacts of commodity agriculture have led to a wide diversity of alternative food networks that revalorize rural space and work toward a more just and sustainable food system (Blay-Palmer, Landman, Knezevic, & Hayhurst, 2013; Goodman, D., & Goodman, M., 2007; Renting, Marsden, & Banks, 2003).

Alternative food networks broadly represent "forms of food provisioning with characteristics deemed to be different from, perhaps counteractive to, mainstream modes which dominate in developed countries" (Tregear, 2011, p. 419). This marks a shift in emphasis from a generic focus on maximizing export commodity production toward a multifunctional understanding of agrarian land-scapes and communities (Wilson, 2010). Alternative food networks pursue rural land uses that emphasize ecologically sustainable and humane agriculture practices, produce value-added "quality" food products, and reconnect consumers and farm-

ers in a moral economy of food (Goodman, D., 2003; Goodman, M. K., 2004; Kneafsey & Holloway, 2008).

The concept of civic food networks (CFNs) was recently developed by Renting, Schermer, and Rossi (2012) in the European context and represents a subset of alternative food networks. Rather than relying on conventional food system infrastructure (Bloom & Hinrichs, 2011), citizen participants in CFNs cooperate to coordinate and control most, if not all, of the steps from farmer to consumer. In contrast to the conventional food system and market-focused alternative food networks, CFNs de-emphasize market-based governance mechanisms such as labeling, price, and marketing. Rather, they emphasize civic governance mechanisms that include cooperation, participatory democracy, solidarity, self-organization, local control, and autonomy, all of which reflect an attempt to empower citizens to shape their food provisioning system (Hassanein, 2003; Seyfang, 2006).

In North America, the earlier conceptualizations of "civic agriculture" were rural in orientation and emphasized the processes of collective problem-solving as the foundation of resilient agrarian communities (Lyson, 2004). More recently, the focus has turned toward conceptualizing CFNs as urban and consumer-driven through research on sustainable and green consumption (Johnston & Szabo, 2011), on the consumer-citizen hybrid (Lehner, 2013) and on the active role of consumers in organizing CFNs (Brunori, Rossi, & Guidi, 2012; Franklin, Newton, & McEntee, 2011; Little, Maye, & Ilbery, 2010). Renting et al. (2012) follow this pattern in their latest definition of CFNs as requiring the active participation of consumers in CFN governance. This emphasis on urban actors and on citizen-consumers inadvertently excludes CFNs that are primarily farmer-driven and that emerge from rural space. However, citizen-farmers can also play a key role in building civic food networks, regardless of any direct and active participation of consumers in their governance (e.g., Trauger and Passidomo, 2012). Cooperation, especially among farmers, has received relatively little attention across the civic and alternative food network literature, which generally overlooks the organizational

processes and social relations that underpin collective problem solving.

Embedding and Disembedding Relations in CFNs CFNs are defined by their explicit focus on reembedding food exchange in a deeper relational context as a counterpoint to the abstract logic, anonymous relations and the market-calculus that undergird the conventional food system (Higgins, Dibden, & Cocklin, 2008; Hinrichs, 2000; Izumi, Wright, & Hamm, 2010; Milestad, Bartel-Kratochvil, Leitner, & Axmann, 2010; Sonnino, 2007). Alternative food network research has focused primarily on farmer-consumer market relations and often draws on Granovetter's (1985) notions of social embeddedness to characterize these relations as being based on trust, regard, and reciprocity (Izumi et al., 2010; Milestad et al., 2010; Sage, 2003; Sonnino, 2007).

The limited research on cooperative relations among farmers in alternative food networks has focused primarily on informal networking, loose ties, and bilateral relations, for example among vendors at farmers' markets (e.g., Griffin & Frongillo, 2003). These informal relationships have been found to produce both economic and social benefits through the exchange of knowledge and skills, the fostering of new friendships, and providing of relief at each other's stalls (Chiffoleau, 2009; Griffin & Frongillo, 2003; Lawson, Guthrie, Cameron, & Fischer, 2008; Milestad et al., 2010).

However, Wittman, Beckie, and Hergesheimer (2012) found that vendors at farmers' markets were averse to engaging in any form of cooperation that threatened the direct connection between farmers and consumers. Further, Glowacki-Dudka, Murray, and Isaacs (2013) conclude that diverging goals and a lack of trust among actors involved in local food production can obstruct cooperativism. These findings allude to the potential relational challenges that arise from the more substantial and interdependent forms of cooperation required in CFNs and suggest that cooperation itself can be a contested practice.

More involved and formalized cooperation between farmers in CFNs can reduce transaction costs (Verhaegen & Van Huylenbroeck, 2001) and help farmers located in remote rural locations to overcome the "tyranny of distance" (Trauger, 2009). Yet CFNs may also reproduce the problems associated with the conventional food system, including the exploitation of farm workers (Trauger, 2009), the marginalization of smaller farms (Brunori, Cerruti, Medeot, & Rossi, 2008) and social exclusion (Franklin et al., 2011). Internal fissures have been identified in these initiatives reflecting the often-conflicting needs, values, and quality claims (e.g., organic versus local) among members (Brunori et al., 2008; Sonnino, 2007).

These findings suggest that any conceptualization of social embeddedness and cooperation must also consider disembedding forces (Sayer, 1997) that express themselves in the form of self-interest (Hinrichs, 2000) and socio-cultural differences among participants. Indeed, the most recent conceptualization of CFNs (Renting et al., 2012) appears to place too much emphasis on the positive outcomes of these renewed civic relationships, and could be augmented by considering how culture and power shape these embedded economies (Sayer, 2001; Sonnino, 2007). This is especially important as a growing number and diversity of farmers, consumers, and other actors are attracted to local food (Mount, 2012), bringing with them multiple and often conflicting values and agendas that must be negotiated in the development of CFNs.

Local Food as a Contested Concept: Meeting Place or Arena of Struggle Local food is positioned as a core discourse in CFNs, but the term "local" has been widely criticized as being vague in meaning, subject to multiple interpretations, and malleable in application (Born & Purcell, 2006; Eriksen, 2013; Mount, 2012; Selfa & Qazi, 2005; Tovey, 2009). The flexibility of the "local food" concept has provided purchase across the political spectrum and underpins its growing resonance as a mobilizing concept. Thus, "local food" has been incorporated in CFNs but also into top-down state policy (Hinrichs, 2013) and as a corporate marketing strategy (Johnston, Biro, & MacKendrick, 2009). As such, local food has been criticized for being susceptible to cooptation by powerful elites, which can undermine its legitimacy and its potential for leading to more

substantial food systems change (Johnston et al., 2009; Tovey, 2009).

The flexibility of local food as an organizing concept, however, also makes it useful for bringing together otherwise diverse and disconnected rural constituents in community development efforts (Chiffoleau, 2009; Connell, Smithers, & Joseph, 2008; Milestad et al., 2010; Sage, 2003). Local food can be interpreted differently between groups and individuals, yet is often assumed to represent a shared set of values where the multidimensional qualities of "good food' gets bundled into a 'local food systems package' wherein organic is good, family-scale farming is good, local is good, natural is good, and shopping at farmers' markets is good" (Connell et al., 2008, p. 181; also see: Sage, 2003).

However, because local food draws together actors with diverse values, needs, and priorities (DuPuis & Goodman, 2005), local food may not always be a benign meeting place, but can also become an arena of contention and struggle between competing interpretations and practices of local food (Tovey, 2009). In *specific* practice, CFN participants ascribe idiosyncratic meaning not only to local food but also to what constitutes good food and good farming (Ostrom, 2006; Selfa & Qazi, 2005). The diverse interpretations and practices of local food are not necessarily compatible and can lead to a politicized terrain for the further development of collective action (Tovey, 2009).

In this paper, we examine the relations among farmers in CFNs to better understand the potential for CFNs to expand the relevance of local food and contribute to a more resilient and locally controlled food system. The objectives of our study were to explore to what extent "local food" can create a meeting space for farmers to engage in CFNs; to understand what motivates farmers to get involved in CFNs; to examine how these initiatives evolve over time and why; and to understand the barriers that confront CFNs and how these can be overcome.

Methods

In this paper we present a single case study documented as a part of a long-term participatory action research project (Anderson, 2014) that involved the development of a CFN in the Canadian Prairies

called the Harvest Moon Local Food Initiative (HMLFI). Participatory action research (PAR) is increasingly used in agri-food studies (e.g., Charles, 2011; Lyons, 2014; Pimbert & Wakeford, 2004) and reflects a range of research approaches where community and academic researchers work together in deliberate processes of organizational and social transformation (Creswell, 2013). Through iterative cycles of inquiry, PAR involves the integration of research and action and of theory and practice, "in the pursuit of practical solutions to issues of pressing concern to people, and more generally the flourishing of individual persons and their communities" (Reason & Bradbury, 2008, p. 4).

Conventional research approaches are often extractive in nature and produce few tangible benefits for research subjects (Cameron & Gibson, 2005). In contrast, PAR explicitly seeks to produce and apply knowledge that is immediately relevant in the local context (Kindon, 2005). This however does not preclude the simultaneous production of conceptual and theoretical contributions that are transferable to other settings through diverse forms of knowledge mobilization (Anderson, 2014). For example, our research team produced a diversity of research outcomes including, most immediately, the development of a successful CFN, and also the publication of videos, academic articles, and blog postings to more broadly communicate our findings.

In contrast to the positivist notion that researchers must be objective, value-free, and separate from research subjects (England, 1994; Maguire, 2001), PAR practitioner-researchers are actively involved as contributors to the organization or situation under study. Our research project was structured as a collaborative process of reflective community development where academic and community co-researchers cooperated in the design of the research agenda and in the implementation of the "action."

The research questions addressed in this paper emerged from the experience of the larger group of participants, and they evolved iteratively as the project unfolded. Four HMLFI contributors participated on a research committee that authored this final paper-based outcome. The senior author

(Anderson) was an active and central participant throughout the entire project (in the action) and facilitated data analysis and writing. Gardiner and McDonald were farmer members of the HMLFI and provided ongoing input through collaborative analysis and writing workshops. McLachlan was a founding member of Harvest Moon Society, the not-for-profit organization that initially housed the CFN. McLachlan also helped to shape the overall project and contributed to the collaborative analysis and writing process.

This paper is based on five years of data collection and draws from the experiences of the research committee, organizational documents, field notes, and interview transcripts that were initiated at the very first meeting of an informal group that would go on to form the HMLFI. The authors participated in over 50 formal meetings over this period. We also drew from a review of meeting minutes, three funding applications, reports to funders, a prefeasibility study, a feasibility study, a business plan, and the HMLFI website. We conducted 19 in-depth interviews with 25 members of participating farm families. These interviews ranged from one to four hours in length and were transcribed and coded in NVivo qualitative data analysis software to identify emergent themes. All interviews and several meetings and group events were captured using video and, when appropriate, we present these data as video clips to give active voice to research participants and allow the reader to better visualize, and thus further understand, the narrative and context. Finally, a draft of this paper was circulated to all participants in the HMLFI and follow-up phone calls or face-to-face meetings (n =12) were arranged to review the paper for the purpose of soliciting feedback, thus confirming the validity of the analysis.

The Territorial Context

The Harvest Moon Local Food Initiative is located approximately 124 miles (200 km) southwest of Winnipeg, Manitoba's largest city, in the Canadian Prairies. Since the late 1800s, settler agriculture in the region has been based on agro-industrial, high-input, intensive, and export-focused modes of grain, oilseed, and livestock production (Rudolf & McLachlan, 2013). Prairie agriculture has been

described as being in a state of chronic crisis (Bessant, 2007), contributing to the declining profitability of family farming, environmental degradation, and rural depopulation. On May 23, 2003, the discovery of the zoonotic cattle disease bovine spongiform encephalopathy (BSE) in Canada triggered a socio-economic crisis that exacerbated this longer rural emergency. Direct farm marketing, cooperatives, and value-added niche food production emerged as important grassroots responses in Canada (Anderson & McLachlan, 2012; Mount, this issue), providing a point of departure for the development of the HMLFI — a cooperative local food initiative that would market value-added food (more) directly to consumers.

Case Study: The Harvest Moon Local Food Initiative

Phase I: The Honeymoon Phase — Celebrating Common Ground?

In August 2006, two of the authors (Anderson and McLachlan) toured three local livestock farms in the Clearwater area. Each of the farmers was minimally engaged in direct farm marketing and expressed enthusiasm over the growing consumer interest in local food. However, they also indicated that the time and resource demands of direct marketing prohibited them from expanding their engagement in the growing opportunities related to local food. These preliminary discussions suggested that a CFN might help farmers overcome these challenges. Based on these interactions, Anderson and McLachlan initiated a scoping meeting in December 2006, inviting farmers who originally expressed an interest in developing a CFN and others identified through referral. Most participants in this initial meeting agreed that the concept was sound, and the group went on to develop the HMLFI.

Group Profile

The 14 founding farm families managed 4,365 acres (1,766 ha) of land dedicated to field crops, 8,965 acres (3,628 ha) of hay and pastureland that supported 1,660 head of beef cattle, 750 pigs, 500 ewes, and 4,200 meat chickens. One participant

operated a feedlot, another was a meat processor, and an additional member family established a butcher shop after the HMLFI was formed. One family also had a market garden and another a well-established organic flour direct marketing enterprise. While almost all members produced livestock, the group was heterogeneous in terms of production practices (e.g., organic, conventional, holistic resource management), marketing approaches (e.g., degree of experience in direct marketing) and previous relations with other group members (e.g., kinship, friendship, weak ties, or no previous acquaintance).

Motivations for Participation

Motivations for forming the CFN are categorized as either instrumental/market or non-instrumental/extra-market (cf. Hinrichs, 2000; Izumi et al., 2010). Members related to all of these motivations to some degree; however, each individual had distinct priorities.

Instrumental/Market

Some participants sought to expand the customer base of their already established direct marketing business (what we term *expansion motivation*): "With Harvest Moon's help I think within another two years I could probably be selling almost everything directly" (Wayne McDonald). Others hoped the collaboration would reduce opportunity costs

associated with managing multiple relationships in their direct marketing businesses (time saving motivation): "Our hands are full now just with the production and processing; we really don't have time for the marketing and delivering any more" (Dan DeRuyck). Members expressed a desire for learning and for pooling intellectual resources (innovation motivation): "One producer can make a lot of mistakes, but you get a half a dozen together, you make a lot less mistakes and make better decisions" (Anonymous). Those who were primarily selling through commodity markets wanted to reduce dependence on corporate intermediaries and gain more control

over price setting (control motivation; price motivation): "If we create our own market and our own chain to get it to the consumer then we have a little more control over what our bottom line is going to be..." (Don Guilford).

Non-instrumental/Extra-market

Many participants expressed a desire for closer social connections with other farmers practicing sustainable agriculture, reflecting in part a need for a support network for otherwise isolated "alternative" farmers (community-building motivation):

I feel because we're a part of this, and we've felt so isolated as far as the kind of things we've been doing for so long. I'm a lot more relaxed, because I don't feel like such a weirdo anymore. I am still weird [langhs], but it doesn't feel as bad. (Clint Cavers; see Video 1)

For others, who were mainly selling into commodity markets, the CFN offered an opportunity to receive positive feedback from peers, customers, and the general public, supporting a sense of pride in providing a high quality and differentiated product (what we term *pride motivation*): "That's why I'm so enthused about the Harvest Moon, it's just going to be able to produce a better product" (Anonymous). Some farmers



Video 1. Pam and Clint Cavers describe how the Harvest Moon Local Food Initiative gave them a peer support network that affirmed their values and allowed them to become more effective educators. http://www.youtube.com/watch?v=S9JlaVvFYeY

described their interest in experimenting with social-economic projects that offered an alternative to conventional economic enterprise (alterity motivation): "I'm there because I'm so interested in the whole social [economy] concept, communication, how people talk about things like this" (Sandy DeRuyck). Finally, members saw the CFN as an opportunity to help support the next generation of farmers (succession motivation): "The big benefit from this group I may never see in my farming days. It's the next generation...that's going to benefit from this" (Anonymous). In many cases, the meaning of the "next generation" extended beyond kinship and included any youth interested in pursuing agriculture as a livelihood.

Together, the members subsumed all of these individual motivations under one common vision statement, "We are a local community committed to ethically producing and marketing high quality, healthy food for the betterment of humankind and the environment now and for generations to come" (HMLFI, 2007). This vision unfolded into three main objectives: (1) increasing their proportion of each food dollar; (2) broadening public outreach; and (3) developing farmer training relating to sustainable agriculture and local food, and sharing what was learned with other farmers (HMLFI, 2007). The vision and objectives were intentionally ambiguous and inclusive to accommodate the wide diversity of founding participants. Some felt that

the excitement of the 'honeymoon phase' led to a false sense of unity because it lacked specificity: "It went too fast...We needed to spend more time at the beginning figuring out what we really wanted to do...It was very philosophical... It's a wonderful idea, but it's got to be focused" (Sandy DeRuyck).

Although originally envisioned as a multiproduct food hub, the group members instead focused their efforts exclusively on marketing meat, whereby farmers would pool their products in a collectively owned entity (HMLFI) that would then coordinate all aspects of marketing and distribution (see figure 1, the "we sell" model). The

group sought to appeal to consumers, first by harnessing the growing interest in local food, and second by differentiating their food products from "conventional food" as superior in taste, animal welfare, and environmental sustainability. Customers would buy HMLFI food through a web portal, while wholesale buyers would be approached directly to negotiate bulk orders. After almost two years of planning, the HMLFI launched in September 2008 with much fanfare reflecting a sense of hope and optimism: "It's a culmination of a lot of...nights and a lot of hard work...It's pretty exciting...For me, it's a future in farming" (Wian Prinsloo, Video 2).

Phase II: Domestic Disputes: Finding Difference

The HMLFI sold only CA\$10,000 worth of products over the next six months, well short of members' expectations. During this period a range of unresolved conflict surfaced, ultimately leading to the dissolution of the CFN in its original form. These divisions, discussed in the next sections, were related to disputes over the prioritization of economic versus non-economic organizational pursuits, the distribution model, and the quality standards; they also reflected divisions based on gender, electronic communication literacy, and generational differences.



Video 2. Launch of the Harvest Moon Local Food Initiative at the fall music and rural culture festival in 2008.

http://www.dailymotion.com/video/x8uv5e_harvest-moon-local-food-initiative_people

First Divide: Economic Versus Non-Economic Organizational Pursuits

The first HMLFI organizational objective suggested that the most common and immediate collective goal was economic in nature. The second and third objectives, however, reflected that the group was simultaneously interested in pursuing social and ecological outcomes. This mixing of the social, economic, environmental, and political in the workings of the HMLFI later emerged as a source of tension. Some members viewed the initiative primarily as a business: "To me you've got to look at it from business-type thinking and it's not just put together to promote idealistic thinking" (Don Guilford). In contrast, others emphasized that alterity and challenging the status quo was an important end in of itself for some participants: "I keep hearing from people who are looking for a TRUE alternative to the conventional food system and selling boxes of meat wholesale is no alternative... I don't see how we're doing anything really different here" (Jason Andrich, coordinator of HMLFI). McDonald indicated that many members felt that, "This isn't just a marketing group," and

were frustrated when only some members contributed toward, "the youth projects etc. [that] became a point of contention within the group and contributed to the bunker mentality that emerged" (Wayne McDonald).

Second Divide: Distribution Model(s)

Although the HMLFI proceeded with a single distribution model as a seemingly cohesive group, it later emerged that almost half of the participants were disinterested in the chosen model (pooling products, selling to restaurants, focusing on meat products), and had been all along. Soon after the launch, some members perceived an irreconcilable division between farmers who wanted to aggregate their products under a single brand, or what the group called the pooled or "we sell" approach, and those who wanted to sell directly from farmer to consumer under the label of the Harvest Moon with the option of coordinating transportation and ordering, or what the group called the direct or "I sell" approach (Figure 1).

As the focus on the "We sell" approach was consolidated through funder support and business

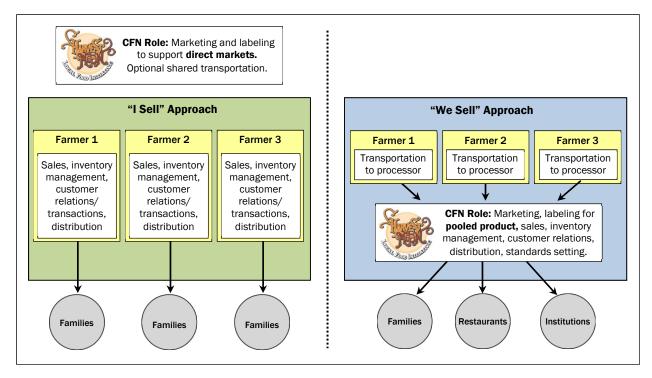


Figure 1. Schematic of "I sell" and "We sell" distribution models that divided the members of the Harvest Moon Local Food Initiative.

planning and market development processes, all alternative development pathways were effaced and those interested in the "I sell" model became excluded: "What were they going to do? They had no control, they had no power, they didn't know what to do; what could they do?" (Sandy DeRuyck). The sidelining of these voices was exacerbated by business planning advisors who recommended focusing exclusively on the "we sell" meat marketing model, as it was most easily accommodated within a conventional business planning approach that focused on volume sales: "It was the consultants who set us down a path that focused on meat and the business instead of the farmers and the food" (Clint Cavers).

The split between "I sell" and "we sell" reflected, in part, differences in the degree to which farmers were open, or able, to establish more involved relationships with their customers. One of the "I sellers" noted, "There is no reason that we shouldn't see our customers all the time" (Clint Cavers), while in direct contrast, a "we-seller" commented, "I mean we can't have our consumers here all the time..." (Don Guilford). Thus, many "we-sellers" resisted the idea that their farm should regularly be open to consumers, whereas "I sellers" often saw this as an integral function of the farm and an important way to generate consumer trust. Don and Clint's diametrically opposed sentiments



Video 3. Keith Gardiner describes the reasons he is not interested in direct farm marketing.

http://www.youtube.com/watch?v=HZM7t88YEyc

also reflect that not all farmers derive personal fulfillment from interacting with consumers, which has been identified as an important mediating factor in direct farm marketing relationships (Kirwan, 2006; Sage, 2003). Indeed, Don later indicated that the relationships with industry professionals in the conventional food system (e.g., cattle buyers) were based in an exchange of mutual technical understanding of agriculture and thus for him were more socially enriching than interacting with many urban consumers.

Yet, the "I sell" approach was criticized by the "we-sellers" as being too burdensome for farmers and as creating the very same barriers that they experienced previously as individual direct farm marketers that the midsized farmers sought to overcome through cooperation. Gardiner described how the "I sell" approach aligned well with goals of educating urbanites about sustainable agriculture and local food: "Direct marketing is perhaps more effective for changing the way that people think about food. It however, isn't necessarily better for the farmer" (Jo-Lene Gardiner).

The "we-sellers" were uninterested in taking on the additional labor that the "I sell" model required and sought a substantial degree of cooperation and thus a greater degree of interdependence. Keith describes, "I have no interest of mar-

> keting on my own...in getting beef done, putting it in the freezer and selling it piece by piece, not at all...I want to be able to take my animal to the abattoir, and then the food group markets it..." (Keith Gardiner, Video 3).

Don, one of the prominent "We sellers," expressed his frustration with some of the "I seller" goals in that they, "Saw this being successful even if we didn't end up with a group at the end of the day...I'd be very disappointed if we don't have a group that continues on" (Don Guilford). Indeed, the "I sellers" often referred to the HMLFI as a "stepping stone" for individual producers to build their own businesses and to cycle out of

the CFN (as suppliers) once they generated a sufficient consumer base.

Sandy explained how the importance of a robust individual identity for direct marketers acted as a barrier to a more collective approach: "They'll lose their identity, they'll lose their direct contact with the customer and customers that they've worked hard to find" (Sandy DeRuyck). Thus the "I sellers" resisted any proposal that weakened their individual identity and autonomy. A "We seller" expressed his frustration with this more individualistic mindset: "Through not marketing collectively, I believe the sense of community that develops when people work together for a common goal has broken down" (Don McIntyre).

Late in the process, a hybrid approach was proposed where both the "I sell" and "We sell" distribution channels would be accommodated (Figure 2). These two approaches would be synergistic in that the "I sellers," who typically turned away larger institutional buyers, could

instead refer them to the "We sell" branch of HMLFI. Likewise, the "We sellers" who were uninterested in relationships with hundreds of smaller buyers could instead direct smaller-volume buyers to the "I sell" branch. The hybrid approach would allow for autonomy between the two distribution channels, but would allow them to remain within a common and mutually supportive organizational structure and common brand. Although this may have been a viable solution earlier in the process, by this point the group cohesion had disintegrated beyond repair: "The hybrid model... could have worked, but the trust issues and relationships by that point had been so fractured..." (Wayne McDonald).

Third Divide: Good Food and Good Farming Quality standards are used to generate added value by defining, codifying, and regulating production practices, thus differentiating products and guaranteeing product quality (however defined) to

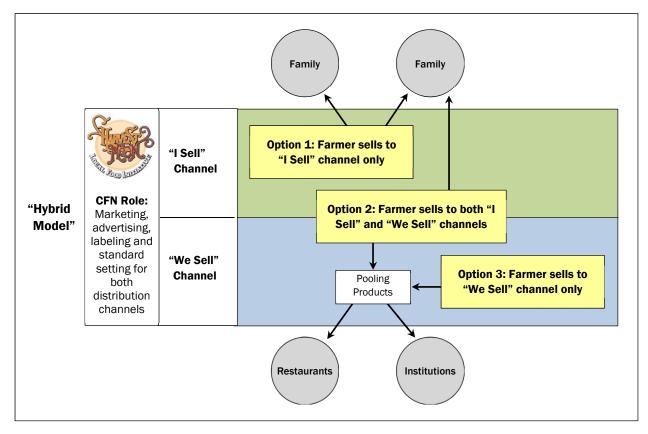


Figure 2. The proposed hybrid distribution model that accommodated and supported both "I sellers" and "We sellers."

consumers. Rather than adopting a pre-existing quality certification and monitoring regime (e.g., organic), the HMLFI opted to develop its own. This choice reflected a desire to further maximize local control rather than delegating this power and responsibility to a third party (Dubuisson-Quellier & Lamine, 2008). This decision also reflected a philosophy of inclusivity whereby adopting any available third-party standard would have immediately excluded many of the founding members. The group recognized that in order to be relevant for most farmers on the prairies, that the standards needed to be flexible enough to support transition over time, as Don described: "If we can move to things over time maybe we can change our production to make it work. But...there's got to be a long window there for people to adapt to change" (Don Guilford, Video 4).

Despite these aims of inclusivity, the cohesiveness of the group was undermined when these flexible standards became more rigid as diverging visions of "good food" and "good farming" were proposed and negotiated. On the one hand, some members (largely the "We sellers") were concerned with ensuring that all beef sold through the group was of a certain grade (which indicates quality primarily in terms of texture, color, and fat marbling) reflecting standardized industrial quality conventions that characterize the commodity beef market. These farmers recognized that grading systems



Video 4. Don Guilford explains the need for adaptive quality standards that allow for transitional farmers.

http://www.youtube.com/watch?v=n7_IRsR8F0k

were developed to provide a consistent eating experience (taste, tenderness), which has conditioned and homogenized the taste preferences of eaters (Stassart & Jamar, 2008). These standards, however, marginalized those farmers raising heritage breeds and those grass-finishing their livestock, as their products did not easily conform to grading standards developed for more conventional breeds and for grain-finished livestock. The "alternative standards" group (largely the "I sellers") were often penalized by lower payments in the commodity market and thus largely rejected the conventional grading system, and instead prioritized more stringent measures of humane animal husbandry, environmental responsibility, and 'closeness' and connection. They believed that quality was more legitimate and robust if constructed through interpersonal relationships and that the "We seller" emphasis on grading marginalized both their personal values and the value of their product.

Interestingly, both "I sellers" and "We sellers" anticipated that consumers would have negative experiences with the other's products, which by association would reflect poorly on the CFN and on their own operations. One "We seller" described how forgoing a grading standard was untenable for him: "I'm not interested in being a part of something like that, because with one bad carcass like that, they'll tell a hundred people and it takes years to develop these markets" (Don Guilford).

Both "We sellers" and "I sellers" were concerned that adopting the other's quality standards would become too prohibitive and restricting. Clint Cavers, an "I seller," commented,

There are abattoirs that are closer than the ones that grade. I don't want to be cornered into a grade standard. I want do my own processing...Trust in people's own products and from customers knowing where their product comes from. By having trust, there isn't a need for [grading].

Clint's experience with direct marketing indicated that his customers define quality based on knowing their farmer and where their food comes from and that they could tolerate, appreciate, or even desire variations in eating experiences among participating farms. Such inconsistencies, however, would be intolerable for the larger buyers sought out by the "We sellers" (e.g., university food services, hospitals, etc.) who typically demand standardized products. At one point the "We sellers" proposed that all animals sold through HMLFI be finished at a central member-owned feedlot to further maximize consistency of product, representing a further homogenization that threatened the individual identity of "I sellers" and their products.

The Worm Turns

The most contentious issue related to quality standards was the use of synthetic (chemical) dewormers, particularly ivermectin, to control intestinal worms and lice in livestock. Those who abstained from using ivermectin felt that it posed unacceptable risks to human health and the environment, while ivermectin users felt that these risks were negligible. Two ivermectin users in the group agreed to abstain from using any synthetic dewormers, and a ban on ivermectin was written into the group's standards. Eighteen months later, the cattle herd of one "We seller" contracted a severe intestinal worm infestation, causing the death of five animals. Upon veterinary recommendation, the farmer administered ivermectin to all his yearlings. Another "We seller," anticipating a similar infestation, then also treated his entire herd. According to the existing standards, these two farmers were barred from marketing these cattle through the HMLFI, effectively excluding them from the group.

At this point, ivermectin users advocated that the standards be changed to allow for the use of synthetic dewormers. Some viewed the need for the dewormer as a scale issue, in that alternative internal parasite management strategies were only viable for small farmers: "When someone who has 700 head is told that he can't delice or control worms, well that's just stupidity. With 700 head you have to do it" (Arvid Dalzel). They positioned

ivermectin use as necessary, relatively harmless, and indeed an important tool for avoiding animal suffering. Further, they asserted that not using synthetic dewormers resulted in ragged and hairless livestock and to inefficient feed conversion that reflected poor husbandry practice and even animal cruelty. Yet, those who eschewed ivermectin use believed that the environmental and human and animal health risks of the chemical outweighed any benefits and thus tolerated worm infestations. Instead they opted to use alternative, albeit less complete, parasite management practices (e.g., multispecies grazing, lower stocking densities) and natural dewormers (e.g., garlic) in order to co-exist with the parasites.

At one critical meeting, the group decided that, rather than revising the standards, they would allow an exemption where, "whole herd treatment using synthetic de-wormer will be allowed in this one instance with triple the recommended withdrawal period (150 days). No synthetic de-wormers will be allowed at any other time in the future as per the standards" (Meeting minutes, December 11, 2008). Although the group had ostensibly reached consensus, this decision did not resonate with the ivermectin users, whose recent experience reinforced their belief in the necessity of ivermectin in their management systems.

Fourth Divide: Gender, Technology, and Age
Communication technologies created power imbalances when important discussions and decisions were carried out through email: "The decision on these proposals should not be made on-line by email...Some of us do not check e-mails regularly and then 3-4 producers could pass something that the rest have no knowledge about!" (Arvid Dalzel). Although the Internet may enhance communication among members in joint initiatives (Knickel, Zerger, Jahn, & Renting, 2008), it can thus also create new inequalities and exclusions based on differential access to, and competency with, new media and electronic communication.

The digital divide was age-related, as older farmers were less interested in email and webbased communication, in part due to a skill deficit but also due to a belief in the importance of faceto-face meetings. Generational differences in priorities were also implicated in tensions between older members (largely "We sellers") who felt the need to reach CA\$1 million in sales within three to five years, and younger members (largely "I sellers") who advocated for, and who could accommodate, a slower approach.

The members who were most firmly polarized and who identified most strongly with either the "I sellers" or "We sellers" groups tended to be men. As the discussions became more fractious, many women who had been involved at the onset began dropping out. Indeed, the ratio of men to women in the group went from 15:9 at the initial meetings to 14:3 at the peak of the conflict. The gradual departure of these women, who tended to provide more moderate voices and who had a tempering influence on interactions, only seemed to exacerbate the conflict. Pam Cavers commented,

I dropped out because of the same reasons as lots of the other women... As soon as all that conflict comes in, the first thing you're going to do as a woman is to make sure you're preserving what's important. That's definitely a gender thing... Men are more likely to be headstrong and try to get it fixed and, you know, more linear.

Pam thus suggested that the women in the group were more holistic in their approach, seeking to shield valued relationships from the destructive competitive dynamic that emerged in the group. Unfortunately, this led to most of the women stepping back and deferring to their male partner as their family representative at meetings. The growing imbalance acted to further marginalize any women who remained involved. For example, it was Sandy DeRuyck who had initially suggested the possibility of a hybrid distribution model, but it was only recognized as relevant when one of the more influential men later rearticulated the concept. It is important to recognize that this gender analysis was contentious and, upon reviewing this paper, that some male members rejected the notion that gender had any bearing on the conflict, stating that at least some women in the group had been equally adversarial and that some of the men had also stopped attending meetings to avoid conflict.

Phase III: Group Dissolution

By early 2010, most of the "We sellers" had resigned from the HMLFI, realizing that the ongoing stalemate was unlikely to be resolved and that the more stringent standards (largely related to the use of synthetic dewormers) would preclude their participation. Andrew Grift commented,

The standards would do more to exclude than include farmers. I don't know if this is good for either group. If someone doesn't go with the flow they are out. I've heard this said, "He was never really a believer." I would still like to know believe in what? It is getting to be a pretty small box.

Don McIntyre left the group questioning the relevance of the "I sell" model for rural development in the province:

As an average size Manitoba farm, we see the problems that our industrial agriculture model brings and willingly seek to develop more ethical markets for our produce while caring sustainably for the land. Farms of this size form the backbone of the local community and must be included if true change is to occur.

Phase IV: New Beginnings

After the dissolution of the original HMLFI, the group split into two. The "I sellers" ceased any collective marketing, but continued to meet under the auspices of the HMLFI, retaining the group's function as a support network and coordinating youth training and public education programs. Approximately six months later, the HMLFI reengaged in collective marketing, this time focusing on an "I sell" approach that operated through a network of local food-buying clubs. Moving beyond a singular focus on beef products, the HMLFI offered customers a wide diversity of local food products. Orders from each farm were combined and delivered monthly by each farm family on an alternating basis to seven central drop-off points in Winnipeg, one in Brandon, and three in rural Manitoba. Importantly for the "I sellers," this model allowed farmers to retain their individual

identities and afforded them almost complete autonomy in terms of product specialization, production practices, and pricing.

A smaller subset of the "We sell" farmers formed a separate corporation called "Prairie Sky" that focused on a pooled approach that targeted restaurants and other institutional food buyers. Despite early positive contacts with a large institutional buyer and a restaurant, the group encountered a number of ultimately fatal barriers and has since disbanded. Restaurant managers and institutional food buyers preferred and even demanded that meat products be processed in a processing facility inspected by federal food safety regulators. However, there was only one federally inspected slaughterhouse in Manitoba, which made access difficult. The large buyers that Prairie Sky worked with also proved to be unreliable: "There were a ton of meetings with some really big numbers and pie in the sky kind of thing that ultimately amounted to nothing" (Wayne McDonald). Prairie Sky also encountered scale issues, where their pooled cattle represented a substantial supply of animals yet was still insufficient to meet the needs of most restaurants: "100 lbs. of beef tenderloin every two weeks. XL Foods can do that but we can't" (Wayne McDonald).

Discussion

The Harvest Moon Local Food Initiative (HMLFI) was a civic food network (CFN) initiated by a group of 14 farm families in the Canadian Prairies. CFNs are generally theorized as highly socially embedded, both in terms of the close and cooperative relations among participants, and also in terms of embodying a holistic development agenda that balances economic pursuits against social, political, and cultural ones (Renting et al., 2012). Our findings emphasize the need to account for power, disembeddedness and conflict in CFNs as a counterpoint to the dominant focus on social embeddedness and consensus in the existing literature. The civic governance mechanisms that define CFNs, such as participation and cooperation, are arguably as, or perhaps even more, likely to lead to tension and conflict as the individualistic, hierarchical, and alienating relations of the conventional food system or in alternative food networks

dominated by market governance mechanisms. Although participation and democracy are fundamental to CFNs, these are also messy and uncomfortable processes (DuPuis & Goodman, 2005; Hassanein, 2003).

We found that the ambiguous nature of "local food" as a mobilizing concept fostered a heterogeneous membership in terms of product type, production practices, and marketing, as well as underlying values and philosophies. The heterogeneity and inclusivity of the initiative was initially celebrated internally and by observers as an organizational strength and for its potential role in large-scale transformative rural development. This hopeful and perhaps naive view of the process and politics of building CFNs led to an imagined space of consensus. Indeed, the focus on commonality in the honeymoon phase sidetracked any opportunity to unpack the different needs and values that informed member's often-colliding understanding and practice of local food.

Farmers are often ideologically and materially locked in to the conventional food system, which can undermine engagement in new innovative forms of diversification such as CFNs (Marsden & Smith, 2005; Stassart & Jamar, 2008). This was indeed reflected in our case particularly where farmers accustomed to commodity agriculture advocated for quality standards and production practices that reflected industrial agriculture conventions (e.g., grading, standardization, corporate branding, use of chemical dewormers). At the same time, the "I sellers" were locked into individualistic business models where these direct marketers were only marginally amenable to cooperation, but resisted any collective intervention that undermined their individual autonomy and farm identity. This hesitancy reflects the importance of farm identity as a brand in direct marketing, the individualistic nature of local food entrepreneurialism, and also the belief by many local-food advocates that the direct connection between farmers and eaters is fundamental to the legitimacy of local food (Mount, 2012; Wittman et al., 2012). While Chiffoleau (2009) suggests that local food promotes greater ties among farmers, this may only apply in the context of informal networking or less involved forms of cooperation where interdependence is minimal, or at early stages of organizational development. Interestingly, it was the midscale farmers in our case, who would normally be considered to be less "alternative" in terms of their otherwise greater engagement with productivist agriculture, who advocated for a more interdependent approach — one that is arguably more congruent with the cooperative ideals of CFNs.

Some farmers viewed the CFN predominantly as a business entity and acted to externalize discussions and actions that were not directly related to the marketing initiative. Paradoxically, outside the context of the HMLFI, most of these businessfocused farmers were active educators, leaders in the sustainable agriculture community, and committed volunteers in their local community. Other HMLFI members prioritized the non-economic organizational pursuits related to training young farmers, educating the urban public on the importance of sustainable agriculture and alternative food systems, and in providing support for the development of similar projects in other regions. Those who valued these extra-economic motivations better tolerated the suboptimal economic performance and incremental growth of the HMLFI. These members were also frustrated when more business-oriented members allocated less time and attention to the group's extra-economic pursuits.

Regardless of their business priorities, all the members valued the peer support network gained through the HMLFI, which was viewed as particularly important in regions dominated by industrial agriculture where rural communities, agriculture institutions, and universities are often dismissive or even hostile toward alternative agricultural knowledge, production, and marketing approaches. All participants indicated that they felt validated through the relationships with other farmers in the group, irrespective of any market benefit they derived from participation. These mutually reinforcing relationships were an important incentive for continued participation, especially in light of the suboptimal economic performance of the CFN. For many members, this social support reduced feelings of isolation, increased self-worth, and, in many cases, empowered members to continue pursuing their own alternative farm development pathways while assisting others in doing the same.

These gratifying face-to-face encounters reflect what has been referred to as the exchange of "regard" in the context of farmer-consumer relations in local food networks (Sage, 2003). These social and affective exchanges occur in tandem with economic exchange (Lee, 2000), where the interpersonal acknowledgement of trust and expertise is a powerful reward in its own right.

The exchange of regard, however, was highly uneven and largely confined to each of the emergent factions within the group. Interactions between these subgroups might be better characterized as the exchange of dis-regard or anti-regard, where the expertise, professional knowledge, and integrity of members were often openly criticized. These conflictual encounters reflected the diverging interpretations and negotiations among members around what represented good food and good farming. Such negative knowledge exchanges undermine trust and act as a disincentive for participation, and in the case of HMLFI, prompted some members (especially women) to withdraw from the initiative.

We found that as group meetings and interactions became more acrimonious, women who had initially played important roles as organizers began to drop out, leading to a highly malegendered organizational dynamic. It is now widely suggested that, compared to the male-dominated spaces that pervade conventional agriculture, women are better represented in the sustainable agriculture industry and often occupy leadership positions in alternative food and agriculture organizations (DeLind & Ferguson, 1999; Jarosz, 2011; McMahon, 2011; Trauger, Sachs, Barbercheck, Brasier, & Kiernan, 2010). However, as much as the cooperative nature of CFNs might represent feminized organizational forms that are "resistant to a hegemonic masculinity (i.e., individual, corporate, competitive ethic)" (Harter, 2004), this does not preclude the emergence of a strongly male-gendered space, which indeed occurred in the HMLFI and led to the intensification of conflict within the group. Many of the women felt that remaining within the HMLFI as active participants would undermine valued and sometimes longstanding relationships, ones that they did not wish to jeopardize. While women have been found to

play an important role in generating and maintaining social capital within rural communities (Healy, Haynes, & Hampshire, 2007), that role ran at odds with the social dynamics that were emerging in the HMLFI.

Although the original form of the HMLFI was ultimately dissolved, a diversity of innovations emerged as participants responded to the opportunities and challenges that the HMLFI itself generated. Members of HMLFI were forced to reflect in new ways about their farms and values, thus stimulating individual and collective innovation — whether this included new cooperative ventures, new farm management practices, identification of new education and mentorship opportunities, and/or the eventual reincarnation of the HMLFI in its modified form. Based on the relative success of the latest iteration of HMLFI, numerous groups in Manitoba and beyond have interacted with HMLFI members to explore developing their own CFNs (Laforge & Avent, 2013).

While such grassroots experiments may at first glance seemingly fail, the excitement and the learning that results from these initiatives is often redirected into re-imagined individual and collective innovations that constitute a broader process of socio-economic change. Evaluating the *cumulative impacts* of these projects by looking beyond the analytic, spatial, and temporal boundaries of any given organization may provide important insights into their evolution and wider rural development implications and how they fit into a longer narrative of grassroots innovation.

In retrospect, participants unanimously agreed that the group should have confronted their differences from the outset. As the group was splitting up one farmer commented, "separate we might be able to do this but together we'll never survive. It was a marriage that was doomed to failure" (Clint Cavers). To effectively work across difference there may be a need for a preliminary interactive space to foster mutual understanding and trust and to identify common values and goals, and as importantly to explicitly discuss intergroup difference, before more interdependent economic enterprises are pursued. Working together on smaller and more readily achievable projects might have provided an opportunity to bridge many differences and to

build the social capital required to sustain more involved collaboration (Glowacki-Dudka et al., 2013). Such a space could have supported the development of more organic enterprise(s), which in our case would likely have led to the formation of two separate groups at the outset, rather than one. Once established, these two groups, having met their own needs, might have then explored the hybrid model or other modes of collaboration as a way of better harnessing their complementary interests and strengths.

Conclusions

The progression of agri-industrialism has led to the consolidation of corporate power and declining sustainability of family farming, which in turn have compromised the resiliency of rural communities (Anderson & McLachlan, 2012; Wilson, 2010). Civic food networks, with their emphasis on participation, democratic governance, and local control, offer an alternative pathway for farmers and rural communities to meet these challenges through a place-contingent, cooperative approach to agrarian community development. They challenge the individualistic and competitive logics that have disconnected and divided farmers and rural communities. These CFNs can play an important role in scaling up local food, cultivating a cooperative ethos, and delivering a wide range of economic and social benefits.

At the onset of this study we were steeped in the excitement of the emerging organization and in a literature on alternative food networks that celebrated social embeddedness and consensus. We did not anticipate the conflict that would later emerge and ultimately compromise the cohesiveness of the CFN. Arguably, it was our long-term and active involvement as researcher-participants that allowed us to document and experience group negotiations and tensions that may be less accessible using more detached (i.e., more extractive) social research approaches where research "informants" reflect retroactively on their experiences. Long-term, community-engaged, and participatory action research approaches are ideally suited to accessing and understanding these underlying processes and

This research suggests a range of potential

directions for future research. First, our in-depth analysis of the tensions that occurred among farmers and also between the farmers and the notfor-profit organization suggests that there is a need to better understand the tensions between eaters and farmers in the emerging multistakeholder forms of CFNs. Another potentially fruitful area of inquiry would focus on the intersection of food justice and CFNs and better describe barriers to farmer participation in these networks, including those related to income, gender, race, and geography. Finally, our research approach raises important questions about the role of university researchers in community development; future research might explore the benefits and risks of academic involvement in the fast-growing number of food-related action research projects.

Our case study suggests that the predominant focus on civic harmony and inclusion in CFNs can obscure the capacity to make sense of and effectively contend with the inevitable power struggles and conflict that permeate these alternatives. Mount (2012) suggests that local food projects are defined "not so much by their shared goals and values, as by the processes through which goals and values come to be shared" (Mount, 2012, p. 115). In our case study, this process ultimately excluded dissenting voices, rather than negotiating a shared and mutually supportive space. From a purely economic rationale, this minimizing of difference among participants can allow for more efficient and expedient business development. However, a more holistic and longer-term vision of CFNs requires that participants confront and reconcile their differences to enable a wider diversity of economic, social, and environmental outcomes.

Failing to confront these differences in CFNs will only perpetuate the fragmentation of rural communities and foster individualistic approaches that limit the capacity for collective problemsolving. By reimagining the challenges of diversity as an opportunity for grassroots innovation we can shift our praxis toward a politics of the possible (Harris, 2009). This will encourage CFNs to focus on strategies that build bridges to harness the diversity of resources, skills and ideas brought together by the wide range of participants attracted

to CFNs. We should envision both "successful" and "unsuccessful" CFNs projects as imperfect works-in-progress, and, ultimately, as embedded within a long-term agenda to build more resilient, and civic, food networks. It is only by embracing the strength in our diversity that the full potential of these networks will be realized.

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The conventionalization of local food: Farm reflections on local, alternative beef marketing groups

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Abstract

Across North America, the local food market has been peddled as an alternative or value-added production and marketing niche for small and midscale family farms. Many former commodity farmers are now selling product to local consumers — either on their own, with groups of farmers, as cooperatives, or through intermediaries with active distribution chains.

The literature on the conventionalization of organic suggests that larger farm scale and an intermediary-controlled chain may produce unintended effects for producers in these local markets. The same literature also questions the role

of farm scale in shaping motivations. Reflections from first-adopters on their experiences in local food marketing channels — both direct-to-consumer and through intermediaries — could provide insight into the effects of "scaling up" and a potential move toward the conventionalization of local food.

In this paper we investigate two models of "local beef" groups that operate in the province of Ontario: one organized by farmers and reliant on direct marketing, and a second, larger-scale model, led by intermediaries that purchase and market the product from farmers. Through an analysis of interviews with farmers, and borrowing from adoption of innovation frameworks, we present — in the farmers' words — some of the factors and motivations that attract commodity producers to these two types of marketing innovation, and try to expose the gap between expectations and outcomes. The findings help to gauge how scale of farm and group operation influences results, how

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this relates to processes of conventionalization, and what this means for the future of these local marketing groups.

Keywords

adoption of innovations, alternative marketing, beef, conventionalization, cooperatives, local food, scaling up

Introduction

In recent years, diversification and value-added production have emerged as options for farmers hoping to maintain family-scale production in North America. The potential of local food as an alternative niche market has increasingly attracted attention, and many midscale producers are testing this market either through direct sales or through a growing number of alternative marketing and distribution chains serving local consumers.

This trend begs questions not only of commodity farmers' ability to adapt to alternative marketing arrangements, but also of the impacts of increased volumes from these chains on local markets. The literature on organic conventionalization suggests that chains controlled by intermediaries not only drive down prices, they also encourage participation of larger producers whose approach and mindset are ill-suited to alternative markets (Buck, Getz, & Guthman, 1997). Research capturing the experiences of first-adopters of these new local food markets could provide insight into the potential for conventionalization to influence local food outcomes.

In this paper we investigate two models of "local beef" group marketing chains in the province of Ontario: one organized by farmers and reliant on direct marketing; and a second, larger-scale model, led by intermediaries that purchase and market the product from farmers. Through an analysis of in-depth interviews with farmers, and borrowing from adoption of innovation frameworks, we explore the factors and motivations that attract commodity producers to these market innovations; the influence of scale of farm and group operation on their experience; the extent to which conventionalization widens the gap between expectations and outcomes; and what this means for the future of these local marketing groups.

The Problem for Family-scale Farms

Over the last half century, family farms in the province of Ontario have experienced the impacts of agricultural trends familiar across developed regions of the world, including intensification and specialization of production, and the consolidation of landholdings, pushed forward by a discourse of competition, modernization, and efficiency. At the same time, a combination of overproduction, market and retail consolidation, and global sourcing has produced stagnant commodity prices, a smaller share of a shrinking consumer food dollar, and steadily increasing input costs, resulting in an economic crisis at the farm level. The conventional solution was increased scale, concentration, capital costs, and debt levels (Gray & Lawrence, 2001; Pierce, 1994) — a productivist treadmill that demanded continual growth without guaranteeing adequate on-farm income (Kloppenburg, 2005; Sparling & Laughland, 2006). For many farm households, this required levels of debt and investment that were either too risky or unavailable — a situation encapsulated in shorthand by the banking sector's oft-given advice to "get big or get out."

Challenges notwithstanding, many family farms have rejected this fatalistic assessment and have explored diverse development paths (Inwood & Sharp, 2012; Oerlemans & Assouline, 2004; Smithers and Johnson, 2004), enabled by a dramatic increase in off-farm labor and income. Over the past generation, off-farm employment in Ontario has gone from occasional supplement to necessary component of household income, now responsible for well over three-quarters of total farm revenue (Agriculture and Agri-Food Canada [AAFC], 2007); almost half of farm operators have an off-farm job or business (Statistics Canada, 2012).

For family-scale farms left behind by commodity systems, value-added differentiation —through new production, processing, or marketing strategies — has been peddled as a cure (Barbieri & Mahoney, 2009; Stevenson & Pirog, 2008; Verhaegen & Van Huylenbroeck, 2001), often in combination with direct marketing. Local food niche markets, which have been growing steadily over the last decade, have attracted much attention

in this context (Bloom & Hinrichs, 2011; Inwood & Sharp, 2012; Stevenson & Pirog, 2008). By capturing a value-added premium, these alternative strategies promise to reduce the need for off-farm jobs, without demanding a dramatic increase in farm production scales. However, these niche markets have failed to make major inroads in overall market share. Along with limits to the local biophysical and productive resources, and regional infrastructure (Clancy & Ruhf ,2010; Donald, 2009; Kneafsey, 2010), consistent supply is often listed as a significant barrier to growing local food markets (Jarosz, 2008; Metcalf Foundation, 2008; Ostrom, 2007). These are compounded by difficulties in accessing stable, value-adding alternative food chains (Bloom & Hinrichs, 2011; Ilbery, Maye, Kneafsey, Jenkins, & Walkley, 2004; King et al., 2010). Midsized farms with a product that can support local marketing chains stand to reap valueadded benefits, while substantially increasing the volumes currently marketed locally.

However, several factors could influence reorientation to a local food alternative. For transitioning farmers, the new opportunity is not without its costs and risks. Most are unfamiliar with producing and marketing a finished product, either direct-toconsumer or through an alternative marketing and distribution chain. Other possible barriers include a lack of influence and power in new chains, the financial risks of developing alternative marketing activities, and the difficulties of creating alliances with processing, distribution, and wholesaling intermediaries (Ilbery et al., 2004). Collective marketing efforts — including sharing costs, labor, and risk — can minimize some of those barriers and make transition more attractive to farmers (Oerlemans & Assouline, 2004; Stevenson, 2009; Verhaegen & Van Huylenbroeck, 2001).

On the other hand, if the transition for largerscale farms is too easy, their approach to production and the increased volumes in local, alternative markets may produce unintended side effects. This warning is an extension of the "conventionalization" thesis, used over a decade ago to describe developments in the organics sector, where the price premium, promises of buyers, strong consumer demand, and weak commodity markets attracted large numbers of conventional producers with no strong ties to the "organics movement" (Buck et al., 1997; Guthman, 2004a). In California, this influx grew organic volumes rapidly, but also diluted the producer pool with those interested only in doing the minimum required to meet organic standards while maintaining industrial production volumes, and continuing to produce conventionally. These large-scale new entrants were less likely to sell direct and, as a result, their profits depended on volume, as their price premium was much lower selling through a buyer, packer, or other intermediary (Guthman, 2004a).

Increased volumes in turn created competition that had not previously existed, forcing all producers to respond to new market imperatives through intensification of production (Guthman, 2004b). This increased the potential for reproduction of conventional food chain outcomes, including loss of small producers (Lockie & Halpin, 2005) and "the operation of a farm-based cost-price squeeze" (Smith & Marsden, 2004, p. 355). Falling premiums and a loss of producer control have been recorded in multiple regional markets (De Wit & Verhoog, 2007; Guptill & Welsh, 2008; Smith & Marsden, 2004), driven by oversupply and "oligopolistic positioning" (Smith and Marsden, 2004, p. 356) of retailers in organic supply chains.

This cautionary tale of organic conventionalization is directly relevant to local, alternative markets, since the same ill-defined mix of characteristics that once were applied to "organic" have largely been transferred to "local," including assumptions about smaller farm scales and synergistic benefits that accrue to farmers, consumers, society, and the environment (Friedland, 2008). If growth in the local food market is driven largely by the introduction of largescale producers and groups with more "industrially oriented" philosophies and practices, this has the potential to reproduce the outcomes seen in the organic market, including (a) driving down price premiums and contributing to intensification (Guptill & Welsh, 2008; Guthman, 2004a), but also (b) decreasing the attention paid to noncommodity benefits that are often loosely articulated yet central to the local food contract. Local markets offer a premium that not only recognizes the tangible and marketable traits of the product and the geographic proximity of its production, but also reflects ecological, food security, and food safety outcomes (Bjørkhaug & Richards, 2008) as well as numerous "intangibles" — from trust and reassurance, to the display of support for local community and farmers (Mount 2012; Verhaegen & Van Huylenbroeck, 2001).

These noncommodity benefits are more easily acknowledged and exchanged through smallerscale chains that are organized by farmers and reliant on direct marketing. Larger-scale local marketing efforts that forego the interaction required to deliver (and capitalize on) noncommodity benefits to consumers — in favor of increased volume and supply-chain efficiencies — may be more likely to adopt practices that promote oversupply and reproduce commodity-chain relationships with farmers, creating a parallel, conventionalized form of local (Lockie & Halpin, 2005). But where increased market volumes come from groups of farmers whose only experience is in commodity production, to what extent is conventionalization an outcome of supply-chain scale and dynamics, or the result of the dilution of motivations in the producer pool?

This latter point has long been contested in the organic conventionalization debate. Some contend that, when the market attracts farmers whose primary interest is the price premium, these farmers may be less resistant to processes of conventionalization (Van Huik & Bock, 2006, in De Wit & Verhoog, 2007). But evidence supporting this thesis has been uneven (Hall & Mogyorody, 2001); in their assessment of the conventionalization of organic, Lockie and Halpin (2005) found no motivational differences based on either farm scale or previous involvement in conventional production. Drawing a direct line between motivations and conventionalization is a problematic approach that necessarily simplifies complex motivational profiles (Guthman, 2004a; Lockie & Halpin, 2005) and minimizes the influences of contextual factors, including farm development path, ease of transition (or "fit"), associated risks, and access to local alternative marketing groups.

In Ontario's beef sector, *local* and *natural* have come together to provide an alternative niche opportunity for value-added production and marketing. Many former commodity beef producers are now finishing¹ and selling natural beef to local customers — either on their own, with groups of farmers, or through intermediaries with active distribution chains. For the purposes of this project, farmers from 27 farms, including 10 couples, were asked to describe their practices before and after joining either direct-marketing or intermediary-led groups; to recall the factors that encouraged them to join; to characterize the nature and function of the group; and to reflect upon their goals and expectations, barriers, satisfaction level, and recommended changes.

Following from a broader research project looking at the effects of scale on the transformations occurring in local food systems (Mount, 2012), in this paper we seek to identify the dissatisfactions, attractions, and fit that encourage farmers who are operating at various scales to become involved in local, alternative beef marketing groups. The analysis delivers a farm-level evaluation of the viability of these groups, paying close attention to how farmers interpret the differences in outcomes produced by the scale and practices of intermediary-led (vs. farmer-led) local marketing chains. This approach will identify gaps between producer expectations and assessments, while also seeking to uncover how the scale of both farm operation and alternative distribution chain interact with contextual factors, motivations, expectations, and evaluations of early-adopting, innovative farmers. Taken together, the perspectives and experiences of producers also shed some preliminary light on the degree and impact of so-called conventionalization in the sector.

In what follows we present a framework for analysis, drawing on adoption of innovation themes and concepts as a way to unpack and systematically investigate the motivations and experiences of farmers. After a brief description of the broader context for decision-making on Ontario beef farms, we describe the research approach and the rationale for categorization of farms, followed by a presentation of the main findings from each category. We conclude by analyzing the influence

¹ Finishing is the final stage of livestock rearing, when animals are fattened or fed to a desired weight before slaughter.

of scale and conventionalization on the outcomes described by these farmers, as well as a broad assessment of the possible conventionalization and potential future of these alternative marketing strategies.

Insights from Innovation Adoption

The challenge of this research involved interpreting reflections from first-adopters on their experiences in local food marketing in order to more thoroughly understand their motivations and expectations, and thereby provide insight into the potential for processes of conventionalization to influence local food outcomes. As mentioned previously, motivations and expectations are framed by a complex set of factors including context, access, fit, and risk. The literature on adoption of innovations offers the tools required to make sense of these decisionmaking processes. While much of this literature in the past has been devoted to understanding the adoption of new technologies or farm production practices (see Röling, 2009), this framework is compatible with the factors that motivate the adoption of alternative marketing strategies.

Local marketing chains delivering value-added product are, by their nature, both alternative and innovative; they force producers to enter into and adapt to new relationships and, often, new production practices. These changes are not made lightly. Family-scale commercial farmers must confront a series of factors that push, pull, and predispose them to look at these alternative marketing strategies. While poor commodity markets and the lure of an expected price premium are important (Barbieri & Mahoney, 2009), if these two factors alone provided sufficient motivation, alternative chains would be the dominant strategy of struggling family-scale commodity farmers across Ontario. Yet even with the associated risks, expanding conventional production remains a common strategy for family farms in the province. Along with off-farm work, it is the income supplement of choice for all farm development pathways (Potter & Lobley, 2004; Smithers and Johnson, 2004; Statistics Canada, 2012).

Regional societal and economic forces, commodity markets, and competition all play a role in these decisions, and yet only a small subset of the family-operated farms in Ontario attempts the transition. Clearly it is important to look for other factors that may also be attracting farmers, such as time, existing on-farm income, age, proximity to markets, and marketing skills. At the same time, the priorities, limitations, and goals of the farmer from familial to philosophical to economic — act as filters on these pushing and pulling factors (Barbieri & Mahoney, 2009; Greiner, Patterson, & Miller, 2009; Jervell, 1999). Recent research has identified a growing number of farms (particularly at the rural-urban interface) that are turning away from the risks of expansion and debt and toward increasing value-adding from niche production and localization, as well as "enterprise stacking" (multiple products and businesses on the same farm), to increase on-farm viability through diversification, flexibility, and intergenerational engagement (Inwood & Sharp, 2012).

Relative Advantage

For some farm families, alternative market innovation may simply be a better fit. Adoption is more likely if farmers are already familiar with the relevant practices (Marra, Pannell, & Ghadim, 2003; Wejnert, 2002), or have useful knowledge or experience (Prokopy, Floress, Klotthor-Weinkauf, & Baumgart-Getz, 2008). Likewise an alternative strategy may fit their philosophical or lifestyle goals (Moreland & Hyland, 2009), or mesh well with the current trajectory of their farm enterprise (Röling, 2009).

The nature of the commitment also influences the "fit," including whether alternative marketing chains are simple to join, participate in, or leave, and possible to try on a small scale. These factors — described in the literature as "complexity," "trialability," and "divisibility" (see for example Moreland & Hyland, 2009) — help to calculate not only the ease of transition, but also the risks and relative advantage involved with adoption.

These decisions are based on a complex set of interconnected factors (see Table 1) that measures the strengths, weaknesses, and potential of the new practices against those being replaced, resulting in a judgement usefully referred to as the *relative advantage* (see Greiner et al., 2009; Moreland & Hyland, 2009). Dissatisfactions, attractions, and predisposi-

Table 1. Indicators in the Calculation of the Relative Advantage of an Innovation

Indicators	Factors
Motivations	DissatisfactionsAttractionsPredispositions
Fit	FamiliarityEffective knowledgeCommitmentComfort
Costs	Transition costsTransaction costsOperational costs
Risk	Risk attitude Uncertainty Insurance

tions push and pull farmers towards these innovations, and are weighed against physical, philosophical, and enterprise "fit" in a calculation of relative advantage.

This calculation is commonly portrayed in the literature as a form of cost-benefit analysis (Lubell, Hillis, & Hoffman, 2011). Stacked against motivations and fit are the costs, including the transition costs (altered practices) and any known increases in operational costs (new inputs) or transaction costs (new relationships). But this analysis is mediated by the knowledge, intuitions, and perceptions of the farmer, including the estimation of the relative potential returns — both current versus future, and old chain versus new (Marra et al., 2003; Prokopy et al., 2008).

In addition, the likelihood of adoption is influenced by the perception of the risks and uncertainties involved in participation (Greiner et al., 2009; Moreland & Hyland, 2009), and is mediated by the farmers' attitudes towards risk-taking. These "risk attitudes" are in turn affected by the region and context of the farm (Greiner et al., 2009), as well as any support that could act as insurance and/or mitigate risk (Sunding & Zilberman, 2001). Familiarity with practices of this alternative will also reduce the perception of risk (Wejnert, 2002). This complex interaction of attitude, risk, and uncertainty is likely to influence not only the decision to adopt, but also the extent or intensity of adoption, reflected in the commitment of the farmer to his or

her group (Greiner et al., 2009; Marra et al., 2003).

The overall balance of factors influencing the assessment of relative advantage is captured in an informal determination of the assumed costs, benefits, and risks of joining, balanced against the motivations driving their interest, and the fit of the alternative to the practices and philosophy of the farmer. The weight given to each of these factors, in turn, is influenced by personal priorities: financial versus lifestyle, and short-term versus long-term (Greiner et al., 2009).

While these factors as a whole offer an explanation of why farmers take part in local, alternative marketing strategies, their assessment of the chain's ability to meet their expectations rests on their reassessment of its potential. Farmers' views of the conventionalization or viability of their alternative value-added marketing chains reflects experiences within their local group, comparing expectations and outcomes, tempered by factors that indicate a willingness and ability to adapt to unexpected outcomes.

According to the conventionalization premise, one might expect large, formerly conventional beef farmers to display identifiably different motives and expectations from small-scale producers engaging in local food initiatives as an alternative (see Buck et al., 1997). However, it is necessary to determine the extent to which the farm's scale of operation influences the decision to choose a group with large or small-scale operations, as this may play a role in shaping motives and expectations. For purposes of our own analysis, this represents an important consideration, as the scale of both farm operation and marketing group may play an important role in the farm-level calculation of risks and benefits, the decision to participate, the level of engagement, and the interpretation of results.

Ontario Beef: A Glimpse of the Sector and the Research Sample

The first decade of the 21st century was not kind to Ontario beef farmers. The vast majority operated small or midsized herds that supplied breeding cattle, calves, and finished animals to the conventional commodity chain. With the loss of most export markets after the discovery of a single

Canadian BSE2-infected animal in 2003, this commodity chain broke. Beef from the large feedlots of Alberta that were originally destined for export flooded the Ontario market, driving down salebarn and packer prices, causing many of these farmers to hold their cattle, and disrupting the entire chain, except for retail, where prices remained stubbornly fixed (National Farmers Union [NFU], 2008). In the midst of this crisis, Cargill,³ a multinational agricultural commodity monolith that already owned large beef-processing facilities in Alberta, purchased Better Beef, a facility in the city of Guelph that processed 80 percent of Ontario's beef. This gave Cargill over 50 percent of Canada's federally inspected fed-cattle slaughter (Standing Committee on Agriculture and Forestry, 2005).

Over the course of the next decade, prices for commodity beef in Ontario slowly rebounded, but not to pre-BSE crisis levels. Many small and midsized beef farmers simply abandoned the sector; between 2001 and 2006, Ontario lost 18 percent of its beef farms (Statistics Canada, 2006). By 2010, a Canada-wide survey of farmers found that 57 percent of beef producers described themselves as "better off" than five years ago (an alltime high number for beef producers), and also that 41 percent would discourage family or friends from a career in primary production (Canadian Cattlemen's Association [CCA], 2011) — a much greater proportion than any other group of farmers. Those who remained were strongly motivated to find alternatives to conventional beef markets and their role as producers of undifferentiated commodities. They were also more inclined to be receptive to the inherent rewards of alternative marketing chains than they might have been prior to the BSE crisis. These realities provide context for the decisions made by farmers in this study.

Table 2. Sample of Alternative Beef Farms in Ontario: Farm Scale X Group Marketing Approach

	Farm Scale (Animals shipped annually)		
Alternative Marketing Chain	S (< 25)	M (25-100)	L (> 100)
Direct	11	5	2
Intermediary	_	7	2

The Sample

Interviews were conducted primarily on-farm, with producers from 27 different farms, including 10 farm couples. The average age was close to the Ontario farm average (approximately 56), with only three respondents under 50. More than half were farming on the family farm, and only six had been farming for fewer than 20 years. Seventeen also worked or had retired from full-time off-farm jobs.

All of the beef sold through these groups was raised as "natural," meaning free of administered hormones or antibiotics. According to our results, the farmers attracted to value-added niche marketing are not a homogeneous cluster, but range in scale from small cow-calf⁴ herds to feedlots.

The sample was categorized according to (1) farm scale and (2) type of alternative marketing chain. For the purposes of this study, farm scale was determined primarily by the number of beef finished on the farm per year (see Table 2). Many of the farms designated as "midsized" actually have large landholdings and secondary agricultural enterprises, including cash crops and diverse livestock. For almost all, beef was the primary focus and largest source of on-farm income. The average beef herd in Ontario has 65 head of cattle (Canfax Research Services [CRS], 2011). Farms finishing fewer than 25 head per year (*n*=11) were desig-

² Bovine spongiform encephalopathy (BSE), also known as "mad cow disease," is a fatal neurodegenerative disease that affects cattle and is implicated in the development of variant Creutzfeldt-Jakob disease in humans.

³ While there are several large multinationals operating in the intensely concentrated industrial beef sector, the largest and most notorious in Ontario is Cargill (see NFU, 2008). For the farmers in this study, "Cargill" often serves as shorthand for industry concentration and market distortion.

⁴ "Cow-calf": In the industrialization of the beef chain, the greatest value was given to the "finishing" stage, where cattle are fed to a desired weight before slaughter. As this stage became segregated into feedlots, most small beef herds restricted their operations to breeding, calving, and rearing animals that were sold at "live" auctions to feedlot purchasers. These small herds became known as cow-calf farms. As a result, the growing cohort of farms in Ontario that keep and finish their own animals to sell directly to packers or other customers have become known as "cow-calf-finishers."

nated "small-scale." Those finishing over 100 head per year (n=4) were classified as "large," based on the notion that this level of production demanded full-time focus on finishing (and marketing). The remaining farms, finishing 25–100 per year (n=12), were designated midsized.

Farms were also differentiated according to whether they sold direct to consumer or via an intermediary. The former belonged to one of four small-scale, direct-marketing groups, where producers arranged the processing and were responsible for marketing and retailing. The latter sold finished animals through one of five larger-scale groups organized by intermediaries with an established value-added chain that assumed responsibility for processing, marketing and /or retailing. These intermediaries offer midscale farms one of the few opportunities to access a market for beef produced with alternative practices, by communicating "credence attributes" (such as no hormones/no antibiotics) to consumers (Buskirk, Schweihofer, Rowntree, Clarke, Grooms, & Foster, 2013). Because of the volumes involved, these intermediaries sought access for their niche products to conventional retail markets, creating a tension between the demands of those markets (higher volumes and slimmer margins) and the farmers' expectations of an alternative market. The details of these groups' activities will be reported elsewhere in the research project.

In the following section, farmers' experiences with and reflections on direct and intermediary-led marketing approaches are analyzed, with careful attention to differences based on the scale of farm operation. For each category, the analysis seeks to capture farmer evaluations of relative advantage as well as their perceptions of barriers and adaptations, results versus expectations, and viability of the alternative marketing chains.

Results

Direct Marketing Chains

The four direct marketing groups ship on average between 2 and 20 head per month, and use four different organizational models. The smallest is an informally organized group of like-minded farmers, who deliver boxes of freshly frozen beef, ordered online and via telephone, to customers in central drop-off locations (mostly in the largest regional city) several times per year. Farmers in the other three groups sell directly to consumers through varying combinations of local farmers' markets, restaurants, and small retail and butcher shops. Of these groups, one is a cooperative, another is incorporated and sells under a regional brand, and the third sells through the farm brand of the principal. The latter operates as a sole proprietorship, while the others use consensus-based decision-making.

Just over one-third of all farms in the study were small-scale farms selling direct to consumer. These farms (n=11) contained both the youngest and oldest farmers, including many retired or approaching retirement, and as a result family cycles and farm paths influenced many of the choices on these farms. The farmers from midsized farms (n=5) in this category were largely pragmatic in their expectations. Most continued to ship through conventional channels even after joining an alternative marketing group. For obvious reasons, not many large-scale producers were involved in small, direct-marketing groups. The two exceptions operated small-scale feedlots and had years of experience in finishing and direct marketing. The first sold as much as possible through alternative markets, including a sizeable local freezer beef trade. The second shifted focus from breeding to direct-marketing fresh beef using his farm as a brand. Both were looking for a stable, large-volume alternative to commercial sales.

Relative Advantage

Poor prices and packer control of the beef market were a large source of dissatisfaction for producers in this category, particularly after the devastating crash of the commodity beef markets following BSE. For these farmers, BSE accelerated a movement away from commodity production and toward niche markets.

The big packers, it doesn't matter on what niche you're aiming for, can squeeze you to death...They can't on local; they can't even really guarantee that it is Canadian beef. So we did that. [D1]

It is therefore no surprise that these farmers identified better prices and stability (through price and market control) as the principal attractions of the alternative strategies. Most felt that, because these new direct markets required flexibility and perseverance, the local food strategy was beyond the reach of Cargill and major retailers, and gave them favored access to elite consumers who are willing to pay a premium for a high-value product.

Among small-scale farmers, only two had significant experience with both finishing cattle and marketing the beef themselves, as freezer beef.5 The majority had minimal or no experience with either finishing or direct-marketing, instead operating as cow-calf producers or breeders6 and selling much of their cattle at local auctions on the open market. This was not the case in larger herds, where three of five midscale and both large-scale producers had valuable experience with finishing and direct-marketing, which suggests that effective knowledge may be an important precondition to larger farms' assessment of fit. Several small-scale farmers had recently retired from off-farm jobs, instantly making these alternative groups a better fit. As one such farmer [F11] said, "I would have never tackled it if I were still working." This mirrored a philosophical fit, where most farmers identified a larger purpose for the alternative chains: to support and sustain small farms and the local community through fair prices and working together.

For most, the financial transition costs were minimal, as existing practices met the protocols demanded by the groups. Even for those new to finishing (and purchasing feed) this involved little added expense, as most shipped few beef per year. Many stated that they would not have joined if they thought the chain would involve too much investment of time or money, but also recognized that it would take a significant contribution of time and effort from each group member to make it work.

We are eliminating the middle man, because each man along the chain claims a piece of the profit — but there also has to be a realization that somebody has to do that work, so if you are going to supply animals to the group you are going to have to do that share of the work...It's not a free ride. [E1]

Many suggested that this expectation had kept some farmers from trying direct-marketing strategies and, similarly, had caused other farmers to leave their groups in the early stages of development. Almost all small-scale farms (but only two midscale farms) relied on diversified income sources (mainly off-farm labor or pensions) as a form of insurance. They felt that by joining a group, their prospects for payment were better than they would be operating alone, while the risk of default would be spread across the group. The calculation of relative advantage in direct-marketing chains is summarized in Table 3.

Alternative Market Viability

Prices and customer interaction made it worthwhile for most. While the premium was modest, because these groups grew slowly, their small volumes produced low transition costs. At the same time, they could see the benefit of shared labour, expenses and risk, and the relative price advantage. However, most felt that the price premium would be sufficient to sustain only those farms operating at a large scale (most were not).

Most of our members are my age or older, so an expansion really isn't in their way of thinking....The vast majority — I think three-quarters of them — are retired from their original jobs, or in the process of retiring. [F2]

For those on the retirement path, small volumes with modest profits fit their trajectory. For the rest, the desire for growth had to be balanced against the risk of investment, without the cash flow required to pay full-time marketing or sales staff.

In groups where each member participated in

⁵ "Freezer beef": Beef from cattle that the farmer finishes on the farm, markets, and sells, often by the side (half) or quarter, direct to customers, destined for their freezers.

⁶ "Breeder": As with plant breeding, a "breeder" raises the seed stock, selected for its genetic characteristics, that other farmers will purchase to improve their herd genetics.

Table 3. Relative Advantage in Direct Market Chains

Indicators	Factors	Examples
Motivations	DissatisfactionsAttractionsPredispositions	 BSE, packer control, farm revenues, off-farm labor, succession Price premium, stability, value-added discourse Control, dignity, "alternative," egalitarianism, sustain family-scale farms and local communities
Fit	FamiliarityEffective knowledgeCommitmentComfort	 Freezer-beef sales, networked to founding members of group Previous finishing and/or direct-marketing experience Reversibility, low capital requirements, grows own feed Philosophical, lifestyle, and enterprise goals
Costs	Transition costsTransaction costsOperational costs	 Difference in time, effort Increased importance, number, investment in relationships New inputs (special feed protocol, freezers)
Risk	Risk attitude Insurance	 Desperation Diversification, retirement strategy, shared costs

decision-making, many identified the time-consuming nature of meetings as a negative outcome. In one group, a specified feed ration became a particularly negative outcome for those who had expected to grow their own feed. For two of these farmers, discord and unexpected expenses caused them to leave their group, but not alternative marketing: one has since successfully developed a sizable direct-marketing clientele. One helpful transition approach adopted by a small group was selling its members' overflow — for a small premium over commodity prices — to a large, intermediary-led chain, since their practices met its requirements.

Before when I sold my animals I never met the guy who ate the steak, whereas now he is giving you feedback about it. Of course it makes you feel better that you're doing something that someone is happy with; you're doing the right thing, obviously. I think we were doing the right thing before, but we just never heard it. [F8]

While most of the farmers in this category had no previous experience with the consuming public, many quickly learned to appreciate the feedback, satisfaction and validation that came with interaction. With this knowledge and reassurance, it was possible to adapt product lines, packaging, and even production practices in response to consumer concerns and suggestions.

It has to get bigger, or we are done. [D1]

Every farmer in this category identified increased volume as a necessity. However, increased scale demanded increased investment in infrastructure, marketing, and sales. For older couples, their age made them less disposed to long-term, growth-oriented investment.

Everybody else, if they have the equipment and they are young enough and they want to make those investments, well that is perfect. But for us it becomes a hazard. [E2]

All also agreed that consumer price expectations and tastes made it difficult to access the required combination of market share and premium. The barrier in this case was not their existing customers, but finding a strategy that allowed them to access consumers who were not currently looking for alternatives. As a consequence, many referenced the fickle tastes, unchanging habits, and waning engagement of consumers as a marketing barrier.

If we plateau where we are right now I don't know how long we can survive, because you can only ask people to volunteer so much. [F8]

The number of volunteer hours required of members, especially in the cooperative, led several to suggest that the age of members and volunteer fatigue were also potential barriers and that a paid employee would be required to sustain growth. The co-op used an unexpected revenue surplus from the previous year, along with a small price increase, to hire its first employees. This was part of a conundrum identified by many: despite high work and time commitments, the current price and volume were insufficient to pay for an employee or marketer required to increase volumes. Because they were not selling enough to satisfy their current membership, groups were reluctant to bring in new members to share the workload.

The direct-marketing category was notable for its focus on barriers and adaptations that related directly to the group. However, the mid- and largescale producers in these groups were highly motivated to develop an alternative market that could handle their volume. Some expressed frustration at being forced to continue to use the commodity markets. Many small-scale farmers advocated patient growth, and maintaining existing prices as well as high levels of satisfaction, quality, and standards, and were wary of the added commitments involved with increasing the scale of operations. Those on mid- and large-scale farms pushed for more aggressive strategies, including hiring a new employee, paying for advertising, and trusting that increased sales volumes would pay for both. Others suggested diversified product lines, or operating the abattoir as a community cooperative that, by virtue of its not-for-profit nature, could process local animals at dramatically reduced rates. This would translate into lower prices without affecting the producer premium.⁷

The product will sell itself, we've seen it. But if we don't have counter space it's not going to sell. [D1] One group developed a "fresh local" niche market, but lack of federal inspection and processing in the region was a barrier to new markets, and shipping livestock hundreds of kilometers for slaughter was simply not an option. For this group, federal inspection is essential, as it would provide access to major retail counter space. Without this, efforts to increase sales through local restaurants and farmers' markets would plateau, as both were reaching saturation points.

On balance, the farmers in this category were happy with their decision to join a direct-marketing group. Difficulty growing the market and high time commitments were recognized as limiting factors, but they were balanced by high price premiums and high satisfaction levels. However, the large-scale producers, while largely happy with their experiences and returns, both stated that their scale of operation meant that the inability to increase sales volumes would result in the end of their efforts, and their beef herd.

Intermediary-led Marketing Chains

The five intermediary-led groups operated at a large scale — all slaughtering over 20 head per week — and used fairly similar organizational models: incorporated, and branded using a regional or quality designation, or the farm brand of the original principal. While each of these groups featured "local" as an element of its marketing strategy, only two sold farm members' beef to consumers through their own retail outlets, while a third sold to customers through large event orders. None of these groups featured direct contact between consumers and farmers, who were simply input suppliers in their value-added chain. According to group principals, their farmers typically ship over 25 head per year.

The producers working with intermediary chains (*n*=9) were relatively youthful, with most in their early or mid-50s. Many had at least one family member working full-time on the farm. Two operated as breeding herds; two farms had certified organic acreage (but did not ship organic cattle), while several others had at least contemplated organic production. All were experienced with finishing cattle, and all had — over time — shipped to multiple intermediary groups.

⁷ Using this approach, diversifying to all meats and producing consistent quality at increased volumes, both the processor and the region's farms could once again become viable, bringing the next generation back to farms — where, currently, there were no prospects for succession.

Table 4. Relative Advantage in Intermediary-led Chains

Indicators	Factors	Examples
Motivations	DissatisfactionsAttractionsPredispositions	 BSE, farm revenues, succession, unfair market competition, distortion, fluctuation Price premium, stability, value-added discourse Control, dignity, innovation
Fit	FamiliarityEffective knowledgeCommitmentComfort	 Networked to group members Previous finishing experience Reversibility, low capital requirements (midscale) Philosophical and enterprise goals
Costs	Transition costsTransaction costsOperational costs	 Altered feeding practices, cost requirements (large-scale) Relatively low New inputs (special feed protocol)
Risk	Risk attitude Uncertainty	 Desperation versus resignation Failures of other alternative marketing chains

Relative Advantage

We're not commodity beef producers! [C1]

Most producers were attracted to niche markets as the only option that allowed them to collect a value-added premium and take advantage of the local food opportunity. The midscale producers showed a curiosity, flexibility, and willingness to innovate that made an alternative niche market a good fit.

That really fit our philosophy of farming as well. I'd like to think I'm reasonably innovative, but I mean I'm also very conscious of it being sustainable as well. [B3]

The near-organic producers and the breeders were somewhat sheltered from the effects of the BSE crisis on the live cattle market. The rest expressed dissatisfaction over unfair market competition from subsidized or unregulated imports and captive supply,⁸ which caused fluctuation and a lack of control over prices that affected the ability of farms to adequately plan their operations.

Most midscale producers were already meeting or exceeding natural practices and growing their own feed, which made it fairly easy to match expected production protocols. With low transition costs, and transaction costs minimized by sales through a licensed intermediary, farmers felt that these chains could be sampled with minimal risk. But most were also aware of cautionary tales and potential risks of dealing with niche intermediary groups. One of these intermediaries failed amid criminal charges (later dropped), and another struggled through difficulties in adapting to the alternative market (and has since failed).

Both large-scale farms were operated by experienced commodity producers, who saw economic value in typical conventional commodity-beef production practices, including hormone implants and feeding Rumensin® 9 and "distillers," a relatively cheap feed byproduct of ethanol production. Because of the transition costs, both anticipated that relatively more work and expense would be required to meet natural protocols. Both were definitely attracted by the premium; in fact, one stated that his business model would not be viable without the premium. The calculation of relative advantage in intermediary-led marketing chains is summarized in Table 4.

Alternative Market Viability

You are really still dealing with commodity beef and these guys...have substantial

⁸ "Captive supply": The operation of large-scale feedlots by packers. This is commonly understood as a mechanism for packers to control supply and regulate the market, and therefore reduce the prices paid to their cow-calf suppliers.

⁹ Rumensin® is an antibiotic administered in pre-mixed feed rations that allows cattle to eat and convert more grain, more rapidly — and is therefore marketed as a growth-promoter.

overhead costs, so they can't afford to pay you very much. [B4]

But they always find a way of getting their products a little cheaper, so they can make a little bit more profit margin on their end. They say they have to be more competitive in the pricing at their end, which is a whole lot of malarkey. [B5]

Producers in this category were not reticent to express dissatisfaction with their involvement. While they were confident that they produced high quality, consistent animals that generated a profit for the intermediary, most felt the premium that they received was insufficient to reflect this, and based on an unfair split of the consumer dollar. At the time of the interviews, all of these intermediary groups but one offered a premium that floated above the commercial price and therefore still reflected commodity prices, 10 which many described as artificial and fluctuating. Even with the premium, their rates remained lower than the historic commercial price — that is, still too low to sustain viable farms of their size.

I don't think you should be paid on commodity beef, to me...there should be enough market differentiation it should be a commodity on its own and not be based on the price of commodity beef. [B3]

All groups also reduced their payments to farmers using criteria to regularly claw back the expected premium with weight and grading penalties at slaughter. Their farmers felt that the penalties had less to do with the quality of the animals shipped and more to do with the growing numbers of "natural" producers and cattle, providing a ready pool of alternative supply. Finally, producers often had to wait for payment; proactively cover themselves through what they described as an inadequate provincial government insurance plan; or, as happened to more than one, absorb thousands or

tens of thousands of dollars lost to nonpayment.

We've even considered forming an association to try and put some kind of captive supply on these guys [intermediaries] — to raise the bar, instead of being dictated to. [B2]

We talked about setting up a Natural Beef Association (like they have in pigs)....We need organization, because numbers is power. [A3]

As a general conclusion, these producers felt that alternative chains show the same tendencies as packers in commodity chains: greed, control, and manipulation. With a price based on the commercial rate, similar relationships, and lack of control, it was clear to them that they were still part of a commodity chain. One large-scale operator, after trying several chains, selected and stuck with one intermediary chain with a stable base rate and lower discounts — both factors that made for more predictable planning. However, the second large-scale operator reflected the norm, preferring the flexibility of choosing from multiple chains as insurance against being in the control of any one group, even though he would prefer to stick with one.

These farmers also identified several barriers beyond their chain, including a lack of public advocacy and education about the high quality standards for beef production in the province, and a need for the rules and regulations that are applied to domestic producers to also be applied equally and rigorously to imports. Producers who had lost money due to nonpayment by intermediary groups also identified inadequate government support and insurance as barriers.

They tell us that we should be doing "value-added," more specialty products, but then they don't offer protection when you do. When you think back to '07 and '08, this is what [the Ministry of Agriculture, Food and Rural Affairs (OMAFRA)] was pushing: the "value chains," "niche markets," "branding"....

¹⁰ The exception was a group offering a fixed rate that was often slightly higher (but occasionally lower) than its competition.

And here, you have people that are taking the initiative, and you provide no support! [B4]

After losing thousands of dollars when one intermediary group failed and discovering that the financial protection plan offered by OMAFRA would not cover his losses, one producer started faithfully recording and reporting every transaction in order to guarantee insurance coverage.

There will be successes in some niches ...but there won't be enough of a paradigm shift to keep the industry afloat. [B2]

In their overall assessment, these producers thought that consumption of natural products would surpass organic because of the price differential, and that both niches, while viable, can not compete with mainstream because they are too similar to commodity chains. In fact, one felt that the similarity would spell the end of the natural beef chains in Ontario, as commodity producers and packers would soon flood the market with natural beef from Alberta, produced on a massive feedlot scale. While there were calls for large-scale, systemic responses, including two who suggested some form of supply management for beef, all identified the need to take advantage of the consumer demand for local. Two were drawn to direct sales as the only way to capture the full premium. Others saw the value of local, direct sales, but thought that smaller local or regional intermediary groups held the solution, perhaps by developing regional brands, producer coops, or value chains with local producers and abattoirs.

Discussion: Local Alternative Marketing Chains and the Influence(s) of Scale

The viability and effectiveness of local food initiatives are in many ways shaped by the expectations and aspirations of the participants. This is particularly the case in local Ontario beef initiatives, where the history of involvement in the commodity beef chain both informs farmers' optimism and tempers their interpretation of outcomes. While neither type of value-added marketing chain explored in this research could be described as unambiguously

Table 5. Key Findings by Market Category

Chain	Assessment
Direct- marketing	 Combination of premium and volumes not enough Urgent focus on developing markets to make the chain successful Significant changes required for increased sales, but insufficient volumes to pay for expenses of growth Consumer as barrier to growth
Intermediary	 Dissatisfaction with conventional approach, practices of intermediaries Niche not producing adequate returns to producers of high quality beef Alternative to intermediary-led chains required Little optimism for future of alternative niches

successful (see Table 5), the two models — marketing through an intermediary, and direct marketing — are very different innovations, with different natures and functions, and producing significantly different outcomes for their farmers.

Direct Marketing: Increased Commitment, Inadequate Volumes

Costs in both labor and time were high for directmarketing farmers, but not unexpectedly so. And these costs were balanced by tangible benefits in shared labor, time, and expenses, a reasonable price premium, and unexpected new skills, confidence, validation, and loyalty from their interaction with consumers. Of course, their group's approach to sharing, pricing, and expenses directly influenced the satisfaction levels of individual farmers. But the primary barrier for direct-marketing farmers, at all scales of farm operation, was the difficulty accessing and expanding their markets to provide fulltime, on-farm incomes. Almost all voiced a desire to sell all of their beef through the chain, reflecting a combination of both financial need and a universal wish to see the group survive and thrive. This attachment to group fortunes was a dominant theme among all direct marketing groups, which meant that farmers of different scales, but sharing the same direct marketing groups, often identified similar barriers and delivered similar assessments. One notable difference was the willingness of

larger farms in these groups to take an aggressive path that would increase group scale and deliver new markets.

The balance between group scale and growth in markets is critical, and there is a gulf between the volumes, coordination, and capital required for direct markets versus large retail contracts. But even growing small, direct markets requires investment, and without established midscale direct marketing infrastructure (e.g., food hubs) it can be difficult to find enough volume in direct markets to satisfy group needs (see for example the Tallgrass Co-op story in McCann & Montabon, 2012).

On the whole, those who have chosen the direct-marketing strategy identify more strongly with their group, take more satisfaction from the group's achievements, are committed to finding solutions that will improve their group's performance, and reflect more positively on their experiences. Most notable is the unwavering commitment of the farmers to local direct marketing as the only viable model for family-scale beef farms — and the universal acknowledgement that they are not there, yet.

Intermediaries: Value-Added Chain, Conventional Results

The farmers who chose to market through intermediaries were flexible innovators seeking valueadded opportunities as a way to keep their farms viable. While these farmers were far more likely than the direct-marketers to suggest structural and policy changes that would support the beef sector in Ontario, many identified philosophically as "alternative" — developing practices and genetics that separated them from commodity beef producers. These farmers were searching for a stable, value-added market whose prices reflected their efforts at distinction. What intermediary-led groups offered was operational fit and very little additional expense or changes in practices, except for those producing at the very largest scale. With low transition costs and low expected costs, the nature and function of the intermediary groups (which absorbed many transaction costs) encouraged dabbling.

But the same factors that produced an easy transition also reproduced the conditions of the

conventional commodity chain, which led to high producer dissatisfaction. This did not put them off alternative local marketing as a strategy. Instead, their dissatisfaction focused on the flaws of an intermediary model that did not transcend the conventional commodity chain, but merely replaced it.

In place of their current intermediaries, some farmers suggested local, direct markets as an option, while others looked to smaller-scale, regional intermediary groups as a potential model, with more responsiveness and perhaps even direct control by farmers. For these farmers, an affinity for similarly situated farms made an intermediaryled group the better option, as it offered better potential for large-scale marketing. In fact, both midscale and large-scale farmers had taken part in informal discussions investigating the regional intermediary option, but saw the need for consumer education and a lack of direct-marketing experience as serious barriers. While dissatisfaction was high and optimism low, all of these farmers continued in alternative markets as their last, best hope in a broken beef sector.

Lessons and Conclusions

All of the farmers in this study looked to local, alternative markets as an antidote to the commodity beef markets, particularly following the BSE crisis of 2003. While reflecting many different farm paths (retirement, contraction) and approaches (mixed farms, cow-calf-finishers, feedlots), almost all were looking for a viable method of extracting their products from the unpredictable commodity beef marketplace. And irrespective of farm or group scale, the price premium that resulted from producing for local, niche markets was the primary attraction. Even given the unpredictable nature of the current conventional beef market, there is a case to be made that many of these farmers would have continued in conventional production in the absence of the BSE crisis. At the same time, having been forced to adapt to circumstance, it is equally true that most are now actively seeking an alternative that provides not only an increase in price, but also an increase in producer control.

But, much like previous assessments of transitioning organic producers, attempting to parse farmer motivations beyond these broad strokes can be misleading. For several farms, the beef group represented an accessible regional alternative, rather than a philosophical choice. If multiple alternative marketing initiatives had been available in these regions, some would undoubtedly have selected a different type of group. This point is reinforced by the fact that some who shipped through intermediary chains also had a sizeable, direct-marketed "freezer-beef" trade. At the same time, most shipping through intermediaries had little experience with —or desire to learn—direct marketing, particularly given their production volumes. These farms were undoubtedly drawn to their groups because transition to these alternative marketing chains required so little change in farm practices, inputs, or volumes. While this may appear to indicate a more pragmatic set of motivations than farmers who chose direct marketing as a means of eliminating intermediaries from their supply chain, this conclusion begs the question of whether the reduced production volumes of smallscale farmers "freed" them to hold a philosophical position that was otherwise untenable.

Similarly, while all farms produced for a "natural" market, there was a clear line between farmers who sold direct ("that's how we had always raised them, anyway"), and farmers who sold through intermediary-led groups: several of the latter had changed their practices, adopting a feeding program that helped them achieve weight gain and production efficiency targets that were equal or superior to conventional finishing practices. But it is unclear whether this reflects a philosophy tied to conventional scales of production or an alternative, "first-adopter" mindset, willing to push the frontiers of farm practices.

What is also unclear is the relationship between scale of farm operation and the farmer's choice of marketing groups. The largest-scale farms showed a preference — and two were specifically tailored — for the advantages offered by their style of marketing group. But many farmers "chose" their marketing chain based on what was available in their region. The dissatisfactions and motivations of midscale producers are not dissimilar to small-scale producers, which is hardly surprising, since many of the latter were midscale producers on a retirement or disinvestment path. Several of

those shipping through intermediaries expressed the intent to switch to direct marketing — for greater control, a larger premium, and more direct contact with the consumer. The rest indicated a preference for the advantages that an intermediary offers, but this may simply reflect the fact that few direct-marketing groups existed in their region.

With few exceptions, all of these farmers inhabit, or at least intimately understand, a modern family-scale farming lifestyle, with the family's main source of income (their off-farm jobs) far more central to decision-making than their farm's struggles on the margins of the commodity beef-production sector. This marginalization reinforces and is reinforced by the almost universal absence of succession prospects on participating farms. These factors affect the ability to attribute farmers' motivations (their dissatisfactions, attractions, and predispositions) to the scale of their farm operations.

The differences in outcomes, as reported by the farmers themselves, offer the most insight into their mindset. For example, the price premium was a universal attraction, and in relative terms the returns for farmers of both types of marketing chain were fairly similar, given the different levels of effort and risk involved. Yet there were stark differences in interpretations of these outcomes, directly related to the chosen type of marketing chain.

Small-scale direct-marketing groups changed the prices paid to farmers infrequently, some as little as once per year. All but one of the intermediary groups had a premium that floats above the commercial price, which fluctuates weekly. Precise comparisons of farm returns (i.e., per pound) between the two types of marketing groups would require access to long-term price figures for both. Based on an informal running comparison at the time of the study, however, farmers in the direct marketing groups averaged 10–15 percent higher returns. Whether this margin is adequate compensation for their greater time (and often monetary) investment is a question worth exploring.

Yet it was the farmers in intermediary-led chains who were dissatisfied, mainly because the practices and relationships of their intermediary reproduced a set of all-too-familiar, conventional outcomes. For those who specifically criticized the market-distorting tendencies of large packers, the direct comparison to the practices of their "alternative" marketing chain is indicative of the disillusionment produced by the conventionalization of these chains. Farmers clearly identified — and rejected as illegitimate — these practices, while still looking for local marketing outlets. Farmer members see intermediary-led chains in their current form as a marginal source of added value with little staying power, but not a true alternative to conventional markets (which they mimic).

This research captures a snapshot of the motivations and experiences of a sample of beef farmers who have transitioned from commodity to alternative, local markets in Ontario, by joining groups with like-minded producers. Their assessments reflect their regional and farm contexts, including the peculiarities of the groups with which they were affiliated. Further research with local marketing chains across North America is needed to clarify whether the conventionalization seen in intermediary-led chains is an inevitable outcome in alternative markets (see Bloom & Hinrichs, 2011), or if the cooperative and value chain practices common to small-scale, direct-marketing groups can be replicated in large-scale local chains.

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Building resilience in nonprofit food hubs

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Abstract

Food hubs serve as intermediaries between market actors in the aggregation and distribution of local food. Scholars have identified four common food hub models: retail-driven, nonprofit-driven, producer-driven, and consumer-driven. The

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nonprofit sector has played a prominent role in emerging alternative food networks such as food hubs. This research uses qualitative methods to analyze the development of nonprofit food hubs in Vermont, as well as potential challenges faced and opportunities gained by this model.

The results suggest that nonprofit food hubs in Vermont can foster the awareness and education necessary to create and expand a thriving community food system, allowing multiple actors to participate at multiple levels. In this way, nonprofit food hubs provide a vehicle for cooperation between farmers and consumers. The most successful food hubs are those that develop within existing organizations; through the multifunctionality of the organization, the food hub can help educate consumers and producers and foster relationships that can lead to an increase in a local food system's capacity. Analysis reveals that although nonprofit food hubs offer the potential to positively impact local food systems, there are key areas of perceived vulnerability that threaten the overall resilience of this model. Recommended interventions for building resilience in nonprofit food hubs include technical assistance,

market analysis, and business planning to foster financially stable nonprofit food hubs with sustainable program models and business structures.

Keywords

aggregation, alternative food networks, distribution, food hubs, food systems, local food, nonprofit, value chains, Vermont

Introduction

Food hubs have become a popular method of supporting local food systems, yet understanding of the organizational characteristics of different food hub models is still limited (Matson & Thayer, 2013). In response to growing consumer concerns surrounding the conventional food system, along with farmer concerns related to market access, networks of food system stakeholders have developed alternative methods of food production and supply that have focused on direct markets and farm-toschool programs, often referred to as alternative food networks (AFNs) (Renting, Marsden, & Banks, 2003). Direct markets refer to farmers' markets and community supported agriculture programs (CSAs), which tend to target individual consumers.

Food hubs, an emerging type of AFN, have the potential to expand the reach of AFNs beyond direct markets by providing supply chain services such as aggregation and distribution of products from multiple suppliers to multiple consumers or consumer groups. These services are needed due to the difficulty of delivering adequate and reliable quantities of food to mass markets, while still maintaining the farmers' identities and connections to consumers (Conner, Izumi, Liquori, & Hamm, 2012). Moreover, direct markets have been so successful that the markets have actually become saturated in some areas, leaving little or no room for continued growth and new market entry (Zezima, 2011). Scholars and practitioners cite the potential of food hubs to provide needed services to help AFNs scale up, evolve, and expand (Diamond & Barham, 2012). Four main food hub models have been widely identified: retail-driven, nonprofit-driven, producer-driven, and consumerdriven (Diamond & Barham, 2012). Nonprofit

food hubs offer the potential to positively impact local food systems through a "civic agriculture" lens, yet this model is vulnerable due to an overall lack of information and best practices, a reliance on volunteers, and unstable funding sources.

Scholars in the United States have defined efforts with similar goals to AFNs as civic agriculture (Lyson, 2004). Most civic agriculture in the extant literature is limited to direct markets, which limits the potential scope and impact on individual consumers. According to Lyson (2004), civic agriculture enterprises embed production and consumption activities within communities, whereas conventional agricultural production and consumption happens at a larger scale and lacks the community ties inherent to civic agriculture. Conventional agriculture typically relies on synthetic fertilizers, pesticides, and other growth regulators for production of a limited range of commodity goods at the farm level. Civic-agriculture practices generally integrate site-specific practices for the production of a wide variety of products. Lyson (2004) argues that civic agriculture can contribute to the health and vitality of communities in social, economic, political, and cultural ways. Nonprofit food hubs have the potential to advance civic agriculture in a least two ways. First, they have the ability to expand markets for and access to locally grown foods with less immediate profit-generating expectations than those of for-profit businesses, providing opportunity for creative learning and experimentation among community members to solve logistical problems. Similarly, these food hubs often have deep roots and credibility in their communities, and can serve as bridges for broader community-building and education efforts. Vermont has robust innovation and cooperation around food systems development, exemplified in part by the groundbreaking Farm to Plate legislation in 2009, which outlines specific goals and actions in the support of increasing the amount of local food consumed in Vermont (Kahler, Perkins, Sawyer, Pipino, & St. Onge, 2011). Many nonprofit organizations in Vermont have realized the potential of civic agriculture, including efforts to provide the supply-chain services that mainstream supplychain actors have failed to provide. Nonprofit food hubs have been established to fill this gap.

Despite the overall success of nonprofits in Vermont's food system, nonprofit food hubs are relatively new models that have not demonstrated long-term financial viability and often depend on donations and grant funding for continued operation, threatening the model's overall resilience and potential impact. According to the 2013 National Food Hub Survey, although only 38 percent of nonprofit food hubs indicated they were highly reliant on outside funding, the most successful food hubs tended to be for-profit or cooperative in structure, had been in operation for over 10 years, and worked with a large number of producers (Fischer, Hamm, Pirog, Fisk, Farbman, & Kiraly, 2013). Resilience can be defined as the ability to adapt and survive in the face of economic shocks and changing markets and tastes (Meadows, 2008). For a nonprofit food hub, resilience means weathering economic changes through the development of a stable and diverse revenue stream and maintaining relevance due to its deep connections and credibility with diverse community producers and consumers, and the ability to engage them as part of its core mission.

In order to build resilience within nonprofit food hubs, more information is needed about the development and growth patterns of this model type, as well as potential interventions that may support the movement of nonprofit food hubs toward sustainability —financially and otherwise. Gaps in the existing literature include a detailed analysis and comparison of nonprofit food hubs based on their origins, how they are structured, what services they provide, how they have evolved, and their future plans. This research begins to fill this knowledge gap surrounding nonprofit food hubs and to offer suggestions for supportive interventions and investments that can lead to greater and broader participation in local food systems by consumers and producers. The following sections summarize existing food hub definitions and typologies, as well as the nonprofit model in the alternative food sector.

Food Hub Definitions and Typologies
The concept of a food hub is a relatively recent development in the growing body of literature on AFNs. The U.S. Department of Agriculture

(Tropp, 2011),¹ Horst, Ringstrom, Tyman, Ward, Werner, and Born (2011),² and Morley, Morgan, and Morgan (2008)³ offer three definitions of food hubs, all of which parlay a common theme: food hubs serve as an intermediary between many market actors in the aggregation and distribution of local or regionally produced food, with a civic agriculture mission. Within this definition, varying operational typologies of food hubs have been identified.

A food hub study by the Centre for Business Relationships, Accountability, Sustainability and Society (BRASS) at Cardiff University identified five food hub models: retail-led, public sector—led, producer-entrepreneur—led, producer-cooperative—led, and wholesaler and food service—led. Horst and colleagues expanded upon the BRASS study by developing a typology to include "the broader range of forms that food hubs can take and the roles they can play" (Horst et al., 2011, p. 214). In developing their typology they considered food hub ownership, purpose, design, and scale. They identify nine different types of food hubs: the boutique/ethnic/artisanal food hub; consumer-

If tied to local food, the food hub tends to magnify social-

good objectives. A food hub may be a purchaser, seller, or

courier of foodstuffs.

¹ The USDA unofficial working definition of a food hub is "a centralized business entity with a business management structure that actively coordinates the aggregation, storage, processing, distribution, and/or marketing of locally/regionally produced food products from multiple farms to multiple wholesale customers" (Tropp, 2011, slide 7).

² Horst et al., 2011, offer the following definition: "A food hub serves as a coordinating intermediary between regional producers and suppliers and customers, including institutions, food service firms, retail outlets, and end consumers. Food hubs embrace a spectrum of functions, purposes, organizational structures, and types, each of which can be tailored to achieve specific community-established objectives. Services provided by a food hub may include and are not limited to aggregation, warehousing, shared processing, coordinated distribution, wholesale and retail sales, and food waste management. Food hubs contribute to strengthening local and regional food systems as well as to broader community goals of sustainability and health" (Horst et al., 2011, p. 224). ³ Morley et al. (2008) describe a food hub as an intermediary between producers, retailers, food-service firms, public-sector buyers, and/or final consumers. They may manage information, administration, collection, warehousing, and distribution.

cooperative model; destination food hub; education and human service—focused food hub; neighborhood-based food hub; online food hub network; regional aggregation food hub; rural town food hub; and hybrid food hub.

Diamond and Barham further refined the food hub literature by distinguishing between four distribution models: retail-driven, nonprofit-driven, producer-driven, and consumer-driven (Diamond & Barham, 2012). Diamond and Barham go on to classify these four distribution models into three stages of development: start-up/nascent, developing/emerging, and mature/developed. Although Diamond and Barham began to separate out different food hubs based on development stage, the analysis lacks clear operational definitions of food hubs' development stages.

In both Diamond and Barham's and Morley et al.'s typologies, the primary driving force of who is leading and driving the food hub organization is the identifying factor between different food hub models. Horst et al.'s typology does less to clarify the structure and general characteristics of food hubs as a concept, and instead characterizes and describes how different iterations of food hubs may exist within the different organizational models outlined by Morley et al. and Diamond and Barham. In Diamond and Barham's work, the patterns, themes, general characteristics, and stages of development of different food hub models are not fully developed; these would be areas for further research.

Nonprofit Models in the Alternative Food Sector
Nonprofit or cooperative organizations have
played a prominent role in emerging AFNs. Socialsector collaborations that result in innovative
strategies to address challenges of scale, scope,
infrastructure, and organizational capacity, and also
foster synergies between social, economic, and
environmental resources, are prevalent in AFNs
(Beckie, Kennedy & Wittman, 2012; Sonnino &
Griggs-Trevarthen, 2013). The social economy,
which refers to organizations such as cooperatives,
nonprofit organizations, and charities, has been
used to advance equity concerns regarding access
to local food, but not without challenges. One particular challenge is competition with mainstream

economic activities that do not always account for negative social, economic, and environmental externalities (Connelly, Markey, & Roseland, 2011). Despite such challenges, the social economy can provide an alternative model to reconnect communities with their resource base, which can enhance community resilience (Sonnino & Griggs-Trevarthen, 2013).

Diamond and Barham's work (2011) indicates that there is a significant relationship between legal structure and food hub development, including operation, funding mechanisms, infrastructure investments, and propensity to run financially selfsufficient operations (Diamond & Barham, 2011). In cooperative structures, members own the cooperative; any profits are either reinvested or returned to members as dividends. As Diamond and Barham (2011) explain, nonprofits are established to pursue a public purpose, are accountable to independent boards of directors, and typically receive ongoing funding from private foundations, government grants, and individual donors. Unlike cooperatives, there are no "owners" or shareholders in a nonprofit to hold a nonprofit organization accountable. This in turn allows nonprofits to take on more risk as a business entity compared to retail-, producer-, or consumer-driven cooperative food hub models, allowing nonprofit models to absorb more of the risk faced by farmers and/or retailers (Diamond & Barham, 2011). Diamond and Barham found that nonprofit food hubs can absorb more risk to allow farmers and retailers to experiment with alternative models of food distribution and aggregation, but this may in turn impede the development of resilient modes of operation, creating an ongoing vulnerability.

Our research further analyzes the nonprofit food hub model to clarify development stages and models, challenges and opportunities, and the emergent theme of nonprofit vulnerability. The research questions we considered in exploring food hub development include: (1) what are the characteristics of nonprofit food hubs, (2) what services do nonprofit food hubs provide, and (3) what are the perceived future directions of nonprofit food hubs? The following sections discuss the study's methods, results, and implications.

Methods

The focus of our research was nonprofit food hubs in Vermont. In addition to having a high level of innovation and cooperation around food systems development, Vermont's small size and large concentration of food hubs in the nonprofit sector created a convenient sample in which to study food hub development. Our research included a new state designation, the low-profit limited liability company (L3C), which has a social mission component that is similar to the mission-driven purpose of a nonprofit.⁴

The research sample was developed from a list of over 20 food centers in Vermont that were part of the Vermont Regional Food Centers Collaborative (a group that emerged to collaborate on a statewide vision of an interconnected food system), as of September 2011. Of the 20 food centers, nine organizations were eliminated from the sample because they were not distributing or aggregating local food, according to organization websites and conversations with experts and practitioners familiar with the groups. Of the 11 organizations contacted, 10 chose to take part in the study.

We used a comparative case study design, primarily using qualitative data collection methods and analyzed using grounded theory (Glesne, 2011; Yin, 2011). We conducted semistructured interviews with participants from each sample organization. The questions were designed to explore the contextual conditions of food hub development in the nonprofit sector in Vermont. Between July 2011 and December 2011, we conducted a semistructured interview with the executive director and/or food hub coordinator of each organization.

We triangulated our findings using website and document analysis, including annual reports, outreach material, and independently created reports or peer-reviewed articles, if available. GuideStar USA, Inc., an information service specializing in U.S. nonprofit companies, was used to compare each Form 990, a tax document that

⁴ Legislation authorizing L3Cs has been enacted in Illinois, Louisiana, Maine, Michigan, North Carolina, Rhode Island, Utah, Vermont, and Wyoming (Americans for Community Development, n.d.). provides the public with financial information about an organization. Some organizations have not formally applied for nonprofit status, or had within the year, so no Form 990 was available. The information from websites and public documents was compared to interview information to help identify gaps or inconsistencies.

We coded and analyzed the data using constant case comparison, which involves breaking down the data into discrete units and coding these units into categories, which then undergo content and definition changes as the units are compared to each other (Glesne, 2011). We coded interviews to develop emergent themes and patterns that were organized into a table and a ranking system that separated out each theme by the level or degree for which that particular element was present in each food hub. This allowed for a more in-depth constant case comparison with more quantifiable variables with which to compare each food hub. After initial data analysis, information gaps were identified and follow-up questions were drafted for all interviewees. These follow-up questions were answered through personal communication with interviewees via email and phone.

Results

We found that the major contribution of nonprofit food hubs in supporting alternative food systems is their multifunctionality, or the array of civic agriculture-based services that are offered for the specific community that the nonprofit serves. The results indicate that there are two major development patterns of nonprofit food hubs in Vermont: those that developed within existing nonprofit organizations, and those that developed as new nonprofit entities. These results offer insight into the different challenges faced and opportunities presented by nonprofit food hubs, specifically their characteristics, services offered, and what next steps nonprofit food hubs may take as they seek to build resilience in the face of vulnerability.

Farmer Involvement

Our results showed that involving farmers in nonprofit food hubs is a critical aspect of their design. Based on the nonprofit food hubs examined, two categories of farmer involvement emerged: moderate and high. Food hubs with high farmer involvement embraced the uniqueness of the specific farmers they worked with, spending time to develop strategies that worked for the farmers involved. In this way, some of the strategies were not transferable as best practices, as they evolved based on the unique characteristics of the specific farmers within each community.

We found that moderate involvement of farmers was characteristic of start-up food hubs. These food hubs involved farmers informally in their structure and operations. For example, farmers may have been surveyed or asked to participate, but may not have had an ownership stake or may not have been involved at a high level of food hub planning. Food hubs with moderate farmer involvement viewed farmers mainly as market actors mainly who would utilize the food hub.

High farmer involvement was characteristic of emerging food hubs. These hubs benefited from the relationships with farmers that had been established previously through existing programs and services offered through the managing nonprofit. Food hubs with high farmer involvement were found to actively include farmers in decision-making processes through board representation and annual meetings. Some food hubs with high farmer involvement were created through the initial urging of farmers.

According to one manager of an emerging hub with high farmer involvement, farmers had been part of operations as part of the initial assessment to create the food hub, and they continued to be surveyed after each growing season. At this particular food hub there were three to four meetings every year where farmers informed the critical business decisions, from crop planning and pricing to operations and logistics. Emerging food hubs had ongoing conversations with farmers about business operations and finances, and some had long-term goals of farmer investment or ownership once profits were made. According to one emerging food hub, farmers were offered new markets, fair prices, guaranteed capital, guaranteed markets, networking, a collaborative environment, marketing support, technical support, and on-farm meetings at various members' farms to discuss marketing strategies.

Our results indicated that the geography and local characteristics of each community, and the farmers and consumers each food hub worked with, were important in influencing the development of nonprofit food hubs. One food hub manager described how the organization was embedded within the community, explaining:

There are some things that we do that are transferable, but the whole structure of the network is based on the geography, the personalities of the farmers, and the location and personalities of the buyers. Because of that locale of the community, that is the hidden immeasurable value in a local or community food system. Anywhere you go, the thing will evolve based on all those individual relationships, personalities, roads, existing infrastructure, etc.

This ethos of uniqueness was mirrored in all conversations with food hub leaders, as each organization had sought to embed its organization within its respective community.

Nonprofit Food Hub Services

Nonprofit food hubs in Vermont offer an array of food system services for their communities, above and beyond aggregation and distribution services. As research revealed, these services can be broadly categorized to include the logistical services for farm-to-school programs, and services for consumer and producer education and food access.

Farm-to-school logistical services

As food leaders in Vermont described in interviews, nonprofit food hubs have the potential to help address logistical barriers and time constraints for increasing the amount of local food available in institutions, such as schools. For some organizations, increasing the amount of local food in schools was the impetus for beginning to aggregate and distribute food. One interviewee said:

Lots of schools and farm-to-school programs wanted to serve and buy from local

farmers, but for the food service chef—there was just no way they could try to track down a number of different farmers and try to track down the product. On the other end, there's no way a farmer would want to deal with 10 different school buyers and service and deliver to all those little accounts with separate invoicing, so the whole system wouldn't work without some aggregation.

Food hubs can serve an important role in reducing the time cost for institutions to source local food. Another food hub leader described the process of identifying a need within the school communities and how the organization came to a solution. The process this food hub leader went through illustrates the specific needs that each producer and buyer may have, and how they eventually were able to come up with a process that worked for all parties.

There weren't enough efforts to get more local food into the cafeteria. We started with sharing a list of farms, but that wasn't enough because of the many challenges that food service directors face, like limited time and inability to do the outreach to farms, to help make those connections. We helped make the initial orders for food service directors and once they made that connection to the apple orchard, they would continue to buy from them, but we found that wasn't enough, so we started producing monthly product lists, where we listed all the farms and their products and allowed people to order through us and we found that was successful in getting people to try buying more local food. For the past three years we have ramped up our communications so now are distributing a weekly product list.

Our results show that food hubs can help increase local food purchases by schools through providing time-intensive logistical services. These services can include developing product lists and communication processes with producers and buyers, in addition to aggregation and distribution of products.

Community food access and education

Ensuring that local food was available for all income levels was an important theme in discussions with food hub leaders. Some food hubs in Vermont were developed with the sole intention of increasing low-income community members' access to local foods, and other food hubs have purposefully taken an inclusive community stance by being open to all methods of food production.

One food hub leader described how supporting access to local foods is just one of many ways that underserved community members benefit from the food hub:

What our food hub is founded upon isn't just access to local foods, it's education, it's hands-on learning and gardening, for single moms, elders, people on parole, for children. It's bridging generation gaps, it's doing more than just providing food to people who need it, it's providing education on how to use that food and grow that food, too.

In addition to education surrounding food access, some food hubs were beginning to offer payment options through Electronic Benefit Transfer (EBT) so that consumers with food stamp benefits could participate. Some organizations were also offering subsidized prices for some consumers or subsidizing some participating sites, such as daycare centers or senior centers. At the time of our research it was unclear what the level of success was in regard to these new initiatives; this is an area for further research.

Another aspect of local food access is making purchasing convenient for people who are committed or interested, but will not participate if it is not convenient. A food hub can make it easier to reach these types of consumers, whom farmers' markets and CSAs do not reach. Regarding these types of consumer needs and the reasons behind creating a food hub, one informant said:

Consumers were certainly interested in getting more local food, but they also highlighted convenience, diversity, quality, price, things along those lines. A conventional CSA model probably wasn't going to address all of those concerns. There are some people that will really do anything to eat local, then there's the next ring of people who are really committed but if it's not convenient then they won't participate. So we were after that group. The dedicated group were already going to the farmers' market and existing CSAs and growing their own food. The folks that would get done work and just go to Price Chopper, go home, get the kids — that's the group we were trying to hit.

Our results indicate that nonprofit food hubs in Vermont play an important role in working to ensure that lower income consumers, or consumers who are not already accessing local foods, are not left out of civic agriculture efforts. These groups were described by interviewees as less familiar with local products and how to prepare and consume unfamiliar items; nonprofit food hubs were able to serve as educators for these consumers.

Cross-cutting theme: Food hub vulnerability

A theme that emerged during this research is the issue of vulnerability of food hubs. Even in Vermont, where there is significant interest, time, money, and support invested in food hubs, and in spite of the deep community connections that enhance their resilience, none of the food hubs in this study have reached a mature status. Our results revealed that key areas of perceived vulnerability include an overall sense of ambiguity surrounding the concept of a food hub in the nonprofit sector, which is perpetuated by a lack of information and best practices, a reliance on volunteers, and unstable funding sources.

Most hubs have been developed within the last five years, suggesting that this is a dynamic time for nonprofit food hubs in Vermont. At the time of the study, each organization was undergoing some sort of major change because of the start-up nature of the food hub model. Some of the changes being considered by hubs in Vermont include changing ownership models, name changes to represent being a food center rather than a food hub, mergers with other organizations, expansion, downsizing, different price structures, more or fewer product offerings, changes in aggregation and dis-

tribution methods, and additional or fewer farmer or consumer participants. Many of these changes reflected the rapid growth and change of these food hubs as they went through development stages of start-up to emerging, and sought to become mature food hubs.

Additional nonprofit food hub vulnerabilities included a reliance on volunteers and poor income streams. Many food hubs, although grateful for volunteer labor, admitted major drawbacks to relying on volunteers who can be unreliable or unskilled in the task needed. For example, one food hub found that many product orders contained errors when volunteer labor was used to pack orders. Financially, nonprofit food hubs relied on grant funding to subsidize the overhead costs associated with aggregation and distribution. According to interviews no food hubs broke even (although one was projecting a gross profit for the year 2013, after five years of operation). This meant they relied on grants and donations to support continued program operation. Although food hubs work toward strengthening their community, the sustainability of their operations is in jeopardy without reliable staff or fully developed revenue sources. These revenues can come from a combination of improved business operations and/or support from donors such as individuals, foundations, and local state governments willing to invest in the community benefits of local food systems. The benefits to the community can be framed in terms of creating a fairer playing field in the face of heavily subsidized conventional commodity agriculture. In any case, increased private and public revenues can leverage each other for increased impact and resilience.

Even in the best cases, only two emerging food hubs were forecasting that they would break even financially in the upcoming fiscal year (2013). Although this indicated that some nonprofit food hubs in Vermont may be able to develop self-sustaining business models, most are still searching for a viable financial model. Other food hubs that were still seeking ways to develop income streams to support operations were restructuring their fees in order to move toward a more sustainable fiscal model.

Food Hub Development Stage

Although this research sought to build on Diamond and Barham's typology of food hub development in the nonprofit sector, our results indicate that, as of the completion of this research, there were no fully developed nonprofit food hubs in Vermont. Our results describe observations of start-up food hubs and emerging food hubs, and offer insights into potential characteristics of developed hubs.

Start-up food hubs

Unlike food hubs that developed specific programming within an existing food system-oriented nonprofit, these newly formed nonprofit food hubs tended to have limited paid staff, if any, and some did not have any formal office space. Three of the start-up food hubs were operating with an already established nonprofit partner serving as the fiscal agent, as these start-up hubs did not yet have the 501(c)(3) nonprofit status needed to operate administrative aspects of a business. These food hubs were often developed by individual community food proponents or community groups that advocate for increased access to local food. Compared with more established nonprofits that have a wide range of programming expertise and service areas, start-up food hubs lack the foundational benefit of having existing relationships.

Many of the start-up food hubs were started by food proponents in the community and had provided limited opportunity for famers to engage in the governance and decision-making of the food hubs. A focus on education and outreach was a major goal of newer food hubs, which stated a need to continue to develop an overall community awareness of the importance of supporting locally produced foods, including how to cook local products that may not be familiar to some consumers. This goal often included collaborating with other organizations in educating the community in their common mission of supporting local food system development.

One food hub surveyed local farmers before creating its food hub program, asking them what opportunities they saw, what barriers they faced, and what production capacity existed. The manager explained:

The farmers said very clearly, if you can find decent markets for us, we'll grow production, we're ready to go. We asked a number of different questions about what direction to go in —aggregation, storage, CSAs, brokerage. We were trying to figure out the domestic fair trade approach. The results came in, and it was clear that farmers had some market capacity barriers. In that case, the direct market capacity had been reached in the region, and farmers were looking for new markets.

One of the distinguishing factors between start-up food hubs and emerging food hubs was the level of market research that has been conducted. At the emerging level, most food hubs had conducted extensive market surveys and analysis to determine the feasibility of food hub programming. In some areas of Vermont, which is dominated by small farms, direct markets were found to still have additional capacity, indicating that the market was not yet ripe for food hub activities. Additional direct market capacity may not preclude food hub development in other regions, as food hubs can be important for midsize farms that are too large for direct marketing, yet have trouble reaching the traditional wholesale market. One informant said,

One challenge is supply. There are farms in this area that would participate, but they still have strong direct sales markets, and it hasn't been proven yet that there is a strong enough market for aggregated products and that farmers should switch the way they grow to wholesale.

Another interviewee indicated that a feasibility study had been conducted and the capacity for a food hub did not exist due to other area commercial kitchens or processing facilities, and because many farmers conduct value-added processing of products at their own facilities. These comments suggest that even in a small state such as Vermont, the market can vary greatly between different regions, showing the importance of market research to reflect the specific characteristics of a given food hub community.

Emerging food hubs

Emerging food hubs tended to benefit from greater capacity offered through a larger and more developed organization. These organizations typically had full-time staff and office space and many owned land, facilities, and/or vehicles. In these cases, the food hub program was one of many services offered, and it benefited from being able to draw on existing expertise within the organization, such as grant-writing and accounting. In these instances, the food hub program was typically developed as a way to further the organization's general mission or to expand existing services or programs. The executive director of an emerging food hub described the benefits of developing the program within an existing organization, saying:

We're almost 25 years old. We have a lot of program activity experience, so we can draw on that. We weren't starting from scratch — we had relationships with farms that we could tap into quite easily, as well as existing relationships with funders for grants. We had a track record that definitely helped us.

One manager of an emerging food hub suggested that the hub was performing more like a business, and that food hub may eventually transition to the for-profit sector. Part of the business mentality included conducting feasibility studies and demand research, which was an important first step for many emerging food hubs that have seen program growth. As one food hub manager explained, the potential growth of a nonprofit food hub can be slowed by the pace of decision-making within the nonprofit organizational structure:

It has been very difficult managing a fast-growing business within a nonprofit. There are needs and resources that the business must have in order for it to be successful, yet it is stymied by the pace and level of decision-making required within the non-profit environment and the resources available.

As our results indicate, market analysis for start-up and emerging food hubs is an important

first step in building a resilient nonprofit food hub. Our research showed that if analysis for a potential food hub finds that there is additional direct market capacity, then the education and outreach services that many nonprofit food hubs offer can be helpful in continuing to develop the local food market capacity.

Discussion

Food hubs can help create new avenues for local foods to reach broader markets, and also can support and strengthen existing AFN markets for local food and help achieve the community-building and problem-solving goals of civic agriculture (Lyson, 2004). As Kennedy (2007) and Izumi, Wright, and Hamm (2010) describe, regional food distributors that have social relationships with farmers are needed to increase the scale and scope of AFNs, so that local food can reach markets that are currently served by broadline distributors. By helping support farm-to-school programs, for example, food hubs can act as a regional distributor by connecting schools with farmers, and by assisting with logistics, aggregation, and distribution. Food hubs are emerging as an important aspect of AFN development, as they represent a method of taking direct markets to the next step of aggregating and distributing local food with local supply chain actors.

Our research builds on the work of Morley et al. (2008), Horst et al. (2011), and primarily Diamond and Barham (2011, 2012). By building on the definitions and typologies of food hubs that have been developed, we dug deeper into the characteristics of food hubs within the nonprofit sector, and analyzed hubs through an organizational development model that was initially outlined by Diamond and Barham.

This study found no food hubs that currently fit into the developed/mature category. Diamond and Barham do not describe this level of development in depth, but based on our findings the next steps for many emerging food hubs may include market development, financial stability, and structure and process improvements.

Food hub managers who focus on building and expanding market avenues for farmers built relationships with potential consumers and finetuned food hub offerings and pricing to reach a balance between what farmers can provide and at what cost, and what consumers want and what they are willing to pay. By actively working toward creating a program that is financially stable and selfsufficient, food hubs sought a diverse revenue stream that would cover the overhead costs of the program without continually relying on grant income or volunteer labor. This is critical to their resilience in the face of economic forces as well as their ability to serve the aforementioned community-building and problem-solving civic agriculture functions. Food hubs that were planning to focus on structure and process improvements were hoping to fine-tune their systems as far as how the food hub is run. For some, this included exploring different ownership models, and for others this just meant adjusting their operations to run more smoothly, as they learned what worked and what did not.

Figure 1, Food Hub Development Stages (below), shows the general characteristics of food hubs at three major stages of development, as these results have demonstrated.

This research taught us three key aspects to approaching vulnerabilities in nonprofit food hubs, including: (a) a thorough understanding of market conditions and local needs, (b) farmer involvement in all aspects of hub development and programming, and (c) the ability to build on the capacity of existing organizations and relationships.

These findings mirror the major food hub definitional themes found by Morley et al., Horst et al., and Diamond and Barham. We found that the social benefit was a key factor in the development of food hubs in the nonprofit sector, and is part of what differentiates a nonprofit food hub from other distributors. The social benefit was related to the civic agriculture functions of nonprofit food hubs. Additionally, the multifunctionality of nonprofit food hubs shows that they offer an array of services in addition to aggregation and distribution.

Community Engagement

Food hubs in the nonprofit sector did more than just aggregate and distribute food, especially those that have many other programs and have been in existence for many years, such as The Intervale Center. Food hub leaders from the examined organizations stressed the importance of the additional services and program offerings as an important aspect of supporting their food hub work. The availability of additional staff to assist in food hub operations and existing organizational relationships that exist through additional services and programs can benefit the food hub in acquiring funding and increase its resilience.

We found that food hubs in the nonprofit sector offer an array of support services and outreach that help bolster local food markets and give farmers the knowledge to access these markets. The role of nonprofit food hubs is far greater than just aggregation and distribution of local foods; by educating the community and farmers they help create the environmental and cultural conditions that allow this exchange of products to be successful. We found that community members are often educated in the potential economic and environmental impacts of supporting local farmers, and in how to integrate unfamiliar ingredients into meals. Farmers, we found, are often educated in how to market to local consumers and develop relationships with buyers, and in general farm viability and business planning. Our results suggest that the success of a food hub in actually selling products depends on a community having the underlying knowledge of why they should change their current purchasing habits. Our results illustrate that nonprofits play an important role in educating communities, thereby advancing civic agriculture goals and ideals and creating future markets for itself, thereby increasing resilience.

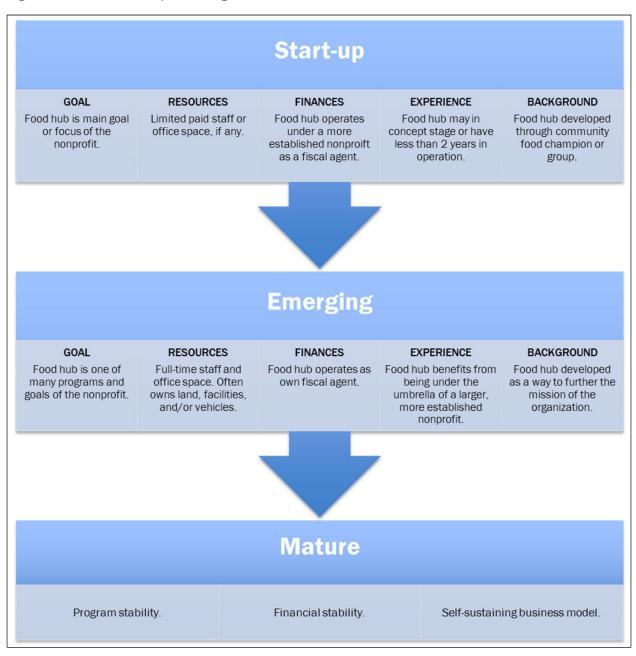
Nonprofit food hubs are poised to serve as steppingstones for communities that have saturated existing consumer and producer outlets via farmers' markets and traditional CSAs. Existing organizations that create food hub programs are able to effectively incubate these new program models from the start-up stage to the emerging stage. As nonprofit food hubs continue to develop, evolve, and mature, there may be overlap into the additional food hub models identified by Diamond and Barham: retail-driven, producer-driven, and consumer-driven.

Implications for Practitioners and Future Research Many of the food hubs that are developing in Vermont have gone through growing pains as they have experimented with different business models, sometimes through trial and error since there are limited best practices research to draw on. Nationwide, food hubs are all learning together about how to effectively aggregate and distribute local food in a market environment that is still very much dominated by more conventional methods of food purchasing and distribution. This suggests

that nonprofit food hubs are currently tenuous and fragile tools for supporting local food systems.

Despite the uncertain long-term viability of nonprofit food hubs due to their overall vulnerability, this research found that nonprofit food hubs have the potential to serve as a tool that can help AFNs grow and become more resilient. As our research illustrates, nonprofit food hubs can support the logistical elements of farm-to-school pro-

Figure 1. Food Hub Development Stages and Their Characteristics



grams, can offer additional market opportunities for farmers, and can provide an additional way for consumers to purchase local products.

Nonprofit food hubs can offer a level of engagement with communities that can foster the awareness and education necessary to create and expand a thriving community food system that allows multiple actors to participate at multiple levels in the local food system. These food distribution models connect farmers and consumers in more cooperative and direct ways and can promote environmentally and socially beneficial food production, distribution, and consumption. These organizations are able to build relationships and educate producers and consumers, yet their nonprofit status can make them vulnerable. Building resilience in nonprofit food hubs within different business climates may involve technical and/or financial assistance from research or financial consultants through feasibility studies and/or market studies of local food systems. Recommendations for nonprofit food hub investments to support increased resilience are described below.

- Providing technical assistance for key staff members to become knowledgeable about food distribution and farming will help food hubs develop relationships with farmers and consumers, and create successful and realistic aggregation and distribution program models.
- Providing state and federal funding for market analysis will help foster informed decision-making. An understanding of economic conditions in the community being served will help nonprofit food hubs better understand the needs of their communities and identify which markets have unmet or saturated conditions. This can help identify focus areas, such as community outreach to increase consumer purchases at farmers' markets, or market development to increase avenues for farmers to sell goods.
- Providing technical assistance for business planning will help nonprofit food
 hubs develop sound organizational development choices. A diverse revenue stream
 that covers the overhead costs of the pro-

gram will enable nonprofit food hubs to hire skilled staff members without draining resources from other important programs. A nonprofit can also be a successful business.

In summary, this research found that the most significant implications for food hub practitioners and researchers are that it is important for nonprofit food management to think like a for-profit business in seeking long-term financial viability, without losing sight of the civic agriculture components that may be the greatest attributes of a nonprofit food hub. This means that nonprofit food hub leaders must be aware, through research and analysis, of what services are needed in the community, what services can be provided efficiently, and in what ways those services will pay for themselves. Nonprofit food hub leaders must also be able to balance these services with the community needs that may not be economically efficient, but are necessary in the long term to grow a vibrant local food system. As our results indicate, while the potential growth of a nonprofit food hub can be stymied by the slow pace of decisionmaking within the nonprofit organizational structure, this slower pace may be part of what enables a nonprofit to thoughtfully balance business needs with the organizational mission. Balancing this tension between a business mentality and a civic agriculture ethos is an area in which further research is needed.

Core competencies that may be important characteristics of successful nonprofit food hubs include engaging farmers and communities as well as serving as educators for the community to prepare consumers and producers to better engage in a community food system. Start-up and emerging food hubs in particular should pursue research and technical assistance on how best to (a) determine which functions are most needed by the specific community that the food hub will serve and especially will pay for themselves; and (b) engage with farmers and communities. Nonprofit food hubs must maintain a healthy bottom line, like a business, yet still provide the civic agriculture functions of community-building and problem-solving. Maintaining this difficult balance will be an ongoing area of research and outreach.

Conclusion

This research develops a deeper understanding of nonprofit food hubs, and specifically their development stages and factors hindering the potential resilience of this model. This study is limited in scope because interviews were conducted only with food hub leaders within the nonprofit sector in Vermont, and the responses only reflect the limited information of those interviewed. Information may not be generalizable in other states or countries, as nonprofit hubs in different contexts will likely have different challenges. Additional research should explore whether these findings hold true in other regions.

Our research focused on the organizational dynamics of nonprofit food hubs; additional research could expand on the roles of producers and consumers in relation to food hubs, and in how different food hub models compare to each other. Some of the nonprofit food hubs in this study were working on food access issues, but their level of success in food access initiatives was unclear at the time of research; this is an area for further investigation. This research captures food hubs during a dynamic period of development, and further research will be needed on food hub practices and impacts over time, and in relation to other AFN models. Additionally, further research is needed on logistical and financial structures related to the movement of food between market actors. The logistical and practical elements of different food hub models could also be expanded on. Because this study found no nonprofit food hubs to be categorized as developed/mature, more research is needed to further explore this development stage as food hubs evolve. Additional research and outreach is needed to document, test, and share keys to success in order to begin to develop a roadmap for development from nascence to maturity. This will aid in creating resilient nonprofit food hubs that are able to maintain relevance through deep connections and credibility with diverse community producers and consumers, and that can engage these community groups as part of their core civic agriculture mission.

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Reflexive resilience and community supported agriculture: The case that emerged from a place

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Abstract

While some aspects of what has broadly been called alternative agri-food networks (AAFNs) are relatively prominent in Ireland, including farmers' markets, garden plots (or allotments), and the GIY, or the Grow it Yourself home gardening phenomenon, community supported agriculture (CSA) initiatives are still rare in Ireland. One of the few, earliest, and most prominent CSAs in Ireland is the subject matter of this article. This paper first contextualizes the study with some of the relevant literature on AAFNs, including a 'civic turn' in the European literature on AAFNs, toward civic food networks (Renting, Schermer, & Rossi, 2012). Key developments in this literature,

including equity, governance, place, and empowerment, are unpacked and demarked as especially important. The studied CSA's organizational restructuring in the face of productivity pressures is examined in detail. While CSAs specifically involve sharing risks and rewards, and while this is described as an acceptable uncertainty, when pushed to its limits the actualized risk of not enough produce became in fact unacceptable for this CSA initiative. The process through which this member-owned and -operated CSA critically self-assessed and restructured in the face of challenges is a core part of what is termed here as a 'reflexive resilience.' The implications of reflexive resilience are then analyzed to draw out research implications. 'Reflexive' refers here to being critically self-aware and willing to change, and then changing. 'Resilience' refers to being prepared for shocks and responding accordingly to said shocks if and when they occur. Taken together, the term 'reflexive resilience' describes a CSA's adaptive awareness.

That this reflexive resilience emerged in a member-owned and -operated CSA may make this

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CSA more a model for communities to use, if the aim is to have a truly civic agriculture (Lyson, 2000) as part of a more civic rural space. Implications for more fruitful interactions between research and practice are also suggested.

Keywords

alternative agri-food networks, civic agriculture, community supported agriculture, CSA, reflexive resilience

Introduction

Ireland has had a strong tradition in export-led farming and food for hundreds of years (Crotty, 1965; Tovey, 1982, 2001). Even into the late 20th century, one-third of net foreign earnings were coming from agri-food, while export-led growth plans for beef and especially dairy have re-emerged strongly since the economic near-collapse of 2007/2008 (Department of Agriculture, Fisheries and Food, 2010).

Concurrently with these processes, since the 1970s and the migrant-led organic movement (Moore 2006b; Tovey 1997, 2002) Ireland has had a small but persistent cohort engaged in what would come to be described as the alternative agrifood networks. In the mid- to late 1990s, this dynamic began to become especially prominent through the farmers' market phenomenon, which emerged and spread rapidly (Briscoe, McCarthy, Moroney, O'Shaughnessy, & Ward, 2010; Moore, 2006a, 2006b, 2006c, 2008).

Curiously, there are very few CSAs in Ireland. Two consumer groups have approached farmers in the southwest county of Cork to create an oats and potato CSA channel of supply in recent years, while a producer-led seasonal vegetable CSA exists in Cork. Two consumer groups have a CSA arrangement with growers north of the capital city, Dublin, and west of it in Kildare. Beyond that, sporadic single-crop or product arrangements happen below the radar from time to time.

Reasons for so few CSAs have been speculated as including the relative strength of other aspects of the AAFNs, especially farmers' markets, and a desire by all parties to avoid displacement; the prominence of allotmenteering and the home gardening movement called GIY (Grow it Your-

self); the recession, in which Ireland suffered significantly from the resulting austerity, with a decline in discretionary spending on organic food (Bord Bia, 2013). It is also the case that the supply of fresh fruit and vegetables is relatively low at the Irish latitude over the winter months, being as it is in northwest of Europe, and thus the momentum may be lost somewhat in efforts to maintain CSA connectivity over 12 months.

But what is a CSA? CSAs are a particular type of food production-consumption network. CSAs involve, to varying extents, sharing the risks, responsibilities, and rewards of production (DeLind, 1999; Saltmarsh, Meldrum, & Longhurst, 2011; Soil Association, 2010). Simply put, this means that if the harvest is good, there is more produce for members; if it is poor, there is less. More broadly, it means that all going well and to members' wishes, the harvest will be good —to think, to eat, and for the future. However, if there are production disasters, no produce or compromised produce will be available, irrespective of the fact that payments are made in advance by consumers/members. This level of shared commitment specifically sets CSAs apart from other aspects of what has been described, and will be described later, as alternative agri-food networks (Lamine, 2005).

These shared-risk-and-reward food production systems first emerged as *Teikei* in Japan in 1965, but were also pioneered by anthroposophy-inspired practitioners in the 1950s and 1960s in Germany, first at Buschberghof farm. Pioneers from Buschberghof and Swiss CSAs established the first of their kind in the U.S. in Temple Wilton and Indian Lane in 1986 and 1984, respectively. Other European countries developed CSAs in the 1990s, while the movement especially flourished in the U.S. (Soil Association, 2010).

In all forms of CSA initiatives, significant compromises and adjustments are made to the realities at the other end" of the food system; producers adjust to consumers' expectations, while also imparting information on the realities at their end, and vice versa, again to varying levels.

In the complexity of thousands of CSAs globally, not all will fit into a neat typology. Nevertheless, Ravenscroft and Taylor (2009) describe six

styles in a matrix of CSA forms. These are needs-based share farming; rights-based share farming; seasonal direct marketing; multifarm CSAs; community buying groups; and community-owned social enterprises. The third, fourth and sixth of these are producer-led, while the rest are consumer-led. The first two require further explanation due to the use of the political terms "needs" and "rights": needs-based involve producers and consumers contributing what they can and taking what they need; rights-based involve equal contributions and shares from and to members.

In this paper we explore one of the few CSA initiatives in Ireland, and the only member-owned and -operated one. We suggest that the CSA has important things to say about civic participation, when examined through the lenses of empowerment, equity, place, and governance. We first contextualize the study with some of the relevant literature on AAFNs, and the later literature on civic food networks. Key conceptual developments in the literature, namely equity, governance, place, and empowerment, are chosen as being especially relevant for this study. We then justify and explain the ethnographic methodology used and describe a year lived in and through the life of the CSA. Next, we analyze the CSA's organizational restructuring in the face of some food-production uncertainties. These uncertainties were acceptable to some CSA members and unacceptable to others (Dubuisson-Quellier & Lamine, 2008), Limits on vegetable availability is an example of an acceptable uncertainty, while use of agri-industrial inputs and processes is an example of an unacceptable uncertainty. However, the balance between acceptability levels played out in a specific way in this CSA, when vegetable production was perceived to be especially constrained. We posit reflexive resilience — the process through which this member-owned and -operated CSA was ready and also able to critically self-assess and restructure in the face of challenges — as a way to explain how this CSA functions. These two words are similar but have subtle differences. 'Reflexive' refers here to being critically self-aware and willing to change, and then changing. 'Resilience' refers to being prepared for shocks and responding accordingly to said shocks if and when they occur. Taken together, the term

reflexive resilience describes a CSA's adaptive awareness.

The process through which reflexive resilience expressed itself is important. We argue that the fact that this CSA is member-owned and -operated is core to its reflexive resilience, and that this may make it more a model for communities to learn from, if the aim is to move toward civic agriculture (Lyson, 2000) as part of a more civic rural space. We also explore implications for more fruitful interactions between research and practice related to CSAs.

Literature: What's on the Alternative Food Table?

The literature on AAFNs has tried to examine how, in food provisioning systems, the noneconomic gets to be valued, in various senses. Notions of quality, regard, embeddedness, reflexivity, and all with relational components, have been suggested in some of the prominent literature that initially tackled this area (for example Murdoch, Marsden, & Banks, 2000; Murdoch & Miele, 2004; and Sage, 2003). Direct sales of various forms, such as farmers' markets and box schemes (i.e., prepaid seasonal deliveries without the CSA risk-reward dimension), have been the subject matter, while the emphasis has been on social and/or environmental factors related to these methods of distribution. AAFNs involve close (empathetic and geographical) connections between producers and consumers, who act in what they feel is a more environmentally benign and socio-culturally embedded manner. These and other studies tried to explain the process through which local, artisan, organic foods, produced in ways that show, in some sense, respect for the environment and connectivity with the region, are produced, distributed, and consumed.

While the scale and importance of AAFNs has been the subject of debate (Goodman, 2004; Van Der Ploeg & Renting, 2004), there have been other considerations too. Even within specific areas of AAFNs, the farmers' market context as an example, various economic and other pressures can be found. Kirwan (2004) points to pressures relating to distance and disconnection: that is, the people, products and place all losing connectivity, or integ-

rity, when faced with the need for commercial viability. Viability is expressed through the array of produce on display, from the producer, locality, region, nation, and globe.

Defining AAFNs as 'alternative' is problematic for some: for them, instead, understanding the specificities of different examples of food production-consumption systems is key. Smith & Marsden (2004) point to specific sectoral dynamics in differing distributional systems in building a case for certified organic foods. Holloway, Kneafsey, Venn, Cox, Dowler, & Tuomainen (2007) point to limits in the literature's methodological scope, suggesting a need for understanding heuristic fields such as site of production, production methods, supply chain arena of exchange, producerconsumer interaction, motivation for participation, and constitution of individual and group identities. Applying this more geographic analysis allows for an examination of "how the specific ordering and spatiality of particular projects can effectively challenge centers of power in the food supply chain" (Holloway et al., 2007, p. 15).

In the field, new producer-consumer dynamics emerged in Europe in the 2000s. Likewise, in North America an interest in local food and the CSA phenomenon grew rapidly. Authors thus have advanced the literature on AAFNs, introducing concepts such as local food systems (e.g. Balázs, 2012; Karner, 2010), or short food supply chains (Marsden, 2000). Flora and Bregendahl (2012), while retaining CSA conceptually within the AAFN domain, point to how collaborative CSAs (multifarm CSAs, number four in Ravenscroft and Taylor's typology), which evolve to maximize multiple capitals (natural, cultural, human, social, political, financial, and built stocks and flows of assets) for individual producers and consumers, are more likely to endure. Thompson and Coskuner-Balli (2007) describe CSAs' pragmatic inconveniences and choice restrictions as enchanting moral virtues. While much has been written on AFFNs and CSAs, for the purposes of this study, empowerment, place, equity, and governance have emerged as four newer and more promising elements, with 'civic' also an overarching consideration.

DeLind (1999, 2002, 2011), following Lyson

(2000), has pointed toward 'civic agriculture' (2002), whereby local food systems can help develop an alternative commerce. Not only that, they can also promote citizenship and environmentalism within both rural and urban settings, through economic relations and, importantly, through common ties to, and physical engagement with, place.

However, DeLind (2011) also suggests that a genuinely place-based experience is absent from how the much valorized local food movement(s) function(s). This then denies deeper concerns about equity, citizenship, place-building, and sustainability. For DeLind, the ownership and practice of the notion of local food can alienate many local people, people whose genuine cultural expressions of identity are excluded from the sometimes rarefied discourse on local food. These expressions might not fit into the hegemonic clichés of good food, but they are genuine place-based expressions, which need to be integrated into a regenerative agri-food system.

DeLind (2011), following Dahlberg (1993), moves the analysis of local food away from the instrumental and toward the contextual, while integrating the 3Es of sustainability: ecology, ethics, and, importantly for her, equity or fairness in the distribution of voice, resources, and power. The latter allows for a public culture of democracy expressed through participation in problem solving locally, protecting the commons, recognizing the virtue of necessity (Vitek, 1996), assuming and sharing public responsibility, and empowering community residents and sets of interconnected communities. Better understanding of and working on genuine community needs, while also using a farmers' market to train and upskill local residents, are cited as examples of the real work of creating participatory local food systems. This then is also "the cultivation of a civic we-ness" which ultimately should "give the local food system definition and holding power" (DeLind, 2011, p. 279).

Unsatisfied with the conceptual limits of AAFNs for describing changes in Europe, Renting et al. (2012) map both the terrain and the state of the research on what they term "civic food networks." This more consumer-driven, or certainly, consumer-participatory terrain is wide and involves

governance structures that emphasize civil society. This terrain is fragmented, often underestimated, and partially 'under the radar,' as groups often operate in an unregistered way. Some of the components of this terrain are food co-ops and collective purchasing groups; CSAs; (possibly) box schemes; garden plots, community gardens, and Grow Your Own initiatives; 'adoption' of production resources (e.g., cow, tree, chicken, land); participation in food-oriented community organizations; local food movements; and food policy councils.

There are other considerations, too: the relations with and role of producers in these new networks is still largely unclear, as are policy or support measures. Various factors that may inhibit the development, heterogeneity or (non)occurrence of these networks include farm structure (scale, type of production); tradition of gardening and/or home production; availability of local/organic food in conventional channels; level of buying power of consumers; existence of food culture and/or sociopolitical awareness on food issues; occurrence of 'shock' by food scandals; degree in which conventional farming or retail have taken up multifunctionality to meet new societal demands. Importantly, the growth model is based on multiplication instead of scale enlargement. It can be suggested that this, in itself, is a civic, 'open source' growth, or more specifically, proliferation, model (Renting et al., 2012).

According to Dubuisson-Quellier and Lamine (2008), France and Italy have seen the fast and quite widespread emergence of two distinct forms of civic food networks that merit consideration and analysis. These are consumer purchasing groups, Gruppi di Acquisto Solidale (GAS) in Italy, and Association pour le Maintien de l'Agriculture Paysanne (AMAP) in France. Both these civic food networks are mostly consumer-driven, falling into type five on Ravenscroftand Taylor's (2009) typology as community-buying groups, although they vary in style and substance. Some have even purchased farmland for strategic and political reasons.

In this new aspect of civic food networks, in describing GAS both Brunori, Rossi, and Malandrin (2010) and Fonte, Pinto, Eboli, Ornella, and Salvioni (2011) find, like DeLind (2011), that

equity is a key new consideration, one "which may have a far more radical impact on the structures of daily life" (Brunori et al., 2010, p. 48). Because of this, they continue, "GAS are a peculiar type of AAFN, aimed at fulfilling the demand for fresh, local, sustainable and nutritious food for middle to low income consumers. Rather than looking at typical, locality [sic], and excellent quality food, GAS focus on daily food" (p. 48). This contrasts with the "jewel-shop" status of health food stores that serve mainly more middle-class consumers as referenced in Fonte et al., 2011).

Moreover, as Renting et al. (2012) also point out, these authors also suggest that new consumerengaged movements represent an innovative type of governance. GAS enroll stakeholders, who can be involved in an organizational capacity, including organic certification bodies, local councils, churches, academics, and trade unions. According to Brunori et al. (2010), in the GAS, new thinking about food can emerge and be legitimized, and new economic patterns and adaptive rules can be expressed. Relationships are defined more by shared values than competition, although this is a constantly evolving and negotiated process. With these new arrangements, farmers and consumers learn to adapt to each others' values, desires, and preferences: farmers may grow their businesses in a specific style with these customers in mind, or they may change some of their practices but expect changes from the consumers, too (Brunori et al., 2010).

New governance structures are also important in the Cardona and Lamine (2011) study of collective action and an AMAP. They describe how an AMAP has been the significant driver in developing multi-stakeholder groups that have buffered part of the south Paris region against certain encroachments, including land acquisitions for military or road-building purposes. In the local municipality, the AMAP was able to provide for an improvement in canteen food quality, in line with government policy on healthy food. Importantly for our analysis here, this sort of civic behavior also alters the place in which the AMAP functions. By being a participant in regional politics, collective power, and governance, the authors consider ecological modernization through rural development and transitioning is in operation (Cardona & Lamine, 2011).

Dubuisson-Quellier and Lamine (2008) examine the engagement and empowerment levels of consumers in French AAFNs, including AMAPs. This involves studying the balance between delegation and empowerment, as well as between acceptable and unacceptable uncertainties. The authors study how consumers are enrolled in a network by a process of translation that establishes modes of ordering between actors (producers, consumers, retailers, importers, processors, etc.) and intermediaries (standards, logos, advertisements, distributional spaces, texts, etc.). Marketplace mechanisms can allow consumers to delegate toward intermediaries, to express an aggregated individualized collective action, or be politically empowered players in a collectively constructed food system. The latter can involve the framing and governance of collective choices by consumers as political actors.

Civically engaged and collectively acting, these empowered groups can temper the governance structures of their locales to at least some extent. These consumers can pressure local authorities to organize for particular types of school meals, farmers' markets, or for other value-laden food options. For the AMAP, empowered collective action can involve using skills to help it function through volunteering with weeding, accountancy, public relations, or other areas. Working out what are acceptable and unacceptable uncertainties much like Thompson and Coskuner-Balli's (2007) enchanting pragmatic inconveniences and choice restrictions— is key. So for example seasonally constrained choice of specific vegetables (acceptable), is traded off against unacceptable uncertainties, such as the possible long-term effects of agriindustrial inputs or processes (e.g., genetic modification, herbicides). Consumers still negotiate and balance delegation and empowerment, though they may also change their food-related trajectories over time. This trajectory change may involve becoming more embedded and also empowered in their food choices. By engaging with other stakeholders in their communities, empowered consumers are involved in the process of governance.

These new civic food networks in Europe,

then, point to significant enrollment of considerations of place, equity, empowerment, and governance. Taken with DeLind's (2011) place-based emphasis on equity, it is clear that Renting et al. (2012), and previously Smith and Marsden (2004) and Holloway et al. (2007), are correct in seeing conceptual and explanatory limits to the notion of AAFNs.

Methodology

For the purposes of this research, the lead researcher became an active member of the CSA being studied. In rural ethnographic research, a traditional worry has been the loss of objectivity in 'going native.' More recently, however, the level of access more embedded ethnographers can have has emerged as a useful methodological approach. For Heley (2011), participant observation, nativism, and especially being local can provide this exceptional access to rich quality data. Backyard ethnographies — researching potentially even intimately familiar study worlds — can engender acceptance of the researcher while also generating what are insider, privileged observation points (Heley, 2011).

The positionality of the self-reflexive researching subject (Fuller, 1999) is key to the successful implementation of this approach. This involves consciously working on both geographic and cultural distance; being fully aware of the vital inevitability of closeness rather than detachment as inherent in ethnographically understanding a culture; all the while being critically self-aware, in an ongoing fashion, of engaging in the practice of research. Indeed, and aptly, DeLind's (1999) anthropological study of a CSA specifically makes the case for the "more complete knowledge and a more organic existence, individually, collectively, sensually, and intellectually" (p. 4), which emerges from her recognizing her academic activism and grassroots engagement, while revealing "less than perfect" experiences in the real life of the CSA.

Ethnographic studies present challenges for researchers in terms of identifying people and places to study; gaining access to those people and places; establishing the trust of those being studied; and exiting the field (Heley, 2011). With a membership-based CSA, identification was straightforward. In terms of access and trust, the lead

researcher was already well-known to many CSA members, having been a member of, though not resident in, the nearby intentional community since 2007. The latter was central to the establishment of the CSA, as will be seen later. Exiting occurred through circumstances not related to the research, although relations were retained via the ongoing intentional community link.

The level to which the lead author participated and was immersed in the life and functioning of the CSA was typical of an especially active member. For a 12-month summer-to-summer period (2010 to 2011), the lead author moved to the town where the CSA is based. He became an active paying member, primarily collecting and adapting to fully using during mealtimes what produce the CSA provided. It also involved visiting the production fields regularly, organizing and participating in fund- and awareness-raising events, and other volunteering. Events were held on the land and in the locale, including in church halls.

A central part of being a member was visiting the distribution center and collecting produce. This was done between two and five times each week. There the researcher met and spoke with other members, encountered the building itself and the produce, in all its colors, shapes, sizes, availability levels, and styles. He also participated in a members' survey, conducted through interview. Community meals were held most Fridays, and while these were largely made up of CSA members, others were also present. After five months, he became a board member of the CSA, and also a member of the subcommittee on education, events, communication, and fundraising. This then gave him significant access to people, data and decisionmaking in the CSA, including on membership, finance, and planning. This included the members' survey information, which was part of the build-up to an extraordinary general meeting (EGM). A newsletter and column in an organic farming magazine were coordinated by the subcommittee.

Events for CSA members were organized, including farm walks, cookery demonstrations, and other social gatherings. As well as regular meetings (once per month for the board, five times for the subcommittee), digital communications — telephone, photographic and email — were part of

the lived experience of being a member of this CSA. In this period, approximately 160 CSA-related email communications took place, some with numerous conversations from the original email. Dozens of CSA-related photographs were taken, while hundreds more were available.

For this year, regular and detailed CSA-specific notes were written up by the lead researcher on experiences as they happened. These included experiences of collection, 'processing,' preparing, and eating, along with notes on key moments and events that occurred. CSA-related encounters with others (at the distribution point, at events, and elsewhere) were likewise written up. These were filed with relevant photos and digital communications, and then coded and where necessary recoded as per the emergent themes of equity, empowerment, place, and governance.

Findings: The Practical Experience of a Year Lived in the Life of a Community Farm

The CSA studied has been in operation since 2008. The CSA grew from an intentional community (also known as an ecovillage) established in the same small rural midlands town of about 500 people. Unusual for an intentional community, this one is essentially an appendage of the main town, rather than isolated from it. The intentional community began in 2004, with houses construction beginning around 2008, although it had been in planning since at least 1999. Most residents are from or were based outside of the locality. A large number, over 50 percent, are from Dublin. The town itself has an unusual heritage (by the standards of the Republic of Ireland), having three churches and a large Anglican/Church of Ireland and Methodist population. Though both the CSA and the ecovillage have separate legal identities, they are seen primarily as part of the same overall eco-newcomer tendency in the locality. Threequarters of CSA members were intentional community members in the early part of the research, while part of the farm's land is leased from the intentional community.

The biodynamic farming movement has been central to the establishment of CSAs in Europe and the U.S. (Soil Association, 2010). As some members and those affiliated with the intentional

community had an interest in biodynamic farming, they were thus familiar with the concept. The intentional community also has an interest in self-sufficiency — its motto is "building sustainable community"— so owning the means of production of food would be typical of its approach.

To establish the CSA, loan stock was generated from about 40 people in, affiliated with, or living in the small town because of the intentional community. From this loan stock, an 80,000 Euro loan from a German ethical bank was generated and people were repaid, although they remain as guarantors of the loan.

CSA membership is open to all in the locale, whereas membership in the intentional community involves living on the ecovillage site or having some intention of living on the site. The latter is usually defined by some sort of monetary commitment, either deposit, site, or ownership of a housing unit. After extensive outreach, CSA memberships started to emerge from the nearest large town, further diluting the ecovillage element of the CSA. Two-thirds of the approximately 50 family memberships are from the intentional community, with the remainder coming from the wider community.

The CSA is very much a membership-driven initiative. As will be explained in the following sections, using Ravenscroft and Taylor's (2009) six forms of CSA, this CSA operates a blend of type one and two — needs-and equity-based share farming — as well as type five, community buyer groups, as it is member-driven, not farmer-driven. Members own and operate the CSA, acquiring land on long-term leases and providing (contracting) the producers from within the membership. All producers and board members are CSA members.

Two separate holdings are farmed: an upper farm of 26 acres (11 ha) and a lower farm of 12 acres (5 ha). The upper farm consists of grains, field-scale vegetable crops, and livestock. Livestock regularly includes sheep and cattle and may include small numbers of goats, pigs, and hens. There is an emphasis on heritage breeds or varieties, including Kerry cows (a milking breed) for providing raw (i.e., unpasteurized and unhomogenized) milk. On the lower farm, 6 acres (2 ha)of vegetables are grown on the 12-acre site. The farm is run to bio-

dynamic principles and is a prominent participant of the biodynamic movement, though it is not a certified organic or biodynamic farm. There is an educational focus built into the memos and articles of the CSA.

In the year of research on which this paper is based (summer 2010 to summer 2011), membership rose from 47 family or individual memberships to 57. Membership from outside the intentional community grew at a faster rate over the year. Standard family membership costs 20 Euro per week, but membership for the unwaged or retired costs 10 Euro. Single people paid less, with the unwaged or retired paying a proportion less again. This entitled members to 3 or more visits to the distribution point per week, to collect whatever level of vegetables and raw milk they felt they needed. This CSA was year-round, not seasonal, and did not operate a box scheme system whereby members receive a set amount of food. Instead, produce was delivered to a distribution point, from which members took what they themselves felt was a fair share, based on their own needs. There was no limit on the amount people could take; indeed there was no lock on the door, despite the fact that the distribution point was in the center of the main village. In practice, some members treated the distribution point as something of a larder, especially with raw milk available seven days per week. Meat was somewhat contentious among vegetarian members, who were, from their perspective, being asked to fund the preference of meat-eaters. During the research period, after membership consultation, meat became a "meat share," available to purchase separately from the regular supply of vegetables and milk.

The CSA's structure in the first half of the research period involved one full-time farm manager doing most of the work in the areas of livestock, dairy, grains, vegetables, poultry, education, and distribution. This farm manager interacted with the board of directors, while an advisory panel interacted with both the manager

¹ Biodynamic farming is a version of organic farming but with cosmological and homeopathic-like dimensions, in tandem with more of a focus on closed production cycles. See http://www.biodynamic.org.uk/start-here/gardening.html

and the board. The board set the budget, based on member fees and on potential fund-raising estimates.

During the first summer of the research period, the lead researcher started to visit the farm and volunteer. A strong emphasis on joining in was immediately observed. Time was taken for children to be integrated into whatever work was being done, especially on days set aside for children's activities. There was a strong media and social media presence for the farm and its activities. Occasional members' meetings and food-oriented outreach events were held, including a high-profile TV event featuring a celebrity chef. Regular community meals were held most Fridays. In the previous years, these were events by and for the intentional community. Over the years the focus broadened to include the wider community, including CSA members. CSA produce tended to feature heavily at these events.

An example of an internal event was entitled "Raw: A milk party." This included information and demonstrations on uses for surplus milk (gluts often occur due to production changes; in the case of milk, this occurs with cycles of calving). The membership had something of a responsibility to deal with the surplus. The event also featured discussion on health and safety issues, milk-based or other dishes, and entertainment. Outreach-oriented events at local festivals and public events featuring well known chefs were also held. All these events involved the opportunity to make food for others to eat from the farm's produce. Other opportunities include contributing to the newsletter, from printing to writing to photographs and distribution. Direct production-related volunteering occurred too, in harvesting and planting.

Many members had their own allotment and membership in a whole-food wholesale buyers' group as well as CSA membership. A strong desire to shop locally rather than in large retailers in the regional towns was also expressed in conversations over the research year. The buyers' group provided wholesale deliveries of whole-food, primarily "non-fresh" (i.e., dried, canned, jarred, processed, etc.) produce, including nuts, seeds, pasta, flour, sauces, spices, coffee, and so on. This comprised mainly certified organic and, where applicable, fair trade,

foods. A bread club was also in operation. This involved a baker who was also a CSA and intentional community member supplying pre-ordered organic, sourdough breads weekly.

Members also volunteered at harvesting and planting times, although some of the impetus for this has been transferred over to WWOOFers (volunteers through Willing Workers On Organic Farms). WWOOFers are volunteers on organic farms who for the equivalent of half a week's work receive bed and board. This was an especially sought-after place to WWOOF because of the intentional community and CSA combination; the costs and use of the WWOOFers are shared.

Accommodation for WWOOFers was to a high standard, in a newly constructed hostel, and the social side of things was more present than in some WWOOF host farms, which can by their nature be isolated. Members volunteer to feed WWOOFers. Members rotated the task of feeding WWOOFers twice a day with an early afternoon and early evening meal. Depending upon WWOOFer preference, these meals could be served in the cook's home or delivered to the hostel.

Members were very much at the core of the CSA's operations. All involved in the functioning of CSA were members, including the coordinators (i.e., the growers and farmers). Members also had the opportunity to make formal and informal suggestions related to the food, including milk, distribution, and crop planting plans. The latter was done specifically through a yearly survey. Members also volunteered at events, both internal and outreach.

Restructuring

Members were very supportive of the concept of the CSA, but also frustrated at the lack of produce at times. This was especially the case for members who also had garden plots on the intentional community land. A reason posited for reduced produce was a severe winter frost. Yet those with garden plots experienced the same frost and still claimed to have relatively good harvests. In the first half of the research year, communication between the board and the membership, and a lack of farm grown vegetables, were membership concerns. Some members expressed concerns over the producer's judgment and performance. There were some unavoidable causal factors for the relative shortage of vegetables, including the especially tough winter frost and an unexpected bereavement of a very close family member of the sole contracted producer. Indeed, certified organic vegetables were bought in over the winter to compensate for the lack of vegetables. To fill the gap in produce, there was a combination of buying-in regional certified organic produce and receiving biodynamic vegetables in lieu of future productivity, the latter being a long-term barter given on trust.

Over the course of the research year, the CSA was restructured to deal with what were perceived by members to be flaws in the structure. In particular the structure, it was thought, placed too broad a work load on the farm manager and discouraged connectivity between members, volunteers, and the farm's management. This restructuring was part of a process that involved a one-time members' survey carried out through direct visits from board members to members' houses, where the above concerns were expressed and recorded.

These pressures and problems were serious enough to lead to an extraordinary general meeting (EGM). The CSA was in debt and struggling financially, a situation that improved somewhat over the course of the study year. This EGM was fraught but did lead to a change in structure. The process used at the EGM included a 'conversation café': members sat around tables, and each table suggested a set number of issues of importance. Color-coded stickers were placed beside the issues to denote relative importance of the issue. What emerged chimed with the members' survey, with lack of produce the key concern.

The new structure involved more members doing more activities and having a greater role in the functioning of the CSA. Instead of a full-time farm manager/producer, three part-time coordinators (i.e., farming and growing member-producers) became the main producers. Only two of these new coordinators were paid from the CSA's coffers; the third one was on a government-funded back-to-work type of scheme. Each had his or her own area of specialization. A new coordina-

tion team was established and the existing advisory group was reinvigorated to aid the coordinators. The coordination team met weekly or fortnightly and included board members and the core coordinators. It reported to the board on the day-to-day functioning of the farm and any matters that arose. The farm advisory group was strengthened to include a wider and more diverse range of experts. These included experts in each of the seven activity areas: vegetables, poultry, livestock, dairy, grains, distribution, and education. Some advisors were also experts in organic or biodynamic methods for the activity. Others on the advisory group were local farmers, community members, and business people, which helped with outreach.

There was also an activities support group, or more specifically, a system to facilitate activities' supports. So, for example, an education, events, communication, and fundraising sub-committee was formed; groups were also formed to deal with other matters that arose, such as raw milk and distribution issues. A members' liaison officer worked on weekly communication with the membership. Both LEADER² and the Biodynamic Association of Ireland³ helped financially, through an educational grant and a loan, respectively. School educational courses were initiated with a local cookery school. (See figures 1 and 2 for the old and new CSA structures.)

At time of writing, spring 2014, these changes seem to have worked: the CSA is still operational. It is no bigger but no smaller either, remaining member-owned and -operated and retaining the same number of members, although personnel have changed somewhat. There have also been changes in production and distribution. Future

² LEADER stands for "Liaison Entre Actions de Développement de l'Économie Rurale," meaning "Links Between the Rural Economy and Development Actions." It is an EU initiative that gives financial assistance to implement local development strategies, by awarding grants to local projects. It is funded through Pillar 2 of the Common Agriculture Policy, the rural development pillar. See http://ec.europa.eu/agriculture/rur/leaderplus/fag_en.htm#37 for more information.

³ The Biodynamic Association promotes the biodynamic agricultural impulse by emphasizing closed nutrient cycles through composting and saved seeds.

Figure 1. Old CSA Structure

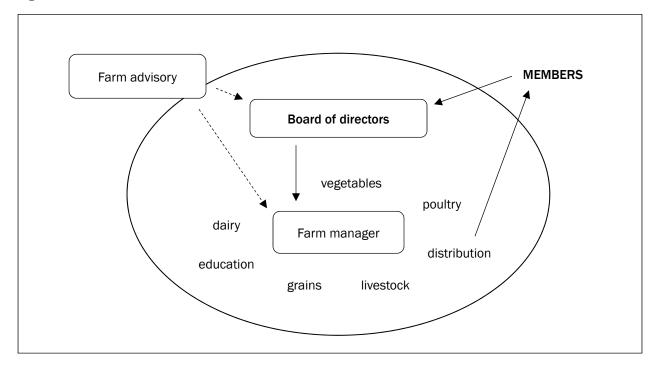
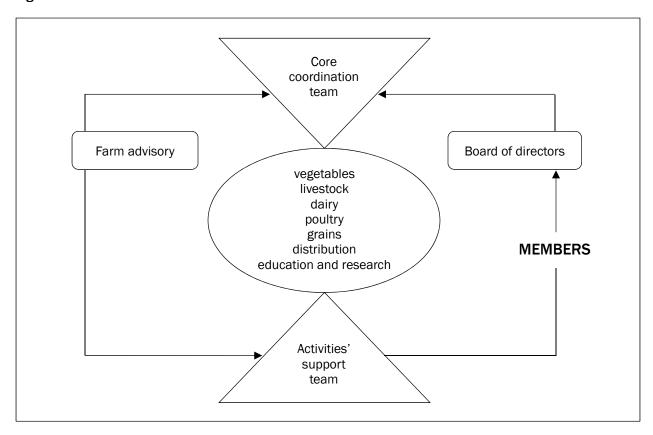


Figure 2. Revised CSA Structure



papers will outline how this restructuring was built upon, as well as how the relationship with the intentional community has unfolded.

Analysis

How does this specific CSA tell us new things about civic food networks, in theory and practice? What role do equity, place, governance, and empowerment play? And what can the research community learn from what happened during that year with this CSA?

Equity was at the fore for this CSA, exemplified by the half-price produce for low-income households, unlocked doors, and "take what you need" ethos. While there is more to enabling the use of CSA produce by lower-income households than simply making it available and affordable, there are some examples of efforts in this regard too. Various learning initiatives, including participatory learning events, were held in local church halls, which helped people learn how to use surplus produce (gluts of seasonal vegetables or milk). Learning how to cope with gluts made the CSA a better value. Beyond economic equity, this CSA expressed an equity of participation in decisionmaking and activities. There are also inevitable limits to what can realistically be expected from a single CSA in equity terms, however.

Newcomers have played an important role in AAFNs and the organic movement in Ireland, as Tovey (1997, 2002) and Moore (2006b) point out. This location, or place, is also reflected in our study to an extent too. In place terms, the CSA was in an unusual geographical location: three religious communities and an intentional community in a small town is not typical of rural Ireland, which is predominantly Catholic. Some aspects of the produce reflected place in DeLind's (2011) terms, with fairly traditional vegetables, milk, and meat along with more novel produce (including, paradoxically, traditional/heirloom varieties) making up the weekly collection. That membership came from more than just the intentional community was a reflection of the wider place. Some of the CSA members were newcomers to the village who were attracted by the existence of an intentional community in the area, even though they did not reside in it. This is a reflection of place — of an evolving

place — although local membership from outside the intentional community and associates was limited. However, taken as a whole, the presence of an intentional community makes place specifics for this CSA especially relevant. There were a range of other opportunities to interact with civic or alternative food networks — through allotments, a wholesale buyers' club, and a bread club. These other agri-food options, as well as the pioneering personnel involved in the CSA, mean that the distinctness of this place is certainly noteworthy.

The nature of governance mechanisms expressed by and through the CSA was certainly interesting, while having relevance for understanding place. The successful crowd-funding of loan stock could also be seen as a governance mechanism. Land-lease and subsequent biodynamic farming could be seen as part of the governance of rural spaces, akin to the AMAP behavior in France as outlined by Cardona & Lamine (2011). The range of stakeholders enrolled through various processes, both internal and outreach, was used successfully to grow membership and stabilize the CSA. Moreover, internal and external networking linkages were developed and strengthened. The makeup of the stakeholders was also noteworthy: rural development supports (LEADER), the Biodynamic Association, local community, business and farming experts, and a blend of ecovillage, newcomer, local, and regional membership.

In terms of the balance between delegation and empowerment as referred to by Dubuisson-Quellier & Lamine (2008), this member-owned and -operated CSA could be seen as closer to the empowerment than delegation end of the pendulum. Likewise, the range of volunteering, from partaking in events to some on-the-farm work such as harvesting and planting, exemplify empowerment. However, novel techniques of delegation were also apparent, which can be seen as empowered decisions, too. Having and housing WWOOFers represented delegation, as the hostel accommodation was rented at a financial cost to the CSA. Other supports offered to WWOOFers were an interesting blend of the two poles: delegating to "full time volunteers," while at the same time having to engage in various practices to facilitate WWOOFers, such as cooking or opening up a

home for meals. Thus, even the delegation was dynamic, responsive, and engaged, while also being constructed to free up time. In part, this was because, with a majority of members also being intentional community members, there was always and inevitably something of a strain and drain on volunteering and empowerment, as the intentional community itself required significant levels of volunteering and help.

Importantly, however, the CSA was also under severe pressure from what are sometimes considered to be relatively under-important constraints. Dubuisson-Quellier & Lamine's (2008) acceptable and unacceptable uncertainties consider external, bigger-picture factors like use of genetically modified seed or pesticide use as unacceptable, and constrained vegetable choice as acceptable. And in general, a core element of CSAs tends to be that risks and rewards are shared; the seasonality of vegetable production has to become a standard, normal part of the rhythm of the relationship. But what happens when the acceptable becomes unacceptable? In theory, acceptable risk is fine, but when participants end up with what they think of as not enough vegetables, in what they think should be a time of abundance, tensions inevitably rise. That the CSA came up with a new structure to adapt and cope is testimony to its robustness, or, specifically, its reflexive resilience.

Members themselves understood that there were risks and rewards: that they would have to support the farm even in the bad times. However, when the theoretical risk became the practical reality of not many vegetables, members adapted rather than carrying on without change or dropping away from the initiative. So they behaved in a reflexively resilient manner when faced with unexpected unacceptability. To elaborate, reflexive refers here to being critically self-aware and willing to change, and then managing to change. Resilience refers to being prepared for shocks, being always already adaptable and able to respond to the shocks if and when they occur. Taken together, the term reflexive resilience describes a CSA's robustness and its adaptive awareness. This notion of reflexive resilience describes both the act of looking and the act of being able to change.

The strength of its internal and external civic

network, in particular through the 'barter' with the biodynamic community, was certainly a part of this: that the CSA had nothing specific to barter, except potential future produce, was an example of the shared risk and reward system operating on a larger, mesoscale rather than microscale. Being member-owned and -operated, this CSA was able to adapt and continue, however awkwardly and slowly, in a more genuinely civic manner. The governance mechanisms employed at the EGM are a good example of how this CSA reflected what are posited in this study as the especially important aspects of civic food networks: equity, participation, empowerment, and governance itself. The EGM's methodology could be seen as a microcosm of the civicness around food this CSA expresses: members sat around tables suggesting positives and negatives about the CSA, which were then placed on the wall. These were color-coded with stickers that each person placed beside the terms. The number and color of stickers pointed to the importance of the issue. EGM decision-making was thus not board-driven or top-down; instead, decisions came from and through the membership.

But this CSA reflects more than these aspects of civicness we demark as important — equity, place, governance, and empowerment. Its robustness, adaptability, and always-already readiness to critically self-assess and change were noteworthy, and are what we are terming here to be reflexive resilience. To emphasize, all these factors, taken together, form the matrix of reflexive resilience: the ability to critically self-assess and adapt to circumstance; a participatory process to develop emergent organizational structures; member-owned and -operated functionality; methods of expressing equity, place, and governance; engagement techniques and adaptability with regard to navigating the balance between enrollment and delegation as well as between acceptable and unacceptable uncertainties.

Conclusion

Moore (2006b, 2006c, 2008) and Briscoe et al. (2010) point to the local benefits of what are termed participatory farmers' markets (and, although not to the same extent, pioneering or privately run farmers' markets) due to the range of

stakeholders they enroll. This CSA also enrolls participation, thus showing parallels between AAFNs and civic food networks in the Irish situation. To reiterate, governance mechanisms, empowerment, and equity, along with participation, have been shown to be important in the functioning of this CSA. The level and style of engagement these four elements involve make them especially civic acts. With this as a civic foundation, another dynamic emerged, building upon this civic base. Finding that constrained vegetable choice, unexpectedly, became an unacceptable uncertainty was a core motivation in this CSA expressing what we are terming here reflexive resilience: robust and critical self-awareness, along with a willingness and ability to change to adapt in the face of challenges.

So what can the research community learn from this, and what is missing from our analysis thus far? In both cases, the answer is a lot, but with limits. Campbell, Carlisle-Cummins and Feenstra (2013) note it is important to attempt to bridge the gap between research and practice in community food systems. The learning outcomes from this study emerged from the lived experience of being a CSA member in a particular place for a year, so the study was practice-led. Moreover, this research, in the style of backyard ethnography (Heley, 2011), gives extremely deep access to very rich, very embedded sources of insider data. So this research, following Fuller (1999), was not so much about 'going native' as about being aware of the issues and benefits of being as 'native' as any other newcomer in a CSA established by a community of newcomers. As Campbell et al.(2013)stated, "practitioners need to be active partners in advancing and generating new knowledge. This might include putting greater priority on fostering partnerships between practitioners and researchers to design and implement research projects on identified challenges"(p. 133).

Beyond the methodological, learning can ensue from how a member-owned and -operated CSA acted in an especially civic and also reflexively resilient way. Thus the techniques and methods from this CSA's functioning and restructuring have generated theoretically useful notions. Both communities and researchers can potentially learn from these practices and their theoretical meaning.

While there are benefits to this very immersive and very specific study, there are also noteworthy limitations. Developing any theories from a study of just one CSA, and one that emerged from an intentional community at that, demands caution. Intentional communities are rare in general, and in Ireland the intentional community in question is the only one. Granted, major cities may have scattered around them similar populations of people interested in the kinds of issues people in this particular place are interested in, as Dublin had before these people moved to the intentional community, for example. Nevertheless, this place has undeniable uniqueness: strong internal and external networks and an especially participatory functionality and structure. Whether, and if so how, the organizational structure of the CSA relates recursively to the intentional community's organizational structure will thus be a topic of future research.

This possible limitation, or certainly defining characteristic, warrants a dedicated study. Place and organizational transitioning, or community capitals (e.g., Brunori et al., 2010; Cardona & Lamine, 2011; and Emery & Flora, 2006) may prove to be fruitful in better understanding how this CSA has functioned in the intervening years. That it is still functioning, without growing dramatically, is noteworthy.

Likewise, the CSA's operational organizational structure is worthy of further exploration. Better understanding why there are still so few CSAs in Ireland is another area of consideration. Is it because AAFNs are in some regards quite strong in Ireland? Or is it the effects of the economic recession? Certainly the study of this CSA offers up many opportunities for learning: potentially the model and the ethnographic method of study could be replicated elsewhere.

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Solidarity economy and agricultural cooperatives: The experience of the Brazilian Landless Rural Workers Movement

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Abstract

Based on field research in southern Brazil, this paper examines successful experiences of encampment, and especially of two agricultural cooperatives of the Landless Rural Workers Movement (MST) as part of the solidarity economy. These co-ops exemplified collective searches for better living conditions to respond to people's needs and hopes, beside and beyond the market economy. The paper thus explores (1) community

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dynamics and movement-building among MST participants as they interact with one another and are shaped by daily practices in their collective struggle for land access and justice; (2) how they foster alternative imaginaries (vision, hope, projects), forms of production, and social reproduction that nurture greater autonomy, solidarity, cooperation, and democratic participation; and (3) how various forms of cooperation allow MST participants to appropriate, defy and transform dominant norms and practices in their everyday lives. The latter process is crucial for researchers and activists interested in social change since these forces are contributing to opening up spaces that allow the emergence of new norms and values, intertwined with new practices and ways of being in the making, despite existing obstacles and challenges.

Keywords

agricultural cooperatives, agroecology, Brazil, community economies, cooperation, food studies, MST, peasant movements, social justice, solidarity economy

Introduction

In Latin America, the solidarity economy is organized around a variety of experiences, partly in response to the hardships created by neoliberalism since the 1980s, and partly building on values of mutual help, various forms of exchanges, and the creativity of peoples (Gaiger, 2007; Souza da Silva & Feijó Fagundes, 2011). Such values and experiences are not equally shared or maintained, however, by all rural families and communities. They are continually transformed through interactions with other values and practices (e.g., individualism, competitiveness), and their proponents are facing multiple challenges and obstacles. The solidarity economy continues to be depicted and perceived as a fragile, marginal, and/or temporary survival strategy (Mourão Vieira, 2005, p.11), due in part to the adoption of a set of policies supporting an industrial model of specialized monocultures. In this context, it is crucial for researchers and activists interested in social change and justice to explore specific cases where communities have succeeded in sustaining cooperation, solidarity, and autonomous forms of governance. These forces are opening up spaces for alternative norms and practices, based on different values and sociopolitical projects, as well as new ways of imagining life and modes of interactions within communities (Wittman, 2007). These norms and practices are already playing a critical role in shaping societies, even as they remain largely invisible and fragile (de Sousa Santos, 2006, 2010; Gibson-Graham, 2006).

This paper focuses on encampment experiences, and especially on two successful cases of agricultural production cooperatives of the Landless Rural Workers Movement (MST, its Portuguese acronym) in the southern region of Brazil.¹

The MST is one of the most significant mass movements in Latin America, in term of membership, longevity, and sociopolitical influence. It was officially launched in 1984 following a series of isolated land occupations toward the end of the 1970s, when the military regime became increasingly contested. These rural struggles were reactions to land concentration and the hardships faced by poor rural populations linked to the modernization project that promoted the development of agribusinesses and hydroelectric megadams. Thousands of farming families have been pushed toward industrializing and now overcrowded urban centers, without many employment opportunities. In fact, since the colonization of Brazil, fertile land has remained highly concentrated among a handful of mostly white male landowners, drastically deepening the crises in the countryside (Wright, A. L., & Wolford, 2003; Stédile & Fernandes, 1999). This helps to explain why Brazil still has one of the most inequal income distributions in the world (Instituto Brasileiro de Geografia e Estatística [IBGE], 2013). Yet it is only one side of the story.

The two MST agricultural cooperatives under study here exemplify another side: that of collective searches for better living conditions that rely on alternative economies and mutual help. They explicitly challenge the dominant agribusiness model by appropriating and subverting the dominant discourse on what is possible and most effective; they defy the capitalist model and create innovative techniques (see de Certeau's "arts of doing," 1990) based on different norms and "real utopias" (Wright, E. O., 2010). The paper thus explores: (1) community dynamics among MST participants as they interact and are shaped by daily practices in their collective struggles for land access and justice; (2) how they foster alternative imaginaries (vision, hope, projects), forms of production, and social reproduction that nurture greater autonomy, solidarity, cooperation, and democratic participation; and (3) how various forms of cooperation allow MST participants to appropriate, defy, and transform dominant norms and practices in their everyday lives.

¹ Encampment (*acampamento*) refers to the site and period during which landless individuals are occupying a piece of land — usually in very precarious conditions, facing for example, food, weather and physical insecurities — and asking the Brazilian governement to proceed with its expropriation and distribution, as required by articles 184 and 186 of the 1988 Constitution, when land does not fulfill its social function. The *assentamento*, or settlement, is the site legally allocated to a group of farming families where they can begin to access credit and other resources to move toward more stability. (For a good and accessible introduction to the MST, see Branford

[&]amp; Rocha, 2002; Stédile & Fernandes, 1999; Wright & Wolford, 2003.)

Methodology

This qualitative analysis is based on field research conducted between 2005 and 2011, mostly in southern Brazil. It relies on document analysis of primary and secondary literature (MST websites, articles, documentaries, pamphlets, and symbols, as well as governmental documents, mass media coverage, and scholarly books and articles) to identify and analyze the norms, values, and dynamics of MST communities that orient their everyday struggles for social change and justice. This was complemented by open-ended, semidirected interviews (lasting 40 to 140 minutes), extensive informal discussions, and participatory observation during multiple visits to encampments and settlements of the MST, as well as at the MST national secretariat, two MST state secretariats, the MST schools Florestan Fernandes and Milton Santos, and the Escola Latino Americana de Agroecología of La Vía Campesina (Latin American School of Agroecology, concept to be defined below). I also attended the 10th Jornada de Agroecología, June 22-25, 2011, in Londrina, Paraná, where over 4,000 participants — peasants, students, landless, workers, women, members of environmental movements and nongovernmental organizations (NGOs), academics and international allies — joined together to promote agroecological farming practices, share experiences, organize workshops, and barter seeds. I interviewed over 50 individuals, including MST national, state, and community leaders, as well as regular members and co-op associates, most of them from the states of Paraná, Rio Grande do Sul, São Paulo, and Santa Catarina, where the MST's roots are and where many of the movement's cooperatives are located. I also conducted interviews with six analysts and allies of the MST who could provide important background information and historical insights. As a foreign woman researcher from the global north, I was acutely aware of my privileged position, power, and gender relations, as well as cultural and linguistic limitations. Nonetheless, the multiple visits and methods were useful to build trust and to better understand the context and conditions that contribute to successful solidarity experiences in food production cooperatives. I also relied on Brazilian research assistants to help with some

interviews, transcriptions, and translations.

This paper specifically examines two case studies. The first, the Cooperativa de Produção Agropecuária União do Oeste (Cooperunião), is an agricultural co-op created in 1990 and located in the state of Santa Catarina, very close to the Argentinian border, in the municipality of Dionisio Cerqueira (see Map 1). Among the first co-ops of the MST, the Cooperunião is economically successful and self-sufficient. Today, all 60 families of the settlement, covering 2,965 acres (1,200 hectares), are part of the Cooperunião. They produce collectively everything they need to ensure their subsistence, including poultry, fish, corn, milk, honey, fruits, vegetables, and tea. Their most important output is conventionally produced poultry, which has expanded to the point that more than 400 small farming families from 15 assentamentos of the region are now associated with the coop. The latter is controlling the whole production process, from animal feed and manure management to distribution and marketing, with a slaughtering capacity soon to reach 2,000 chickens per hour² (email communication with a member of the COOPAN, February 23, 2014; anonymous interview, Ministério do Desenvolvimento Agrário, 2010). The second agricultural co-op to be analyzed is the Cooperativa de Produção Agropecuária Nova Santa Rita Ltda (Coopan), created in May 1994, only a month after the settlement was established for 100 landless families on land covering 5,360 acres (2,169 ha). The Coopan produces mostly organic, agroecological rice, and conventional pork. It is located approximately 19 miles (30 km) north of Porto Alegre, the capital city of the state of Rio Grande do Sul (see Map 1).

It should be noted that these two cooperatives are neither representative nor easily replicable cases. Other co-ops are fragile or have failed in seeking to implement similar norms and practices in Brazil and elsewhere (Diniz & Gilbert, 2013; Vergara-

² See more at the Ministério do Desenvolvimento Agrário (MDA) site: http://www.mda.gov.br/portalmda/noticias/cooperuni%C3%A3o-amplia-produ%C3%A7%C3%A3o-de-frango-em-santa-catarina; and at the Censo Agropecuário 2006 at the Instituto Brasileiro de Geografia e Estatística (IBGE) website: http://www.ibge.gov.br/home/estatistica/economia/agropecuaria/censoagro/2006/agropecuario.pdf

Map 1. Locations of Study Areas

Both study locations are in the southern region of Brazil. The Cooperunião is in the municipality of Dionisio Cerqueira (in red), state of Santa Catarina (next to the Argentinian border at left), and the Coopan is in the municipality of Nova Santa Rita (also in red), very close to the capital city of Porto Alegre, state of Rio Grande do Sul.



Source: Instituto Brasileiro de Geografia e Estatística. (2007). Digital Municipal Mesh. Map created by Sarah Simpkin.

Camus, 2009). However, it remains essential to examine and make visible those emerging, successful experiences so as to obtain a better understanding of the ways in which social change is actually happening in specific cultural, political, and socioeconomic contexts.

Conceptual Framework: The Solidarity Economy and Everyday Forms of Peasant Resistance in Southern Brazil³

Looking back a few decades, one begins to realize how the development and modernization agenda promoted mostly by Western-based "experts" ended up marginalizing — but never erasing completely — the solidarity economy and reciprocity practices, north and south (Escobar, 2004; McMichael, 2004; Rist, 2008). This has been reinforced, in Brazil as elsewhere, by the Green Revolution and its technology packages promoting an agriculture that is capital- and oil-intensive, but reportedly more "efficient" and productive. In implementing its practices, many family farmers have been displaced, put in precarious positions, or made to believe that they need to adopt marketcentered strategies and grow their farms in order to survive and compete. Even among the early MST settlements, most small farmers sought to follow the industrial path, introducing chemical inputs and favoring monocultures (e.g., sugar cane, cattle). However, after noticing the pervasive impacts of this model on the land and people's health, and also on indebtedness and household subsistence,

³ Borrowing from James Scott (1985), I am using the concept "peasant" since the MST, as a key member of La Via Campesina (The *Peasant* Way), has adopted this language to refer to small and medium-scale farmers who are living on and cultivating the land.

various communities began to look for alternative models of production, work, and social reproduction that challenge dominant norms and practices in their everyday activities, based on an alternative vision of society.

The solidarity economy is one such alternative, re-emerging as a way to respond to people's needs and hopes, beside and beyond the market economy, or at least partly sidestepping market exchanges and the circuits of capital (Fiorentin, 2006; Lemaître & Helmsing 2012; Mourão Vieira, 2005). In Latin America, the participants in the solidarity economy come from various backgrounds and sectors; many are either excluded from the formal market economy or their salary is insufficient to live a decent life and support themselves and their families (Marañón, & López, 2010). These experiences have the potential of repoliticizing the economy and creating new forms of socioeconomic interaction, as well as deepening democratic and solidarity norms and practices. Yet few analyses have linked MST agricultural cooperatives to the solidarity economy literature (although for an exception see Mourão Vieira, 2013), or to alternative agri-food networks and the solidarity economy as movements (visit http://www.faanweb.eu/ for an example of alternative agri-food networks). This study begins to fill these gaps by highlighting the ways in which the MST is sharing values and practices promoted by the solidarity economy, while providing an alternative economic model that defies some elements of the capitalist market economy, and that goes beyond the European or North American examples of the social and solidarity economy. Moreover, even among MST's leadership, few analysts have identified agricultural coops as participating in the solidarity economy, nor have they explored to what extent such economic

⁴ We can think of the Argentinian workers who after the 2001 financial debacle organized to regain control of bankrupt factories as workers' co-ops and to ensure their subsistence. Nonetheless, work and income generation remain key objectives for the actors under study here.

alternatives contribute to mobilizing activists and sustaining the movement among marginalized communities.

In this highly populated country, rich in cultural and natural resources, just under 15 percent of the population lived in the countryside as of 2010 (IBGE, 2013, p. 71); however, about 51 percent of the poverty (less than R\$2 a day) is concentrated among the rural population. Nonetheless, small-scale family agriculture creates most rural employment (about 84 percent as of 2006) and "accounts for about 70 per cent of the country's food production and a significant share of food exports" (International Fund for Agricultural Development [IFAD], n.d.; Russo, 2012). On the other hand, fewer than 3 percent of large landholders (greater than 2,470 acres or 1,000 hectares) own more than 43 percent of all cultivated farmland in Brazil, whereas a great number of smallholders with less than 25 acres or 10 hectares occupy around 2.7 percent of all rural settlements (Russo, 2012).

Following Quijano (2008), Gaiger (2007), and Corragio (2011), this study refers to the solidarity economy concept, not so much due to its legal characteristics or organizational structure, but to highlight key principles that work to foster a set of solidarity practices, including autonomy, cooperation, equality seeking, co-responsibility, reciprocity, and collective forms of governance and decisionmaking that contribute to build capacity and strengthen communities (Massicotte & Marques, 2012). These elements are not equally shared nor systematically implemented in every community under study. Nonetheless, they are central to processes aimed at deepening democratic practices, social justice, and solidarity practices. These ideals guide most rural community projects of the MST. The two cases under investigation here both have a history of practices and explicit efforts to enact at least some of these principles. "Success stories" were chosen also because they better enable us to analyze the conditions and mechanisms by which these co-ops were able to translate principles into daily practices. This is informed by a normative stance, to propose not specific recommendations, policies, or actions, but rather a shared sense that these types of innovations and changes are neces-

⁵ This is based on field research notes, conversations and interviews with MST members and researchers, as well as ongoing analysis of information provided by the MST and its allies (websites, journal and magazine articles, public documents, etc.).

sary to move toward a more just and ecologically sustainable society and agriculture.

It is thus essential to better understand how specific actors have already been able to consolidate alternative norms and practices in particular contexts. As the work of Michel de Certeau (1990) suggests, this paper explores the "appropriation" that everyday actors make of mainstream representations, which implies a process of re-production of meaning that may or may not reflect the initial norm in circulation. Indeed, peasants, landless laborers, and other marginalized actors are not passive receptors. They create their own ways of imagining community life and produce new meanings and practices. Their proactive behavior may succeed in distorting normative constraints, tactically twisting and manipulating them into more positive outcomes that better fit their priorities (de Certeau, 1990; Scott, 1985).6 Analyses such as that presented here allow us to understand not only some of the conditions under which resistance emerges but also how participants attribute meaning to their own everyday struggles.

Political economist Karl Polanyi is another important scholar who studied resistance forces and different economic models. He has reminded us that societies are not only organized and integrated through market relations, but also through redistribution (via the modern state, the church, feudal systems, etc.) and reciprocity (exchange of services, care, labor, land, seeds, as well as more symbolic aspects such as honor, respect, emotional support, etc.). Denouncing the attempts to transform land, labor, and money into commodities for the "well functioning of a market economy" and "human prosperity," Polanyi demonstrated that the attempts to separate, or "disembed," the economy from society were far from natural or automatic, requiring rather violent forms of intervention (enclosure, work houses, Poor Laws, etc., see (Polanyi, 1944). The very efforts by some to create a so-called self-regulated market have led to a countermovement from society to protect itself. Polanyi argued that such a separation of the

economic and the social spheres could never be completed except by destroying the very fabric of society and the environment, which is also essential for human survival. Indeed, the raison d'être of the economy was first thought of as the sphere of activities for providing what is necessary for the well-being of the individual or the family unit. In this sense, the solidarity economy is a rediscovered form of social organization that communities across the globe are promoting in order to nurture economic relations that respond first and foremost to people's needs and aspirations.

Pushing the argument of the diversity of economic relations and their continued embeddedness in contemporary societies, the Community Economies Research Network (http://www. communityeconomies.org/) and Gibson-Graham's (2006) work offer a feminist critique of political economic approaches that insists on theorizing, making visible, and enacting alternative visions of economy that are usually discredited and/or marginalized by dominant discourses. Their analyses show that alternative economic practices are used by thousands of people in different sectors and regions on a daily basis as the main source of revenue and subsistence. These alternatives include the solidarity economy and "community economies," the advocates of which promote the main principles also highlighted above. The community economies scholars also use the concepts of "diverse economies" and "alternative economies" in order to highlight the fact that economies are always diverse and always under construction. Their works thus seek to make visible the multiplicity of economic practices that exist beside and beyond the capitalocentric forms of market exchanges, an objective also pursued in this paper.

Two additional concepts need to be clarified. In Latin America, "agroecology" refers to a science and a set of principles. As such, it is an ideal to attain and an alternative model of small scale, diversified agriculture that seeks to avoid agrotoxins and genetically modified organisms (GMOs), that is economically and environmentally sustainable, and that produces healthy and culturally appropriate food primarily for small producers and local markets, thus challenging "neoliberal modern-

⁶ Thanks to Dan F. Marques for this insight. For similar arguments but drawing from the work of Arendt and decolonial thought, see Icaza and Vázquez, 2013.

ization policies" (Altieri & Toledo, 2011, p. 587). It goes beyond organic farming by rejecting organic monocultures; it promotes a holistic view that values technical training for production, but also social reproduction and the strengthening of peasant and rural worker movements. Its advocates value local knowledges and their socialization so that a greater number of small producers can benefit from such knowledges and improve each other's socio-ecological techniques and productivity, respecting the lifecycles of both human beings and ecosystems (Altieri & Toledo, 2011; Gliessman, 2001). In Brazil, "food sovereignty" is promoted mostly through agroecology principles. To promote and implement agroecological practices during the 4th National Congress of the MST in 2000, the 11,000 delegates collectively decided to incorporate agroecology into all their education and training programs, from elementary school curriculum to political leadership courses and university-level degrees dedicated to agroecology (Hadich & Tardin, 2009; Massicotte, 2014; interviews, 2011).

The following analysis thus examines existing practices and the collective processes of appropriation of economic and reproductive activities that rely on solidarity among small food producers who value another form of living together and who seek ways to promote greater justice and autonomy while respecting ecosystem cycles in specific cultural, political and ecological territories (Quijano, 2008). These principles are similar to the concept of buen vivir, or living well, promoted by indigenous communities, especially in the Andes (Gutiérrez Escobar, 2011). The solidarity economy thus refers to an explicitly sociopolitical and emancipatory project designed and appropriated by core participants to open up opportunities and to foster greater equality, democracy, and cooperation among themselves. This paper examines concrete experiences

where individuals engage with and participate *collectively* in innovative initiatives to secure their subsistence through alternative production and reproduction models, thus succeeding in improving their common well-being (differently defined and evolving through experience). The conclusion briefly discusses some of the obstacles and opportunities that sustain and limit the potential for consolidating and diffusing such alternative solidarity economies and communities.

Encampments: A Privileged Space of Politicization and Everyday Collaborative Exchanges This section analyses everyday practices and values of participants in MST encampments and cooperatives that challenge dominant norms and ways of living, thus contributing to the development of alternative economies based on solidarity principles. In order to speak to this issue, I first need to explain the relevant practices of the MST. This landless movement emerged in the early 1980s in a context of rebellion in Brazil, a country that was still under a military regime, which was losing control over a population fighting for change, democracy, and justice. For decades there had been demands for agrarian reform, but the dictatorship had emerged partly in response to a modest attempt by President Joao Goulart in March 1964 to redistribute land (Konder Comparato, 2004). In a society with dire rates of poverty, discrimination (both race and gender-based), and startling inequalities between the richest few and the masses of poor people, land occupations in rural areas reemerged in the early 1980s as a prominent way to resist and survive.

When the MST was officially created in 1984, the objective was to join forces across the immense national territory to call for justice that, in the eyes of those commonly experiencing exploitation, requires democratizing the access to land. One of the main slogans reveals much about their tactics: "Occupy, resist, produce." Through direct action, the MST leadership invites landless people to collectively occupy underutilized land. They use moral justification, or in de Certeau's words, "a style of moral resistance" in reaction to injustice and colonial abuse, as well as legal and constitutional arguments (redistribution to fulfil the "social

⁷ As noted, not all solidarity economy projects fit into this definition, but the cases under study respond to these criteria. I also avoid free association and collective ownership of the means of production as principles because adoption of the cooperative model was not necessarily the preferred economic option. Some participants felt pressure to join the co-ops, and most MST co-ops chose not to adopt collective work, but they consider the co-op as an alternative, emancipatory project.

function" of the land and contestation of land titles fraudulently acquired) as tactical tools to demand redistribution and gain legal titles (Wright, A. L., & Wolford, 2003). However, the acquisition of land titles often takes much patience, political pressure and struggle in encampments.

In the meantime, the families organize and resist. As Nashieli Rangel Loera aptly highlights, "encampment time" is essential in politicizing participants and promoting greater activism, political training, and leadership building. Indeed, the months and years of everyday sacrifice, suffering, and commitment to the struggle required to obtain access to land symbolize key social status markers to gain respect within the MST (Brandford & Rocha, 2002; Rangel Loera, 2010; Stédile & Mançano Fernandes, 1999/2005. From the initial moment of occupation, when women are usually at the forefront in their shared struggle for land and dignity with their male counterparts, through the organization of daily life with participants, who generally do not know each other but need to work together on a daily basis to meet their needs (e.g., access to food, clean water, security) and establish common norms for the emerging community, the encampments become privileged spaces of politicization, resistance, mutual help, and friendship building.

The experiment of a community put in motion, by choice and by necessity, allows for the institution of alternative norms and practices, such as solidarity and reciprocity. In turn, these norms and practices bind people together, not only through a common goal (such as land access), but also through establishing collectively what a just community should look like, in principle and in practice. Each experience of encampment remains unique, and the process of organizing is in itself quite stressful and prone to confrontations and constraints vis-à-vis outside forces and among participants themselves, despite their shared social marginalization. The harshness of everyday life in camps (fear, hunger, cold, rain and mud, burning hot days, etc.) often discourages some participants or family members, dividing people and diminishing the number of bodies to defend the "conquered" territory. In this sense, one needs to be careful not to romanticize these experiments nor

take for granted that efforts in nurturing mutual trust, solidarity, and cooperation will eventually succeed (Massicotte & Marques, 2012). Some acampamentos failed to consolidate and gain formal titles. And whereas some participants may occupy other territories until they finally gain land titles, others leave the MST and abandon the struggle, or join other popular organizations (Rangel Loera, 2010).

Different styles of leadership emerging among those occupying the land can help or hinder the social integration process and the sense of solidarity. Some are charismatic leaders, others are respected for their long farming experience or formal education, and yet others bring in particularly useful skills in communicating and in reconciling participants who have divergent views or interests. For instance, during a field research trip in May and June 2009, one encampment was fractured mostly due to the rejection of the leadership style of a strongman in the state of São Paulo; at the same time, another was flourishing and had recently gained legal title, based on the multiple involvements of a group of mostly women promoting political activism, reciprocity, and solidarity (field research notes and interviews with MST members and allies, Irma Alberta settlement, MST National Secretariat in São Paulo, 2005, 2009).

Hence, identities and ways of being are transformed through collective participation as subjects making their own history, sharing new and often positive experiences, and deliberating and dealing with tensions and conflicts. The social references that participants had prior to land occupations are sometimes transformed into new values and practices that they "appropriate" daily. In this process of constant interactions, they establish social roles, norms, and status, helping each other in shaping the new collectivity of which they are now part; solidarity and co-responsibility become core values that guide their everyday behaviors. When developing very strong social connections, individuals and families come to perceive that they owe each other mutual help. As A. L. Wright and Wolford's field research (2003) has demonstrated, while some tensions cannot be resolved and lead to ruptures within the MST, in other cases common suffering and friendship lead to mutual help and coresponsibility. Indeed, in Sarandi, Rio Grande do Sul, for instance, the Placotnik couple refused to move to another settlement, which would have meant leaving behind their "new family" as they called their friends of the occupation. They decided to settle on a very poor parcel. The rest of the newly created settlement felt it necessary to join forces and help them clean up the land so that they could cultivate it. Since then, the Placotniks have committed to celebrate the acquisition of the land every year by inviting the community to their home for a feast. This type of reciprocity and debt is voluntarily acquired rather than imposed; it is a sort of obligation or co-responsibility based on friendship, explicitly confronting dominant norms of utilitarianism, individualism, and interest maximization. In other words, acampados produce different ways of imagining life in community that reshape their behavior and ways of seeing their relationship with their environment.

Reflecting beyond their own local community, MST leaders and activists often insisted in various interviews and conversations on collective responsibility and the need for solidarity to pursue the struggle until every landless person can live a decent life:

The raison d'être of the MST...is to struggle for the democratization of land...because of the historical problem of land concentration....This means that land needs to be distributed...to those who want to work and live on the land....But we live in a society that is capitalist, that is individualist, and that privileges values we don't share.... Hence, there is permanent confrontation....In fact, this is the work of the MST. Who's part of the MST? The assentados and acampados. Because those who are assentados, it is because they have been acampados. And if he is acampado, it's because he's with the MST and therefore, he must continue with the MST [by participating in training, marches, and helping to support other occupations and settlements]. (interview, Porto Alegre, 2009)

This illustrates the tense relationships — but

mutual influences — between landless participants seeking a piece of land, the leadership of the MST resisting the dominant social order and proposing an alternative based on socialism, and systemic forces with the power to impose strategies and constraints on everyday actors. The use of the auxiliary verb "he *must* continue" both validates a perception among MST leaders that structural constraints and unequal power relations of capitalist society require a continuing battle and commitment, and that landless participants owe this commitment to the MST as the latter helped them to access land.

The encampment also allows the emergence of an alternative economy that relies on everyone's skills, assets, relations, cooperation, and solidarity, without much direct interaction with the market economy. That alternative economy can either collapse or consolidate in the settlements. Different interviewees, analysts, and members of the MST have emphasized that the "cooperative is born in the encampment, and it has grown in the settlement" (MST coordinators, production sector, São Paulo and Porto Alegre, 2009). Indeed, they often insist on the crucial role of discussions and socialization, as well as "political and ideological training" that happen among acampados, where some participants become convinced, and help to convince others, of the need for and advantages of collective work and cooperation: that "this should be used and that it is the way" to go (interviews with MST coordinator, Porto Alegre, 2009; Copavi members, 2011; Coopan members, 2009, 2013). It is the birth and formation of their own norms that will translate into practices — once they grasp the reasons why they find themselves in their socioeconomic conditions of dispossession (Harvey, 2003). They are the ones who can promote, implement and consolidate the principles and practices in the settlements when they secure land titles, through different forms of cooperation. This is one early way through which a certain distinction emerges between two kinds of acampados: those who become MST activists, who support the broader sociopolitical project and values of the MST, including cooperation and solidarity to promote a more just and sustainable society for all; and those who take part in the occupation mostly

to secure access to land and who tend to avoid further political involvement for various reasons, including because they have multiple family and production duties, or because they feel they have suffered enough and want to work the land they've been dreaming of for so long (Brenneisen, 2005; Vergara-Camus, 2009).

On the role and multiple forms of cooperation and cooperatives in the MST

As of February 2012, the MST claimed to have over 130 cooperatives (Previattelli, 2012) across the country, mostly concentrated in the southern states of Brazil, and between 450 and 500 associations also based on cooperation without having the legal characteristics of cooperatives (interview, São Paulo, July 2009). Very often in Southern Brazil, landless people come from individually owned farms rooted in family culture, where large families could not always divide the land between all (mostly) male children, so as to enable them to ensure their subsistence. Hence, after experiencing a number of failures and criticisms for trying to implement a Cuban-inspired form of cooperatives based on collective agricultural production and ownership of the land among landless families that are also rather marginal in other parts of the world (but see Bleil, 2012, for an in-dept analysis of the Copavi), the MST has decided that the members of each settlement should decide what forms of cooperation they want to adopt (interviews, São Paulo, Curitiba, Londrina 2009, 2011; Brenneisen, 2005; Gonçalves, 2008).

Among the various cooperative models, some are rooted at the local and regional levels, some are active at the level of a state or across a few states, while others operate on a national scale. Some focus on production or marketing, whereas others provide services to local and regional co-ops, like credit unions and co-ops providing technical training in agroecological production or cooperative management. Hence, in today's MST settlements, cooperation as a normative principle remains an essential value and feature of everyday life:

Cooperation can take various forms. There are associations and cooperation to buy machineries, for community tasks (*mutirão*)

and collective mobilizations,...and regional cooperatives, which we have the most as forms of cooperation within the MST.... These co-ops work with many settlements...providing services, marketing, helping with training...Production cooperatives per se are a more advanced model of cooperation. They require a degree of training, of awareness ["conscientização," in Paulo Freire's (1970) sense of awakening of consciousness, through practice and dialoguel, of availability and of willingness that is greatly superior to others. This is why it's not all families who want to work in such co-ops. Yet what is important is that, in one way or another, we have cooperation, for a tractor, to buy or sell...That there are forms of cooperation, this is what the movement promotes. (interview with MST leader, Porto Alegre, 2009, quoted in Massicotte & Marques, 2012)

In this leader's view, to attain a high degree of cooperation in everyday practices, an equivalent degree of consciousness, political training, and individual commitment must be acquired; hence the production co-ops appear as the most demanding form of cooperation. In recent years, the "transformation and marketing cooperatives" have been the MST's most common way to promote cooperatives within the movement. In Rio Grande do Sul, Santa Catarina, and Paraná, for example, regional co-ops have emerged as a way to gain greater autonomy and self-determination (autogestão), increase the value of their products, and keep most revenue within the MST and its settlements, which allow reinvestment in the cooperatives (interviews, Nova Santa Rita, Porto Alegre, Curitiba, Lapa, and São Paulo, 2009; various settlements and encampments, Paraná, 2011). Marketing co-ops and agro-industries owned and managed by the MST are integrating market circuits and thus becoming more vulnerable to market fluctuations. Yet these same developments have allowed them to transform, diversify, and commercialize the agricultural production of many small farming households from different settlements, thus increasing their autonomy vis-à-vis conventional market

forces and powerful intermediaries that were once imposing their rules and prices. An MST national coordinator in the production sector further emphasized:

One of our strategies is what you saw in our assentamentos, where people try to obtain as much autonomy as possible, from production until the agro-industrialization of all our products. So we put a lot of effort not on producing and selling only primary products to anybody in the market, but on setting up industries, in our own areas [MST settlements], to transform and sell not any products, but a product that carries an ideological weight...We don't want to just sell seeds, but produce and sell ecological seeds, produced in a correct way in terms of both ecological management and the human beings that are working and producing them [through, for example, the MST's own organic seed production, called Rede BioNatur]. This is a central element of our struggle, that we can gain this autonomy, which is not easy. (Interview, São Paulo, July 2009; also quoted in Massicotte & Marques, 2012)

These practices represent a good example of the tensions and challenges co-ops face, and of how dominant norms become appropriated and reshaped by everyday actors to serve the collective goals and needs of the MST and its members. Embedded in a normative discourse, they become a sort of praxis of the solidarity economy. Although they still adopt a division of labor and produce in part for conventional supermarkets, where they need to be competitive to secure financial revenues, they have partly subverted the production process to make it fit into their own norms and priorities, including a permanent struggle that ultimately aims at dislodging capitalist markets to redistribute wealth more equitably in society. They thus continue to produce for selfsubsistence and for various political activities of the MST, such as national marches and congresses, and the yearly Jornada de Agroecologia event. The latter attracts thousands of local, national and international participants, where almost every delegation comes to celebrate, bringing and cooking their own food as well as exchanging seeds and ecological production techniques (field research notes and interviews, Londrina, June, 22-25, 2011; Massicotte, 2014).

Beyond the challenges faced by MST cooperatives as a result of the 2007-08 food crisis, a young female leader of the MST emphasized the recurrent fluctuations of food prices: "We cannot be romantics! It isn't sufficient to say that we'll make an allnice settlement and work in agroecology...Everybody needs an income to survive and if this financial return doesn't come, we cannot make it" (interview, São Paulo, 2009). This "market rationale" supporting transformation and marketing co-ops emerged from MST participants themselves who are well aware of, and do reassert, the influence of dominant economic discourses and material constraints imposed on them. However, they devise their own tactics by bringing together many smallscale producers, diversifying their production, avoiding intermediaries, and controlling almost every aspect of the food chain. In doing so, they reduce their dependence while increasing individual and collective revenues that remain within the settlements, thus strengthening the movement and its political agenda.

Yet, if compared with mega-agribusinesses, cooperatives continue to be "small enterprises" that face several difficulties, as this interviewee reminds us:

The consequences of the crisis for us are much bigger, because of the enormous competition on the market....And we don't work with the intention of exploiting workers. So there is a different conception here. This is why for us, in our settlements, the impact is so important in a collective enterprise...In the conventional market, the one who lost the least is the fazendeiro (rural landowner), the agribusiness, because he has this strategy of exploitation and we don't....The size of our industries makes it very painful to absorb such attacks. In the case of milk, for a long period we could not sell, so the whole process became very fragile...We don't have the structure to support the

crisis. There is the *political force*, the *will to struggle*...but the crisis is cruel in our settlements...And on top of that, the government finances and is concerned about the agribusiness, but it does not help small producers, it does not provide what it offers to agribusinesses. So, for us, it can be fatal. (interview, São Paulo, July 2009, our emphasis)

This interviewee highlights a "strategy of exploitation" that can be linked to how de Certeau (1990) defines strategy as the prevalent "way of doing" things. At the same time, she consciously says that this is not the "way we do things here." In other words, constrained by the dominant "strategy," they employ "tactics" in their own space. While they use dominant tools such as the market, they also refuse to use them in the same way: they transform the rules of the game through their "political force." They remain embedded in an individualist, consumerist, and capitalist society, yet their practices reject the market ideology and seek ways to implement alternative economic practices that sustain other norms and values, such as social and environmental justice and the common good. The MST also continually negotiates with the Brazilian state, securing various programs that guarantee, among other things, a stable monthly income for small producers beyond the market rule of supply and demand. For example, since 2009 a law has ensured that a minimum of 30 percent of the food purchased for a governmental program providing free school lunches comes from small family farms, many of them located in MST settlements, as we will see below. This program (Programa Nacional de Alimentação Escolar, PNAE) contributes to strengthening the socioeconomic viability, autonomy, and visibility of the cooperatives and the MST.

In parallel, one begins to see dilemmas and tensions faced by MST cooperatives. This economic model allows many peasants to collaborate in exciting and demanding collective endeavors, including transitioning toward diversified agroecological production and industrialization that have, in some cases, effectively increased their income and quality of life (see below). Agro-

industries have simultaneously increased their degree of integration into the capitalist market economy, giving them better access to credit and debt, and in turn, making them more vulnerable to market competition and its boom and bust cycles. Nonetheless, it is crucial to highlight the opportunities that the very spaces and territories of encampments and settlements have opened up for numerous landless and marginalized households. What emerged from shared everyday experiences of organizing and resistance is a new way of imagining themselves as agents of sociopolitical change: a revamped sense of identity, dignity, and hope, and a sense that better lives are possible and in the making. Hence the political struggles of the MST are contributing to building alternative societies and economies. If what participants want in the short run is to be able to survive and live a decent life, this requires in the medium run changing state and economic policies; and in the long run, their struggle is to found a different society that unites around new values and different ways of being. The following section looks at two cooperatives to demonstrate how some experiences have nurtured solidarity and a collective identity that seem to be the secret ingredients for consolidating the co-ops as successful community economies.8

Daily Life in MST Settlements and Cooperatives

The Cooperunião, Conquista na Fronteira Settlement, Santa Catarina

In Santa Catarina, family farming employs 82 percent of all rural workers and produces 64 percent of the total agricultural output of the state (e.g., 73 percent of beans, 77 percent of corn, 90 percent of coffee (IBGE, 2013). Small producers are therefore significant economic players contributing to the

⁸ Many landless workers come to the MST dreaming of owning their piece of land to guarantee the well-being of their family and descendants, break dependency linkages, and avoid the suffering they have known too well. Hence not every participant who benefits from land redistribution is equally committed to the longer-term collective fight for agrarian reform and to continually respond positively to the multiple demands of the MST leadership to pursue socialist ideals (Diniz & Gilbert, 2013).

well-being of the people. It is in the western region of that Brazilian state that, after an "encampment time" spanning from two to five years, 60 landless families obtained the legalization of the *Conquista na Fronteira* encampment in June 1988. The new settlement covers 2,965 acres (1,200 hectares) of land. The cooperative *Cooperunião* was launched in October 1990 and remains among the few MST co-ops that are fully cooperative, commercializing mostly conventional poultry and milk, but producing everything that is necessary to ensure subsistence and good living conditions for each of the 60 households:

All the basic food items come from the settlement. People can buy if they want, like white sugar, because we only produce brown sugar internally. But...in general, people don't go to the store....In my mother's home...you cannot get them [plastic bags] as you don't go to the supermarket; you produce. (interview, MST member, June 2009)

After more than two decades, all the community's families have very decent homes, and like many other MST settlements, they have a health clinic, a cultural center, daycare services, and an elementary school with its own curriculum, which includes political, cultural, socioeconomic, and environmental justice components. These socioeconomic resources also become social and political vehicles through which co-op associates try to institute their own norms and practices on a daily basis.

As mentioned earlier, all the settled families are involved in some aspects of the agricultural co-op's work as *associados* (associates). They share the land, tools, production, and income. They also collectively make decisions regarding all aspects of community life⁹ and share the responsibilities for their successes and failures (interview, São Paulo, June 2009). When the MST-affiliated families created the Cooperunião, they followed the usual

cooperative organizing structure with a general assembly as the main body for decision-making. However, they added management elements characteristic of other MST settlements, organizing in "núcleos de base" (small committees) of about 10 households, in various sectors of production (cattle raising, milk, vegetables, management, market sales, etc.), as well as key sectors for organizing collective life (sport and leisure, education, infrastructure, health, etc.). In their search for greater autonomy and democratic participation, each sector and coop member is responsible for implementing the collective decisions that emerge from the assembly and reporting back on progress and difficulties. Regularly attended by about 70 percent of all associates, the assembly also elects those in charge of the various productive activities and responsibilities of the co-op by secret ballot for a three-year term. Regular elections encourage a rotation of tasks and responsibilities. When associates assume difficult tasks, they know that this is for a limited time. It means that they have to transmit their knowledge and techniques to others, a "way of doing" promoted by the MST with its emphasis on ongoing education and training, in schools and on the ground, which some refer to as "learning by doing," through practices and exchanges (interviews and discussions, Paraná, São Paulo, Rio Grande do Sul, 2009, 2011; Massicotte, 2014). This is an effective way of avoiding dependency on a single person or leader to perform certain tasks. Such organizing principles also contribute to building capacity, knowledge, and leadership of the community as a whole, and encourage reciprocity and mutual learning.

Nonetheless, it is important to highlight that during the first years of the settlement, there were tensions between settlers who formed two distinct groups and separated the land between them, with an equivalent of 50 acres (20 hectares) per family (Frente de Prensa, 2007; Vieitezi & Dal Ri, 2003). Whereas the group supported by the municipality was not convinced by the collective model, mostly because of family farming traditions, the MST families pushed for the creation of a production cooperative. Among landless workers who were politicized through MST occupations and struggles, self-management (autogestão) and collective work

⁹ When members have special needs for specialized training or medical treatment unavailable within the settlement, for instance, the general assembly decides whether they can obtain it.

seemed more appropriate to gain leverage and be more effective. As an organizing norm, the emphasis on collective work defies the dominant model of agro-industrial monoculture. Discussing work relationships, tensions, and challenges that the Cooperunião associates face constantly, Carla Tatiane Guindani (2013, p. 3) explains:

Workers are owners of the means of production and the work force is collective...to the extent that they can develop a collective consciousness, work stops being a painful necessity and becomes a pleasant duty, because they don't work for the benefit of the boss but for the benefit of the collective.

As such, and despite remaining frustrations among co-op workers, the everyday experiences of members of the new settlement clearly reshaped normative discourses, as well as their political economic preferences, rather than being shaped only by neoliberalism.

Like five other co-ops in Santa Catarina, the Cooperunião sells under an MST brand, "Terra Viva." With the advice of agronomists, they have chosen to produce fish as a complement to poultry production because it allows them to use parts of the chicken to feed the fish; this combined method greatly reduces what is usually considered waste to be discarded in the environment. Here, they have found holistic ways to farm that integrate the lifecycle of the products, from the beginning to the end of the food chain (interview, MST member, June 2009). The Cooperunião has expanded to the point of producing an average of 660 to 790 U.S. gallons (2,500 to 3,000 liters) of milk per day, transformed and commercialized by another MST co-op in the region. They also recently doubled their slaughtering capacity in their own abattoir to about 2,000 chickens per hour, some of which come from other family producers in the region (interview 2009; email exchange, 24 Feb. 2014; Prensa de Frente, 2007). While this larger-scale production allows them to be more competitive in the regional market, it also means that they rely mostly on conventional methods with greater environmental impact, and that market fluctuations are felt more directly by the families.

The subsistence provisioning and revenue of the co-op associates remain partly monetized and partly in-kind products, following the number of hours worked but also taking into account the needs of each household. Based on a gendered division of labor, men normally work 8 hours per day, 5 days a week, whereas women work 4 hours or more for the co-op and 4 hours for household responsibilities (caring for children, elders, family garden, etc.). Despite formal recognition of these crucial tasks that are still largely women's responsibilities, they are not calculated in the number of hours worked for the co-op. On the other hand, hours spent in external meetings and MST activities such as marches, training, and mobilization count toward the co-op income distribution. Hence the notions of justice and solidarity, central to the MST and the Cooperunião's vision of a better society, remain problematic in terms of gender justice.

The production surpluses, which are very significant in this case, are commercialized and sold in farmers' and conventional markets across the state of Santa Catarina and in four other Brazilian states. Other key outlets for the Cooperunião are federal, state, and municipal social assistance programs such as the Food Acquisition Program (Programa de Aquisição de Alimentos, PAA) and the previously mentioned PNAE. These programs work in parallel to the capitalist market as they guarantee a stable revenue at a fair price specifically targeted at family producers, and they provide fresh and healthy food aiming at ensuring food security for all through, for instance, school lunches, community kitchens, and basic food baskets. In 2011 the Cooperunião participated in the PNAE, providing 19,080 lb. (8,655 kilos) of frozen chicken to public schools and received in return R\$31,05010 (Intituto Nacional de Colonização e Reforma Agrária [INCRA], 2012). In 2013, the co-op sold 97 million pounds (44 million kilos) of chicken to the PAA program, a program that will expand in 2014 at the municipal level and will include beef, vegetables, and grains (email exchange, MST member, February 23, 2014).

 $^{^{10}}$ On June 29, 2012, the conversion rate was R\$1 = US\$0.50, so R\$31,010 = US\$15,525.

Hence the cooperative organizes the settlement around the sociopolitical goals of the MST and the daily needs of the community (personal, family, work relationships, security, services, cultural activities, etc.), as well as around its economic activities. In Polanyi's words, they are re-embedding the economy into the political and cultural sphere of the community. Through the activities of the co-op, one can however witness (1) how gender biases persist and (2) how various forms of paid and calculated labor (e.g., food production, transformation, marketing, administration, MST and co-op meetings and militancy) and unpaid and uncalculated labor (e.g., caring for elders, children, sick people, and family plots) intermingles with other spaces of daily life, thereby multiplying and diversifying social interactions among settlers. In most cases and despite significant efforts by the MST, the machista culture continues to assign traditional roles to men and women, thus reproducing gender roles and power structures, attributing more value and monetized income to certain types of work. Nonetheless, co-ops tend to divide revenues among all associates working for the co-ops, including women and young adults, either equally or based on the number of hours worked. Some co-ops are considering, or have already established, that a greater value should be attributed to more complex or demanding tasks that only some members are willing or able to accomplish. Paid and unpaid work are both crucial to strengthen community life and maintain good relationships since people have to interact and collaborate continually. In such recently created community and territory, one witnesses the emergence of a system of reciprocity, based on obligations and coresponsibilities that bind members together on a voluntary basis.

This co-op is known internationally for its economic success, but it is also a very interesting example of collective autonomy and democratic self-governance from below. As one MST interviewee (2009) explained, the associates have "learned to cooperate through their daily practices" in order to organize daily life, production, and social reproduction of the broader community. Nonetheless, this case points out some of the numerous challenges that co-ops continue to face,

as they remain partly dependent on the capitalist market economy and governmental programs. The other major challenge relates to their ecological impact as the expanding size of the production and agro-industries makes it increasingly difficult for the co-op to transition toward more agroecological forms of production.

The Coopan, Capela settlement, Rio Grande do Sul In the state of Rio Grande do Sul — where the Labour Party (PT, for its Portuguese acronym) was strong at the end of the 1980s in Porto Alegre, and the region in which progressive initiatives such as the participatory budget and the first editions of the World Social Forum have been implemented — the MST has been criminalized, especially under the leadership of state governor Yeda Crusius (PSDB political party, in office 2007–2011). Negative media coverage of the MST is not new, but recently government officials, mainstream media and business leaders have increased their attacks, for example by refusing to pay for and by closing seven itinerary schools in MST encampments in the state in February 2009 (interviews Coopan members, 2009, 2013; Scalabrin, 2009). In this context, the successful experiences of the MST have been essential for demonstrating the benefits for society and for rural farming families in the context of a limited process of land distribution. The MST claims that among the settled families who gained access to land in 250 settlements of this southernmost state of Brazil, 24 settlements are producing "3,300 hectares [8,154 acres] of organic rice" and were planning to get 280 thousand bags for the harvest year 2012-13 (interview conducted by Dan F. Marques with a Coopan member, June 18, 2013). This organic rice will not only benefit upper- and middle-class households but will also be redistributed to public schools and included in food baskets for poor families through CONAB and various governmental programs (Globo.com, 2011). 11 As mentioned in the intro-

ONAB stands for the Companhia Nacional de Abastecimento, or National Food Supply Agency. This public company was created by the federal government in 1990 to work in the agribusiness sector and to ensure regularity of the food supply. It monitors agricultural production and stores food stocks, and

duction, the Coopan is one of the MST's oldest coops producing agroecological rice in Rio Grande do Sul, near Porto Alegre (Map 1).

When it was created in 1994, 52 families joined the co-op (Lanner, 2011). These MST families had chosen, during their encampment time, to stick together until they could get a large enough parcel of land for all of them to work collectively in order to gain more social and economic benefits. From the start, some families chose to work their plots individually. Over the years, others left the Coopan for various reasons, including the fact that some individuals felt it was too complicated to constantly make decisions and work collectively, or because they hoped to be more profitable outside of the coop (interviews, 2009, 2013). As of 2013, the Coopan includes 30 families and 61 co-op workers who have opted for a diversified model of production in an area covering 1,430 acres (580 ha) of the settlement (Lanner, 2011; interview conducted by Dan F. Marques). Households of the agrovila (small rural villages where co-op members have lined up their homes close to the co-op installations, including an abattoir, a cafeteria, and a daycare) grow some vegetables, herbs, fruit trees, and and/or flowers for subsistence and to embellish their environment. Having benefitted from the housing program created under the PT government of Lula da Silva, most houses are spacious and comfortable. They have electricity, which is essential for the coop industries discussed below. Many homes also have Brazilian-style barbecues, and some even have a garage and a car or motorcycle, symbols of higher social status in Brazilian culture (author's observation and interviews, Coopan, 2009).

In order to generate permanent, monthly revenue, co-op members rely mostly on pork (a longstanding family practice for many), dairy, and organic rice production (16 thousand bags of organic rice per year produced by the co-op and another 64 thousand bags processed by the co-op but coming from other producers in the Capela and other surrounding settlements). Since 1997,

Coopan has controlled the full production process, and today around 3,000 pigs are sent to the co-op's abattoir each month (about 20 percent from the Coopan), while also providing hog slaughtering services for other producers of the region (Lanner, 2011; interview, 2013). Lanner (2011) highlights the polluting aspects of this production, with an estimated 1,336 U.S. gallons (5,058 liters) of liquid waste per day, plus the abattoir's own waste. Yet pork remains the main source of revenue for the Coopan, which highlights the paradox and multiple dilemmas with which co-op associates are dealing. They are presently seeking ways to reduce their environmental impact by producing biofertilizers but also, as suggested by Lanner's study, by investigating the possibility of buying biodigestors, for example.

Over the years, the co-op has developed its own agro-industries and marketing circuits for pork and agroecological rice to "create more jobs for their children," to "avoid exploitation," and to gain "greater autonomy and control" over fluctuating markets (interview, Porto Alegre, 2009). These products are sold in 30 regional and local farmers' markets in the metropolitan area of Porto Alegre. At first, the co-op produced rice and milk following conventional methods, using the usual package of agro-toxins. However, they have decided to make the "transition toward agroecology" for rice, after realizing that traditional methods were ecologically damaging, as well as making them "less healthy and poorer," because of the dependency on, and the price of, these "technological packages" (interview, 2009). The valueadded for agroecological products was also part of the equation. Emerson Giacomelli, one of the five directors of the settlement and ex-president of the Cooperativa Central dos Assentamentos do Rio Grande do Sul (Central Cooperative of the Settlements of the State of Rio Grande do Sul, or Coceargs), explains that when MST settlements opted for agroecological rice production, "conventional producers thought we were crazy. Today, they want to know how we make benefits in the middle of the crisis." Giacomelli maintains that this political decision is why even if organic producers "entered the crisis, they did not go bankrupt" like so many conventional producers, because they

it is also in charge of providing income to small rural producers as well as food to poor households and social sectors (e.g., public schools, hospitals) through various public programs and policies.

have lower cost of production (R\$15 per bag compared to R\$28 for conventional) while seeking to maintain affordable prices for consumers (Estadão/Blogs, 2011). However, the Coopan had to stop its dairy production early in 2012 because tuberculosis had decimated its dairy cow herd. It is hoping to resume this activity (email exchanges with Coopan member, 2011; interview with Coopan member, conducted by Dan F. Marques, May 2013).

The co-op sustains all of the associates' families as well as helping to strengthen the MST economically and symbolically by providing a concrete example of the capacity of landless people to organize themselves and produce quality food. Moreover, as attested to by Zara Lubing Schroeter, vice mayor of the nearby town of Nova Santa Rita during the 12th anniversary of the Coopan in 2006, co-op members are contributing to the regional economy by generating income, expanding the circulation of products and money, and promoting education and cultural activities:

The benefits are not felt only by assentados, but by the local population as well....The MST settlement only brings benefits. These are people who work and contribute to our economy....Here we have people (landless) that were born believing in an egalitarian country and today, they are concretizing this dream. We have a lot to celebrate. (quoted in MST article, 2006)

This is a concrete example of everyday practices based on alternative discourses directly influencing the socioeconomic development of communities beyond their own. Public authorities recognize their positive role in improving the dynamism and social structures of the region.

A founding member of the Coopan, Etelvino Romanzin, constructively synthesized the multiple and transformative impacts that collective work and everyday life in cooperatives, as well as in many encampments and settlements, have for MST participants:

The cooperative opens up more opportunities for progress and social and

economic development of the settlement.... It is a new experience of living collectively in harmony (experiência nova de convivência no coletivo)....Working together, we are able to get better prices for our products and we develop ourselves as citizens. (MST article, 2006, emphasis added)

This "new experience of collective living" that "develops" the co-op members as "citizens" is an extremely important process for their political imagining. Indeed, it is through everyday interactions based on solidarity and mutual help that the members elaborate their sense of duty and belonging to the community. They become aware of the importance of co-responsibility in the development of both their own individuality and of collective well-being.

Beyond significant material gains for MST participants, Emerson Giacomelli insists on the "human benefits" and on the fact that the decisions to industrialize and develop their own marketing strategy came "from small producers themselves," as a way to face the crisis and to increase the value of their production:

Our conquest is *more human than it is material.* The settlement and the Coopan bring dignity to the landless; they allowed these people to walk with their heads up high and to acquire their rights. They now have an employment and leisure activities. (quoted in MST, 2006; emphasis added)

This testimony is revealing of what they consider to be their main achievements. Of course, as noted earlier, they must produce for their subsistence and therefore, to a certain extent, play by market rules. However, as this MST coordinator highlights, what they "conquer" is "more human than material." They learn the importance of working together, as a community, for a common goal, which also involves some personal sacrifices for an ideal greater than themselves.

Conclusion

Some theoretical reflections include how ways of imagining life in rural communities are emerging at

the margins of today's dominant market economy, and how the manner in which participants think of themselves and their role within such communities interacts with and is shaped by their everyday practices in organizing and struggling for community economies and societies. The work of de Certeau is useful for understanding to what extent and in what ways MST encampments and settlements are opening spaces for imagining and experimenting with different modes of production and community. This paper discussed the tactics through which less powerful communities appropriate and distort dominant norms and institutions, such as consumerism, individualism, and market capitalism, within the limits of the possible (Braudel, 1981), and create alternative forms of solidarity economies. By explicitly looking for alternative values and practices emerging at the margins of today's dominant institutions (Gibson-Graham, 2006; de Sousa Santos, 2006), including modern industrial monoculture, I was able to make visible the experiences of rural communities that, despite and in part because of harsh socioeconomic conditions, have succeeded in implementing more participatory, just, and sustainable practices.

When discussing the opportunities and limits of promoting alternative models of agriculture based on agroecological principles in Brazil, for example, one Coopan interviewee noted that agroecology is nurturing a sense of community toward greater participation, as well as social and environmental justice. For him, the battle remains at the level of ideas and perceptions, which require constant efforts, but also socioeconomic and political support. He argues that people are becoming more aware of the "need to diversify food production, to preserve the environment...and the result is that we have more consumers [for organic products]." Yet he specifies that it is still insufficient when considering how few households in fact translate such awareness into concrete practices (interview, MST member, Porto Alegre, 2009). Moreover, while some federal programs exist for small producers engaging in diversified, more ecological farming, these are quite negligible in comparison to policies and resources supporting large-scale agribusinesses, thus highlighting the material and structural constraints that resistance forces face

when seeking to implement more just and ecological practices. As another MST interviewee insisted, it is crucial that "the government provide an effective technical assistance program, as well as more incentives for rural youth to continue to work the land and to encourage small-scale, organic production" (email exchanges, February 23, 2014). Indeed, as the two co-op cases above illustrate, when conventional practices are in place, allowing significant productivity and revenues, it is difficult to transition toward more agroecological practices, especially in more challenging sectors such as poultry and pork, without greater governmental supports and commitment to small-scale producers.

At the empirical level, my field research and document analyses have shown that, in practice, there are many forms of cooperation and solidarity within MST camps and settlements, beyond the formal structure of cooperatives usually associated with the solidarity economy. When MST participants did not wish to work the land collectively or take part in a formal cooperative where decisions are made by all co-op associates, it did not hinder their desire for devising other forms of mutual help. Hence, what counts as cooperation and the solidarity economy in Brazil and in other parts of the world may benefit from a more flexible definition in order to learn from a wider range of experiences. I believe that this case study research points out the need for further research on the various principles, and spatial and temporal conditions, that tend to foster greater solidarity and mutual help among individuals and communities. Deepening our understanding of such processes would be useful not only in the rural south but also in the global north, where most analyses of the social and solidarity economy tend to focus on the procedural and economic efficiency of co-ops, and much less on the sociopolitical imaginaries, values, and norms that can foster and sustain greater cooperation.

In this paper, I also noted how leadership, time, and space are crucial factors to study; they can sustain or impede greater solidarity and the consolidation of a community economy. The occupation and encampment experiences — which open up a specific *space* as well as a significant *time period* where individuals and families are forced to work together and build trust for their own security and

survival — highlight some of the conditions that contributed to the emergence and consolidation of alternative norms and practices, including coresponsibility, cooperation, participation, collective autonomy, and governance. In this respect, the type of leaders who emerged in each community and agricultural cooperative can make a crucial difference between success and failure, as well as the perception and actual form of support received by allies and movements, in this case the Brazilian Landless Rural Workers Movement. Of course, in North America or Europe, the contexts are very different. Nonetheless, it remains relevant to take into account conditions that contributed to successful experiences in rural Brazil and to explore if they are present in other contexts, and if they could be adapted by other communities sharing similar sociopolitical projects.

Finally, and although this was not explicitly stated by interviewees, it is important to note that there remains a long way to go before successful experiences, such as those of the two co-ops studied here, can be implemented on a larger scale and contribute to consolidating a greater number of alternative economic models, based on solidarity, reciprocity, and greater social and environmental justice. Even the two "successful" cooperatives described in this study face important challenges and need to struggle to maintain their membership, especially among the younger generations (email exchange, February 23, 2014). The key principles that underpin such initiatives are constantly under pressure in that they are embedded in a competitive and globalizing environment marked by gender, racial, ecological, ideological, and economic biases. Nonetheless, the MST's steady efforts and ability to support land occupations and to pressure governments have led to successful experiences of agricultural production and reproduction, inspiring other movements and communities. In Rio Grande do Sul, for example, the MST contributed to state officials' decision to settle the remaining 186 families who still lived in encampments across the state as of May 2013 (interview by Dan F. Marques with a COOPAN member, May 2013). The struggle therefore continues as MST activists have

always maintained that their struggle is not only for access to land but also for greater justice for all, which is pursued through agricultural cooperatives among other tactics and strategies, despite and in parallel with the advance of agribusinesses locally and on a global scale.

The United Nations has designated 2014 as the International Year of Family Farming, recognizing its contribution to fighting the environmental crisis and fostering greater food sovereignty. The World Economic Forum, the Food and Agriculture Organization of the U.N. (FAO), and the U.N. Conference on Trade and Development (UNCTAD) also acknowledge the value of smallscale, agroecological and family farming to fight rural poverty. Further analyses highlighting the strategies, tactics, political imaginaries, and community dynamics, as well as (re)productive and mobilizing capacities of rural communities, are needed to turn these mostly symbolic recognitions into concrete actions. They can contribute to a better understanding of the obstacles, needs, and opportunities that small producers still face while making such initiatives more visible and credible. They should also deepen our understanding of the necessary changes to promote greater social and environmental justice, anchored in specific cultural and sociopolitical contexts, that are already working to build alternative community economies.

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Pulling in the indigenous fishery cooperative net: Fishing for sustainable livelihoods and food security in Garden Hill First Nation, Manitoba, Canada

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Abstract

Cooperatives offer a vehicle for community development in less-developed countries as well as in economically challenged indigenous communities in developed countries. The authors engaged in a participatory community development research project involving students and faculty working with the Island Lake Opakitawek Cooperative (ILOC), a fishery cooperative in the remote community of Garden Hill First Nation (GHFN) in Manitoba, Canada. The project included four general components: (a) a sustainable livelihoods assessment; (b) a basic community food security assessment; (c) strategic business analysis; and (d) a business plan.

Keywords

cooperatives, country foods, fishing, local food economy, sustainable livelihoods, indigenous, First Nation, poverty, participatory community development research

The analysis shows that traditional foodways and livelihoods take advantage of prodigious natural capital, and that this indigenous cooperative offers potential to improve the fishers' quality of life. However, we also found that fishers' livelihoods and the ILOC were not sustainable without significant changes. Together, high operating expenses and low prices for whole fish are impoverishing fishers. Despite the poor return on investment, commercial fishing has continued for decades due to its connection with traditional hunting and fishing activities and the region's high unemployment level. Working collaboratively with the ILOC and GHFN community we have been able to reinvigorate the cooperative based on local food provision and fair trade.

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Introduction and Methods

It is widely understood that cooperatives have been successful in fighting poverty (Bharadwaj 2012; Bibby & Shaw, 2005; Birchall, 2003; Prasad & Satsangi, 2013; Wanyama, Develtere, & Pollet, 2009). Birchall (2004) touts cooperatives' positive impact on poverty reduction, saying, "Their track record over 150 years in lifting whole groups of people out of poverty in the now developed world is substantial" (p. 45). Cooperatives around the world have improved the sustainability of rural livelihoods, in particular in Africa (Wanyama et al., 2008), India (Prasad & Satsangi, 2013), Nepal (Bharadwaj, 2012), and Bangladesh and Bolivia (Bibby & Shaw, 2005). Cooperative approaches have successfully addressed socio-economic issues (Wanyama et al, 2008); built capacity, enabled effective supervision, and fostered sustainable livelihoods (Prasad & Satsangi, 2013); and increased ethical consideration among members, empowered women, and created democratic institutions (Bhradwaj, 2012). The Amul Dairy Cooperative in India, for example, transformed members' social and economic lives by developing participative, yet professional, management. These dairy farmers improved their livelihoods by cutting out the middlemen and creating a variety of new value-added products (Prasad & Satsangi, 2013). Another dairy farmer cooperative, Milk Vita Cooperative in Bangladesh, enhanced social equity by engaging and empowering women. Additionally, by increasing their earnings tenfold milk producers were able to rise above the poverty line (Bibby & Shaw, 2005).

Cooperatives have been described as "persons united voluntarily to meet their economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled enterprise" (International Cooperative Alliance [ICA], 2012, para. 1). As cooperative members can control their own productive activity, this type of enterprise encourages the principles of equality and freedom, offering potential to alleviate economic poverty and improve livelihoods (Sen, 1999). Thus cooperatives present a culturally appropriate vehicle for sustainable development and food sovereignty in indigenous communities, including rural and remote First Nation fishing communities in Canada.

There is a dearth of research, however, on the impact of cooperatives in North American indigenous communities and their role in food security, sustainable livelihoods, and decolonization of traditional diets. By closely examining the ability of one indigenous fishing cooperative, the Island Lake Opakitawek Cooperative (ILOC) of Garden Hill First Nation (GHFN) in Canada, to improve the community's fortunes, we have begun to fill this gap in the literature.

It should be noted that the trials and tribulations of ILOC provide an important lesson for other cooperatives and communities (including nonindigenous ones). As LaDuke (2002) points out, cooperatives and other businesses would benefit society at large by incorporating an indigenous worldview. An indigenous worldview considers cyclical thinking, reciprocal relations, and responsibilities to the earth and to Creation (Ballard, 2012). An indigenous worldview offers a counterpoint to the more competitive forces that deprive and isolate indigenous people from community, land, culture, medicinal resources, and traditional (also known as "country") foods. It is this indigenous worldview that led to the foundation of the Island Lake Opakitawek Cooperative (ILOC) in 1995, which currently operates a fish processing plant on the outskirts of the GHFN community.

In this participatory community development research project, our team of students and faculty at the University of Manitoba collaborated with ILOC and GHFN to understand the role of cooperatives in an indigenous setting as well as offer practical technical assistance to the ILOC, which has struggled with viability since its inception. Participatory community development research methods were utilized to assess the livelihood and food security status of fishers, analyze the viability of their fishing enterprise, and identify strategies for increasing sustainability. This holistic mixed methods approach included unstructured interviews with cooperative leaders, key tribal officials, and commercial fishing experts; focus groups with fishers; field visits and tours of fishing and processing operations; market research; and a review of business records and practices. This data gathering resulted in four key project outputs: (1) a sustainable livelihoods assessment; (2) a basic community food security assessment; (3) strategic business analysis; and (4) a business plan. This work received institutional approval on March 12, 2013, and the first phase of this ongoing project ended April 30, 2014.

The Setting

Garden Hill First Nation is located at the northern

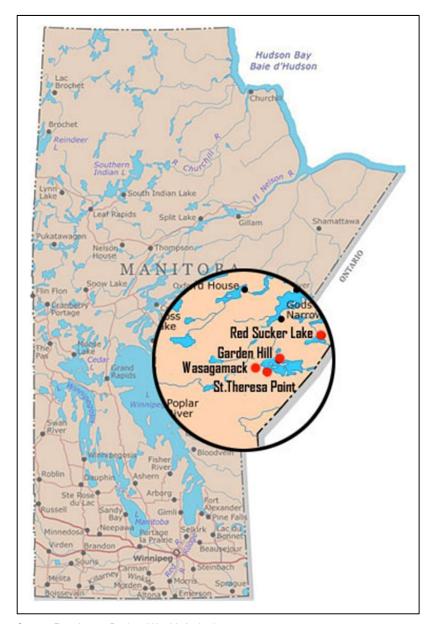
tip of Island Lake in Manitoba, approximately 610 km (380 miles) northeast of Winnipeg (see Figure 1). GHFN does not have its own airport, and people must go to a nearby island to access a gravel airstrip. GHFN is accessible via plane, winter road, and/or a boat from Wasagamack and St. Theresa Point First Nations, both of which are approximately 17 km (11 miles) northeast by boat.

The population in this community is growing rapidly. In 2011, GHFN had a population of 2,776, up 46.3 percent from 1,898 in 2006 with a median age of 18.9 years (Statistics Canada, 2011). The very high birth rates of this youthful population are creating pressure on available housing. Census families number 640, although private dwellings available are limited to 545 (Statistics Canada, 2011). Due to lack of housing, the average number of persons per household is higher at 5.1 than the Manitoba average of 3.8 (Statistics Canada, 2011).

Despite the issues being experienced by the community due to population growth, GHFN has preserved its language, culture, and traditions. Sixty percent of people speak Ojibway-Cree and 14 percent speak Cree as both their mother tongue and the language spoken at home. In addition to valuing their language and social customs,

hunting and fishing traditions remain strong (Thompson, Kamal, Alam, & Wiebe, 2012). Hunting traplines, which were assigned to each family by the colonial government centuries ago to maximize the number of furs being traded to the Hudson Bay Company, are still used for sustenance despite often being located hundreds of kilometers away from the community or even in another province.

Figure 1. Location of Garden Hill First Nation on Island Lake in Manitoba



Source: Four Arrows Regional Health Authority.

Garden Hill Fishers Association and the Island Lake Opakitawek Cooperative

The Garden Hill Fishers Association (GHFA) established a cooperative that runs as a social enterprise. Presently having about 50 fisher members, the cooperative was established in 1995 when the government of Manitoba awarded the four Island Lakes First Nations' fishers with a license to commercial harvest and export fish out of the province but within Canada. Until recently this venture operated under the registered name of Island Lake Opakitawek Cooperative (ILOC) with the export and special dealer's fisher's

license granted to GHFA. The cooperative provides high-quality pickerel from the pristine freshwater lakes of northern Manitoba. ILOC has a fish-processing plant located on the outskirts of the GHFN community by the lakeshore (see Figure 2). We became aware of the fishery cooperative during our study of food security rates in 2011 (Islam, Thompson, Zahariuk, & Mailman, 2011).

In the proceeding sections we present the results of our work in the community in the context of each of the four project outputs.

Project Findings

Sustainable Livelihoods Assessment

A sustainable livelihood is defined as "the assets, the activities, and the access to these (mediated by institutions and social relations) that together determine the living gained by an individual or household" (Ellis, 2000, p. 10). Five assets (sometimes referred to as "capitals"), namely natural, physical, human, financial, and social assets, can be used to conduct a sustainable livelihoods assessment.1 These assets are influenced by processes (e.g., laws, policies, societal norms and incentives)

Figure 2. The Fish Processing Plant in Garden Hill First Nation, Home of Island Lake Opakitawek Cooperative Limited



Photo credit: Mohammad Rony

and institutional structures (e.g., rules, customs and land tenure) that operate at multiple levels (individual, household, community, regional, government, multinational corporations) (Brocklesby & Fisher, 2003; Carney, 1998; Ellis, 2000; Scoones, 1998, 2009). People approach livelihood strategies based in part on the external environment, including trends, markets, and politics over which they often have little control (Chambers & Conway, 1992; Department for International Development [DFID], 2001). This complex amalgam of assets and factors have been found useful for assessing the policies causing poverty and underdevelopment on First Nation reserves (Ballard, 2012; Thompson et al, 2012). We analyzed the assets of fishers' families in GHFN to more fully understand the sustainability of their livelihoods.

Human Assets

Human assets are the skills, health, and education of individuals that contribute to the productivity of labor and capacity to manage land. Human assets are limited in GHFN, given the relatively low levels of education, high rates of chronic unemployment, and high rates of disease compared to other non–First Nation communities in Canada (Aboriginal Affairs and Northern Development Canada, 2013).

At present, students in the Island Lake region have to travel to distant urban centers to finish

¹ See more about the sustainable livelihoods approach at http://www.fao.org/docrep/006/ad682e/ad682e04.htm#TopOfPage

their secondary school degree and to seek higher education due to the lack of local or distance learning programs at the college or university level. Compounding the geographical challenge, many of the fishers do not speak or write English, and communicating mainly in Ojibway-Cree poses a major language barrier when negotiating contracts and seeking new business opportunities. In addition to literacy, the community is also challenged by severe health issues. We discovered that GHFN and the other three Island Lake First Nation communities have the highest levels of pediatric diabetes in North America (Amed et al., 2010).

Natural Assets

Natural or environmental assets are the resources and land management practices in the community. Island Lake and its surrounding lakes and rivers are pristine and have abundant fish. Both local fishers and staff from the Manitoba Conservation office at GHFN consider the mesotrophic lakes in this area to be highly productive and the fishery to be sustainably managed. Mesotrophic lakes have a moderate amount of dissolved nutrients and tend to have the greatest biodiversity.

The harvests in Island Lake and surrounding lakes have always been well below the quota of ILOC's commercial license. Although Manitoba Conservation tracks and quantifies commercial fishing, subsistence fishing is not documented. As most community members do eat local fish for sustenance, the number of fish harvested for subsistence purposes is expected to be high. To prioritize subsistence fishing and ensure that fish are available near where community members live, ILOC fishers do not commercially fish adjacent to the reserve to.

Although the GHFN traditional territory is vast, under Canadian law this First Nation has no regulatory or ownership rights to resources in its territories (Ballard, 2012; LaDuke, 2002; Thompson, Gulrukh, Ballard, Beardy, Islam, Lozeznik, & Wong, 2011). However, every First Nation community has consultation rights, as well as historical use and occupancy rights, which gives these communities a strong claim to the land and waters in their territory. A land use plan is being created by GHFN with the intention of preserving much of

the Island Lake territory and resources, including the fisheries, from industrial development. With the threat of mining in this region that is known for its gold and precious metals, we are currently collaborating to help develop this land use plan to ensure that ancestral land and traditional uses of the land are respected.

Social Assets

Social assets consist of the close social bonds that facilitate cooperative action as well as the social bridging that facilitates the sharing of ideas and resources between institutions and diverse people. The culture in Island Lake has a norm of reciprocity where community members are expected to do things to help each other and share country foods. The Island Lake community members also highly value traditional activities, such as hunting, fishing, and gathering. The social bonds are clearly evident by how the community television or radio is always on in each home so people can stay informed of community news. If someone needs help, such as a car ride, that person will phone the station and someone in the community will respond to their request if they can.

Once strong, regional and community social bonds have been weakened by reserve settlements, the residential school system that all GHFN residents had to attend, the "Sixties Scoop" (a government practice until the 1980s of sending high numbers of First Nation children to foster homes or putting them up for adoption, usually into white families), and settler education (Ballard, 2012; LaDuke, 2002). These oppressive policies resulted in few opportunities for First Nation people to influence Canadian policies, programs, and their own development (Ballard, 2012; Thompson, Gulrukh, Ballard, et al., 2011; Thompson, Gulrukh, & Murthy, 2011; Thompson, Lozeznik, & Klatt, 2011).

Physical Assets

Physical assets are the equipment and infrastructure in the community that affect the quality of fishers' lives, their business operation, and their productivity. The fish-processing plant, ILOC's biggest physical asset, contains a weighing scale, a blast freezer, and a large space that could be used for filleting. However, the fish plant needs many upgrades.

GHFN fishers have limited resources to practice their livelihoods. The small family-sized boats they use lack fish finders, depth meters, or any specialized equipment. Community docks where fish are unloaded are unsafe, with holes large enough for a person to fall through. This poor infrastructure places fishers at high risk for injury or product loss when loading and unloading 25 kg (55 lb.) boxes of fish.

The fish plant and many GHFN homes do not have access to piped, safe water or sewage facilities. Fifty-one percent of homes have treated water trucked to cisterns or barrels, and 49 percent of homes and the fish plant have no water service at all. Due to the lack of running water, filleting occurs at the school's commercial kitchen so that the product meets Manitoba's public health regulations (see Figure 3).

Without road access, marketing fish is expensive. Winter roads, which are built over lakes, rivers and land, are generally only available from late January to mid-March (East Side Road Authority [ESRA], 2013). A late lake freeze-up and early spring thaw can truncate the window for winter road access as the roads are only useable when there is a thick layer of ice on the lake to support

the weight of trucks and cars (ESRA, 2013; Kuryk, 2003). An all-season road of 648 km (403 miles) connecting the Island Lake communities to Norway House Cree Nation is scheduled to be built between 2035 and 2045, with the final road planned for the end of the century (ESRA, 2013). Once an all-season road is in place, shipping costs should decrease.

Financial Assets

Financial assets are the savings and financial credit of fishers and other community members in GHFN. On the reserve, the land and housing are owned by the federal government (Ballard, 2012). As a result of not owning property,

GHFN people lack the collateral required to obtain credit. Additionally many community members and most fishers lack other regular sources of income. In GHFN, the average median family income is CA\$24,320 (Statistics Canada, 2011), which is significantly lower than the national average at CA\$68,400.

Taken together, the analysis of assets presents a challenging picture. While rich in natural assets, the fishers of GHFN suffer from depleted human, social, physical, and financial capital. This livelihoods assessment hinted at what we would expect to find in our community food security assessment.

Community Food Security Assessment

Food security occurs "when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life" (Food and Agriculture Organization of the United Nations [FAO], 1996, p. 1). To get a fine-grained view of household food security we conducted surveys with 10 randomly selected fisher households and 41 nonfisher households in GHFN for comparison using a validated instrument from Health Canada (2007). We used the survey to estimate both the prevalence of food insecurity and its severity (Bickel, Nord, Price,

Figure 3. Garden Hill First Nation's Community Members Who Have Food Handling Certificates Fillet Fish at the ILOC Fish Processing and Packaging Facility



Photo credit: Mohammad Rony

Hamilton, & Cook, 2000; Health Canada, 2007) in these two populations.

Food insecurity rates were highest among our samples' fishers families compared to others in the community. Nine fishers' households in GHFN in 2011 were 100 percent severely food insecure (Islam & Thompson, 2011; Islam, Thompson, Zahariuk et al., 2011). This was higher than the overall high rates in the general population of GHFN, where 42 percent were severely food insecure and another 43 percent were moderately food insecure (Thompson, Gulrukh, Ballard, et al., 2011; Thompson et al., 2012). Severe food insecurity means that the household's food supply was disrupted and that children and/or adults went without food or regularly had to reduce their intake due to having no food and no money to buy more (Power, 1999, 2008; Power & Tarasuk, 2006). Negative health consequences, which reduce human assets, are expected in fishers' families due to their high food insecurity. Food insecurity is linked to broader food-related health problems such as obesity, heart disease, diabetes, high blood pressure, emotional distress, depression, and low immunity levels (Ford & Mokdad, 2008; Kirkpatrick & Tarasuk, 2008; Ledrou & Gervais, 2005; Scheier, 2005; Willows, Hanley, & Delormier, 2012).

It should be noted that in addition to availability, accessibility, acceptability, adequacy, and action, sharing food has been identified by Power (2008) as a sixth pillar of food security. The importance of sharing food was supported by a large survey conducted in 14 northern Manitoba communities that found sharing of country foods had a stronger relationship to food security than either road access or competition between stores (Thompson et al., 2012). Country food, the currency of sharing, refers to the mammals, fish, plants, berries, and waterfowl and seabirds harvested from local stocks. Sharing of country food is a traditional way for indigenous communities to deal with food shortages and to foster social networks (Thompson et al., 2012).

Country food access, including fish access, has been restricted by government policies. During our early investigation we learned that serving freshcaught fish at the school or any event without a special dealer's license could result in the federal public health inspectors shutting the school kitchen down temporarily for serving "illegal" fish in a public place (Thompson et al., 2012). Due in part to these restrictions, GHFN fishers and other community members were eating less country foods. This decline in eating country foods shifted the local diet to high-calorie, processed, store-bought food (Thompson, 2005; Thompson, Gulrukh, Ballard et al., 2011), which are widely believed to be associated with increased incidence of obesity, tooth decay, anemia, lowered resistance to infection, diabetes, and food insecurity (Szathmary, Ritenbaugh, & Goodby, 1987; Thouez, Rannou, & Foggin, 1989; Willows, Veugelers, Raine, & Kuhle 2011; Willows et al., 2012).

Strategic Business Analysis

Building on our assessment of the livelihoods and food security of the fishers, we conducted a strategic business analysis that took employment and foodways into consideration. Our meetings with key informants and focus groups with fishers revealed a number of critical themes which appear to be at the heart of the challenges and opportunities faced by ILOC: (1) traditional sustenance activities have become fused with commercial fishing; (2) commercial fishing is unprofitable; (3) the ILOC engages in poor business practices; and (4) fishers are not aware of their eligibility for employment insurance (EI). These themes were both of academic interest and practical significance for improving livelihoods and business outcomes.

Traditional Sustenance and Commercial Activities Have Become Intertwined

The commercial fishing season is also hunting and harvesting season; it is the key time for moose, deer, and goose hunting, as well as being an important time to pick traditional herbal medicines. To some degree commercial fishing subsidizes the time spent on sustenance hunting, fishing, and living in the fishers' traditional territory. Many fishers described the hunting, fishing, and gathering as sacred and integral to their culture. As one GHFN band employee explained:

The fishermen love to get out on their trap line and commercial fishing is the excuse to do

it. They don't even care if they make money as long as they can get out on their trap line to hunt and fish. That's what they live for.

This is a challenge because commercial fishing on the trapline in inland lakes has very high transportation costs. With only ice huts to refrigerate fish and a license that only allowed the selling of whole fish, fish had to be flown out by floatplanes several times a week at great expense to fishers.

Commercial Fishing at GHFN Is Unprofitable
Our analysis shows that commercial fishers and the
ILOC operated in the red. While we estimate
fishers out-of-pocket expenses were CA\$6.70/kg
in 2012, they only received CA\$3.52/kg selling fish

commercially, representing a CA\$3.18/kg loss to fishers. Fish sales by ILOC also operated at a loss. The fish were sold in 2012 for CA\$6.60/kg (CA\$3.00/lb). However, we estimated that the break-even cost of selling whole fish was CA\$9.88/kg (CA\$4.49/lb), representing a loss of CA\$3.29/kg overall for shipping fish to the Winnipeg market (see Table 1). Contribution margin was calculated to be CA\$2.08 for the break-even price per unit minus the variable cost per unit.

Based on our discussions, observations, and the breakeven analysis we found ILOC is not profitable for the following key reasons:

1. **High shipping costs.** The GHFN community and traditional territory is remote, and government-prescribed trap

Table 1. Breakdown of the Total Cost to Fishers for Commercial Production Based on Year 2012, When Individual Fishers Caught an Average of 2,268 kg (5000 lbs.) (All amounts in CA\$)

Item	Unit	Amount (CA\$)	Total Quantity (kg)	Total Quantity (lb)	Cost (per Kg)	Cost (per lb)
Variable Costs (paid by individua	al fishers)					
Fuel	\$1.69/L	\$4,331.88	2,268	5,000	\$1.91	\$0.87
Engine oil	\$8/qt	\$907.20	2,268	5,000	\$0.40	\$0.18
Air transport	\$450/trip of 4	\$5579.28	2,268	5,000	\$2.46	\$1.12
Boat/motor repairs		\$204.12	2,268	5,000	\$0.09	\$0.04
Fishing supplies (nets, lines, etc.)		\$997.92	2,268	5,000	\$0.44	\$0.20
Total Variable costs		\$12,020.40	2,268	5,000	\$5.30	\$2.41
Contribution margin at break- even price			2,268	5,000	\$4.58	\$ 2.08
Fixed Costs (Paid by Individual F	isher)					
Capital purchases (boat, motor etc.)		\$3,000.00	2,268	5,000	\$1.32	\$0.60
Depreciation	5% annual depreciation	\$150.00	2,268	5,000	\$0.07	\$0.03
Fishing license	Annual renewal	\$12.00	2,268	5,000	\$0.00	\$0.00
Total Fisher Fixed Cost		\$3162.00	2,268	5,000	\$1.39	\$0.63
Fixed Costs (Paid by ILOC)						
Running fish plant & freezer		\$5,000.00	2,268	5,000	\$2.20	\$1.00
Shipment of fish by air to Winnipeg		\$2,100.00	2,268	5,000	\$0.92	\$0.42
Miscellaneous (estimate)		\$150.00	2,268	5,000	\$0.07	\$0.03
Total ILOC Fixed Cost		\$7,250.00			\$3.19	\$1.45
Total Fixed Cost (ILOC & Fisher)		\$10,412.00				
Break-even Price					\$9.88	\$4.49

lines on Island Lake are often hundreds of kilometers away from the packing plant. With no roads to provide easy access or electricity to allow refrigeration of fish, floatplane transport to the GHFN packing plant costs an estimated CA\$2.46/kg, an expense borne by ILOC and the fishers rather than the fish buyers.

- 2. Low prices received. With transportation expenses unavoidable, fishers operate at a loss selling at the prices offered by buyers. The 2012 price paid for whole headless pickerel was CA\$4.15/kg (CA\$1.89/lb), which is not sufficient to cover the estimated total expense of CA\$9.88/kg (CA\$4.49/lb) to catch, process, and transport the pickerel.
- 3. Lack of planning and resources to make improvements. The fishery lacked a business plan to adequately address these problems, and lacked the resources to finance start-ups or to upgrade its facilities. One First Nation band councilor complained that the First Nation band always had to subsidize the fisheries: "Each year the band contributes money to fix up the plant and the freezer and get the fisheries started. It is a lot of money every year."

Hegemony of the Freshwater Fish Marketing Corporation (FFMC)
The Freshwater Fish Marketing Corporation (FFMC), created by the national government to prevent competition that would drive down freshwater fish prices, regulates all freshwater fish sales in central Canada. With the exception of a few special dealer licenses that FFMC gave to interprovincial vendors, the FFMC became the only seller of freshwater fish in central Canada (FFMC, 2010).

The monopoly by FFMC hampers fish trade in northern Manitoba. Public health officers strictly enforce regulations that all fish must be inspected by FFMC before sale to public institutions (FFMC, 2010). This restriction curtails selling locally to community institutions. As a result, the school

kitchen, sport fishing lodges, and other public venues in GHFN were temporarily shut down when public health officials caught them serving local, healthy fish not inspected in a federal facility. These shutdowns were very disruptive; for example, they prevented children and youth from receiving lunch programs for days or weeks.

Fishers in northern Manitoba were more negatively affected than southern fishers by the FFMC monopoly. In addition to marketing, FFMC maintains a monopoly on processing fish; all fish have to be processed by the FFMC processing plant before export outside the province. This restriction put an end to the filleting operations run by the ILOC. Overnight, all the women employed filleting fish lost their jobs, and fishers faced higher transport costs as they were obliged to transport whole fish. The disadvantages to northern fishers were the greater distances and logistical difficulties involved with transporting by plane whole headless fish on ice. Due to the increased transportation costs, fishers had to pay to meet FFMC requirements, and commercial fishing became a losing proposition for fishers living in remote communities.

Poor Business Practices Identified at ILOC
Poor business practices at ILOC were identified in our focus groups, with numerous complaints about financial, business, and information mismanagement. The accuracy and timing of information were clearly problematic, and there are delays in getting the annual start-up funds, paying transportation bills from previous years, and securing a buyer contract.

The fishers also expressed concerns about financial management, including missing funds and inappropriate expenses being charged: "CA\$15,000 was unaccounted for last year and when the fishers got CA\$300 start-up to get their gear for fishing and get to the trap line for their fishing season, so did each of the councilors." An accounting system that requires multiple directors to sign checks was identified as necessary.

The ILOC's finances are further complicated by its dependence on the chief and council to obtain start-up funding, as ILOC has no bank account or line of credit. The fishery was dependent on the Mikisew Store, a small gas and grocery merchant, for all financial services after the band became third-party managed. (After the band fell into debt the federal government required all band finances to be administered by a for-profit accounting firm, which took a sizeable portion of the small budget for housing, governance, and community development.) In 2012 the store provided the fishers credit notes at CA\$3.62/kg (CA\$1.60/lb) immediately when the pickerel came to the packing plant, as most fishers required daily funding for gas in order to continue fishing. The store recouped its investment throughout the season from fish sales revenue and from fishers purchasing their food and gas from the store; fishers were required to do so as a condition for receiving credit notes.

Fishers expressed concerns about the ecologically sustainability of the fishery, including the need to diversify the species marketed and not waste by-catch. Sales are currently limited to pickerel, which represents 25 percent of the total catch (Thompson et al., 2012). One fisher estimated 75 percent of fish are thrown from the nets due to lack of markets and prices being too low to cover freight costs for by-catch (e.g., white fish, lake trout, walleye, suckers, perch, etc.). He maintained, "We need a way to sell all our fish, not just a small fraction of them." These by-catch fish are now left on the shore of the lake to feed wildlife. If the fishers could sell by-catch locally or smoke these fish to increase their price, pressure on pickerel supplies would be reduced.

Missed Opportunity

ILOC fishers are losing money by not being aware of changing federal policies and rules. A decade ago the Canadian government changed the unemployment insurance (EI) eligibility rules to accommodate the massive unemployment of fishers after the East Coast cod collapse and subsequent moratorium on cod sidelined most fishers. Until this project, GHFN fishers were unaware of the government changes and their new eligibility. Due to the extremely high unemployment rate in this region, the minimum annual commercial fish sales for EI eligibility is CA\$2,500 (Service Canada, 2011a). As most fishers sell

between CA\$2,500 and CA\$10,000 per year, most are eligible for EI. However, due to lack of knowledge, the fishers collect social assistance (welfare) despite EI providing higher rates; unlike social assistance, they are not limited to one EI collector per household. On social assistance, fisher families remain food insecure, as the amount of social assistance is not indexed to account for the much higher food and gas prices on remote First Nation reserves.

According to industry experts, EI is a necessary subsidy for fishers; northern non-First Nation communities are using EI because they have more social capital, including better information networks. An industry representative stated, "Fishers cannot make money from selling fish... Fishers in northern Manitoba only make a livable wage from EI" (focus group discussion, 2013). Another industry expert affirmed that EI was more profitable than fishing, saying, "You can make three to five times the money on EI for fishing than from selling fish" (focus group discussion, 2013). EI could deliver an estimated half a million to a million dollars per year to the GHFN community, if 30 to 50 fishers there applied. This would substantially improve the livelihoods of fishers' households and the whole community.

Business Plan

During the course of our project, due to cash flow problems the ILOC fell behind in its payments to Perimeter Airlines, which transported the fish from Island Lake to markets in Winnipeg. The airline operator required a business plan from the ILOC before resuming shipping, but there was no business expertise to draw on within ILOC. ILOC requested that we develop a business plan as part of our university research program. We used a collaborative process with the fishers that considered the existing operation, markets, financial arrangements, and visions for the future. As many of the fishers were not highly literate, we did everything orally, including reviewing the plan and analyzing it line by line out loud, to ensure that (a) the fishers could provide feedback, (b) they shaped the vision, mission, objectives, and (c) they agreed with the financial analysis, which had never previously been undertaken. The key components of the

business plan included:

- Mission, vision, and objectives
- Market analysis
- Competitive SWOT analysis
- Strategic partnerships and alliances
- Operations and supply chain management
- Marketing and branding strategy
- Break-even analysis
- Sales forecast, cash flow, and income statements
- Risks and mitigation
- Evaluation and impact assessment
- Timeline of key milestones
- Implementation plan

The mission approved by the fishers for the cooperative business plan was "To support fishers' traditional livelihoods and enhance the community's economic and social condition" (GHFA, 2013, p. 6). The vision was "A healthy and prosperous fishery and community for today and tomorrow" (GHFA, 2013, p. 6). The GHFA fishers adopted the following objectives: "to develop local, provincial and inter-provincial markets for fish products; to ensure a better price for fisherman by implementing a direct marketing system; to create positive economic impact within the community; to earn customer loyalty by establishing brand image for northern products; and to develop entrepreneurship/livelihood capacities among Garden Hill Community members." A copy of the business plan may be obtained by contacting the lead author.

Project Outcomes

Over the course of our three-year participatory community development research project, our engagement with the ILOC led to four specific outcomes: (1) expanding the local market; (2) adding value and positioning exports as fair trade products; (3) improving management systems for ILOC; and (4) creating a social net through employment insurance. The progress to date on each of these is described below.

Expanding the Local Market by Selling Through the Country Foods Program We observed that the ILOC is growing social capital by building bonds in the community by sharing resources. The First Nation is setting up a Country Foods Program (CFP) in its health center to improve the health and food security of its community. The GHFN Health Center will be upgrading its kitchen and has committed to spending at least 10 percent of its CA\$10,000/year budget on the purchase of local whitefish and other species. This is enough to feed 20 to 50 people in the community each weekday. A number of diabetic elders reported that eating whitefish lowered their blood sugar levels. We also have noted that health workers are shifting their purchases from processed store-bought food to local fish. Educational programming related to the CFP is being developed to engage fishers to teach schoolchildren and youth how to live off the land by hunting and fishing.

Adding Value and Adding Values
In addition to making more fish available locally, the project team identified the need to process and sell value-added fish products (fish fillets and smoked fish) locally and elsewhere in Manitoba. However, since sales and processing had to be approved by FFMC, the fishers felt they could not proceed to process fish without a special dealer license. On the ILOC's behalf, we requested this license from FFMC in 2012. Using videos and statistics, we helped demonstrate to officials that fishers in GHFN needed this license to assist them in developing their livelihoods, reducing poverty, and improving food security.

A special dealer license was granted to ILOC by FFMC for one year in April 2012. This license was renewed the next year for three years, until April 2016. This license allows the Garden Hill Fishers Association and/or fishers to sell legally to the school, health center, and GHFN band office for public events, and to process fish in a commercial kitchen for sale within the province. Different kitchens are being used for this purpose based on availability, including the secondary school kitchen and the health center kitchen. Also, a small-scale pilot filleting operation was started in

2013 as a means of value-adding and opening new market opportunities. Filleted fish sold for slightly above the fishers' costs when prices were CA\$5.50/kg (CA\$2.50/lb) for whole fish (paid to fishers) and CA\$5.50/kg for filleting the fish (paid to filleters). For filleting, we were able to play a supportive role by supervising the first two filleting programs, bankrolling the operation, providing packaging, and delivering the fish from the Winnipeg airport to the store. After two shipments that were supervised by University of Manitoba students with food handling licenses, the community organized its own filleting and shipping of fish to Neechi Cooperative. Neechi Cooperative bought several hundred pounds of filleted fish in 2013 at CA\$13.20/kg (CA\$6.00/lb) for pickerel and CA\$9.90/kg (CA\$4.50/lb) for by-catch.

With a new marketing strategy for the valuesadded products, including banners, a video-based commercial, and a social marketing platform, we were able to help the ILOC reposition itself as a fair trade producer. The growing interest in fair trade fish and local food provides increasing potential for marketing local fish from ILOC at premium prices. Discussions have started about extending this business arrangement to other products such as blueberries, herbal teas, and arts and crafts. After hearing about our work helping ILOC implement its business plan, a GHFN artist approached us to help start another cooperative. Now a number of artists from GHFN, including one stone carver with pieces in Winnipeg Art Gallery, are in the process of starting an artists' cooperative in GHFN.

Improving Management for ILOC

In a gesture reflecting their hope for the future, the fishers elected to revise their name from ILOC Limited to Island Lake Wabung Fisheries Co-op. Wabung has a literal Ojibway-Cree translation of "tomorrow." This new name has been officially registered but all the directors have not signed off on the articles of incorporation under the Cooperatives Act. Due to this delay, although the name will soon be changed, we used the old name, ILOC, throughout this paper.

ILOC also held several business meetings in early 2014 and elected a new slate of directors.

Two well-respected elder fishers were elected as president and vice president. The other three positions were filled by capable people with the skills needed to carry out their jobs, namely an accountant as the treasurer; a business leader with expertise in governance, as well as marketing, as the secretary; and a community health worker with the job of setting up the Country Foods Program as the member-at-large. Financially ILOC is gaining autonomy by opening its own bank account. ILOC has also committed to improve its bottom line and has already implemented various aspects of the 2013 business plan.

Creating a Social Net Through Employment Insurance EI could subsidize fishers' low wages and provide enhanced benefits over social assistance, and many are considering applying. Although selling CA\$2,500 to CA\$10,000 per year of fish provides insufficient income to feed a fisher's family and meet other basic needs, with EI supplementing their fishing income these families will not go hungry, or at least will not go hungry not as often.

Conclusion

Many people in First Nation communities feel they have been "studied to death." Researchers have come, gathered data, and never been heard from again. In contrast, our participatory community development research project generated useful data and built community capacity to address food security and improve livelihoods. As researchers, we worked alongside the fishers to try to improve their livelihoods in culturally appropriate ways.

The sustainable livelihoods assessment identified policies that have restricted many assets in First Nation communities. Fishers in GHFN had limited assets due in part to government policies underfunding First Nation communities and restricting access to country foods. Logistical difficulties result from the paucity of physical assets, with a lack of safe boat docks, trap lines, banks, roads to access markets, etc. To improve sustainable livelihoods, government investment is needed to improve infrastructure in First Nation and northern communities (e.g., roads, safe water systems, housing, and public transit). In addition, ILOC and all four of the Island Lake First Nation

communities have limited financial assets, without any banking services in their area. Considering its responsibility for these circumstances, the federal government faces a moral obligation to offer financial services in these poverty-stricken communities.

Human assets are diminished by food insecurity. Shifting spending of community organizations to local fish, and thereby keeping food and money cycling in the community, is expected to decrease local food insecurity. The Country Foods Program, which will offer some funding to fishers, provides a community-based and traditional approach to deal with food insecurity by sharing rather than depending on the market system.

Other assets are plentiful. Natural and social assets related to the commercial fisheries are abundant. GHFN fishers fish on pristine lakes with good supplies of fish. Commercial fishing is valued as it is firmly intertwined with the Ojibway-Cree traditional lifestyle of living off the land and of subsistence food provisioning. Although in the past social capital perpetuated the fisheries even though fishers lose money on the endeavor, these assets could be better used to their marketing advantage to provide a fair trade First Nation brand. Higher prices (from niche marketing) for ILOC fish are expected. The richness of resources and the high cultural value placed on fishing can be leveraged, if matched with the financial means and physical assets, in a way that increases human assets.

Our work on the business plan advanced the fishery's business interests immediately. The plan also laid out a long-term vision and strategy to build sustainable livelihoods, food security, and capacity. Collaboratively, we identified a few options to improve fishers' livelihoods. First, fishers will work with the school and health center to include local fish in lunches, snacks, and the new Country Foods Program. This local food economy has the potential to provide additional income for fishers, a healthier lunch and snack community program, and to contribute to overall improved food security. Second, we have shown that fishers can produce and market value-added fair trade products such as filleted and eventually smoked fish. By returning to traditional ways of smoking

fish (modernized to meet public health codes), the fishers could simultaneously increase the value of fish, reduce spoilage risk, and decrease transportation costs.

Third, we found that in order to provide more sustainable livelihoods and food security, the new Island Lake Wabung Fisheries Co-op (ILWFC) requires better management and leadership. Members of the cooperative have begun to make significant organizational changes in these directions, including creating a board of directors and new staff positions to ensure the orderly management of the co-op. Finally, we have helped fishers realize they would benefit more from Employment Insurance than from welfare, as the returns are higher and not limited to one EI collector per household. The increase in fishers' incomes would bring millions of dollars into GHFN. With EI supplementing fishing incomes, fisher families would not go hungry as often.

We believe that with the approaches described above for the new Island Lake Wabung Fisheries Co-op puts it on a path toward decolonization. The GHFN fishers, by prioritizing local food security, traditional culture, and environmental stewardship in their business plan, demonstrate an approach to sustainable development that can inform the efforts of other indigenous and non-indigenous cooperatives. It is our conclusion that in balancing the indigenous worldview approach to cooperatives with a competitive business strategy based on fair trade, the ILWFC will find its place in the regional marketplace and enhance the sustainability of its fishers' livelihoods.

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Collaboration meets opportunity: The Baltimore Food Policy Initiative

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Abstract

As cities across the nation seek to improve healthy food access, this participant observer case study highlights how one midsized city successfully developed a collaborative infrastructure to understand and address inequity in healthy food access. We trace the genesis and evolution of Baltimore's Food Policy Task Force, the hiring of a food policy director, and the establishment of the Baltimore Food Policy Initiative, which is an

intergovernmental partnership to increase access to healthy, affordable foods in urban food deserts. While some cities have approached food access issues through community coalitions pressuring city government or government edicts, Baltimore successfully identified its need, used available research to drive and inform action, established priorities, and acted expeditiously with a focus on sustainability. This case study is relevant and applicable for those seeking to influence change in local food policy in midsized urban settings.

Keywords

food policy, collaboration, food access, local government, food system mapping, community food security

Introduction

Since the 1980s, food system stakeholders across North America have formed entities to consolidate their efforts to increase the accessibility, consump-

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tion, and affordability of healthy and sustainable food (Clancy, Hammer, & Lippoldt, 2007; Scherb, Palmer, Frattarolli, & Pollack, 2012). They are motivated by a variety of issues — frustration with supermarket chains relocating to the suburbs, increasing rates of diet-related diseases, loss of farmland, and the poor quality of school meals all of which reflect broader trends in the food system (Scherb et al., 2012). As a result, the nation has seen an increase in food policy groups, councils, or coalitions that are attempting to change food policy at the city, state, regional, and tribal level (Neuner, Kelly, & Raja, 2011; Scherb et al., 2012). These policy actions have the opportunity to create organization and institutional changes, potentially modeling effective solutions for the federal, state, and local level, and can also help nonprofits seeking to improve access to nutritious foods and address food insecurity in urban settings.

How and where food policy councils (FPCs) originate has a lasting influence on their evolution and potential impact. Some of the earliest iterations of FPCs were started in the 1980s by city governments to cope with hunger, nutrition, and food supply issues (Clancy et al., 2007). A recent report analyzing 13 U.S. municipal food policy directors (sought out through the Urban Sustainability Directors Network) found that over half of the cities' efforts originated from within local government through a centralized, top-down approach directed by the mayor, a city council member, or another civil servant (Hatfield, 2012). While that government model remains commonly used by various jurisdictions, nonprofits have also housed and supported FPC efforts, particularly when potential FPC members may not have a favorable attitude toward government (Schiff, 2008) or, as in the case of the Los Angeles FPC, the founders sought to establish a larger, more inclusive, and public-driven coalition of working groups (Hatfield, 2012). Oakland's FPC took a hybrid approach (Schiff, 2008) by having city government initiate a food system study, passing a city council recommendation to create an FPC, and then selecting a nonprofit to house the council (Harper, Shattuck, Holt-Giménez, Alkon, & Lambrick, 2009).

The experience of the City of Baltimore and its

creation of the Baltimore Food Policy Initiative (BFPI) illustrate this hybrid model. BFPI was prompted by the coordination of work between several community stakeholders and city officials, but its formation, particularly its unique rendition of the role of the food policy director, was more centrally directed and ultimately centrally funded. The series of events that led to the BFPI's current status arose in an opportunistic manner that contributed to its noteworthy and prompt progress in consolidating various efforts to improve food access and food security.

The City of Baltimore has been described as "one of the most progressive cities in addressing food insecurity" (Messner, 2012). While each community is unique and there is no straightforward formula for addressing public food policy, the Baltimore experience is illustrative of what can happen when utilizing a strategic approach in a progressive environment. In this case study, we examine the issue of food access and insecurity in Baltimore; the founding of the Food Policy Task Force; the hiring of one of the country's first food policy directors; the subsequent development of the BFPI, currently the country's largest food policy program in terms of full-time salaried positions; and the structure, functioning, and jurisdiction of this interdisciplinary, comprehensive body. Finally, we will discuss what others working on local food policy can learn from Baltimore's model and experience.

It should be noted that the authors of this paper have been and are currently involved with various aspects of Baltimore's food policy efforts. Anne Palmer has been involved in Baltimore food policy since 2007. Rachel Yong was the Healthy Food Coordinator for the Baltimore Food Policy Initiative from 2011 to 2013. Raychel Santo was a public health studies and global environmental change and sustainability double-major senior at Johns Hopkins University. We have striven to provide an accurate account; however, we fully acknowledge that while our engagement in the development of the BFPI as participant-observers gives us a unique perspective, there is also the potential for a bias. To maximize the accuracy of our account, the draft manuscript was shared and revised with key stakeholders' input.

Methods

The information presented in this case study was gathered primarily through document analysis, interviews, a literature review of other local food policy initiatives, and, as mentioned above, direct experience with the events. Document analysis included reviewing reports and website information provided by the Baltimore City Planning and Health departments; archives of the Baltimore Sun and other local newspapers; and meeting agendas, transcripts, and reports from the original Baltimore Food Policy Task Force. During October 2012, Raychel Santo conducted taped interviews with Holly Freishtat, the Baltimore Food Policy director, and co-author Anne Palmer to collect details about the development of the BFPI. The authors later conducted a literature review to contextualize Baltimore's progress with similar efforts in other cities. To ensure accurate representation of the events, final drafts of the paper were shared with key participants Holly Freishtat, Seema Iyer, and Joyce Smith, and edited based on feedback.

Overview

Baltimore City is a midsized city of approximately 620,000 residents who identify themselves with 55 unique neighborhoods (Baltimore City Health Department, 2012; United States Census Bureau, 2013). Food insecurity affects nearly 14 percent of Baltimore households (Food Research and Action Center, 2013). These families report not having "enough food for an active and healthy lifestyle" (Food Research and Action Center, 2013). The median family income in Baltimore is US\$40,100 and its population is predominantly African American (63.6 percent) (U.S. Census Bureau, 2013). Racial disparity plays a role in food insecurity. The Baltimore City Health Department's Office of Epidemiology and Planning (2010) gave the city a "D" in the disparity between blacks and whites on food insecurity, with almost 2.5 times more blacks than whites reporting concerns about not having enough healthy food. Access to nutritious food is recognized by the city as an important social determinant of health (Baltimore City Health Department, Office of Epidemiology and Planning, 2010).

In Baltimore, areas where inhabitants have

limited access to supermarkets and healthy foods correspond to higher rates of diet-related disease (Center for a Livable Future, 2012). Obesity and poor diet are associated with the first and third leading causes of death in Baltimore, cardiovascular disease at 26.7 percent and stroke at 5.3 percent, respectively (Baltimore City Health Department, n.d.). In Baltimore, 67.7 percent of adults and 38.4 percent of high school students surveyed, respectively, randomly through the Behavioral Risk Factor Surveillance System and Youth Risk Behavior Surveillance System, in 2007 were overweight or obese, and obesity prevalence is about 30 percent higher in Baltimore than in Maryland as a whole or nationally (Baltimore City Health Department, 2008).

In its efforts to address these public health issues, Baltimore City followed the national trend in the formation of a city-level food policy group, but through a unique, circumstantial, and notably successful way. This case study details, in chronological order, how Baltimore developed an infrastructure for food policy work during this time (see Figure 1).

Existing Local Policies (2000–2008)

In response to supermarket chains increasing their presence in the surrounding suburbs, then-Mayor Martin O'Malley launched a grocery store initiative in 2000 that attracted 17 grocery stores to the city in 2.5 years (Baltimore City Planning Department, 2003). Following this development, the Planning Department adopted a comprehensive plan in 2006 that included a goal to "Ensure all residents are within 1.5 miles [2.4 km] of quality groceries and neighborhood services." The comprehensive plan acknowledged the role of the Health Department in achieving this goal; as a result, senior staff from both departments met in 2007 to discuss the plan. In addition, the Baltimore City Council later convened the Task Force on Childhood Obesity in 2007 (Baltimore City Council, 2007). In 2008, they released final recommendations related to the food environment to "improve access to and affordability of healthy foods for low-income populations in Baltimore City" and to "develop policies that will support healthy eating among Baltimore City residents" (Baltimore City Health Department,

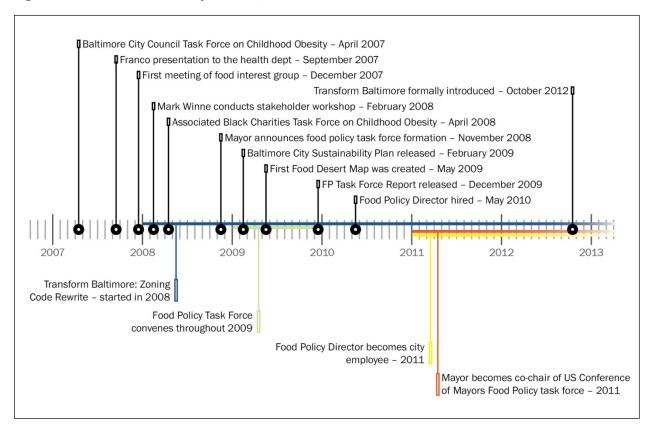


Figure 1. Baltimore's Food Policy Timeline, 2007-2012

2008). With funding from the Robert Wood Johnson Foundation, the Associated Black Charities (ABC) also launched its own task force on childhood obesity in 2007. ABC highlighted the food policy council model as a promising institution and committed to providing support to community partners to improve the local food environment (Associated Black Charities, 2011). In March 2008, the City Council, and subsequently then-Mayor Sheila Dixon, approved a ban on the sale of all restaurant foods with trans fats, which went into effect in September 2009 (Dash, 2008).

Individual Organization Efforts (2000–2009)

Food insecurity and health disparities were becoming increasingly apparent to policymakers, funders, nonprofits, community advocates, leaders, and academics in Baltimore in the early 2000s. It is important to note that Baltimore in particular had a relative absence of large-scale, coordinated efforts on healthy food access from the nonprofit sector. While many organizations and institutions were already addressing some food system issues, they were working in relative isolation from each other up to that time.

In early 2009, the Health Department created the Charm City Health Award for Nutritional Information, to be awarded to food facilities that display point-of-purchase nutrition information about menu items including calories, saturated fat, carbohydrates, and sodium (Baltimore City Health Department, Bureau of Food Control, 2009). Meanwhile, the Planning Department began its first zoning code rewrite in decades, a process that

¹ Trans fats (found in partially hydrogenated oils) are industrially created fats made by the transformation of liquid vegetable oils into solid fats. According to the American Heart Association, trans fats raise levels of LDL (bad) cholesterol and lower HDL (good) cholesterol levels, thereby increasing one's risk for heart disease, stroke, and type II diabetes. As a result of these poor health consequences, many cities have been banning the use of trans fats in restaurants in order to reduce public consumption of trans fats.

was completed in March 2013 (Baltimore City Planning Department, n.d.a). The new code includes provisions to support the development of urban agriculture and other public health and environmental sustainability considerations.

Anthony Geraci assumed the position of the Baltimore City public school director of food and nutrition in July 2008. Under his leadership, Great Kids Farm, a 33-acre (13-hectare) farm in a Baltimore suburb owned and operated by the city public school system, was founded to provide handson educational opportunities for students (Simmons, 2009). Geraci also began sourcing produce from local farms and significantly increased participation in the school breakfast program.

Little was happening in the commercial sector during the early 2000s. The city had seven farmers' markets, two limited grocery delivery services, and a community supported agriculture program through One Straw Farm that had established several drop-off sites.

In the nonprofit sector, Maryland Food Bank operated a popular free Produce Giveaway Program, distributing produce to a statewide network of soup kitchens, food pantries, and emergency shelters, including some in Baltimore City. Produce Giveaways typically delivered 7,000 pounds (3,175 kg) of fresh produce one to three times a week in Baltimore City (Maryland Food Bank, n.d.). The Food for Life food and nutrition education program was also in operation at two Baltimore City public schools (Riddims, 2007).

The local food environment was an active topic of interest for researchers in Baltimore's academic institutions. Joel Gittelsohn of the Center for Human Nutrition at the Johns Hopkins Bloomberg School of Public Health has led a team since 2002 in conducting research on food store-based environmental nutrition interventions. In 2006, the team partnered with the Baltimore City Health Department and other community organizations to begin an intervention study called the Baltimore Healthy Stores Project (BHSP). BHSP was aimed at improving the availability and purchasing of healthy food in low-income Baltimore corner stores and supermarkets (Song, Gittelsohn, Kim, Suratkar, Sharma, & Anliker, 2009). Gittelsohn worked in collaboration with the Korean American

Grocers & Licensed Beverage Association of Maryland (KAGRO) to assist storeowners in stocking healthy foods in local corner stores. He then assessed their opinions and perceived barriers to offering healthy foods. As an extension of the BHSP, Gittelsohn also initiated the Baltimore Healthy Eating Zones Project to improve the availability of healthy foods in corner stores near 12 Baltimore City recreation centers, training peer mentors and recreation center staff in nutrition and healthy eating promotion for kids.

Needs Assessment (2007–2009)

In 2007 Johns Hopkins Center for a Livable Future (CLF), an interdisciplinary academic center based at the Bloomberg School of Public Health, partnered with Operation ReachOut Southwest (OROSW), a coalition of community associations led by Joyce Smith that organizes community associations in Southwest Baltimore. As part of work by OROSW's health committee to reduce health disparities, it conducted a community food assessment (Palmer, Smith, Haering, & McKenzie, 2009). This study identified community members' key food and nutrition concerns and measured the availability of healthy foods in Southwest Baltimore City. Out of a complete sample of the 41 food stores OROSW residents shopped in (35 within OROSW boundaries — including two supermarkets — and six nearby stores), the assessment found that 75 percent of the stores did not offer any fruits, and 68 percent did not offer any vegetables. In addition, residents reported that 46 percent of their food-related shopping visits were made to corner stores.

Meanwhile, Manuel Franco, a PhD student and Innovation Grant recipient from the CLF, was in the process of mapping healthy food availability and health outcomes across 159 contiguous Baltimore neighborhoods and in the 226 food stores within them. He noticed a significant association between the availability and price of healthy food and risk for cardiovascular disease (Franco, Diez-Roux, Glass, Caballero, & Brancati, 2008). Franco et al. found that racial and economic disparities were notably present, with 43 percent of predominantly black neighborhoods and 46 percent of low-income neighborhoods having the lowest healthy

food availability rating, compared to only 4 percent and 13 percent in predominantly white and wealthy neighborhoods. A strong correlation between healthy food availability and dietary patterns was also noted, as individuals living in neighborhoods with lower availability of healthy food had higher intakes of fats and processed meats and lower intakes of whole grains and fruits (Franco, Diez-Roux, Nettleton, Lazo, Brancati, Caballero, Glass, & Moore, 2009). Moreover, the availability of healthy foods was inversely related to body mass index (BMI), a recognized cardiovascular and metabolic disease risk factor (Franco et al., 2009).

At the invitation of Baltimore's Health Commissioner, Dr. Joshua Sharfstein, Franco gave a presentation of his research findings to the Baltimore City Health Department in 2007. Recognizing the need to consolidate efforts currently underway, such as the implementation of the city's comprehensive plan, Sharfstein requested that the CLF meet with the Planning and Health departments to discuss what could be done.

The first meeting included senior staff from the Planning and Health departments, Dr. Gittelsohn, and Joyce Smith, the community partner from the OROSW southwest Baltimore food assessment. The group members talked about their respective work and where there were opportunities for collaboration. Surprisingly, the city departments had not previously interacted because the Health Department was organized by disease and the Planning Department was organized by geography. Everyone's interest was piqued. Several months earlier, Palmer had sought out Mark Winne, a noted expert on local and state food policy, at the Community Food Security Coalition's annual conference and asked his opinion on what Baltimore should be doing. Winne recommended that Baltimore convene those already working on food issues to talk about joint opportunities through a type of food policy council. Palmer mentioned this option to the group and it was well received.

Collaboration: The Baltimore Food Policy Task Force (2008–2009)

Overview

As mentioned earlier, a variety of stakeholders, including public health researchers, policymakers from the city's Planning and Health departments, hunger advocates, and other nonprofit organization representatives, were working on various food system—related problems, but were not working together to solve them. In 2009 these stakeholders were brought together when Mayor Sheila Dixon appointed the Baltimore Food Policy Task Force, convened by the health commissioner and the Planning Department's director of research and strategic planning, to assess local food system features and offer recommendations for how to improve the overall system.

After one year, the Baltimore City Food Policy Task Force (2009a) issued a report with 10 goals addressing many different issues related to healthy and sustainable food — a "roadmap" for action. This report led to the funding of the Baltimore food policy director in 2010, who would establish a new intergovernmental collaboration, the Baltimore Food Policy Initiative (BFPI), to carry out these recommendations. Within the BFPI, a Food Policy Advisory Committee (Food PAC) — Baltimore's version of a food policy council, comprising 60 stakeholder organizations in the Baltimore community — was brought together to collaborate and drive the coordinated implementation of the task force recommendations.

In the past three years (and in a timeframe coinciding with the nation's economic recession) BFPI has achieved many significant goals that have earned it widespread media attention, both locally and nationally (Baltimore City Planning Department, n.d.b). This has included changing zoning code to allow for urban agriculture, addressing policy barriers related to accepting SNAP benefits at farmers' markets, improving food options at public markets, and supporting online grocery shopping for SNAP customers. At the end of 2011, Mayor Stephanie Rawlings-Blake assumed national leadership on the issue as vice chair of the U.S. Conference of Mayors (USCM) Food Policy Task Force, bringing together mayors throughout

the country to share ideas and facilitate conversations regarding food policy change.

Development of the Baltimore Food Policy Task Force (2008–2009)

In February 2008 the CLF invited and supported Winne in coming to Baltimore and holding a workshop with 25 participants representing various stakeholders in the local food system. He introduced participants to the food policy council concept and discussed the various efforts underway across the country to improve community food systems. The group agreed that collective action was key to moving forward and recommended that Mayor Dixon get involved. Staff from the Health Department suggested they talk to Dr. Sharfstein, Baltimore's health commissioner, to encourage his support.

A few months later, Dr. Sharfstein contacted Palmer and recommended that he and the head of the Planning Department² convene a task force that would meet for one year to decide how to move forward. This development boded well because getting city government's buy-in was crucial to any progress. Several months passed and it appeared the task force idea and interest had waned. However, in November 2008 Mayor Dixon announced that the Baltimore Food Policy Task Force would be appointed to facilitate the necessary collaboration among food system stakeholders. Using the precedent from the Swan Park Task Force, commissioned by Mayor Dixon in 2007 to address an arsenic contamination issue in South Baltimore (Goldman, Moore, Nilson, Sharfstein, & Simms, 2007), this new body agreed to convene three times between February and November 2009 in order "to identify means to create demand for healthy food through awareness and education and to ensure opportunities for all Baltimoreans to access affordable healthy food options in order to achieve and sustain better health outcomes and a higher quality of life" (Baltimore City Food Policy Task Force, 2009a). In

² By the first meeting, the planning director had left the department, so the director of research and strategic planning, Dr. Seema Iyer, took his place. Dr. Iyer had been involved in early meetings, so this change was fortuitous.

essence, the group was tasked with creating specific, actionable solutions that would address these recognized needs for improved healthy food access, demand, and affordability.

The task force was composed of 18 stake-holders representing the Baltimore City Planning Department, the Health Department and its Division of Environmental Health, the Development Corporation, and the Department of Recreation and Parks; grocery chains including Giant, Santoni's, Safeway, and KAGRO; the Maryland Food Bank; Baltimore City Public Schools; the Johns Hopkins Bloomberg School of Public Health; the University of Maryland School of Medicine; Operation ReachOut Southwest; and Park Heights Community Health Alliance.

The task force members' inexperience in food policy proved to be an advantage because it allowed the group to learn and evolve collectively in their efforts. Members did not attempt to change laws; they did not even know what food laws existed. In the beginning, many members attended without a clear idea of why they were invited. Over the course of the year, however, they came to realize that at the city level, zoning, regulations, procurement contracts, and ordinances all constitute local food policy.

Task Force Recommendations (2009)

On February 9, 2009, the first meeting was held. The key objectives included understanding the food policy council model; reviewing what was happening in Baltimore; and working in small groups to produce a list of opportunities. The groups developed 23 actionable programs, projects, or policy ideas to create a food system that would better ensure equal access to healthy food for all residents. The Planning Department also vetted the list with other food system stakeholders. During the second meeting, members used that list to concentrate on the feasibility of each strategy and to develop action plans for those opportunities selected for the short list. A brief amount of time was allocated to reviewing the draft mission statement and goals. At the final meeting in December 2009, the members prioritized the actions and voted for the following 10 key recommendations (not ranked hierarchically). The CLF drafted the

Food Policy Task Force Report, which was issued in December 2009 (Baltimore City Food Policy Task Force, 2009a).

Baltimore Food Policy Task Force recommendations:

- 1. Promote and expand farmers' markets.
- 2. Promote and expand community supported agriculture.
- Support continued research on food deserts and collaboration with policymakers.
- 4. Support a central kitchen model for the Baltimore City Public School System.
- 5. Support community gardens and urban agriculture.
- Expand supermarket home delivery program.
- 7. Improve the food environment around schools and recreation centers.
- 8. Support street vending of healthy foods.
- 9. Create healthy food zoning requirements or incentives.
- Develop a targeted marketing campaign to encourage healthy eating among all Baltimoreans.

As the task force was assembling in the fall of 2008, the Planning Department simultaneously was drafting Baltimore City's first Sustainability Plan. Palmer was asked to participate in the green infrastructure working group, where the topic of food was located. When the group learned how the task force recommendations were shaping up, it was clear that they should be cross-referenced and incorporated into the City Sustainability Plan for consistency and dual accountability. As a result, the plan's Greening Goal 2 was to "establish Baltimore as a leader in sustainable local food systems" through the following strategies (Baltimore Commission on Sustainability and Baltimore City Planning Commission, 2009):

- Increase the percentage of land under cultivation for agricultural purposes;
- Improve the quantity and quality of food available at food outlets;
- Increase demand for locally produced,

- healthy foods among schools, institutions, supermarkets, and citizens;
- Develop an urban agriculture plan;
- Implement Baltimore Food Policy Task Force recommendations related to sustainability and food; and
- Compile local and regional data on various components of the food system.

Thus before the task force made much progress, it was designated as a "means of implementing the City's adopted Sustainability Plan," and "its recommendations should help to inform the TransForm Baltimore zoning code rewrite project to ensure that the city's built environment does not impede access to healthy foods" (Baltimore City Food Policy Task Force, 2009b).

Baltimore's Food Desert Map

Partly due to the third task force recommendation, Baltimore City officials and the CLF continued their research on food deserts. Baltimore City operationally defined a food desert as "an area where the distance to a supermarket is more than 1/4 mile [0.4 km], the median household income is at or below 185 percent of the Federal Poverty Level, over 40 percent of households have no vehicle available, and the average Healthy Food Availability Index score for supermarkets, convenience and corner stores is low (measured using the Nutrition Environment Measurement Survey [as reported in Franco et al, 2008])" (Baltimore City Planning Department, 2012, p. 2).

The research showed that many areas in Baltimore and other urban inner-city settings are food deserts. According to data compiled by the Baltimore Department of Planning using 2010 Census data, 20 percent of Baltimore's population (around 125,000 people) lives in food deserts, which are found in one in three neighborhoods (Center for a Livable Future, 2012). Racial disparities are particularly prevalent, as 26 percent of the African American population lives in food deserts, compared to only 7 percent of the white population. In the absence of supermarkets, which typically offer a better variety of healthy foods than other food stores, residents in food deserts are

surrounded by cheap, mostly high-fat and high-calorie foods and meals from the high proportion of corner stores and carryout restaurants. These features have led some experts to use the term "food swamp" over "food desert" to more adequately describe the phenomenon (Maryland Department of Planning, 2012).

Organizational Structure: Food Policy Director, Initiative, and Advisory Committee (2009–Present)

Food Policy Director

Once the task force recommendations were established, the next challenge faced was how to implement them. The Association of Baltimore Area Grantmakers had member funders who were interested in supporting more work related to food systems, so they offered a forum to educate their members about what was happening in Baltimore with regards to the food system. Seema Iyer, cochair of the task force from the Planning Department, Palmer, and others discussed the food system mapping project that CLF was undertaking, the task force recommendations, and urban agriculture initiatives. The task force considered the idea of funding a food policy position to carry out and oversee implementation of its recommendations. A mentor of Palmer's, Kate Clancy, recommended that several foundations jointly contribute to the position. She argued that while funders need to narrow their focuses based on their missions, any foundation working on public health, food security, urban development, etc., would benefit from having a dedicated position for food policy. This share-the-burden strategy was also popular because the foundations were anticipating a financial hit from the 2008 recession. Several foundations invited the city to submit letters of interest. As a result, four external donors, the Abell Foundation, Annie E. Casey Foundation, Baltimore Community Foundation (BCF), and Kaiser Permanente, provided a total of US\$70,000 to initially fund the position as a contractor to city government, with the BCF serving as the fiscal agent. The role and responsibilities of the food policy director would be to work with members of city government to review and develop specific food-related policy and

assist with facilitating those policy changes; partner with community, political, academic, private, and nonprofit stakeholders to facilitate food system changes; expand current projects and initiate new ones to expand access and availability of healthy food choices in targeted Baltimore communities; and more.

On May 1, 2010, Stephanie Rawlings-Blake, the former City Council president and new mayor of Baltimore, announced the city's Food Policy Task Force recommendations and Baltimore's food policy director. Demonstrating the city's timely developments, the White House released its report on childhood obesity around the same time, which served as a frame for First Lady Michelle Obama's "Let's Move" campaign. The major points and recommendations of the White House report mirrored many of the Baltimore Food Policy Task Force recommendations and accomplishments that Baltimore had already made, such as starting a food policy council.

Native Baltimorean Holly Freishtat accepted the job as Baltimore City's first food policy director as a part-time, 15 hours-per-week position with the intention that, once additional funds were secured, it would become full-time (Marsh, 2011). A 2007–2008 Kellogg Food and Society Fellow through the Institute for Agriculture and Trade Policy and graduate of Tufts University with a master's degree in food policy and applied nutrition, Freishtat had previous experience in the food system realm as the founder of a farm-to-school program and a farm-to-healthcare project in Washington state (Cohn, 2010).

Having the task force assembled and recommendations established before Freishtat arrived was invaluable to the progress of the BFPI. Moreover, the roadmap of recommendations was general enough to provide Freishtat with the flexibility to carry it out with appropriate timing based on the present priorities of the Mayor's Office and community needs, a crucial aspect of the job. Having a broad food policy framework provides the opportunity to develop the detailed food policy agenda over time.

One unique aspect of Baltimore's arrangement is the relationship between Baltimore City and the Sustainability Food Fund at BCF, which was

established to support the city's food policy work. The intention of the Food Policy Task Force recommendations was to have a permanent city employee solely focused on food policy and food access issues, yet its designers anticipated that the position would require some years of outside grant funding. BCF agreed to act as a fiscal agent for the consultant position, a role they had played for other city initiatives. Within a short time, Freishtat was hired as the food policy director through a consultancy with BCF, yet she had an office in the Office of Sustainability and "looked and felt like a City employee" (H. Freishtat, personal communication, October 18, 2012). "Having the option to start as a consultant allowed the Planning Department to hire someone without asking the City for funding," Palmer noted. Within one year, Freishtat became a city employee and no longer relied on grant funding for her salary. The relationship between the city and the Sustainability Food Fund is still very important, and Freishtat uses the fund to write proposals for additional staffing as well as program and policy implementation through the city.

Baltimore Food Policy Initiative

In 2010, Freishtat proceeded to create the Baltimore City Food Policy Initiative (BFPI), an intragovernmental collaboration among the Baltimore Department of Planning, Office of Sustainability, Baltimore Development Corporation, and the Health Department aimed "to increase access to healthy and affordable foods in Baltimore City food deserts...through a holistic and comprehensive food system approach" (Baltimore City Planning Department, n.d.c). BFPI is a planning and policy shop that works to identify barriers across city agencies to improve food access, increase food production, and address these and many other food system issues through local, state, and national policy changes.

Baltimore Food Policy Advisory Committee
Within the BFPI, Freishtat assembled the Food
Policy Advisory Committee (Food PAC), composed of over 100 stakeholders representing more
than 60 organizations currently working on local
food system projects in nutrition, hunger and food

access, schools, gardening, sustainability, and urban agriculture. The purpose of Food PAC is to break down silos between organizations working on all types of food issues. By the very nature of their work, these groups are already implementing the task force recommendations, and Food PAC provides an opportunity for the organizations to coordinate and collaborate on their efforts. Food PAC groups are "on the ground" and have the pulse of neighborhoods and the community at large. In addition to ongoing communication, the group meets six times per year to provide updates and raise policy issues and barriers to the food policy director so that BFPI and city government are abreast of all issues and can help drive solutions (Baltimore Food Policy Initiative, n.d.). While Food PAC is essentially Baltimore's equivalent to a food policy council, its distinction as a purely advisory group, and not a council, is important. It is not a formal, decision-making body (H. Freishtat, personal communication, October 18, 2012).

Having the task force assembled and recommendations established before Freishtat and the Food PAC arrived were important contributions to the process. The task force report established the case for how the city could engage in food policy issues that would contribute to better health outcomes. Without the report, there would have been little evidence that hiring anyone to focus on food policy would make a difference. The process also allowed Freishtat to step into the position and immediately use her skills and knowledge to act on the recommendations. Moreover, the roadmap of recommendations was general enough to provide her with the flexibility to carry it out with appropriate timing, a crucial aspect of this job. "So much of what I do is successful because of timing," Freishtat noted, and a very detailed roadmap would have proven a hindrance to her efforts (H. Freishtat, personal communication, October 18, 2012).

Implementation: The Baltimore Food Policy Initiative (2010–Present)

Attention to Food Access

Within the first month on the job, Freishtat already had 50 media calls. By the end of the first year it was apparent that BFPI was filling a needed role in

the city through its successful initiatives: an educational campaign called Get Fresh Baltimore, an effort to get EBT cards accepted at farmers' markets, incorporation of urban agriculture into rezoning laws, and more. Other city initiatives, such as the Health Department's virtual supermarket program for pickup in inner-city libraries, garnered more media attention because Freishtat was able to highlight them.

Financial Sustainability

BFPI has grown from solely Freishtat as a consultant to two city-funded positions, and one to two grant-funded employees. The growth of the BFPI and the support, both internal and external, harnessed in such a short time frame and in a relatively difficult economic climate was no small accomplishment. In the last four years, BFPI has secured approximately US\$1 million in grants to address food access (as of 2013) (H. Freishtat, personal communication, August 4, 2013).

Governance

The BFPI's role within city government, technically located under the Office of Sustainability but in reality under a multi-agency governmental collaboration, directly influences its functioning and power. Working with the Health Department, the Baltimore Development Corporation, Department of Planning, Office of Sustainability, Food PAC, and others, Freishtat can connect these groups' efforts to address other recognized challenges in the food system. Her role is to identify policy opportunities, so she focuses on collaborating and explaining policies in ways that encourage these groups to act on issues that affect food policy on multiple levels. She is able to officially interact with these other agencies because she has been appointed to various cabinets and committees throughout the city and is able to organize meetings with their directors and administrators when needed.

Policy Changes: Need-Driven (2009–Present)

Assessment and Evaluation
The Baltimore Food Desert Map is one tool that

helped Freishtat and the BFPI provide the sense of urgency needed to successfully frame the highest priority policy needs and interventions. Initially created by the Johns Hopkins Center for a Livable Future as part of its Maryland Food System Map Project, the first food desert map of the city was released in May 2009. Using geographic information system (GIS) technology, this map overlayed household income with proximity to supermarkets to show the areas of the city that were in greatest need of access to healthy foods (Baltimore City Planning Department, 2012). It was updated in 2012 with additional information on vehicle availability and the quantity and availability of healthy food within all food stores, from corner stores to supermarkets. Jointly published with the city in 2012, this map proved to be an invaluable resource. According to Freishtat, "Having the cityapproved food desert map was one of our greatest successes. It's not an external report or from somewhere nationally, it's from us. It was how we were able to get the buy-in of establishing need very clearly; as such, it's really driving our policies, our urgency" (H. Freishtat, personal communication, October 18, 2012).

Focus on Policy

Freishtat cites her background in policy as another key force behind the BFPI's initiatives. While other food policy directors across the country have come to the position as former chefs, lawyers, public health officials, or other food system stakeholders, she came in with extensive experience in grant writing, food policy, and food system media training. This background has allowed her to see where her efforts can be most efficiently implemented. Compared to other food policy councils that often struggle to balance their focus between programs and policy, she spends virtually all of her time on policy. More specifically, she focuses on details of policy implementation, such as permitting, requirements, and procedures, and has found that making changes in the small policy details has led to substantial positive impact on the city's food environment (H. Freishtat, personal communication, October 18, 2012). Through her education and past experience, she is able to recognize these gaps and address them to the best of her ability.

City-centric Priorities

Around the country there are places where food policy directors are commonly located within city government: the mayor's office, office of sustainability, the department of planning, health, economic development, etc. A unique aspect of Baltimore is that the food policy director position is located in the Office of Sustainability (a division of the Department of Planning), yet has a very close relationship with the Mayor's Office without being located within the mayor's office. Freishtat has found that it is important to maintain a close relationship with the mayor but to remain in separate offices (H. Freishtat, personal communication, October 18, 2012). Food policy directors in other cities have learned this the hard way, as their positions located within the mayor's office became threatened when the incumbent mayor left. Freishtat maintains her relationship with Mayor Rawlings-Blake by providing briefing memos, in which she describes the background issue at hand and various needs related to it, before each major media event. By having frequent events, she maintains direct communication with the mayor while simultaneously increasing the mayor's media coverage on the issues.

Freishtat had a fortuitous opportunity to accompany Mayor Rawlings-Blake to a round-table summit on improving healthy food access that was hosted by First Lady Michelle Obama in Chicago. Observing the need and urgency described by the mayors and the first lady at this summit provided the impetus for the mayor to be chosen for national leadership in food access. Following the event, Mayor Rawlings-Blake helped form the U.S. Conference of Mayors (USCM) Food Policy Task Force, a national committee of which she is vice chair that brings together mayors throughout the country to share ideas and consolidate efforts (United States Conference of Mayors, n.d.). The mayor's national leadership is having far-reaching effects at home as well, helping drive the momentum and change that Baltimore is now seeing.

Conclusion and Lessons Learned

When the Baltimore food policy director started there were only a handful of similar positions embedded in city governments across the country, and none with the same mandate as Baltimore's. As of 2013, 16 food policy director equivalents have been established throughout the country. Similarly, in the few years of BFPI's existence the number of food policy councils has more than doubled. In 2010, there were 92 food policy councils (Scherb et al., 2012). In 2013, the Center for a Livable Future's Food Policy Network program conducted a census that recorded over 270 active councils in the U.S. and Canada (Center for a Livable Future, 2013). As the movement addressing policy at the food system level continues to expand, the formation, structure, and functioning of BFPI may help guide future efforts with similar missions.

Ultimately, the Baltimore Food Policy Initiative is one example of how much progress can be made in only a few years' time. Before BFPI, there were many disparate efforts with the same goal of improving healthy food access and demand in Baltimore, but nothing to coordinate them to make greater impact. Circumstances placed the city in a proactive role to provide and shape how food policy would look in its midsize urban setting. The case study of BFPI provides an example for other midsize urban cities to consider.

(1) Identify need and priorities first: Baltimore convened a task force specifically focused on identifying how the city would address food access and food policy. The task force created short-, medium-, and long-term goals for tangible outcomes and developed a timeline based on available financial resources. Setting priorities before a food policy director was hired was effective because attention could be focused strictly on implementation.

The food policy director's mandate to implement a predetermined set of recommendations led to her unique relationship with the Food PAC as an advisory committee instead of a food policy council with decision-making abilities (Hatfield, 2012). The flexibility imparted by this structure has given her the influence needed to implement stakeholder recommendations without as many bureaucratic limitations as typical councils, which often need members to vote in order to implement action items.

(2) Balance evidence and action: The task force understood the need to improve food access but was willing to make decisions based on available data instead of waiting for complete and perfect evidence. The task force was highly effective in bringing academic, governmental, and community partners together in order to use available evidence and members' expertise in research to drive decisions. Yet more importantly, it looked for opportunities for what could be done immediately to improve food access. It spent less time waiting for complete data or determining exact strategies and instead focused on how to gain momentum in fixing the city's broken food system.

Notably, the process of selecting which activities to include in the task force report did not involve reviewing all the scientific literature to determine which activities were more likely to be successful. At that time few peer-reviewed journal articles had been published that evaluated food system interventions. Instead, the task force contacted similar initiatives around the country and sought out potential opportunities despite the economic hardships that came as a result of the 2008 economic recession.

(3) Ensure financial sustainability: In the midst of an economic downturn, Baltimore successfully found a way to work on food policy within the city. In creating the Baltimore Food Policy Initiative, key partners and funders invested in — and continue to invest in — the vision set by the task force. Through briefings and participation in activities, each funder recognized that working on a systems problem meant that all sectors could be engaged in solving the problem. BFPI built its credibility in the city through work funded by nonprofit grants. As the city took note of its work, BFPI leveraged the funds to become partially funded by the local government, creating a sustainable way to work on Baltimore's food system.

BFPI now has three full-time positions dedicated exclusively to food policy work, one of the largest offices in the country. The funding for these positions, which came through its

- demonstrated need and notable achievements, has allowed BFPI to achieve even more progress simply by having more devoted staff time to facilitate effective policy changes.
- (4) Maintain agility: One of the notable goals absent from the task force report was the opening of supermarkets in food deserts, which all the retail task force members agreed was untenable in the current economic climate. Now is it central to Baltimore's focus. Baltimore has been successful because of its ability to stay agile and use the task force report as a blueprint to start its work.

Further, the media spotlight on Baltimore's food policy initiatives, first used by Freishtat as a tool of garnering attention and further highlighted by the mayor's efforts nationwide, have contributed to the continued interest in and support of the BFPI's efforts. Baltimore is working to continue to evaluate and show the impact of its efforts. Its current metrics are mainly centered on the food desert map and include the number of residents living in food deserts and the percentage of the city designated as a food desert. Future evaluation efforts may include reporting on a range of measures relevant to the city's effort to improve access in different sectors, such as urban agriculture or healthy food availability in existing food stores. This would include combining evaluation metrics used in existing programs and by Food PAC partners.

Within three years, Baltimore became a national leader in food policy (Hodgson, 2012). Future challenges BFPI may face include incentivizing new or improved supermarkets in underserved neighborhoods; supporting the sustainability of all healthy food sources; increasing demand for and affordability of healthy foods; addressing health disparities and diet-related disease; ensuring fresh, healthy foods in school meals; and addressing barriers that arise as unintended consequences of federal and state policies. Baltimore's unique ability to address food policy through BFPI attests to the promising ability of its approach, both structurally and functionally, to tackle the issues of healthy and sustainable food access.

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Seeding a culture of remembering

Book review by Deirdre Helfferich University of Alaska School of Natural Resources and Extension

Saving More Than Seeds: Practices and Politics of Seed Saving

Phillips, C. (2013). Saving more than seeds: Practices and politics of seed saving. Surrey, UK: Ashgate, 286 pages. Available as hardcover and ebook. Publisher's website: http://www.ashgate.com/isbn/9781409446514



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Por thousands of years gardeners and farmers have practiced basic plant breeding by selecting those plants deemed of value and saving their seed, tubers, rootstock, etc., to grow and care for them for another generation. Catherine Phillips uses the term *seed saving* in this broad and traditional sense throughout her book *Saving More Than Seeds: Practices and Politics of Seed Saving.* This long process of agricultural adaptation has resulted not only in the survival of species and strains of plants with qualities humans deem desirable, but also in the creation of rich cultural traditions as well (think

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cacao, henna, garlic, poppy). While we have saved their seeds, bulbs, and tubers, plants have profoundly affected us, even providing the foundation for civilization, some have argued (through, appropriately, grain for beer and thus, fittingly, politics (Hayden, 2013)).

Over the last century and a half, researchers and agriculturalists have sped up the adaptation process through the application of genetic technologies and the development of new breeding techniques. Agrobiodiversity, seed saving, and long-standing cultural traditions, however, are disappearing. Measures ostensibly designed to protect the agricultural sector and seed growers have produced negative consequences. For example, intellectual property rights and trade treaties have instead constrained the livelihood of farmers and the rights of gardeners. This has contributed to there being fewer producers and breeders. As a

result, the public faces less variety and public accountability, and more genetic and economic vulnerability.

The global market's commodity approach, which requires only a few varieties and broad approximate adaptation, disregards the importance of local knowledge and specific adaptation of plants to myriad habitats and conditions. But local and indigenous knowledge of crops may be vital to the resilience of agriculture in the face of climate change (many sources discuss this issue; for an overview, see Swiderska, Song, Li, Reid, & Mutta, 2011). As argued by Phillips, it is not just in First Nations peoples and non-Western countries that this knowledge may be found and cultivated.

Phillips' book focuses on the seed industry and seed saving in Canada and is a welcome and important addition to the literature on the modern seed industry and food movements. Some of the most refreshing prose in the book arises from the author's original research on the attitudes and practices of Canadian seed savers. Phillips illustrates the complexities of the relationships among seeds, seed savers, seed sellers, plant breeders, farming associations, government regulators and policy makers, and, of course, transnational corporations such as Monsanto.

In Chapter 1, Starting with Seed, Phillips first reflects on the philosophical question of agency, in other words, the capacity to act or influence who and what is around us. The author describes her book as exploring "the ethics and politics of seed saving" and "an effort to challenge our thinking about the present realities and future possibilities of seed saving" (p. 7). Part of this is moving humans from the center of things and allowing for nonhuman agency, "the idea that agency is more distributed and relational rather than concentrated in people" (p. 7). After all, seeds are alive—but more, seeds and people have relationships with each other. I was not expecting to read a book of philosophy and ethics, so these sections took me by surprise. Phillips also provides chapter outlines here.

In Chapter 2, Rethinking Practice, Agency and Worldly Engagements, Phillips elaborates on the experience and practice of seed saving in the decentering of human beings as the agencies of change. She also remarks on how "other things — intellectual property rights, gene banks, bacterial DNA, policy proposals — make appearances, shaping and being shaped by seed saving" (p. 26). These first two chapters provide the ethical and thematic background that frames the context of the rest of the book. While Chapter 2 was much more dense and somewhat unevenly written, it still laid a fascinating and important grounding for the following chapters.

Phillips describes Chapters 3, 4, and 5 as being about "seed-people orderings different from, but entangled with seed saving" (p. 11). In Chapter 3, Reordering with Corporations, Phillips reviews the neoliberal, corporate reordering of the seed industry, describing international agreements and their influence on Canadian (and other countries') domestic policies, particularly with regard to commodification and extreme intellectual property rights and patenting. Commodification in and of itself is not a problem for many seed savers, she observes, as they do order from seed companies to refresh their stock, source rare or unusual varieties not carried by larger companies, or support local business, and/or obtain locally adapted seed. Seed savers' relationships with their seed and their seeds' histories, as well as with the companies that carry them, is important to seed savers, as she illustrates with many quotes. Yet, when commodification is carried to the extreme of creating dependence rather than interdependence, seeds and agriculture may suffer. As the author points out, what constitutes "the best seed" is not necessarily the best for

Phillips shows how the neoliberalization of the economy's agricultural sector, and its objectification of seeds as natural resources, commodities, and patentable items are a "technopolitical reordering of seeds." This enables "collaborations between governments and seed corporations [to] facilitate commercial market expansion and regulatory constraint of seed saving" (p. 35). The problem of the contamination of the Canadian flaxseed crop with GMOs and the subsequent collapse of the market was especially troubling. Phillips describes how seed certification, rather than "protect[ing] growers from dishonest seed sellers" as intended, has become a way instead to govern all

aspects of growing specific crops, and "though the pedigreed seed process and its classes remain unaltered, industry now turns to its advantage provisions once used to protect growers from profiteers. In promoting certified seed, industry does more than advocate quality seed — it attempts to enclose seed saving practices, expand certified seed markets and increase opportunities for markets" (p. 45).

In Chapter 4, Configuring Rights, Phillips admirably and fairly addresses the complexities of intellectual property rights. She includes the more subtle issues associated with plant breeders' rights and certification of seed in her discussion, exploring topics on how plant breeders are affected by international treaty and what the establishment (or loss) of rights means in a philosophical sense. Phillips pinpoints the effects on seed savers, farmers, and the seed involved. Her calm treatment of the legal and broader ethical and political issues in the sensationalized Percy Schmeiser case was refreshing (Schmeiser was sued by Monsanto for patent infringement when RoundUp-resistant canola was found growing in his fields). Phillips provides chilling insight into the restrictions the government has increasingly placed on small-scale seed saving by the public and by farmers, and the lack of government sensitivity to the importance of public engagement. "Many of the political decisions related to seed-people relations are considered by governments — including Canada's — to be technical matters, and as such, the underlying beliefs and priorities need not be discussed" (p. 86). Phillips illustrates how many of Canada's regulations and restrictions on seed saving relate directly to the adoption of international treaties such as the *Union* Internationale pour la Protection des Obtentions Végétales, or UPOV.

In Chapter 5, Securing Accessions, Phillips delves into the issue of genebanking, arguing that the practice is flawed for several reasons. First, it reinforces inequity within seed saving by strengthening the divisions between breeders and farmers as well as Northern and Southern hemispheres (rich and poor). Second, selection is often based on what is deemed "useful," ignoring other values, such as sheer fun, and also the vast potential and possibilities that are still left to be explored or are

simply unknown. Last, one should not detach seeds from their culture and histories. Phillips also discusses regeneration failure due to lack of funding and the odd potential for seed adapting to life in a gene bank rather than life in the field.

Chapters 6 and 7, Learning Seed Saving and Reconstituting Worlds Together, are a reflective look on the individual learning process of seed savers, and how seed savers grow to see themselves and their world as a result of their experiences. Phillips quotes from many individual gardeners and seed savers who bring many issues and viewpoints to readers. Phillips explores questions of responsibility toward seed, toward its history and the families who have nurtured it, and the full meaning of stewardship. The development of small businesses as a result of starting in seed sharing, learning through practice, and many other meaningful acts of saving and sharing plants are all lessons in interconnectedness.

Chapter 8, Resisting, Remaking and More, addresses the political nature of seed saving, which can result in political engagement and serve as a way to resist corporate seed ordering and commodification. In particular Phillips focuses on cooperation among seed savers, writing, "the isolated individual of neoliberalisation is countered as savers function necessarily as part of collectives" (p. 204). This statement, however, is in contrast to the lack of discussion of seed libraries throughout the book. A seed library's mission is to preserve through propagation and dissemination, which in turn leads to evolution, rather than to employ methods of isolation and conservation as in a gene bank. Seed libraries are less common in Canada than in the United States, but are prevailing centers of seed-saver activity. They host seed swaps, fairs, and workshops—all of which are activities that the author identifies as opening the possibilities of networking. While Phillips does use the example of the Heirloom Seed Sanctuary in Kingston, Ontario, as an example of "fostering collective belonging," useful to her personally for the information shared and connections made with other savers, she only briefly elaborates on community seed collections like these. In one instance she even goes so far as to state:

Community-based seed libraries and sanctuaries, like this one [Heirloom Seed Sanctuary], exemplify savers' efforts to build upon their ongoing informal relations by expanding learning, collections and connections. (p. 203)

So why not explore community-based seed libraries and sanctuaries more thoroughly if they exemplify her overall topic, especially in contrast to genebanking? Phillips is careful to explore in meticulous detail the ramifications of seeds and human society, but here she does not. Disappointingly, the philosophical, political, sociological, agroecological, and economic importance of these institutions and of their seed-human relations will have to be considered further in another book.

Aside from this one gap, Phillips covers her topic in depth, producing a thoroughly researched, well written, and well structured work. Her subject matter is carefully placed in larger contexts of ethics, history, politics, economics, property rights, and the human — and nonhuman — experience. Despite the quiet, thoughtful tone and scholarly approach to her subject, the author has written a book that exercised both my intellect and my

emotions — at times quite strenuously and loudly! I highly recommend her book to agricultural appointees in government; academics interested in agroecology and sustainability policy; seed librarians; and most of all, North American seed savers wishing to gain a deeper understanding of the impact of neoliberal policy on their rights to save seeds in their farms and gardens.

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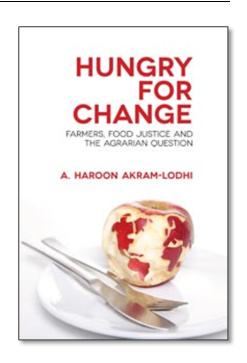
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Voices of peasant farmers from the margins of the global food crisis

Book review by Breann Maxwell^a and Zulfiya Tursunova^b University of Manitoba

Hungry for Change: Farmers, Food Justice and the Agrarian Question

Akram-Lodhi, A. H. (2013). *Hungry for change: Farmers, food justice and the agrarian question*. Black Point, Nova Scotia: Fernwood Publishing, 200 pages. Available as paperback. Publisher's website: http://fernwoodpublishing.ca/Hungry-for-Change/



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Harmers, Food Justice and the Agrarian Question adds to the growing literature on food sovereignty and social movements from around the globe. The books Food Sovereignty in Canada: Creating Just and Sustainable Food Systems (2011) and Food Sovereignty: Reconnecting Food, Nature and Community (2010), written by scholars and agrarian activists and edited by Hannah Wittman, Annette Aurelie Desmarais, and Nettie Wiebe, detail the origins of food sovereignty and analyze food regimes and food crises. The authors outline agrarian reforms from historical and contemporary perspectives and explain the relationships between food systems, energy, climate change, environment, and food

regime restructuring. Through an examination of socio-economic and environmental consequences of the food system, the authors provide examples of peasant movements that are transforming relationships between food, markets, and local and global communities. Other recent books include Food Regimes and Agrarian Questions by Philip McMichael (2013), Class Dynamics of Agrarian Change by Henry Bernstein (2010), and Peasants and the Art of Farming: A Chayanovian Manifesto by Jan Douwe van der Ploeg (2013). These scholars focus on the structure and dynamics of peasant farms, production and labor, and consistent marginalization of peasants as result of liberalization and globalization. Such books as Food for Thought: A Multidisciplinary Discussion by Robert Stewart and Susan Korol (2012) and Food for Change: The Politics and Values of Social Movements by Jeff Pratt and Pete Luetchford (2013) seek to address food production, distribution, and food choices people make in

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order to show how important alternative food movements are in creating an economic system within which individuals know where, how, and by whom their food is produced.

These influential authors address food sovereignty issues from a systemic perspective to help their readers understand the complex relationships between agriculture, market, laws, and environment and their influences on each other both locally and on a global scale. Building on these and other books, Akram-Lodhi's Hungry for Change puts a human face on agricultural development by examining the socio-economic transformations in individual peasant farmers' lives and the lives of their families as a segment of a bigger global picture. Akram-Lodhi's approach is especially useful as an introduction for readers who wish to understand the devastating effects of the global food regimes on the lives of individuals, especially in the global South. Through personal accounts of peasant farmers, the author fills a niche in the literature by examining the process by which the world food system has become a capitalist enterprise in the hands of power holders, corporations, the IMF and World Bank, and privileged consumers in the North. In the process of creating such a wide-scale food system, those who are producing the food family farmers, peasant farmers, and landless rural workers — are becoming increasingly marginalized while corporations are earning larger profits. Akram-Lodhi identifies the irony of the current global substance crisis: those producing the majority of the world's food are often going hungry while many in the West are suffering from obesity due to their high-calorie intake and yet nutrientdeficient diets.

In the nine chapters of his book, Akram-Lodhi covers a range of topics that help the reader develop a sound understanding of the issues at hand. In chapter one, Akram-Lodhi offers a detailed account of how money has transformed the exchange of goods and services and the complex modes and methods of social reciprocity. The accelerated use of money to purchase food in globalized markets and the expansion of food choices meeting customers' perceptions of the standard of uniformity, color, size, and texture year-round have severe implications for those farmers who produce food, but

cannot afford to consume it. In chapter two, the author analyzes how small-scale farmers working as a part of a much larger capitalist economic system are "compelled" to expand their operations and reduce costs in order to survive in the new capitalist food regime. Akram-Lodhi argues that farmers face false choices, being compelled to sell and seek out profits when the profits are uncertain in the market and oligopolies restrict competition.

In chapter three, Akram-Lodhi explains how rural landscapes and farming systems were reconfigured in the global economy in order to produce higher yields for export, which resulted in "food-based deprivation." This deprivation is the outcome of the market system's coercion: forcing farmers to sell their entire crop to generate money. In this case the agrarian question is dealt with through capitalist relations of production leading to the farmers' dispossession of land.

In chapter four, the author describes the resistance strategies used by peasants in an effort to fight against the transformations in agriculture created by capitalist markets. The evidence suggests that distributive land reforms that favored the poor were often curtailed by the increased control of land by the rural elite in the global South. Furthermore, capitalist markets were transforming farming and agricultural practices at the expense of peasant farmers and the impeding effects of the Green Revolution. Chapter five further develops an analysis of the devastating effects of the Green Revolution; these include an increasingly widespread wealth disparity and deepening inequalities across "developing" capitalist countries.

Chapters six and seven showcase Bob Miller, a fourth-generation rice farmer in Louisiana, and Maxime Auxialaire, who farmed rice for decades in Haiti. The structural adjustment program in Haiti led to trade liberalization and opening of the market to international trade when subsidized U.S. rice invaded local markets and destabilized the livelihood of farmers like Auxialaire. These examples reveal the "predatory role of the capitalist state in establishing a global food regime that undermined peasant and family farming...to the benefit of the large-scale capitalist farms and industrial agriculture" (p. 2). Akram-Lodhi explains how societies have been transformed in ways that create export-

oriented agriculture while simultaneously intensifying the global subsistence crisis.

Chapter eight shows two incompatible visions for a way out of this crisis. The first is advocated by the World Bank and calls for further developing the capitalism of agriculture. The second is led by a global peasant movement called La Via Campesina. They suggest the need for food sovereignty, a local and sustainable food system that produces abundant, nutritious, and culturally appropriate food produced through ecologically sustainable methods. The heart of this paradigm is to reclaim decision-making power in the food system, focus policies on people's need for food, build knowledge and skills, work with nature, value food providers, localize food systems to build self-sufficiency, and localize control.

In addition to farmers Miller and Auxialaire, Hungry for Change reflects the stories of several characters: Pervaiz Qazi of India, Sam Namimisi, a small-scale Ugandan coffee farmer, and Jessica Carson, a Canadian university student. The use of personal narrative eliminates the isolating effect that theory-rich texts with academic language can have. These first-person testimonies make the alarming statistics all the more powerful, adding a personal connection to issues that can seem beyond any one person's control. Akram-Lodhi's use of storytelling privileges and validates the knowledge of some of the many people who are becoming marginalized by the capitalist global food system. In one especially useful example of participants' personal stories, Akram-Lodhi describes the relationship between Sam Namimisi and Jessica Carson. Jessica lives in a university residence, and like many other universities across Canada, Jessica's university food service holds a contract with Aramark. Akram-Lodhi explains:

Aramark's coffee is a blend designed...by a coffee supplier to have a specific flavour, body and aroma. One of the coffee robustas in the blend supplied to Aramark originates in Uganda, so between Jessica Carson's cup of coffee and a small-scale Ugandan coffee farmer...are a series of steps in a food supply chain that serve to get Sam's coffee to Jessica's cup. (p. 27)

Akram-Lodhi describes the process by which money changes hands in this food supply chain: the small-scale farmer (who produces this crop solely for the purpose of income) is paid very little while the consumer pays a lot, "and most of the money ends up in between, in the hands of global food corporations" (p. 30). The author spells out the rise of a capitalist-centered food system in a way that allows readers not only to understand the pertinent issues at hand but also begin to strategize a more people-centered approach to sustenance.

Akram-Lodhi also provides historical analysis that helps the reader understand the context in which the current food system has evolved. He concisely describes how historical practices have created and continue to influence the way in which we go about growing and consuming food. A series of well intentioned "upgrades," like selling food for currency rather than trading in a barter system, the mechanization of agriculture, the introduction of chemicals, the creation of GMOs, etc., all of which were intended to produce surplus to help feed more people, have in fact worked together to create a world in which hunger and obesity are occurring simultaneously. Removing nature and personal connections from food production has led us to this point; Akram-Lodhi suggests that it seems only logical that the way out of this unsustainable system is to return to small-scale farming, challenging the power of the market imperative and reconstructing food as a public good.

Taken as a whole, Akram-Lodhi's research contributes strongly through the voices of farmers to understanding the challenges in implementing food sovereignty principles. He informs his readers about the importance of acting both locally and globally in developing sustainable agricultural and environmental systems that benefit the many rather than the few. This book is good for students specializing in development studies as well as the general public. In order to develop solutions to the global problems created by the current food system we must first understand what has brought us to this point; Akram-Lodhi's work provides valuable insight that is necessary to begin to this process of understanding.