Irena Knezevic · Alison Blay-Palmer
Charles Z. Levkoe · Phil Mount
Erin Nelson *Editors*

Nourishing Communities

From Fractured Food Systems to Transformative Pathways

Springer

Nourishing Communities

Irena Knezevic · Alison Blay-Palmer
Charles Z. Levkoe · Phil Mount
Erin Nelson
Editors

Nourishing Communities

From Fractured Food Systems to Transformative Pathways

Springer

Editors
Irena Knezevic
Carleton University
Ottawa, ON
Canada

Alison Blay-Palmer
Wilfrid Laurier University
Waterloo, ON
Canada

Charles Z. Levkoe
Department of Health Sciences
Lakehead University
Thunder Bay, ON
Canada

Phil Mount
Just Food
Ottawa, ON
Canada

Erin Nelson
International Development Studies
University of Guelph
Guelph, ON
Canada

ISBN 978-3-319-56999-4 ISBN 978-3-319-57000-6 (eBook)
DOI 10.1007/978-3-319-57000-6

Library of Congress Control Number: 2017937521

Printed on acid-free paper

This Springer imprint is published by Springer Nature
The registered company is Springer International Publishing AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Preface

Nourishing Communities: From Fractured Food Systems to Transformative Pathways is the product of more than a decade of collaborative work by a network of scholars, community-based partners and practitioners interested in constructing more sustainable and just food systems. Established in 2007, the Nourishing Communities research network aimed to foster direct connections between university- and community-based actors, and to draw on tools rooted in both theory and practice to support food system transformation. Our early work was based primarily in the province of Ontario, Canada, where we explored a wide range of sustainable food systems initiatives in an effort to better understand their successes, innovations and challenges and make their experiences more accessible to a wider audience. Drawing on the varied backgrounds and areas of expertise of the network's first members, we adopted an interdisciplinary approach and collaborated closely with regionally anchored community organizations, businesses and government personnel representing the interrelated actors that comprise a food system.

As our work evolved, so too did these relationships and connections with community partners from different sectors, creating a number of opportunities. For example, we began to more explicitly incorporate *participatory action research* into our activities, collaborating in action-oriented projects with a food justice organization in eastern Ontario, a participatory research network with close ties to First Nations communities in northern Ontario, and a municipal government and food system roundtable in the south-western part of the province. Beyond those specific in-depth efforts, we also began to turn more directly to our growing network of partners to inform our data collection and analysis and to more fundamentally shape our work by identifying their most pressing research needs. We established a system of multi-actor regional advisory committees that, through regular meetings and ongoing communication, could identify areas of investigation crucial to understanding key challenges and promising trajectories for the development of sustainable and resilient place-based community food systems. Drawing heavily on the ideas and expertise shared by these advisors, our work in Ontario has explored a

number of specific themes related to local sustainable food systems, including tensions between food affordability and producer livelihoods; connections between food and housing security; access to land for new farmers; creative food distribution models that serve both small farm and limited access communities; and innovative food initiative financing strategies such as crowdfunding.

While this research helped us to better understand the ongoing transformations in Ontario's diverse food systems, it was clear that our work would be far richer if it could be expanded in scope to allow for trans-local learning beyond the boundaries of one Canadian province. Building upon the solid structural foundation of community-university partnership that had been developed through our efforts in Ontario, we began to extend the network by turning to colleagues in other parts of Canada, as well as the USA, Europe, Africa and Latin America, fostering more active relationships of collaboration with them and, by extension, their networks of community partners. As a result of this process, the Nourishing Communities research network has evolved to become a continuously growing global network of scholars and practitioners deeply concerned about food system transformation.

Housed in Waterloo, Ontario, at Wilfrid Laurier University's Centre for Sustainable Food Systems, our collaborative research and action projects continue to be shaped by advisory committees that, now regional, national and international in scope, ensure our connection to a wide range of grass-roots, place-based food initiatives. Simultaneously, these activities create opportunities for dialogue at a global scale regarding the imagination and construction of more sustainable food systems. As we have grown from a regionally focused to a global community of practice, the Nourishing Communities research network has remained committed to the spirit of multi-actor engagement and interdisciplinarity—as well as to the participatory, action-oriented approach grounded in community-identified priorities —that informed our initial work. In all of our work, we actively seek to cultivate and maintain relationships with community partners that are based on an exchange of knowledge and resources in a context of partnership and reciprocity that brings mutual benefit to all those involved.

While the chapters in this collection could not possibly cover the full scope of collaborative projects associated with our network, this collection of chapters represents many of the key learnings of the Nourishing Communities work to date and highlights some of the commonalities and divergences of the sustainable food system research and practice engaged in by our group. Our research partnership has grown from a handful of actors in 2007 to now include nearly one hundred organizations, from universities and research centres to small community-based organizations. As we have worked to weave together the diversity of initiatives and experiences represented by Nourishing Communities, we are gradually fine-tuning our understandings of some of the key concepts used in our work. Far from offering

any definitive conclusions, *Nourishing Communities* aims to provide a general foundation for the interrogation of sustainability and transformation of food systems, with a recognition that specific conceptualizations and uses of these concepts are contested and context specific—as pathways to food systems transformation.

Ottawa, Canada — Irena Knezevic
Thunder Bay, Canada — Charles Z. Levkoe
Guelph, Canada — Erin Nelson
Ottawa, Canada — Phil Mount
Waterloo, Canada — Alison Blay-Palmer

Contents

Introduction

Over the past three decades, hundreds of community food initiatives have sprung up across North America. Diverse as they are in their mandates and levels of success, they collectively contribute to transformational changes to food systems. Take the example of FoodShare in Toronto. In 1985, the City of Toronto was experiencing deep economic crisis and, along with it, a crisis of food insecurity. As part of the response, the municipal government funded a small $30,000 pilot project designed to connect food donors with people in need. Early leaders of this initiative, which was given the name FoodShare, recognized that reliance on a charity-based model of emergency food relief would never adequately address the problems of poverty and hunger that were plaguing the city. As a result, FoodShare decided to focus its efforts on coordinating food aid, but also advocating for systemic solutions such as increasing the minimum wage, providing more affordable housing and day care, getting trucks coming from the Ontario Food Terminal to supply co-op markets and improving social assistance. They also made it a priority to research the underlying causes of rising rates of food insecurity and food bank use in the city. Although initially there was just one staff person and a tiny budget, the agenda was ambitious and that ambition proved effective. By 2016, FoodShare had become one of Canada's leading food movement organizations, distributing more than two million pounds of fresh fruits and vegetables through a range of programmes, including a Good Food Box, urban agriculture sites, partnerships with several remote northern Indigenous communities and student nutrition programmes delivered in partnership with School Boards, their Foundations, Toronto Public Health and community groups serving more than 1,77,000 students across more than 500 schools. Given this success, it is not surprising that, in 2012, the United Nations Special Rapporteur on the Right to Food, Olivier De Schutter, included a visit to FoodShare as part of his Canadian mission. This provided an opportunity for the organization to raise the profile of its long-time advocacy for a national student nutrition policy and broader changes to Canada's public food system. To this day, FoodShare continues to be a key voice in conversations about the development of a national food policy that could support a transformation to more sustainable food systems.

The story of FoodShare is central to the message in this book for two reasons. First, the organization has always been deeply committed to combining research and practice to maximize the impact of its work. As one of the founding partners of the Nourishing Communities network, FoodShare exemplifies the spirit of community-engaged scholarship that informs food systems research and practice. Second, FoodShare demonstrates that "because of its material, cultural and social importance, food is special in its power to mobilize people to action" (FoodShare, n.d.), and the complexity, scope and success of its programmes offer a clear demonstration of how efforts to increase access to healthy food, support local farmers and provide food education can serve as pathways for broader transformation of our food systems and, by extension, our society.

Transformation is necessary, given the current state of the dominant food system. The corporate-led industrial food system has been constructed through centuries of capitalism, colonialism and industrialization and governed by the drive for power and profit (Patel 2007; Albritton 2009). Each of those historical trajectories has worked to stratify and segment communities, economies and the environment. As contemporary forms of neoliberal capitalism are characterized by increased privatization, decreased regulation and "free" trade,[1] it is promoted as a pathway to increased personal (and, by association, business) liberties. However, its consequences have been far reaching and perhaps most poignantly evident in the realm of food, where stratification and segmentation have been enormously damaging.

From Fractured Food Systems to Transformative Pathways

The journey of food from the fields, forests and oceans to our plates and back into the soil weaves together a multitude of biological, material and social elements in that complex set of relationships we call a "food system". This interrelated assemblage of people, ecosystems and food itself not only describes the convergence of multiple systems, but also reflects the particular constraints, possibilities and aspirations of place that are much more than the sum of their individual parts (Levkoe and Wakefield 2013). Key to food systems scholarship is the recognition that all of these processes and elements are inextricably linked. In contrast, the economic logic inherent to neoliberalism splits apart, stratifies and silos sectors, governments, people and nature from each other. This creates an atomistic set of relationships, where food systems are broken into component parts understood as individual actors rather than parts of communities, bioregions and networks. The neoliberal food system is not entirely devoid of integration, as we can observe in the scale and reach of major agri-food conglomerates that integrate economic activities horizontally (absorbing smaller enterprises) and vertically (up and down the value

[1]As this trade (especially in food) is still very much governed by logics and regulations that benefit the larger corporate players, it is only "free" to those who benefit directly.

chain). Such integration, however, only concentrates political and economic power and through promoting competition serves to further fracture the food system. At the same time, the structure of this industrial political economy precludes the fostering and convergence of collaborative synergies needed to effectively deal with complex and pressing global problems. Neoliberalism's inherently profit-driven, market-focused and segmented structure renders it incapable of acknowledging or dealing with difficult challenges. While private corporations are seeing record profits and immense benefit, the majority of the world's population faces growing pressures with a limited ability to bring about the needed structural changes.

It is increasingly acknowledged that the industrial food system—from production to consumption to waste management—has dispersed a suite of common challenges to communities around the globe (Patel 2007; Roberts 2013; Blay-Palmer et al. 2015). Examples of food system dysfunction that have emerged from this neoliberal segmentation abound. They include the push by corporations for costly, high-technology fixes for small-scale farmers. They encompass the enormous scale of greenhouse gas emissions caused by industrial food production and distribution, which account for up to 57% of total global emissions (GRAIN 2011). There is also the damage to human health caused by the double burden of persistent food insecurity coupled with increasing food-related health problems and non-communicable diseases. Predatory bi- and multilateral "free" trade deals are also part of this dysfunction and have a proven track record of degrading local food systems, combined with the increased enclosure of the land, seed and gene commons as corporations increasingly take private ownership of these resources, and displace and impoverish communities (ETC Group 2015). Escalating rates of food-related disease, increasing and entrenched food insecurity, shifting growing conditions, declining farm incomes, increasing rural–urban migration, ageing farm populations and increasing structural barriers to local food are common, and increasing challenges are felt in both the global north and south (McMichael 2011; Van der Ploeg 2013). These examples, and many others, illustrate how the neoliberal order has worked to pull people apart from the sources of their food, from their environment, from basic resources such as land and water, and from one another. The industrialization of food, as Canadian food scholar-practitioner Brewster Kneen described more than two decades ago, has produced multiple forms of *distancing* in the food system (Kneen 1995), and these examples point to a series of pressing needs generated through the resulting segmentation (Friedmann 1994; Kneen 1995; Hendrickson and Heffernan 2002).

As the economy lurches from one crisis to another, communities look for ways to reduce and reverse stratification and segmentation, by creating alternatives that highlight commonality rather than difference, prioritize engaged participation and build collaborative solutions to shared problems. Community-based food hubs, farm-to-school programmes and multi-stakeholder food cooperatives are just a few examples of alternative approaches designed to transform food systems (Feenstra 2002; Elton 2010; Hinrichs and Lyson 2010; Winne 2010; Gottlieb and Joshi 2010; Levkoe 2015). *Nourishing Communities* builds on existing research about alternative food initiatives and food movements to explore how a systems approach to

food can bring about health and well-being through enhanced cohesion. Food can make it possible for citizens, practitioners, policy-makers and academics to understand the connections between the social, economic and ecological aspects of sustainability. Initiatives that build community food system resilience have the potential to act as pillars for regional transformation in concentrated urban areas, isolated and remote rural environments and also bridge between the two spaces. A systems approach offers an integrated, nonlinear way to understand challenges. Given the lack of synergy between government departments, between disciplines and across sectors, a systems approach is critical to realize transformation (Fraser 2005). Clare Hinrichs notes, "What commends many "systems" approaches is their attention to comprehensiveness, connections, juxtapositions, places of leverage, and potential feedback" (2010: 26). However, she also challenges us to be mindful of the blinders and boundaries that can come with systems thinking. Systems approaches can prevent researchers from looking for the disconnections in their efforts to find the connectivity. Making choices about the boundaries of a system unavoidably limits the extent of research and analysis—in some ways a necessary limit, as it is impossible to study everything at the same time. Similarly, systems approaches set up the "field of concern" (Hinrichs 2010: 27), which can be particularly challenging when looking at power and social justice issues, as researchers must decide who is included and who is not.

To understand how innovative initiatives can transform the dominant food system, we must identify why such transformations are needed in the first place. As evidenced by the multifaceted initiatives highlighted in our book, sustainable food systems work allows us to weave together diverse approaches in the efforts to contribute to collective resilience and well-being. As Garnett (2013) explains, problems—from environment to health—have their roots in excess and insufficiency, rather than technology or individual decisions. A sustainable food system transformation approach seeks equity for all actors in the food system:

> At its ethical heart lies an emphasis on social justice…the emphasis is on the responsibility of the system to deliver the desired objectives rather than on the individual…it questions the ability of the market, as it stands, to deliver benefits equitably (Garnett 2013: 4).

Sustainable food system transformation is about changing relationships over space and time to bring about the needed structural transformations, change power and class imbalances and heal disconnections. Given the fractured and compartmentalized realities that different organizations and institutions inhabit, tolerate and reproduce, bringing about change is a tall order.

Place-based considerations are fundamental to sustainable food systems: there is no one-size-fits-all solution (Marsden 2012; Knezevic et al. 2013). The chapters in *Nourishing Communities* shine a light on myriad ways in which community-driven actors are working to foster food systems that are socially just, embed food in local economies, regenerate the environment and actively engage citizens by breaking down the segmentation through the forging of communities of food practice. Through integration, they are creating synergies where the zero-sum game rules of neoliberalism do not apply. As Sekler (2009) argues, neoliberalism works in

multiple and adaptive ways and in a variety of realms, so countering it also has to be multifaceted and dynamic (pp. 62–63). The process of articulating the way that food systems have been fractured illuminating the transformative pathways is the focus of *Nourishing Communities.*

Methodology and Approach

A key contribution made by *Nourishing Communities* is the focus on approaches and methodologies that both support and recognize the value of community-based practices. Throughout this, book, we identify success stories, challenges and opportunities that link practitioner experience to critical debates in food studies, practice and policy. By making current practices visible to scholars, this book speaks to people engaged in the co-creation of knowledge. *Nourishing Communities'* case studies identify existing and needed capacity as well as pathways to food systems transformation. By describing these underexplored opportunities to make connections between segmented issues, we make the practice more accessible to scholars and the scholarship more connected to practitioners. The research described in all of the chapters is rooted in community engagement and, in many cases, active practices of transformation. While the traditional academic approach is to collect research and translate it into scholarship that adds to social theory, this book has been constructed through a grounded, integrative and participatory methodology.

We are writing in the midst of a complex set of existing debates around agroecology, food sovereignty, gender, race, social justice, colonialism and class. While these themes are present within, and deeply inform our work, many of these important debates are not explicitly addressed in this book. Rigorous community-based scholarship demands an approach that engages relevant and operational theory. As with all scholarship and practice, the authors decide where, how and what questions to ask. In many cases, the research direction and questions emerged directly from the communities of practice. Consequently, there may appear to be some misalignment between a critical academic framing and what is useful and relevant on the ground. To communicate the results of their community-based research, the authors in this volume strive to speak directly and equally to the academic-practitioner and the practitioner-academic. The result is a set of chapters rich in relevant detail and innovative practices that serve as a starting point for theoretical engagement without privileging the theoretical as the ultimate goal.

Our work is still developing, and we continue to look for ways to better bridge contemporary theory and the lived experiences of our research participants and community co-researchers. Whereas racialization, class differences and the rural–urban tensions are all featured to some degree in this volume, several major theoretical streams regarding social justice are not addressed here. Most palpably, considerations of gender remain largely underdeveloped in this account. Given the

excellent body of literature that already exists on this topic (Counihan 1999; Federici 2012; Sachs 2013), our ongoing research agenda attempts to better incorporate gender theory in our work as a complement to the integrity of community-driven research.

As a result of a shared vision founded in sustainable food systems, social capital is developed and strengthened in and between the communities of research and practice in the process of iterative research-creation, knowledge-mobilization networks. While the approach is the same, the questions and challenges to nourishing communities are context specific, so that every chapter is based in specific community needs. Partnerships and ongoing community consultation about research tools—and who to include in our research—are the basis of the community-defined research, helping all parties to define needs and identify transformational pathways as part of their communities of food practice.

As researchers, we are all committed to and integrated into communities of food practice. We have many common beliefs in terms of our commitments to more socially just and ecologically regenerative food systems. Part of our commitment is to recognize our positionality, how we are different and where we disagree. We are also conscious that, as academics, we have certain power and privilege in relation to the communities we work with. As described in the chapters, we have attempted to use the research processes as a way to redistribute resources when possible by providing salaries to community-based researchers, supporting our community partners to speak with their own voices at conferences and in publications, and providing opportunities to contribute at all stages of the research.

The findings are a product of our participatory methodologies that explore links between sustainability and social justice through storytelling and community-based research. Given the complexity of different food systems, the diverse and competing voices demand multiple, context-specific approaches and pathways for the co-creation of knowledge. Research tools include community engagement, interviews, focus groups, workshops and photovoice. The people integrated through this work are from multiple political jurisdictions (municipal, regional, national, international), policy spheres (e.g. economic development, agriculture, education, the environment) and sectors (public, private, civil society). The work is also interdisciplinary, bringing together academics from communication studies, environmental studies, geography, health sciences, landscape architecture, law, nutrition, planning, political science, psychology and social work.

As a result, the research is relevant for food studies scholarship and community-based programmes that have practical impact. Policy-makers and shapers will find in the case studies practices that illuminate pathways towards policies that will support a sustainable and just food system. For those doing practical research/critically informed practice, these chapters exemplify different ways to do and write about scholarship rooted in both critical thought and community-based practice. The diverse perspectives and approaches demonstrated throughout this book contribute to the development of community-based theory, helping us to recognize and identify patterns that emerge directly from the community. This in turn illustrates broader patterns that inform the pathways to transformation.

Structure of the Book

The first part of *Nourishing Communities* highlights some of the impacts of this historical trend, presenting examples of complex and sometimes seemingly insurmountable challenges resulting from a "failure to strategize by anticipating the ripple effects" of the capitalist food system (Roberts 2013: 23). The four chapters in this part reflect on how neoliberal foodways contribute to social and economic stratification and the resulting marginalization in the North American context. Each chapter looks at the neoliberal dynamics through specific forms of marginalization —of farmers, people living in poverty, migrant workers, Indigenous communities and racialized cities.

Collectively, these chapters uncover how inadequate governance and compartmentalized policy models reproduce inequities that are born of global mechanisms, but play out at local and regional scales. Each chapter also points to some action-oriented perspective on how we might begin to address marginalization, be it through more deliberate collaborative efforts, more comprehensive approaches to economic inequities in post-industrial settings, a more compassionate understanding of farm labour, non-traditional ways of engaging communities through research or more inclusive, integrated planning strategies. Further, while acknowledging the deeply embedded structural challenges related to these issues, each chapter provides insight into the tensions and opportunities that can point us towards pathways to food system transformation.

The second part of this book builds upon those beginnings, delving more deeply into examples of how people are working towards solutions that bring together disjointed segments of the food system to offer pathways towards food system transformation. The chapters in this part focus on some of the ways that collaborative alternatives are being created by a range of (sometimes unexpected) allies. These alternatives point to a need for an integrated, holistic, systemic approach as a means of addressing the problems created by our stratified, segmented food systems, for example through building networks and social capital, and working to achieve multi-stakeholder policy interventions at various scales.

Nourishing Communities reflects critically on these experiences, identifies the pathways to transformation that they represent and explores the insights that they offer into how we can collectively create more sustainable food systems that are ecologically regenerative, economically localized, socially just and grounded in active democratic engagement. Each of the chapters in this volume is the product of long-term relationships developed between researchers, organizations, communities and social movements based in Canada, the USA and Mexico. The case studies are all grounded in particular regional contexts; however, the stories they tell highlight how both food system problems and innovations can unfold locally, but reverberate at regional, national and global scales. By presenting these cases, *Nourishing Communities* aims to illustrate patterns of divergence and marginalization, but also of collaboration and integration as we connect empirical studies to broader debates

in food systems literature and highlight the many potential pathways for transformation through both policy and practice.

Collective Insights From *Nourishing Communities*

Several common themes surfaced in the chapters of *Nourishing Communities*, including the merits of adopting place-based approaches for sustainable food systems analysis and project development, the emergence of various innovative governance mechanisms and the need for both local and global governance supports to foster sustainable food systems from multiple scales.

The importance of place-based initiatives emerged with communities serving as foundational spaces for identifying, establishing and fostering the parameters for sustainable food systems. There are two sides to the place-based coin, as communities identify their own challenges *and* the solutions needed to create lasting change. In the example from Pictou Landing (Pictou Landing and Knezevic, Chap. 3), members of the local Mi'kmaq community identified a number of challenges to their community food security. These included industrial pollution preventing access to traditional country foods, thereby violating their right to cultural safety, and resulting in food swamps and deserts, and an overall lack of physical and economic access to healthy foods. At the same time, the community recognized the presence of key assets such as the wealth of indigenous knowledge about the local food system. This example highlights how important it is for communities to conduct place-based food systems analyses, to identify their own complex challenges and to develop solutions that will be relevant to their context. It also demonstrates that those solutions may be critically reliant on funding and/or regulatory and legislative action from non-local state actors.

In addition to their place-based nature, it is well documented that sustainable food systems offer multiple solutions at the same time to address "wicked" problems (Nelson and Stroink 2014; Marsden and Sonnino 2012; Clark 2005). In accordance with Stroink et al.'s Complex Adaptive Systems analysis (Chap. 7), an integrated perspective also supports the need for a systems approach to effect the kind of structural changes required for sustainable food systems to thrive. *Nourishing Communities* adds to the body of evidence about a systems approach and stretches our understanding of the interconnectivities into new realms. For example, the development of The Mount Community Centre in Peterborough, Ontario (Chap. 1) illustrates the interconnected nature of housing and food security and demonstrates how a public housing project can address both issues by providing more affordable housing spaces, as well as community gardens, revitalized orchards, common spaces for community meals and supports for food skilling initiatives. Similarly, in Eastern Ontario, initiatives such as CSA work-shares and Good Food Markets in low-income neighbourhoods aim to tackle the interwoven challenges of increasing fresh food access and providing fair compensation to

farmers (Chap. 5), while Levkoe elaborates the simultaneous benefits of community sharing and capacity building through community networks (Chap. 11). School Food Gardens provide another excellent example of a systems approach, as they are at once sites of learning, social development, inclusive community engagement, skill building and, of course, food production, fostering an environmental ethic, food and health literacy, connections to the land and nature, local food and sustainable agriculture linkages (Chap. 6).

While the dominant industrial food system creates shared vulnerabilities across many different groups, sustainable food systems can help seemingly unlikely partners identify common interests and platforms to work synergistically through mutually beneficial initiatives. McLaughlin's chapter on labour makes this clear as she identifies the potential benefits of adopting fair labour practices for migrant workers but also for farmer-employers (Chap. 2). Intersections between housing and food security (Chap. 1) and access to healthy food at a fair price for farmers (Chap. 5), as well as the multi-stakeholder food system assessment conducted in Buffalo Niagara (Chap. 4), are other examples of these synergistic opportunities. Using place-based initiatives as the foundation for scaling up sustainable food systems work to the national level was demonstrated in Levkoe's description of Food Secure Canada's "People's Food Policy" (PFP) (Chap. 11). In this case, country-wide kitchen table consultations produced a document that was co-written and edited by hundreds of people representing many different food systems perspectives.

The research presented in *Nourishing Communities* also points to several areas of alternative, innovative governance mechanisms. One such mechanism is the integration of food into municipal and regional planning processes as a means of shaping policy in favour of sustainable food systems (Chaps. 4 and 8). As Raja et al. make clear, there is an opportunity for a supportive planning environment to address normative concerns (e.g. equity). Planning can also provide practical tools needed to, for instance, enhance food access by creating better links between eaters, producers/harvesters and vendors. Innovation in food systems planning recognizes the need to move away from blunt regulations, towards investment and other tools that foster more structural change. For example, rather than entrenching emergency food systems, which provide important services but do not challenge the underlying structural causes of hunger (Tarasuk et al. 2014; Guthman 2008), planning strategies could take a more systemic and forward-thinking approach. In order to achieve more equitable solutions, municipal governments need to become active in working towards sustainable food systems. Evidence of food in some comprehensive plans is a positive step in this direction, but it also needs to be included in more specific ways, such as in transportation planning documents. Raja et al.'s case study of Buffalo points to the importance of institutions that are able to implement food system plans (Chap. 4). It also underscores the benefit of wide engagement as plans are developed as platforms for knowledge building and sharing, empowerment and engagement.

Mechanisms that allow community actors and initiatives to translate their work into effective and collective political action are also important for food system

governance. The Food Policy Audit (FPA) (Chap. 8) is an excellent example of how to segue from *civic* to *political* engagement, thereby bringing about more systemic change. The Franklin County Local Food Council (FCLFC) used the FPA as a way to capture information about policy as it related to their goals and, in the process, they were able to build a broader advocacy coalition, increase their capacity to engage in food system governance and help define a sustainable food systems policy agenda for the future. Raja's discussion of Buffalo youth unemployment, distressed communities and food security (Chap. 3) raises the importance of recognizing multifunctional benefits of food and food policy and, if enacted, the capacity to address complex problems. The discussion of Mexico's Network of Local Organic Markets (Chap. 10) offers another example of how a sustainable food systems initiative grounded in civil society can achieve policy influence. By creating a strong, unified voice for the Mexican local organic movement, and leveraging linkages between the organization's leaders and key government contacts, the network was able to play an important role in the crafting of legislation to govern the country's organic sector. While it was unable to transform Mexico's overarching, conventionally oriented, agri-food policy agenda, the organization's ability to gain legal recognition for participatory organic certification still represents an important political achievement for community-based SFS advocates, particularly smallholder, ecological producers. A similar political victory is shared by Mount (Chap. 9), who aptly describes a recent accommodation in the Ontario supply management system as a "textbook food sovereignty solution" (p. 89), and an example of an innovative and effective policy intervention by farm-based advocates. Like accommodations for participatory certification, Ontario's Artisanal Chicken Program provides policy support for small- and medium-sized producers, many of whom have highly diversified production systems and who aim to supply local markets. While neither example was transformative of the entire food system, both represent important openings for food system governance that facilitate—rather than constrain—the development of sustainable food systems.

While, in many respects, the chapters illustrate hopeful examples of innovation, they also make it clear that there are multiple challenges in addressing all sustainability dimensions simultaneously, and capturing the multitude of potential interconnected benefits through any given initiative remains a somewhat elusive endeavour. Solutions that take a truly multifunctional approach and target the root causes of our food system crises still need to be more thoroughly examined. For example, our research on the links between poverty and food insecurity suggests there would be real merit in looking closely at the opportunities and challenges presented by implementing a Basic Income Guarantee, an initiative that is beginning to gain political traction in Canada. As well addressing head-on the negative effects of food quality and access would improve individual, household and community health and well-being.

Finally, it is important to acknowledge the tension that surrounds community initiatives that, while doing important work, almost inevitably lack sufficient financial, physical and human resources and are often situated in an unsupportive macro-level policy context. Scaling up sustainable food systems efforts under these

conditions presents a seemingly intractable challenge. Drawing on the nut-cracking analogy that demands pressure exerted from all sides (raised by Levkoe in Chap. 11), complementary local *and* global institutions are needed to bring about sustainable food system transformation. There is significant potential for multi-scaled policy interventions, from local through to supranational, to leverage the multifunctional benefits of SFS work. For instance, direct access to national policy-makers to make the case for investment that mitigates expensive problems (e.g. arguing for labour rights for migrant workers as way to increase productivity, Chap. 2) would enable this process.

Conclusion

While *Nourishing Communities* contributes to a better understanding about pathways to food system transformation, there is a need to do even more detailed work within communities. The research, analysis and reflections in this book add to the guiding approaches about engagement with communities of food practice, but finding lasting solutions requires specific information about community resources and needs. There are no shortcuts—the only way to do this work is on the ground through trust-based community initiatives. Whether school or community gardens, a food hub or a community kitchen proves the best entry point depends entirely on community specifics. As the chapters in this book demonstrate, the pathways to transformation can be realized through a detailed understanding of community capacities and needs as well as increased commitment to evidence-based policy. For transformation to be effective, there needs to be iteration across multiple scales, sectors and disciplines, increasing the extent and depth of sustainable food systems, and making the hidden and messy realities of practice evident and documented. The journey of food from the fields, forests and oceans to our plates and back into the soil is part of complex system that is much more than its aggregate parts. In isolation, each of the food initiatives, projects, practices and policies on these pages might appear as a drop of water. A few drops of water may cause some dampness, but a rushing stream has the power to change the very structure of the earth itself. Our task is to describe and explain how those drops of water can become the stream.

References

Albritton, R. 2009. *Let them eat junk: How capitalism creates obesity and hunger*. Winnipeg: Arbeiter Ring Publishing.

Blay-Palmer, A., R. Sonnino, and J. Custot. 2015. A food 'politics of the possible'? Growing sustainable food places through collective action. *Agriculture and Human Values*. doi:10.1007/s10460-015-9592-0.

Clark, J.R.A. 2005. The 'new associationalism' in agriculture: Agro-food diversification and multifunctional production logics. *Journal of Economic Geography* 5 (4): 475–498. First published online February 24, 2005. doi:10.1093/jnlecg/lbh064.

Counihan, C.M. 1999. *The anthropology of food and body: Gender, meaning and power.* New York: Routledge.

Elton, S. 2010. *Locavore: From farmers' fields to rooftop gardens—How Canadians are changing the way we eat.* Toronto: Harper Collins Publishers Ltd.

ETC Group. 2015. *Breaking bad: Big Ag Mega-Mergers in play.* Communique 115. Retrieved from http://www.etcgroup.org/content/breaking-bad-big-ag-mega-mergers-play.

Federici, S. 2012. *Revolution at point zero: Housework, reproduction, and feminist struggle.* Oakland, CA: PM Press.

Feenstra, G. 2002. Creating space for sustainable food systems: Lessons from the field. *Agriculture and Human Values* 19 (2): 99–106.

FoodShare. n.d. Vision, mission and values. *FoodShare Website.* Retrieved from http://foodshare.net/about/values/.

Fraser, N. 2005. Reframing justice in a globalizing world. *New Left Review* 36: 69–88.

Friedmann, H. 1994. Distance and durability: Shaky foundations of the world food economy. In *The global restructuring of agro-food systems*, ed. P. McMichael. Ithaca, NY: Cornell University Press.

Garnett, T. 2013 Three perspectives on sustainable food security: Efficiency, demand restraint, food system transformation. What role for LCA? *Journal of Cleaner Production.* doi:10.1016/j.jclepro.2013.07.045.

Gottlieb, R., and A. Joshi. 2010. *Food justice.* Massachusetts Institute of Technology: The MIT Press.

GRAIN. 2011. Food and climate change: The forgotten link. *Against the Grain*, September 2011. Retrieved from https://www.grain.org/e/4357.

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

Hendrickson, M., and W. Heffernan. 2002. Opening spaces through relocalization: Locating potential resistance in the weaknesses of the global food system. *Sociologia Ruralis.* doi:10.1111/1467-9523.00221.

Hinrichs, C. 2010. Conceptualizing and creating sustainable food systems: How interdisciplinarity can help. In *Imagining sustainable food systems: Theory and practice*, ed. A. Blay-Palmer. Aldershot, UK: Ashgate.

Hinrichs, C., and T. Lyson. 2010. *Remaking the North American food system: Strategies for sustainability*. Lincoln, NB: University of Nebraska Press.

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

Knezevic, I., A. Blay-Palmer, K. Landman, and E. Nelson. 2013. *Models and best practices in Ontario communities of food.* Retrieved from http://nourishingontario.ca/reports/.

Levkoe, C. 2015. Strategies for forging and sustaining social movement networks: A case study of provincial food networking organizations in Canada. *Geoforum* 58: 174–183.

Levkoe, C.Z., and S. Wakefield. 2013. Understanding contemporary networks of environmental and social change: Complex assemblages within Canada's "food movement." *Environmental Politics* 23 (2): 302–320.

Marsden, T. 2012. Food systems under pressure: Regulatory instabilities and the challenge of sustainable development. In *Food practices in transition: Changing food consumption, retail and production in the age of reflexive modernity*, ed. G. Spaargaren, P. Oosterveer, and A. Loeber, 291–312. London, UK: Routledge.

Marsden, T., and R. Sonnino. 2012. Human health and wellbeing and the sustainability of urban–regional food systems. *Current Opinion in Environmental Sustainability*, 4 (4): 427–430.

McMichael, P. 2011. *Development and social change: A global perspective.* Pine Forge Press.

Nelson, C., and M. Stroink. 2014. Accessability and viability: A complex adaptive systems approach to a Wicked problem for the local food movement. *Journal of Agriculture, Food Systems and Community Development*. 191–206. doi:10.5304/jafscd.2014.044.016.

Patel, R. 2007. *Stuffed and starved: Markets, power and the hidden battle for the world's food system*. Toronto: Harper Collins.

Roberts, W. 2013. *The no-nonsense guide to world food,* 2nd ed. Toronto: New Internationalist.

Sachs, C. 2013. Feminist food sovereignty: Crafting a new vision. *Food sovereignty: A critical dialogue international conference proceedings.* New Haven, CT: Yale University.

Sekler, N. 2009. Post neoliberalism from a counter hegemonic perspective. *Development dialogue* 51: 59–71.

Tarasuk, V., A. Mitchell and N. Dachner. 2014. *Household food insecurity in Canada, 2012*. Toronto: Research to identify policy options to reduce food insecurity (PROOF). Retrieved from http://nutritionalsciences.lamp.utoronto.ca/.

Van der Ploeg, J.D. 2013. *Peasants and the art of farming: A Chayanovian manifesto.* Winnipeg: Fernwood.

Via Campesina. 2015. *La Via Campesina: International peasants movement.* Accessed online December 7, 2015 at: http://viacampesina.org/en/.

Winne, M. 2010. *Food rebels, guerilla gardeners, and smart cookin' mamas: Fighting back in an age of industrial agriculture.* Boston: Beacon Press.

Part I
Need for Transformations

Each chapter in Part I of *Nourishing Communities* explores a set of challenges created by the fragmentation of food systems. The chapters identify instances of segmentation and seek to challenge the fractures at their source. Chapter 1 explores the simultaneous need for both viable on-farm incomes and access to healthy, affordable food for low-income communities. In a fragmented understanding of the market, the interests of farmers and eaters are irreconcilable. Rather than positioning the interests as competing, the authors argue that making direct connections between them helps to address the need for fairly priced food. In Chap. 2, the authors ask questions about how to achieve both housing and food security for people living in poverty in a more seamless and integrated way, instead of continuing to deal with them as separate and at times competing policy and economic problems. Chapter 3 highlights some of the key issues facing Caribbean and Mexican migrant workers in south-western Ontario and considers how the current regulatory frame pits farmers/employers against workers and social justice advocates. Chapter 4 looks at how economic priorities of settler communities have undermined the food security (and cultural, economic and environmental well-being) of Indigenous communities. Part I concludes with a chapter that draws on experiences at the local and regional government scales in the USA and demonstrates the continued disconnection between food systems and planning, and the imbalance of interests that influence planning policy.

Chapter 1
Connecting Food Access and Housing Security: Lessons from Peterborough, Ontario

Patricia Ballamingie, Peter Andrée, Mary Anne Martin and Julie Pilson

Abstract Housing security and food access are two fundamentally related social issues: materially, through the experience of living with poverty and through the spatial organization of our communities; and conceptually, through discussions about the right to the city and distributive justice. Drawing on a broad literature review and fieldwork in Eastern Ontario, this chapter highlights strategies that could address housing security and food access in a more seamless, integrated way. We analyze the case study of Peterborough, Ontario, which exemplifies persistent challenges related to both food and housing. We trace the history of social, political and economic changes that led to this situation, and explore the extent to which governments and community-based initiatives (CBIs) have tried to address it. While Peterborough CBIs have introduced innovative programs to address these two issues, a crisis continues which requires more concerted action on all levels. We conclude with reflections on the benefits and limits of looking at food access and housing security through an integrated lens, identifying new research avenues that the lens opens.

Keywords Community food security · Distributive justice · Food access · Housing (in)security · Social housing

P. Ballamingie (✉) · J. Pilson
Department of Geography & Environmental Studies, Carleton University, Ottawa, Canada
e-mail: Patricia.Ballamingie@carleton.ca

J. Pilson
e-mail: juliepilson@gmail.com

P. Andrée
Department of Political Science, Carleton University, Ottawa, Canada
e-mail: Peter.Andree@carleton.ca

M.A. Martin
Frost Centre for Canadian Studies & Indigenous Studies, Trent University, Peterborough, Canada
e-mail: maryannemartin71@gmail.com

I. Knezevic et al. (eds.), *Nourishing Communities*,
DOI 10.1007/978-3-319-57000-6_1

Introduction

Housing security and food access are interrelated socio-economic and political policy challenges: materially, through the experience of living with poverty and through the spatial organization of communities; and conceptually, through discussions about the right to the city, community food security, and distributive justice. However, policy-makers and community activists rarely address these challenges in a coordinated fashion. In a volume focused on fractured food systems and transformative pathways, this chapter highlights the too often unrecognized links between inequitable access to healthy food and housing. It draws on lessons from Peterborough, Ontario, a medium-sized Canadian city, gleaned through multiple methods, including: a literature review and environmental scan; semi-structured interviews and a focus group with community developers, employees from the social housing sector, and representatives from related organizations or programs; a site visit at the JustFood program; and ongoing dialogue with representatives from Peterborough-based food, housing and income programs who informed and reviewed a report based on our case study research (Andrée et al. 2015). Our approach, characterized as community-based participatory action research, co-generated knowledge through praxis—the application of theory to practice. The findings illustrate what looking at these policy challenges together, means for proponents of food systems transformation.

Food Security, Housing Security and Their Intersection

The Food and Agriculture Organization (FAO) (2006) defines food security as a state in which "all people, at all times, have physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for an active and healthy life" (p. 1). Physical access can be limited by a number of variables, including: limited mobility; lack of personal and/or public transportation; proximity to retail food outlets; and, having young children in tow (Moffatt 2008; Williams et al. 2012). Economic access can be limited due to inadequate income, or restricted access to affordable and healthy foods. As global populations become increasingly urbanized (FAO 2012), the food insecurity experienced by the urban poor has garnered increasing attention (Battersby 2011).

In Canada, certain groups prove especially vulnerable to food insecurity, including: female-headed single-parent families, children, seniors, Aboriginal people, homeless people, unemployed people and new immigrants (OPHA 2002). In 2013–14, 12% of households in Canada's nine provinces and territories who kept this data (including Ontario at 11.9%) experienced some level of food insecurity (Tarasuk et al. 2016). A majority of households relying on social assistance proved food insecure—many were severely food insecure (with disrupted eating patterns and reduced food intake), and this included 35.6% of households relying on

Workers' Compensation and Employment Insurance. However, over 62% of food insecure households still garnered income from wages and/or employment salaries (Ibid.). Food Banks Canada (2013) found almost a third of food bank users come from households with employment or pension income.

Safe, healthy and affordable housing is also necessary for full social, political and economic participation. The United Nation's High Commission for Human Rights and UN Habitat note that despite a central place for the "right to an adequate standard of living, including adequate housing" in international law (as declared in the UN Declaration of Human Rights of 1948), "well over a billion people are not adequately housed" (UNHCHR 2009, p. 1).

In Canada, the concept of core housing need serves as a proxy for housing insecurity (Hulchanski 1995). Core housing need involves a normative assessment of the repair of housing, the number of bedrooms proportionate to the size and composition of the household, and whether households pay 30% or more of their total gross income on housing (Pomeroy 2011); the latter proved the case for about 1.4 million Canadian urban households in 2009 (CMHC 2012). However, this definition has its limitations, since it does not consider the actual amount of after-shelter income—a figure that affects a household's ability to fulfill other basic needs (Kirkpatrick and Tarasuk 2007). Housing insecurity also comprises non-economic dimensions, including quality (poor conditions) and size (overcrowding) (City of Ottawa 2007), which are sometimes compromised to liberate income for expenses such as food, transportation and childcare.

The development of social housing is one of the ways governments try to alleviate income-related housing insecurity. Since the 1980s, social housing providers in Canada typically rent housing units to individuals or households at no more than 30% of income (CMHC 2011). In Ontario, the non-profit housing sector provides affordable, social housing to seniors, low-income families, disabled persons and "hard to house" persons. Non-profit housing corporations are usually sponsored by community or faith-based organizations and supported/subsidized by municipal, provincial and federal government programs (ONPHA 2014). Ontario has almost 1,500 non-profit housing providers located in 220 communities (Ibid.).

Notwithstanding the existence of non-profit housing corporations, social housing represents only 5–6% of the total housing stock in Canada (Dalton 2009; Hackworth 2008). In Ontario, the number is just slightly above the national average at 6.3% of all housing units, with the highest concentration of social housing in large cities (Hackworth 2008). In 2013, there were 158,000 Ontario households on waitlists for rent-geared-to-income (ONPHA 2014).

Households that pay a large percentage of total income on housing must necessarily direct limited financial resources away from other expenses (Pothukuchi and Kaufman 1999). Fixed costs like rent and utilities are generally paid first, and remaining funds must cover everything else, from groceries, to medical and dental expenses, to school fees, clothing, recreation and transportation (Bryant 2003; Kirkpatrick and Tarasuk 2007). Kirkpatrick and Tarasuk (2011) found "a significant association between food insecurity and the proportion of income allocated to

shelter" (p. 287). However, a number of unrelated federal government departments manage portfolios that impact either food *or* housing.

In terms of federal social supports, Human Resources and Skills Development (and in particular Service Canada) provide some income support measures, while the Canada Housing and Mortgage Corporation (CMHC) provides research and information, and directly funds social housing. CMHC invests about $1.7 billion CAN annually in support of almost 600,000 social housing households across Canada. However, as a percentage of GDP, the federal government spent 40% less on housing in 2014 than it did in 1989 (FCM 2015).

Moreover, no federal government department ensures explicitly that Canadians are food secure, though Canada has signed several international conventions that entail a duty to respect, protect and uphold the right to food. In his 2012 report, the UN Special Rapporteur on the Right to Food observed that while several Canadian provinces have poverty reduction strategies, neither federal nor provincial governments have adopted food strategies as such, "combining different objectives in a holistic approach cutting across sectors" (De Schutter 2012, p. 6).

In the absence of a coordinated set of federal policies to respond to food and housing insecurity, provincial and local-level actors can still address these integrated concerns in planning new and existing developments.

Addressing Food Access and Housing Security Together

In our broad literature review, we surveyed policies and initiatives in North America that address the two issues in an integrated way. We have summarized these strategies in the following tables, indicating the roles of specific actors (in relation to the Canadian context) to help realize these goals. Table 1.1 presents food access strategies for new and existing neighborhoods with high populations of the groups vulnerable to food insecurity (whether designed as 'social housing' or not).

A comment is warranted on 'community-based initiatives' (CBIs) and 'affordable housing developers'. In Ontario, CBIs are typically projects spearheaded by a mix of local actors, led by a non-profit organization (such as a faith-based or women's organization), partnering with other local non-profits as well as a local health unit [organized at the municipal or regional level, but accountable to the province of Ontario under the Health Protections and Promotions Act (Ontario 2014)]. They are usually funded (albeit often poorly) from a mix of government and private sources, including charitable foundations. While the long-term sustainability of many CBIs remains precarious (Andrée et al. 2013)—they often run on tight budgets and offer insecure employment—their involvement ensures initiatives are rooted in local needs and informed by local expertise. The 'affordable housing developers' are typically CBIs themselves (such as non-profit corporations) which ultimately depend on financial support from municipal, provincial and federal levels of government, in addition to supportive policies enacted by all of these levels of government, to offer new housing.

Table 1.1 Food access strategies for new and existing housing developments

Strategy	Primary responsibility
Offer subsidies or incentives for developers to incorporate grocery stores as tenants in new developments (especially in underserviced communities)	Municipal government
Ensure access to affordable grocery stores through adequate public transportation, safe pedestrian routes, community shuttles, delivery and shopping services	Municipal government, businesses, CBIs
Ensure fresh and healthy food options in local convenience stores	CBIs and public health agencies
Locate and design with food security in mind (e.g. in close proximity to existing food retail outlets, markets, community gardens and/or along well-serviced transit routes)	Municipal planners and housing developers
Design housing to include: larger kitchens for preparing and eating food; larger pantries to enable bulk buying, preserving and storing of foods; larger balconies (with supportive infrastructure) to facilitate container gardening; and community gardening space, water infrastructure as well as equipment storage	Municipal planners (standard setting), housing developers, CBIs
Design with issues of accessibility (including both physical and mental ability) in mind	Municipal planners (standard setting) and housing developers
Ensure access to community kitchens, community freezers, cooking and nutrition classes, good food boxes, community gardens, and bulk buying clubs	CBIs with greater support from all levels of government
Establish new farmers' markets and community gardens through provision of land, changes to infrastructure/built environment	Municipal government and CBIs
Update and increase the number of social housing units	Municipal, provincial and federal governments
Ensure the provision of centralized food security supports such as emergency food cupboards, community freezers and cooking classes as part of developments	Housing developers with support of CBIs

Many of the strategies found in Table 1.1 relate closely to the spatial organization of communities. But even recognizing these interconnections, comprehensive and forward-thinking policy supports would be required to enable such strategies to be implemented. Other considerations include increasing core funding to social housing and food security initiatives, building partnerships, and advocating for adequate incomes. The considerations detailed above draw on the literature to offer affordable housing providers guidance for augmenting food access in their projects, in concert with municipal planners and community-based food initiatives. New affordable housing developments ought to be located and designed with food access in mind: with community gardening space and equipment storage;

with larger balconies, kitchens and pantries; and situated either near existing grocery stores (or with new stores as tenants), and in close proximity to farmers' markets, community gardens, food banks, and other CBIs.

Food and Housing in Peterborough[1]

To identify the ways that issues of food access and housing security influence each other and to argue that addressing them in tandem can build pathways for transformation, we use Peterborough, Ontario as a place-based, grounded case study. Both the decision to conduct the research in this jurisdiction and the findings themselves have been heavily informed by Peterborough community members who work to address and/or live the effects of local food insecurity, housing insecurity and poverty.

Peterborough was established in the 1820s by Scottish and Irish immigrants working in Canada's booming lumber industry and proclaimed a city in 1905 (Bothwell 1986). Following the Great Depression, Peterborough prospered and, in fact, proved a significant part of Ontario's industrial power during the post-World War II years (Ibid.).

In the early 1960s, Peterborough held the position of North America's leader in manufacturing employment per capita (CCEDN 2005). Since 1961, however, the manufacturing sector across Canada has declined (Statistics Canada 2009). Since 1947, manufacturing in the City of Peterborough has declined from 54% of employment to 10%, while service sector jobs have increased from 18 to 82% (Ibid.). Compared to manufacturing, service sector wages tend to be lower, tenure less reliable, benefits harder to come by, and skills development more limited.

In 2011, the population of the City of Peterborough represented 78,700 of the total population of 134,900 for the City and County (PSPC 2014). Peterborough has a higher percentage of people 65 years of age and older than does Ontario as a whole. In 2014, Peterborough census metropolitan area (CMA) was the only Canadian CMA with a double-digit unemployment rate (11.2%), well above the national (6.9%) and Ontario (7.3%) averages (MTCU 2014). These trends correspond to an increased prevalence of food insecurity between 2007 and 2011, and to an expansion of the social housing waiting lists between 2008 and 2011 (ONPHA 2013).

PROOF, a research group exploring policy solutions to food insecurity in Canada, found the level of food insecurity for the Peterborough CMA increased from 10% in 2007–8 to 15.9% in 2011–12 (Tarasuk et al. 2014) and then to 17.6% of households in 2013–14, now the highest level of any of the 27 Canadian CMAs studied (Tarasuk et al. 2016).

[1]Unless otherwise specified, when we refer to 'Peterborough', we are referring to both the City of Peterborough and the County of Peterborough—two separate administrative units. There are also two separately governed First Nations located within the County.

Housing insecurity also remains a significant challenge. In 2011, 12,335 people or 25.9% of households (48.1% of rental households) in the Peterborough CMA lived in core housing need (Affordable Housing Action Committee 2014), compared to an Ontario average of 42%. Peterborough's market rental costs compare to other mid-sized Ontario cities (Ibid.), but average incomes are significantly lower. In 2010, Peterborough renters earning the average wage of about $18/hour had to work longer (over 160 h/month) than in any other Canadian city to cover the average rent for a 2-bedroom apartment (assuming rent does not exceed 30% of income) (CMHC, October 2011). Further, many seniors who own their homes struggle to bridge the gap between the amount of municipal tax, which rises at a faster rate than pensions and other federal and provincial government payments (John Martyn, personal communication, January 26, 2015).

The Peterborough 10-year Housing and Homelessness Plan 2014–2024 cites many rental units in substandard repair (Welch et al. 2013, p. 8). In 2013, housing consumed at least 30% of the incomes of approximately 12,000 households in Peterborough CMA (Affordable Housing Action Committee 2014). Over 1,500 applicants were on the list for social housing (Welch et al. 2013, p. 9) and many more chose not to sign up for the list given its current length (Affordable Housing Action Committee 2014). Over the course of a year, approximately 900 people made use of four Peterborough emergency shelters (Welch et al. 2013). From 2011 to 2012, the average number of people using emergency shelters leapt from 17,078 bed-days to 20,816 and remained about the same for 2013 (City of Peterborough Social Services 2014).

Municipalities have been involved in the provision of social welfare in Ontario for almost a century. During the 'golden age' of welfare programs, from the 1960s to the late 1980s, these programs were federally financed, provincially designed, and municipally administered (Guest 2000). Since the 1990s, social assistance funding in Ontario has been divided into two programs: Ontario Works (OW) and the Ontario Disability Support Program (ODSP). OW provides financial assistance and employment supports, while ODSP helps individuals with disabilities who are in financial need. In the mid-1990s, a Conservative government created the two separate streams, downloaded the programs onto municipalities, and cut overall social assistance rates by 21.6%. This cut has never been fully restored by subsequent governments. In 2008, a Liberal government committed to gradually upload the costs of these programs back onto the province by 2018 (OMAH 2013).

City of Peterborough Social Services (2013) reports that it serves almost 4,000 individuals and families per month through OW, with a 2013 gross budget of $42.45 million. Despite this significant annual investment, two recent changes illustrate the growing gap between citizens' expenses and what is funded.

The first change is the loss of a number of 'discretionary benefits' beginning in 2013. Discretionary benefits are municipally-administered benefits for OW and ODSP recipients that the municipality is not provincially mandated to provide. These benefits are categorized as either "health-related" or "non-health-related"

(PSPC, June 2012, p. 2). In 2012, a total of about $2.5 million was available for discretionary benefits in Peterborough. $2.1 million of this total was to be funded by the province and the remainder by the City and County governments (PSPC, June 2012). However, the 2012 Ontario Budget capped (for the first time) the combined amount for health and non-health-related discretionary benefits at $10 per OW or ODSP case (Ibid.). In 2013, the City of Peterborough chose to augment the $10 paid by the province by another $5, but the total still did not add up to the previous level of $24/case (Prindiville 2013). As a result, a number of discretionary benefits have been eliminated (funding for home repairs, emergency housing expenses such as rent or a fridge), and others reduced (e.g. paternity testing, vocational training, funerals, baby supplies and equipment, dentures, the children's social and recreational subsidy) (Ibid.).

Another recent change to provincial-municipal funding programs is the loss of funding for the Community Start-Up and Maintenance Benefit (CSUMB) previously available to recipients of OW and ODSP (it covered a range of items such as "first and last month's rent deposits, buying or replacing furniture, deposits for utilities, overdue utility bills") (PSPC, June 2012, p. 4). In 2013, provincial housing and homelessness initiatives, including CSUMB, were brought together under the new Community Homelessness Prevention Initiative (CHPI). The CHPI provides some funding for emergency housing supports as well as the Housing Stability Fund (HSF) which provides funds up to once a year for housing debt reduction or rehousing (City of Peterborough Social Services, CCRC, PPRN, 2015).[2] However, this transition meant a loss of almost $1 M annually of emergency housing funding for Peterborough City and County from 2012 to 2015, and also of numerous CSUMB provisions (Prindiville 2013; Mitchelson and Doherty 2014).[3]

Some of the community's most marginalized populations rely on HSF funding—including people moving from shelters to rental accommodations or women leaving abusive situations. Significantly, of 111 households in Peterborough who responded to a Peterborough Poverty Reduction Network (PPRN) survey and had been denied discretionary or HSF benefits, over two-thirds reported an ensuing lack of food or the use of food banks. Among 12 possible survey outcomes, this outcome was second in prevalence only to stress and anxiety (Prindiville 2013).

Peterborough has a number of municipal policies and programs that deserve mention. First, the City currently owns over 2,500 social housing units—about 13% of the rental stock in the city—half of which are reserved for seniors. However, due to lack of support for social housing by higher levels of governments, the future of this stock remains uncertain (Bacque, personal communication, June 9, 2015).

[2]Notably, the HSF is primarily used by OW and ODSP recipients (over 80% of applicants according to City of Peterborough 2015), leaving the "working poor" especially vulnerable (John Martyn, personal communication, January 26, 2015).

[3]Social assistance payments to recipients through CSUMB represented $2.8 million annually, while its replacement, the HSF, distributed only $1.2 million in 2013, even though the HSF applies to all low-income residents while CSUMB only applied to social assistance recipients (City of Peterborough 2013).

Second, development charges are normally collected from developers to help pay for services like roads, police, fire and transit. Since 2014, Peterborough added an affordable housing charge to go toward incentives for building new affordable housing (Progress Report 2014). And third, there exists a new tax class for multi-residential developments in both the City and County—intended to stimulate more of this type of rental development (Bacque, personal communication, June 9, 2015). In total, Peterborough has a budget of about $14 M/year used for housing subsidies, programs and administration, including for social housing. However, municipal staff point out that in the coming decade this amount will change as operating agreements in the non-profit housing sector end. "This is both a challenge and opportunity as the landscape in social housing changes" (Bacque, personal communication, June 9, 2015).

Furthermore, City and County governments fund a range of initiatives—many through the CHPI envelope. These initiatives include rent supplements and funding for shelters (e.g. Brock Mission, the Youth Emergency Shelter), specific drop-in sites, community meal programs, as well as Kawartha Food Share (the umbrella food bank organization in Peterborough).[4] The City and County also support a number of activities available to precariously-housed and food-insecure people such as the Dental Assistance Treatment fund, as well as transit subsidies and youth and seniors' programming (Mitchelson, personal communication, June 4, 2015).

While we cannot examine in detail the full suite of local government activities, three major trends can be seen: First, municipal engagement in housing security is extensive, but recent changes show that the social safety net is getting weaker in general, especially for families relying on OW and ODSP. Second, funding and attention is increasingly being directed at homelessness—failing to also provide structural supports for the most economically challenged who remain housed. Third, municipal engagement in food security has primarily supported emergency response programs such as food banks and meal programs, rather than supporting other forms of capacity building. However, exceptions to this trend include the 2013 city policy supporting community gardening (City of Peterborough 2013), and the recently released Draft City of Peterborough Official Plan 2016, which has more support for food programs (City of Peterborough 2016).

Community-Based Initiatives on Housing and Food

The evidence shows that local governments in Peterborough have taken some steps to address housing security and food access, but the statistics show that they *can* and *should* do more in partnership with their provincial and federal counterparts. By

[4]The funding for Kawartha Food Share is $78,836 in 2014 ($31,836 in Community Service Grant, $20,000 from Social Services and $27,000 in property tax rebate) (Nancy Fisher, personal communication, June 30, 2015).

comparison, efforts are being made through collaborative initiatives that bring together local governments, the public health unit, and non-profit organizations to tackle these two issues in tandem.

On the housing front, the *10-year Housing and Homelessness Plan for the City and County of Peterborough* reports that, since 2003, a number of initiatives across the City and County have resulted in 500 affordable rental units (including rent-geared-to-income, accessible and special needs units) as well as rent supplements, repair support and accessibility funding for low-income tenants. Furthermore, the City has worked to increase standards in "rooming, lodging and boarding houses" through licensing (Welch et al. 2013, p. 7). Much of the Plan involves supporting community organizations (hospitals, correctional facilities, emergency shelters, mental health and addictions services, homelessness services) in order to foster more secure housing. In addition, the plan emphasizes various forms of collaboration: with landlords, with community members (especially those with lived experience of housing insecurity), and between municipal departments and committees. Furthermore, this promising plan supports the existence, affordability and good repair of rental housing (Welch et al. 2013), though further work is needed to ensure it is fully implemented in the collaborative manner envisioned.

Within Peterborough, community members, municipal staff and councillors, and volunteers make up the Affordable Housing Action Committee, a group committed to augmenting affordable housing access in Peterborough City and County (City of Peterborough 2014). Committee activities include: educating the community; analysing and promoting local affordable housing supply; and monitoring and improving housing access and services (Ibid.). Further, the Community Counselling and Resource Centre hosts a housing support website and operates Peterborough's Housing Resource Centre. In addition, the Canadian Mental Health Association Haliburton, Kawartha, Pine Ridge offers housing supports for people with serious mental health issues.

While Peterborough has several housing-related initiatives, it also has *many* community-based food security initiatives. One exemplary project, a joint initiative with the YWCA, Fleming College, PCCHU and GreenUP, is the Peterborough Community Garden Network (PCGN). In 2015, the PCGN had over 700 gardeners using 509 plots in 41 community gardens (Peterborough Community Garden Network 2016).

Peterborough Food Action Network (PFAN) (formerly the Peterborough Community Food Network), a working group of the PPRN, works at the intersection of all of these initiatives. PFAN focuses on a food security continuum that considers emergency need, capacity building and system change/policies to support access to healthy food for all. The JustFood program of YWCA Peterborough Haliburton uses a sliding fee scale to offer healthy food boxes focusing on fresh vegetables and fruits twice monthly (and non-perishable healthy staple foods as well as fresh produce once each month) (see Fig. 1.1). JustFood works to reduce food insecurity in ways that are attentive to the income security of farmers, by paying fair prices, and to people living on low incomes, by offering them access in a dignified way to subsidized food.

Fig. 1.1 JustFood program's fresh, healthy food box packed in a Church basement. *Photo credit* P. Ballamingie (2013)

In addition, Kawartha Food Share (KFS) is the umbrella organization that, through donations of food and other goods, and grocery store gift certificates, supports and warehouses food for 4 meal programs, 4 food banks in the City of Peterborough (and 7 in the County) as well as over 20 food cupboards and 6 housing projects—all of whom pay a membership fee to access the warehouse for their programs etc. (KFS 2014).

Initiatives that Actively Address Both Housing and Food

Community activists in Peterborough are increasingly sensitive to the links between food insecurity and housing insecurity—due in part to the work of the PPRN. This network hosts both the Peterborough Food Action Network (PFAN) and the Affordable Housing Action Committee—described above. PFAN's long-term goals include working with PPRN working groups to advocate for reducing housing and income inequity, as explicit recognition that food security connects directly to these issues (PCFN 2012).

Table 1.1 presented strategies for addressing food insecurity in the context of existing at risk neighbourhoods. In Peterborough, a number of these strategies have been recently implemented, especially through CBIs. There are several social housing and low-income neighbourhoods (e.g. Stewart Street) that now have

community gardens. The YWCA, in determining the JustFood Program's food box drop-off points, has also deliberately considered median income and proximity to transit, both within the City and in the surrounding County. Two other CBIs stand out as exemplary for their efforts to address food and housing in an integrated fashion: The Mount Community Centre and the Nourish Project (hereafter referred to as Nourish).

In 2011, the Peterborough Poverty Reduction Network (PPRN) decided that Peterborough needed a "hub for affordable housing and food." In 2013, the PPRN purchased The Mount, a 10-acre property that had previously housed the Sisters of St. Joseph Convent. The PPRN transferred the property to the newly formed non-profit, The Mount Community Centre (MCC), to develop a place that: "focuses on housing, food, health, arts and culture, and ecological sustainability" and, in so doing, cultivates a "self-sustaining community" (MCC 2013). As of 2014, the MCC rents out space, and it has received funding from the Ontario Trillium Foundation (to hire a Strategic Advancement Director) and from the Community Foundation of Greater Peterborough (for operations and renovations, and a bonds investment initiative). The MCC's first priority remains housing; it plans to offer units for residents at both market and non-profit rental rates (10% below market rate), to combine funding from its own initiatives with funding from municipal and provincial governments. At the time of writing, Phase 1 is underway involving the development of 47 apartments. Another of the MCC's priorities regards food, with a vision for the (re)development of an orchard, community gardens, commercial kitchen, community dining space, food education and social enterprise (Ibid.).

The idea for Nourish developed out of the Peterborough Community Food Network when its members decided that Peterborough City and County needed to pull together multiple strands of the local food system in specific places to address pressing issues regarding food access, farmer livelihood, and the commoditization of food. Nourish consists of a broad and highly collaborative network of community partners, seeking to "build a new local food system that is accessible, equitable and sustainable" (YWCA Peterborough Haliburton 2015). To meet this ambitious goal, Nourish focuses on food (local and healthy) access, skills and advocacy. In 2013, Nourish launched its pilot project, A Taste of Nourish, in downtown Peterborough. Participants convene at workshops where they develop skills around healthy eating and food safety, selection, preparation, growing and storage. After preparing healthy meals with seasonal food, participants may receive JustFood boxes or, during the market season, farmers' market coupons. The workshops periodically involve a market tour. As a next step, the project has partnered with local organizations to offer food literacy classes for groups with specialized food needs. With its second pilot project, the Nourish Peer Advocacy Training, Nourish has begun to provide community members with opportunities to volunteer, mentor and advocate around food issues.

Both housing- and food-centered community organizations have identified the need to 'bring food home' for Peterborough residents: by reducing food miles and considering food access. Many food initiatives, like community gardens, Come Cook With Us and the JustFood program, bring food closer to where people live.

Others, like the Peterborough Gleaning Program, help bring people to food. While Nourish builds on existing community ties to develop places for food in these communities, The Mount plans to use housing, food and culture to help establish a community in the City of Peterborough. Both sets of initiatives highlight the need to apply a spatial lens to these interconnected issues.

The case study of Peterborough enables an on-the-ground look at the issues of food access and housing security, and possible approaches to address these issues together, including the separate and combined responses that have been made in policy, programming and advocacy (see also Andrée et al. 2015). Peterborough community-based organizations are working actively and collaboratively, and local governments remain engaged to some degree. However, stronger, multi-scalar and collaborative governance in close collaboration with community-based actors would facilitate even more progress. At the municipal level, the potential for discretionary and housing-related financial supports (e.g. the Housing Stability Fund) crisis cannot be underestimated. Additionally, it is important to address issues of inadequate employment income (through policies such as increased minimum wage, living wages or basic income guarantees) and not just lack of employment itself. The broad adoption by local employers of a living wage as outlined by the Peterborough Social Planning Council (2014), could be instrumental here. Finally, the federal government could and should play a much stronger role by developing both a National Housing Strategy (Wellesley Institute 2010) and a National Food Strategy (De Schutter 2012). We intend to closely follow the outcomes of public commitments made by Canada's Liberal government (elected in 2015) to develop new federal strategies on each of these issues.

Toward a Conceptual Framework

In order to conceptualize the common ground between food access and housing security (i.e., beyond the obvious—'poverty'), we link our observations from Peterborough to principles of distributive justice, neoliberal realities, the 'right to the city', and a spatial analysis. Although the focus of much of this chapter is on a specific case study, it is worth situating that case in the context of concepts at play in the literature.

Principles of distributive justice ensure the allocation of goods and services to members within society in a socially just way, and apply first and foremost to basic human physiological needs (food, water, shelter, etc.). The above-noted efforts of the Peterborough Community Garden Network, Peterborough Food Action Network, the JustFood program, and Kawartha Food Share all advance such principles. Distributive justice in relation to housing would ensure that the most marginalized have access to truly affordable housing. A first step would be to allocate resources to those most in need and develop a plan to augment access. Again, Peterborough has made strides in this regard: the 10-Year Housing and Homelessness Plan spurred initiatives that resulted in 500 new affordable rental

units since 2003; and volunteers on the Affordable Housing Action Committee continue to press for more available, accessible and affordable housing. Distributive justice relates to perceived fairness around the material outcomes afforded to members of a society, and the corresponding duty of both government and citizens to ensure that the basic needs of all are met.

Clearly, these principles chafe against a neoliberal capitalist economy premised on profit generation, capital accumulation, competition and free markets. Notwithstanding the small federal government investments in social housing noted above, the attitude that the market will solve these problems is representative of the shift toward neoliberalism (Bryant 2003). The neoliberal approach, with its reduced government involvement and focus on profit maximization, has resulted in decreased affordability in the housing sector (Bryant 2003; Hulchanski 2007; Kipfer and Petrunia 2009). Initiatives such as The Mount disrupt neoliberal mores in their holistic vision for the redevelopment of a faith-based property (see Martin and Ballamingie 2015)—specifically by offering some units at a non-profit rental rate and by integrating all aspects of human wellbeing, "housing, food, health, arts and culture, and ecological sustainability" (MCC 2013)—all of which requires a more collaborative community economy. In fact, The Mount exemplifies the recommendations in Table 1.1.

However, with regards to food, we also find an emphasis on neoliberal 'solutions': i.e., rather than sufficiently increasing the minimum wage and disability supports, self-help programs such as community gardens are framed as adequate solutions by some local actors while they are really incommensurate with the scale of the problem (Guthman 2008). In fairness to the CBIs who operate these programs, however, most are also actively resisting neoliberal practices and ideology by building the collective, re-centering care/human needs, providing alternatives to market logics, building awareness around systems of social (in)equality, and advocating for redistributive justice (Andrée et al. 2014).

Harvey (2008), in his seminal 'The Right to the City', implicitly challenges readers to upend hegemonic neoliberal market logics and think deeply about 'what kind of city we want'. In our context, Harvey would no doubt view the right to the city not just in terms of material access to food and housing (though he would surely include these facets), but more deeply for its emancipatory potential. This logic would hold in the context of any city, but it holds more acutely in Peterborough, given its aging population, higher-than-average unemployment, declining job opportunities, and challenging combination of rental prices and income. Harvey (2008) argues that the individual (and collective) agency to make and remake processes of urbanization is a freedom—"one of the most precious yet most neglected of our human rights" (p. 23).

In the context of Peterborough, which is both City and County, we might extend this to 'the right to the country', or even more broadly to 'the right to one's home place'—across geographic scale, as 'emancipatory home environments'—whereby place and identity are mutually constituted. Peterborough illustrates a growing trend of post-industrial decline, where cities boomed when they served the market, where people were used to support market needs, and then abandoned when market trends

made it less desirable for industry to stay. Countless cities such as Peterborough are now left with infrastructures and administrative systems designed for a particular economic model—one that does not serve citizens. Thus, rather than rights over property, a more fruitful discussion focuses on what it means to be human, on rights to live and work (and perform aspects of oneself) in spaces that meet our myriad needs. Again, this notion chafes against liberal conceptions of property rights, but that is precisely why we need these types of ideas right now.

Lefebvre (1968, 1972) encourages a spatial analysis of social justice, to make visible social relations (and more importantly, social injustices)—something we concur is necessary given the evidence we compiled on the spatial interconnections between food access and housing security. Apparicio et al. (2007) highlight spatial disparities in food access between urban and rural locations. We recognize the need to consider explicitly the spatial organization of communities when siting food banks, meal provision services, grocery stores, healthy corner stores, farmers' markets and community gardens; and similarly, where goods and services cannot be brought directly to people, ensuring spatial access (through public transportation) to these critical supports (see Table 1.1). Such structural change would facilitate the type of sustainable food system transformation the editors of this volume have in mind. In fact, the PCCHU and partners have developed live maps of community food services,[5] including Employment and Training, Children and Youth, and Food, for the entire city and county—demonstrating an integrated approach that explicitly adopts a spatial lens. A next step might be to correlate services with income to optimize program access for those in greatest need. Also, the community development model employed by food CBIs such as Nourish, JustFood and the PCGN helps to address human need by starting where people are at—their unique geographic location and identification of urgent community needs.

Conclusion

Clearly, housing and food access issues intersect (and exacerbate one another), and addressing them simultaneously allows for synergies to emerge. Proponents in Peterborough have shown tremendous leadership in advancing these interconnected goals, though many stressed that this discussion (and corresponding activities) have only just begun. These initiatives augment capacity, though they would benefit from greater funding and other complementary and concerted efforts. In other words, community-based action does not preclude a more structural approach that

[5]To access Peterborough's Community Services Map, go to: http://maps.peterborough.ca/community/.

ensures adequate income (however that is discursively framed) for the most vulnerable among us. Government ought to play a greater role in fulfilling these interdependent (yet often separate) mandates, especially in light of the growing precarity of the urban poor these twin challenges exemplify. Community-based innovation in relation to food and housing *must* be accompanied by stronger action from provincial and federal governments to be commensurate with the scale of the problems—something the case study of Peterborough really brings to the fore.

This research also points to overlaps between housing, food access and farmer livelihood (a theme explored in Chap. 5). In fact, many community-based food initiatives (such as the Nourish Project, JustFood Program, and MCC) seek to achieve a multiplicity of goals. Food becomes a portal for community development, health promotion, and other worthy ends. Emerging discussions about community food centres and community food hubs reveal the need for greater clarity around which goals they are trying to achieve, and how they will serve the immediate needs and interests of the different communities they wish to include.

Finally, much of the work we have seen remains discursively grounded in 'scarcity' and 'insecurity'. Starting the discussion about the intersecting needs of food and shelter, and the possibilities this intersection generates, allows for a discursive shift from scarcity to a more positive lens: food access and housing security. Notably, this shift parallels a move away from neoliberal discourse of 'fat-trimming' and practices of austerity towards a more radical alternative that frames the meeting of basic human needs as necessary and possible.

Further analysis is required, including mapping socio-economic variables in conjunction with food access and housing security, to determine what insights a spatial lens might offer. However, several critical questions must also be posed. What policy supports might facilitate developers and social housing providers to more consistently take into consideration the food access strategies identified in Table 1.1? Where do the real roadblocks lie, and what combination of community action and government intervention can make the difference? How would greater income equality (or basic guaranteed minimum income) improve food access and metrics? Such work must be part of the agenda of research groups like ours, which otherwise risk highlighting innovation at the community level and minimizing the potential role of (and demands on) the state. Cases like that of Peterborough remind us that we need to continue to actively reflect on the responsibilities of higher levels of government as we examine the pathways to transformation presented through community-based synergies at the intersection of food and housing.

Acknowledgements Our sincere thanks to our research partners: Carolyn Doris, Public Health Nutritionist, and Sue Hubay, (retired) Public Health Nutritionist, Peterborough City-County Health Unit; and Joëlle Favreau, Community Development and Training Supervisor and Charlotte Kennedy, Food Action Worker, YWCA Peterborough-Haliburton.

References

Affordable Housing Action Committee. 2014. Housing is Fundamental. http://www.peterborough.ca/Assets/City+Assets/Housing/Documents/Reports/Housing+is+Fundamental/2014+Housing+is+Fundamental$!2c+AHAC.pdf.

Andrée, P., P. Ballamingie, and B. Sinclair-Waters. 2013. 'Chapter 2: Eastern Ontario'. In *Models and best practices for building sustainable food systems in Ontario and Beyond*, ed. Irena Knezevic, Karen Landman, Alison Blay-Palmer, and Erin Nelson. Guelph, ON: Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA). http://nourishingontario.ca/wp-content/uploads/2013/04/CHAPTER-2_EASTERN-ONT.pdf.

Andrée, P., P. Ballamingie, and B. Sinclair-Waters. 2014. Neoliberalism and the making of food politics in Eastern Ontario. *Local Environment: The International Journal of Justice and Sustainability.* doi:10.1080/13549839.2014.908277.

Andrée, P., M.A. Martin, P. Ballamingie, and J. Pilson. 2015. *Housing Security, Food Access and Community Connections: A Case Study of Peterborough, Ontario.* Nourishing Communities Report.

Apparicio, P., M.-S. Cloutier, and R. Shearmur. 2007. The case of Montreal's missing food deserts: Evaluation of accessibility to food supermarkets. *International Journal of Health Geographics* 6 (4).

Bacque, Susan. 2015. Manager, Housing Division, City of Peterborough, personal communication [e-mail], June 9.

Battersby, J. 2011. Urban food insecurity in Cape Town, South Africa: An alternative approach to food access. *Development Southern Africa* 28 (4).

Bothwell, R. 1986. *A short history of Ontario*. Edmonton, Alberta: Hurtig Publishers Ltd.

Bryant, T. 2003. The current state of housing in Canada as a social determinant of health. *Policy Options* 52–56.

Canadian Community Economic Development Network (CCEDN). 2005. Pan-Canadian Community Development Learning Network, Profile of Effective Practice: Community Opportunity and Innovation Network Inc. http://ccednet-rcdec.ca/files/ccednet/COIN-EN.pdf. Accessed 14 Sept 2014.

Canada Mortgage and Housing Corporation (CMHC). 2011. The evolution of social housing in Canada In *Canadian housing observer 2011*. http://www.cmhc.ca/en/hoficlincl/observer/upload/Chapter_9_EN_W.pdf. Accessed 18 May 2016.

Canada Mortgage and Housing Corporation. 2011. *Housing now Canada: Canadian market overview.* Ottawa: Canada Mortgage and Housing Corporation.

Canada Mortgage and Housing Corporation (CMHC). 2012. Canadian Housing Observer 2012. http://www.cmhc-schl.gc.ca/odpub/pdf/67708.pdf. Accessed 6 Aug 2014.

City of Ottawa. 2007. City Housing Strategy. http://www.ottawa.ca/en/social_com/housing/addressing/index.html. Accessed 6 Mar 2012.

City of Peterborough. 2011. Plan It Peterborough: City of Peterborough official plan review. [powerpoint slides]. http://www.peterborough.ca/Assets/City+Assets/Planning/Documents/Presentation+$!231-+Official+Plan+Review+Public+Workshops-+Envisioning+Peterborough$!27s+Future.pdf.

City of Peterborough. 2013. *Impacts of housing and homelessness program and funding changes, report PLHD13-005.*

City of Peterborough. 2014. Affordable Housing Action Committee (AHAC). http://www.peterborough.ca/Living/City_Services/Housing_Division/AHAC.htm. Accessed 14 Sept 2014.

City of Peterborough. 2016. Draft City of Peterborough Official Plan 2016. http://www.peterborough.ca/AssetFactory.aspx?did=37881. Accessed 18 May 2016.

City of Peterborough Social Services. 2013. Social Services Budget Backgrounder. http://www.peterborough.ca/Assets/City+Assets/Social+Services/Documents/Reports+and+Research/Budget/Beyond+the+Budget+2013.pdf. Accessed 14 Sept 2014.

City of Peterborough Social Services. 2015. Community Counseling Resource Centre, and Peterborough Poverty Reduction Network. *Housing Stability Fund: Peterborough evaluation report 2014.*

Dalton, T. 2009. Housing policy retrenchment: Australia and Canada compared. *Urban Studies* 46 (1): 63–91.

De Schutter, O. 2012. *Mission to Canada*. Report of the Special Rapporteur on the Right to Food. United Nations General Assembly. Human Rights Council.

Federation of Canadian Municipalities (FCM). 2015. Built to Last: Strengthening the Foundations of Housing in Canada. http://www.fcm.ca/Documents/reports/FCM/Built_to_Last_Strengthening_the_foundations_of_housing_in_Canada_EN.pdf. Accessed 20 May 2015.

Fisher, Nancy. 2015. Senior Program Analyst, Social Services, City of Peterborough, personal communication [telephone], June 30.

Food and Agriculture Organization (FAO). 2006. Food Security: Policy Brief. FAO's Agriculture and Development Economics Division. ftp://ftp.fao.org/es/ESA/policybriefs/pb_02.pdf. Accessed 27 Mar 2013.

Food and Agriculture Organization (FAO). 2012. The state of food insecurity in the world. http://www.fao.org/publications/sofi/en/. Accessed 12 Oct 2012.

Food Banks Canada. 2013. Hunger Count 2013: A comprehensive report on hunger and food bank use in Canada and recommendations for change. http://www.foodbankscanada.ca/FoodBanks/MediaLibrary/HungerCount/HungerCount2013.pdf. Accessed 18 Dec 2013.

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

Hackworth, J. (2008) 'The durability of roll-out neoliberalism under centre-left governance: The case of Ontario's social housing sector' in *Studies in Political Economy (81)*: 7–26.

Harvey, D. 2008. The right to the city. *New Left Review* 53: 23–40.

Hulchanski, J. David. 1995. The concept of housing affordability: Six contemporary uses of the expenditure to income ratio. *Housing Studies* 10 (4). http://www.urbancenter.utoronto.ca/pdfs/researchassociates/Hulchanski_Concept-H-Affd_H.pdf. Accessed 6 Aug 2014.

Hulchanski, J.D. 2007. *Canada's Dual Housing Policy: Assisting Owners, neglecting Renters*. Research Bulletin #38. Centre for Urban and Community Studies. University of Toronto. http://www.urbancentre.utoronto.ca/pdfs/researchbulletins/CUCSRB38Hulchanski.pdf. Accessed 17 Mar 2012.

Kawartha Food Share (KFS). 2014. Kawartha Food Share. http://www.kawarthafoodshare.com/. Accessed 23 Aug 2014.

Kipfer, S., and J. Petrunia. 2009. "Recolonization" and public housing: A Toronto case study. *Studies in Political Economy* 83: 111–139.

Kirkpatrick, Sharon, and Valerie Tarasuk. 2007. Adequacy of food spending is related to housing expenditures among lower-income Canadian households. *Public Health Nutrition* 10 (12): 1464–1473.

Kirkpatrick, S.I., and V. Tarasuk. 2011. Housing circumstances are associated with household food access among low-income urban families. *Journal of Urban Health: Bulletin of the New York Academy of Medicine* 88 (2).

Lefebvre, H. 1968. *Le Droit à la ville*. Paris: Anthropos.

Lefebvre, H. 1972. *Espace et politique*. Paris: Anthropos.

Martin, G., and P. Ballamingie. 2015. Faith missions and Church redevelopment in Ottawa, Ontario. *Canadian Journal of Urban Research* [in press].

Martyn, John. 2015. Community Advocate and Member of the Mount Community Centre Board of Directors, personal communication, January 26.

Ministry of Training, Colleges & Universities (MTCU). 2014. Ontario Labour Market Statistics for March 2014. http://www.tcu.gov.on.ca/eng/labourmarket/currenttrends/docs/monthly/201403.pdf.

Mitchelson, Linda. 2015. Social Services Division Manager, City of Peterborough, personal communication [e-mail], June 4.

Mitchelson, L., and Doherty, K. 2014. 2015 *Social Services budget overview*. Presentation prepared for Peterborough County Council. December 12. (on file with authors).

Moffatt, H. 2008. *Food security & housing: Preliminary rationale and strategies for the subsidized housing sector*. Vancouver Coastal Health, Population Health. http://www.vch.ca/media/PopulationHealth_FoodSecurityHousing.pdf. Accessed 7 Sept 2014.

Mount Community Centre (MCC). 2013. The Mount Community Centre. http://www.themountpeterborough.com/. Accessed 14 Sept 2014.

Ontario Ministry of Municipal Affairs and Housing (OMAH). 2013. Provincial Uploads. http://www.mah.gov.on.ca/page9204.aspx. Accessed 14 Sept 2014.

Ontario Non-Profit Housing Association (ONPHA). 2014. Non-profit housing in Ontario. https://www.onpha.on.ca/onpha/web/Non-profit_housing/Types_of_non-profit_housing_/Content/About_Non-Profit_Housing/Types/NPH_in_Ontario.aspx?hkey=4c7bb5ab-75a4-41f5-9b38-85ea89079f4b. Accessed 23 Aug 2014.

Ontario Non-Profit Housing Association (ONPHA). 2013. Waiting lists survey 2013. https://www.onpha.on.ca/onpha/web/Policyandresearch/Waiting_lists_2015/Content/PolicyAndResearch/Waiting_Lists_2015/2015_Waiting_Lists_Survey.aspx?hkey=64634a36-b6de-46b2-b76b-39541b2ea497. Accessed 23 Oct 2015.

Ontario Public Health Association (OPHA). 2002. A systemic approach to community food security: a role for public health. http://www.opha.on.ca/OPHA/media/Resources/Resource%20Documents/2002-01_pp.pdf?ext=.pdf. Accessed 6 Sept 2014.

Peterborough Community Food Network (PCFN). 2012. Peterborough Poverty Reduction Network: Community Food Network terms of reference. http://www.foodinpeterborough.ca/wp-content/uploads/2014/07/CFN-TOR.pdf.

Peterborough Community Garden Network (PCGN). 2016. 2015: A year in review. https://growpeterborough.org/2016/02/10/2015-a-year-in-review/. Accessed 18 May 2016.

Peterborough County-City Health Unit (PCCHU). 2013. Limited Incomes: A recipe for hunger. http://www.pcchu.ca/wp-content/uploads/2011/09/2013-Limited-Incomes-website.pdf.

Peterborough County-City Health Unit (PCCHU). 2014. Limited Incomes: A recipe for hunger. http://www.pcchu.ca/wp-content/uploads/2014/11/2014-Limited-Incomes-4pg.pdf.

Peterborough Social Planning Council (PSPC). 2012. Info Notes, Informing Our Community: Changes to Discretionary Benefits. http://pspc.on.ca/pdf/infonote_changes_to_discretionary_benefits-CN.pdf. Accessed 14 Sept 2014.

Peterborough Social Planning Council (PSPC). 2014. Peterborough Profile 2014. http://www.pspc.on.ca/pdf/Peterborough%20Profile%202014_sept%2025.pdf.

Pomeroy, Steve. 2011. Are we making any difference? Measures to assess housing outcomes: Comparing the experience in Canada and the UK. Toronto: The Wellesley Institute. http://www.wellesleyinstitute.com/wp-content/uploads/2011/10/Pomeroy-Oct-5-2011.pdf. Accessed 18 May 2016.

Pothukuchi, K., and J.L. Kaufman. 1999. Placing the food system on the urban agenda: The role of municipal institutions in food systems planning. *Agriculture and Human Values* 16: 213–224.

Prindiville, T. 2013. Impacts of Reductions to Discretionary and Emergency Housing Benefits in Peterborough. http://www.pprn.ca/news/impacts_of_reductions2013.pdf. Accessed 14 Sept 2014.

Statistics Canada. 2009. The Canadian Manufacturing Sector: Adapting to Challenges. http://www.statcan.gc.ca/pub/11f0027m/2009057/aftertoc-aprestdm2-eng.htm. Accessed 3 July 2016.

Tarasuk, V., A. Mitchell, and N. Dachner. 2014. Household food insecurity in Canada, 2012. Toronto: Research to identify policy options to reduce food insecurity (PROOF). http://nutritionalsciences.lamp.utoronto.ca. Accessed 23 Oct 2015.

Tarasuk, V., A. Mitchell, N. Dachner. 2016. Household food insecurity in Canada, 2014. Toronto: PROOF Food Insecurity Policy Research. http://proof.utoronto.ca/wp-content/uploads/2016/04/Household-Food-Insecurity-in-Canada-2014.pdf. Accessed 17 May 2016.

UNHCHR. 2009. The Right To Adequate Housing. Human Rights Fact Sheet 21 (rev. 1). http://www.ohchr.org/Documents/Publications/FS21_rev_1_Housing_en.pdf. Accessed 6 Aug 2014.

Welch, Tim, Greg Suttor, and Deb Ballak. 2013. Peterborough 10-year Housing and Homelessness Plan, 2014-2024. http://www.peterborough.ca/Assets/City+Assets/Housing/10-year+Housing+and+Homelessness+Plan.pdf. Accessed 16 Aug 2014.

Wellesley Institute. 2010. Precarious housing in Canada. http://www.wellesleyinstitute.com/publications/new-report-precarious-housing-in-canada-2010/. Accessed 23 Oct 2015.

Williams, P.L., et al. 2012. "I would have never thought that I would be in such a predicament": Voices from women experiencing food insecurity in Nova Scotia, Canada. *Journal of Hunger & Nutrition* 7: 253–270.

YWCA Peterborough Haliburton. 2015. Nourish Project. http://ywcapeterborough.org/nourish-project/. Accessed 23 Oct 2015.

Chapter 2
Strengthening the Backbone: Local Food, Foreign Labour and Social Justice

Janet McLaughlin

Abstract Increasingly social-justice oriented food movements have been paying attention to a long-neglected and largely invisible aspect of "local" food production—the lives and wellbeing of the "imported" workers who make labour intensive agriculture possible, and profitable, for many operations. Indeed, many farmers acknowledge that migrant workers are the backbone behind their industry. This chapter explores the contemporary use of migrant workers in agriculture and the social and community movements aimed at improving their conditions, rights and health. The chapter first outlines the use of migrant workers globally, with a focus on Europe and the United States, including an examination of both guest worker and visa programs as well as undocumented work. It then delves into the case study of Mexican and Caribbean workers in Southwestern Ontario agriculture. Drawing on over a decade of ethnographic and interview-based research, it highlights some of the key issues (both positive and negative) facing this population—including economic and livelihood gains, living and working conditions, family separation, health, rights, and social integration—highlighting recent controversies and struggles, as well as the social and rights-based movements that have arisen to address these challenges. The use of migrant workers in Canada is only growing amid a climate of intense competition in which flexible and reliable migrant agricultural labour has become ubiquitous in the global agri-food system. Rather than pitting farmers/employers, workers and social justice advocates as serving oppositional purposes, the chapter argues that improving workers' health and rights can benefit not only migrant labourers, but also strengthen the integrity of a food system that has become dependent on their use.

Keywords Migrant agricultural workers · Social justice · Local food systems · Human rights · Health

---

The original version of this chapter was revised. For detailed information please see Erratum. The erratum to this chapter is available at 10.1007/978-3-319-57000-6_13

J. McLaughlin (✉)
Health Studies/International Migration Research Centre,
Wilfrid Laurier University, Brantford, ON, Canada
e-mail: jmclaughlin@wlu.ca

I. Knezevic et al. (eds.), *Nourishing Communities*,
DOI 10.1007/978-3-319-57000-6_2

Mr. Ellis, Jamaica

There are many sugar cane fields on the drive through Clarendon, the Jamaican district which sees the highest number of migrant farmworkers depart for Canada each year. Smoke from the cane factories rises in the distance. The stark beauty of the plantations, bordered by palm trees blowing in the island breeze, obscures all of the back-breaking work done by Jamaicans, both in Jamaica and abroad.

At one stop on our journey, we meet an elderly man, Mr. Ellis; his grey hair and wrinkled face reveal a long and varied life. When asked if he ever worked abroad, Mr. Ellis responds as though I had posed a most obvious question. Yes, of course, he had migrated all over the place—in Canada with the "farmworker program," the United States, England, and several other Caribbean islands. How was it, I ask? "Can't support a family living in Jamaica…. A man's gotta do what a man's gotta do" he replies nonchalantly.

Mr. Ellis was one of the first workers to go to Canada after the Seasonal Agricultural Workers Program initiated in 1966, but this was just the first stop on his migration journey. "After Canada I went to the U.S. for 28 years and England and other islands. I worked in farming and construction … but Canada was the hardest. The people was nice, but the work was hard…. All my fingers would bleed after peeling and canning … ." He groans and gestures with his body, bending over holding an old, battered back for added emphasis, "My back would hurt so hard at the end of the day, I couldn't even sit down. But a man's gotta do what a man's gotta do," he repeats.

After all of his travels, piecing together a living across multiple continents, Mr. Ellis returned to Jamaica because "it will always be home." Looking around across the lush countryside I could understand why so many workers speak of an endless ache for their sun-kissed homeland. This is home—everywhere else is somewhere else. (Adapted from field notes, McLaughlin 2009)[1]

The farmers in Canada, the United States, and England who employed Mr. Ellis have more in common with him and the other migrant farmers they hire than one might expect. Each group is attempting to support their families through engaging in agriculture, an industry upon which the world both depends and under-values, amid economic and social circumstances largely beyond their control. Similar stories could be told of the Moroccan farmers in France, Ecuadorian workers in Spain, Romanians in England, or Pacific Islanders in Australia and New Zealand. Grossly inequitable and unjust global economic systems, stemming from centuries of "structural violence" rooted in slave, colonial, and post-colonial systems, render some countries to experience continuing disadvantages in a vastly uneven playing field (Farmer 2005).

The modern day inhabitants of such disadvantaged regions are leaving their families and communities to do the low paid, difficult and sometimes dangerous

[1]All field notes and quotes are adapted from research for my doctoral thesis (McLaughlin 2009). Workers' names are pseudonyms.

jobs that citizens of higher income countries typically turn down. Facing intense and increasingly consolidated globalized competition, farmers in higher income regions appreciate—some say even require—the flexibility, dependability and lower wage expectations of the migrants. By many accounts, it is a win-win situation, in which both employers and farmworkers advance their interests, and by keeping labour costs to a minimum, we can all enjoy more affordable food. Yet a growing chorus of labour and social justice groups asserts that such labour migration is inherently exploitative and has called for major changes to advance workers' rights. Many also wonder about the paradox and sustainability of a local food system that relies on imported labour.

Although migrant farmworkers have been coming to Canada for over half a century, only recently has the public, and the local food movement in particular, become aware of and demonstrated concern over the issues facing them. Spawned by academic investigations, media reports, documentary films such as Min Sook Lee's *El Contrato* (2003) and *Migrant Dreams* (2016) and labour and community movements, many are now not only aware of the presence of these workers, but are also fighting to improve their conditions. Although few dispute the economic advantages to workers, farm employers and the public, concerns arise over poor and variable living and working conditions, health risks and consequences, problematic access to labour rights and protections, a lack of social and political integration, and other issues. Often, these issues play out in the media, in social rights groups and public discourse with an employer versus worker rights narrative. The implicit assumptions are that: (a) employers are to blame for these problems; and that (b) for workers' interests to be advanced employers' interests must necessarily suffer.

One of the aims of the present volume is to analyze the interlinkages among various aspects and actors within the food system. In this case study, both employers and hired workers on farms are embedded in neoliberal forces beyond their control, yet their shared fortunes are inextricably linked—neither can thrive without the other. As part of this collection on nourishing communities, and in the spirit of achieving healthy, sustainable food systems for all involved in food production and consumption, I would like to propose a vision which strives to harmonize workers' and employers' interests to the collective benefit of both.

It is undoubtedly true that in some cases employers feel threatened by the advance of workers' rights, and it is also true that employers sometimes abuse workers. However, a closer examination of some of the controversial issues at play reveals that the most imperative factor impeding workers' rights is not individual employers, but rather the nature and policy of the migration system itself, which is employer-influenced but ultimately determined by government. I further argue that improving workers' conditions would benefit not only workers, but could also positively impact the farmers who employ them. In fact, not only is advancing workers' rights a moral imperative, but it can also support farms' productivity and public image, and in turn enhance their business models and success.

To support this argument, I situate the issues facing migrant workers in global context, as part of interrelated food systems in both countries of origin and of employment; explain the Canadian agricultural migration system; provide an

overview of the main controversies surrounding and movements supporting migrant workers in Canada; and outline how improving their rights can be seen as a win-win for both workers and their employers. As I describe the main issues of contention, I suggest practices and/or policies that would support workers' rights and need not be incompatible with, or threatening to, employers' interests. Findings and observations are based on over a decade of ethnographic research, including participant observation (living alongside workers in Canada, Mexico and Jamaica); interviews with hundreds of workers, and dozens of employers, government and civil society groups; surveys in various projects with over 800 workers; focus groups; and archival investigations.

Migrant Farmworkers in Global Context

The last half century can be categorized as "the age of migration," one that has caused a "fundamental transformation" of the international political, economic and social order (Castles and Miller 2003: x-2). Temporary labour migration via guestworker schemes has been a major source of economic development in North America, Europe, Australia and New Zealand, as well as the Middle East oil states and "Asian tiger" economies (Castles 2006). Migrant farmworkers are employed through a variety of formal and informal programs and work arrangements that reflect the social, economic and political dynamics of the various states in which they are employed.

In Western Europe, guestworker programs employing workers from the Mediterranean basin were prevalent between 1945 and 1973. Facing criticisms, including that these programs were inherently exploitative, they were largely phased out in the 1970s (Castles 1986, 2006; Castles and Miller 2003). In recent years, Europe experienced sharply declining fertility rates and the increasing labour shortages in low-paid service sectors within a context of neoliberalism and a post-Fordist "flexible" global economy. This led European governments to rethink their former positions and once again increase their reliance on guestworker programs (Castles 2006). This "new generation" of programs is arguably "more restrictive than their predecessors," with the aim of managing flexible labour while restricting permanent settlement, especially in jobs viewed as "low-skilled," including agricultural work (Hennebry and Preibisch 2010). Most high-income countries now have arrangements for the employment of temporary workers in agriculture. Today traditional migrant-receiving countries, such as Germany and the United States, are being joined by traditional migrant-sending countries, such as Italy and Greece, in the employment of temporary agricultural workers (Ibid). Temporary, or cyclical labour migration in agriculture, has truly become a global phenomenon; only the articulations (i.e. legal frameworks, participant countries) vary from place to place.

The United States has relied primarily on a substantial population of undocumented, or irregular migrants, most of whom come via the increasingly securitized and precarious southern Mexican border, often risking and sometimes losing their lives in the process. A smaller number of workers enter the United States with temporary legal status through the H2 visa program, implemented in 1952, now known as the H2-A—signifying the name of the visa which allows temporary workers in agriculture and which continues to bring in thousands of Mexican and Caribbean agricultural workers (Rothenberg 2000: 40). Still, these visas make up only a fraction of the migrant workforce, employing about 30000 of the over three million, or just 1%, of the migrant and seasonal agricultural workers annually working in the United States (NCFH 2012). Of these three million workers, 72% are foreign born, with 68% coming from Mexico and 3% from Central American countries. This population is comprised of 78% males and 22% females (Ibid). The United States has long been debating major immigration reform, which could bring about significant changes to both undocumented workers (e.g. a proposed pathway to citizenship) and guestworker programs. These debates are ongoing, with both employer and government representatives calling for a more comprehensive guestworker program as a means to address the labour and immigration crisis in that country, and with Canada sometimes referred to as a model to emulate (Hennebry and Preibisch 2010).

Migrant Agricultural Work in Canada

In Canada legally employed temporary contract workers are the predominant source of migrant labourers in the agricultural industry. Migrant workers arrive through various streams of Canada's Temporary Foreign Worker Program (TFWP). The Seasonal Agricultural Workers Program (SAWP), which employs workers from Mexican and various Caribbean countries for up to 8 months each year, is the longest-standing and largest of these. In place since 1966, the SAWP has continually expanded, now occupying approximately 40,000 of the over 50,000 migrant agricultural worker positions across the country (ESDC 2016). The other temporary foreign workers are employed through more recent streams of the TFWP, introduced in various incarnations since 2002, including a dedicated agricultural stream. These streams allow employers more flexibility with respect to country of origin (any), operation/crop type and contract length (up to 2 years) and do not benefit from the same government involvement/oversight as in the SAWP. This chapter will focus on issues primarily researched within the SAWP, although most of the concerns would be shared with, if not magnified for, workers in other streams of the TFWP, for whom even fewer standards and protections are in place. Although the SAWP has been widely touted, both within Canada and internationally, as a "model migration program," a growing number of criticisms have been levied against it. Some of the primary areas of controversy are summarized below.

How the SAWP Disempowers Workers

> "*My first farm ... that was a much better place. After a hard day of work we had a nice place to lay your head. It was two men to a room and a real house; we had bathrooms and laundry. It made a big difference to my happiness, going up that first time. At the second farm, things are much worse, the living quarters were no place for humans. Real inhumane. There wasn't even a window in the bathroom. So there was always a bad odor, not meant for humans. There was a bunkhouse and one bedroom for eight people. Once you're not comfortable, it's hard to be happy, and it's hard to work.*" – Donovan, Jamaican worker

> "*Right now we're not allowed to go anywhere, no sales person, no visitors, no family – he (the boss) talked with some other farmers, and they're not letting anyone on his farm so he will know who's coming and who goes ... . It's like a prison.*" – Alex, Jamaican worker

> "*(Our employer) goes to the airport to meet us and always greets us with a hug and a handshake and asks us how our families are. He's come to visit us in Kingston three times, including on his honeymoon ... . He's one of the best.*" – Alfred, Jamaican worker

These quotes, representing common sentiments across the spectrum of hundreds of workers I've interviewed, demonstrate the extreme variability of employment relationships in the SAWP. Some farms employ just one worker and have for decades; others employ hundreds, shifting national workforces from year to year en masse. Consequently, the experiences vary from those who develop "family-like" bonds with off-season visits, to those who never meet the people they employ. This is the main concern with the SAWP—not that all workplaces and accommodations are poor—but rather that the variation is too great, and there is a lack of safe recourse when workers feel their conditions are substandard, unsafe, or abusive.

Indeed, living and working conditions are as varied for workers as are the people who employ them. As in any industry, employers in agriculture exhibit a spectrum of behaviours and management styles, with some neglecting or even abusing their workers, and others going far beyond minimal expectations to provide workers with comfortable, friendly and dignified conditions. What is problematic about the SAWP is the unique and all-encompassing power relationship that exists between workers and employers. First, employers are responsible not only for providing safe and secure working conditions, but also for workers' accommodations. Arriving in a foreign country, often with no means of transportation or independent communication with local residents, many workers find that their employers are their only link to community, social and medical services. Amid this totalizing relationship, employer-specific work contracts bind workers to their employers, and employers have arbitrary rights to fire and thereby trigger the repatriation of workers, with no appeals or monitoring process, and also exert influence over future years' employment through a "naming" system. The result is an inevitable dynamic in which, even with the best of employers and circumstances, workers feel they must depend on, and therefore work to appease, their employers. Employers also feel a sense of added responsibility to monitor and provide for the workers, and paternalistic relationships often result. Workers have very little say over their conditions

and very limited empowerment to challenge conditions without the fear of consequence. Every issue to be explored below is coloured by this dynamic of skewed power relations embedded within the SAWP.

Living Conditions

Research has uncovered unsafe, uncomfortable and inhumane housing conditions on some farms, while on others workers are housed in accommodations that are secure and hospitable (e.g. Preibisch 2003; Hennebry 2006; Hennebry et al. 2012; Verduzco and Lozano 2003). Some workers are housed in unheated trailers with outhouses and no phone, while others are placed in homes equipped with satellite television and internet connections. Although the employer-provided living quarters are supposed to be assessed by public health inspectors before the workers arrive, housing guidelines are minimal and inspections do not continue throughout the growing season. As employers are typically also the workers' landlords, many workers fear making complaints about their accommodations. Furthermore, employers can exercise a great deal of control over workers' lives, including instituting curfews or restrictions on visitors or entering workers' homes without notice (McLaughlin 2009; Preibisch 2003).

A survey of nearly 600 migrant farmworkers in Ontario found a number of specific shortcomings with respect to housing. These included: inadequate facilities for food preparation and consumption; crowded and poorly ventilated sleeping areas; and a general lack of comfort, privacy, and necessary amenities such as adequate laundry facilities. A number had poor sanitation, insufficient access to clean drinking water, inadequate hand-washing and bathing facilities, and close proximity to pesticide storage areas. Housing tended to be overcrowded and lacked privacy. Nearly 150 migrants interviewed agreed with the statement that "my residence is hazardous to my health" (Hennebry et al. 2012). Similar areas of concern were reported in a study of 100 Mexican and other agricultural workers in British Columbia, in which 37% of workers felt that their housing damages their health; 21% reported not having adequate means to refrigerate their food; and 25% stated they had insufficient cooking elements. Over 25% reported not having window screens to allow ventilation in the summer and 14% did not have a heater for the cold (Otero and Preibisch 2009).

Simple solutions could help to address these problems without leading to undue hardship to employers. Creating stricter regulations, developed in consultation with workers and their advocates, and enforcing them with random visits throughout the growing season, would not impact the employers who are already providing healthy, safe and dignified accommodations, and would advance the reputation of the program as a whole. Inexpensive additions often make a big difference to workers. For example, it may not be possible for an employer of one worker to rent an entire home, but perhaps they could provide the worker with heating and cooling systems to make a trailer more comfortable. In many cases, workers I interviewed simply wanted a fan and window

screen to help them cool off during hot summer nights. Alternatively, rather than housing a worker in a poorly equipped trailer just so that he or she is on site, the employer could rent a room for the worker in a home with other migrants in the community. The key is for workers to be consulted regarding their living environments, and not feel threatened in asking for improvements for a basic level of health, comfort and security.

Working Conditions

Agricultural work is difficult, tedious and precarious (see Tucker 2006) and ranked as the most dangerous after mining and construction in Canada (Basok 2002: 60). The work is also highly variable—involving intense peaks of continual work and slower periods of relative inactivity. Within this context, SAWP workers are employed in a number of capacities in every stage of operations. Despite being classified as a "low skilled" labour force, some of the tasks assigned require high levels of experience, skill, and productivity. Duties depend on the crop and time of year, and may include such tasks as preparing soil; mixing and applying chemicals; planting, transplanting, irrigating, cultivating, weeding, pruning, and harvesting crops; driving and maintaining farm machinery; sorting, packing and packaging. Many tasks involve repetitive bending, lifting and stretching, requiring the worker to be in an awkward position for long periods of time. Migrants may work in greenhouses, fields, orchards, nurseries or processing and packing plants, or between various locations.

Although workers may be accustomed to difficult physical labour (most practice agricultural work at home), many report that the work is "more difficult" in Canada. The main reason for this is not necessarily the nature of the work in itself, but the lack of control they have over their working conditions (including hours and rest periods) and the fact that as foreigners, they feel they are given the most difficult or demanding tasks. As Manuel explains: "The work (in Canada) is more difficult because we use our physical force, here (in Mexico) if I want to work quickly, I work quickly, if I want to rest, I rest. Here it is calmer." Some workers say they can't even control when they use the bathroom. Martha observes: "We can't go to bathroom or get water (when working). Sometimes it's very hot and we have to have a little water. Even if we have diarrhea we can't go, we have to wait until the break."

The SAWP Agreement stipulates that workers should work a minimum of 240 h in 6 weeks to a maximum of 8 months. Although guaranteed minimum wage, agricultural workers on a whole are excluded from certain provisions of the Ontario Employment Standards Act regarding their hours of work, daily as well as weekly and bi-weekly rest periods, statutory holidays, and overtime (see McLaughlin et al.

2014; OMOL 2008; Verma 2003). Vacation pay is also denied to farmworkers.[2] The SAWP agreements do contain some basic guidelines regarding hours of work, stating that workers should be entitled to one day of rest following six consecutive days of work and that their working day may be up to 12 h, depending on the needs of the farm. However, the contracts also state that "where the urgency to finish farm work cannot be delayed," the employer may "request the worker's consent" to postpone periods of rest until a later date (ESDC 2017). Given their structural vulnerability (McLaughlin 2009), most workers feel compelled to work whatever amount of time or consecutive days are asked of them, a common finding of analysts studying the program (e.g. Basok 2002; Fairey et al. 2008). In peak work times especially, these "days of rest" may in fact be postponed until their return home, when their contracts have ended. In reality, workers' hours are determined by their employers, and fluctuate greatly throughout the season depending on weather, sector and timing. A number of researchers have found that workers work about 63–65 h a week, with some busy weeks totaling upwards of 80–90 h (Binford 2002; Fairey et al. 2008; Hennebry et al. 2012; Russel 2003).

Sam, a farm employer argues that, "They (migrant workers) want to work as many hours as possible—each hour worked means more money to send to their families." This is a common sentiment or justification among employers for requesting extended workdays and it is not totally unfounded; most workers report they would rather work too many than too few hours as their priority in Canada is to send money home (see Wells et al. 2014). Among even the most ambitious workers, however, there is the sense that there is an upper limit after which they would rather not keep working, but they feel they have no control over determining their hours. The key point here is that despite the provisions of the employment agreement, workers feel that they have very little say over the hours assigned. To address such issues, the SAWP agreement could change to allow workers to request modified working conditions or a day off to rest when needed, without fearing they will risk future employment opportunities.

Health

The consequence of poor and difficult living and working conditions is a wide variety of health risks and issues. Many of the health risks mentioned above (e.g. long strenuous work days, with few rest periods; exposure to chemicals, sunlight, heat; inadequate sanitation facilities; long periods of bending and lifting) have been uncovered as common in recent studies in Canada (e.g. Hennebry et al. 2012; McLaughlin 2009; McLaughlin et al. 2014; Otero and Preibisch 2009). Various

[2]Workers classified as "harvesters" who have worked more than 13 consecutive weeks may be eligible for vacation pay, but Verma (2003) reports they are often denied these payments since their work may not always be classified as harvesting.

studies have found health and safety training, as well as the provision and use of personal protective equipment, to be inconsistent and insufficient for migrant farmworkers (Basok 2002; Hennebry et al. 2012; McLaughlin et al. 2014; Russell 2003; Preibisch 2003; Verduzco and Lozano 2003). In particular, two recent studies of 600 and 100 Ontario migrant farmworkers respectively found extensive exposure to occupational hazards, with a majority of workers reporting minimal knowledge of the occupational risks in their work, and health and safety-related information or training (Hennebry et al. 2012; McLaughlin et al. 2014). A British Columbia-based study similarly found that 74% of the 100 Mexican workers surveyed had received no health or safety training (Otero and Preibisch 2009).

Illness and injury rates among temporary agricultural workers in Canada appear to be both high and underreported (Hennebry et al. 2012; McLaughlin et al. 2014). Studies of Mexican workers (Binford et al. 2004) and Jamaican workers (Russell 2003: 82) found illness/injury rates of around 25% of migrant farmworkers. Some 32% of workers in the Jamaican study reported a long-term illness as a result of illness/injury experienced while in Canada (Russell 2003).[3] In addition, many migrant workers suffer from mental health issues such as depression, anxiety and *nervios*[4] (McLaughlin 2009; Mysyk et al. 2008). Living and working away from their communities without adequate support, they are also susceptible to sexually transmitted infections, unwanted pregnancies and other sexual and reproductive health concerns (McLaughlin 2009; Narushima et al. 2016).

Many workers experience barriers to accessing health care, such as long hours of work and limited clinic hours, lack of transportation and translation services, and concerns over privacy and confidentiality when employers or supervisors act as intermediaries (see: Hennebry et al. 2016; Pysklywec et al. 2011). In recent years pilot health projects, including the Migrant Worker Health Project (which includes an information web site for health care providers and the general public at http://www.migrantworkerhealth.ca) have attempted to address and overcome these barriers. Since 2006, the Occupational Health Clinics for Ontario Workers has been holding clinics targeted at migrant workers in various regions of Ontario. In 2014 two Community Health Centres received pilot funding from the Hamilton Niagara Haldimand Brant Local Health Integration Network to run specialized migrant health clinics and programming in Niagara on the Lake, Simcoe and Delhi, Ontario (see McLaughlin and Tew forthcoming).

These initiatives have successfully overcome many of the access barriers by providing services at times and locations accessible to workers and with interpreters and other supports on site (for example, at central locations on Friday evenings or Sunday afternoons when workers are most likely to be off). They have also provided health promotion and education events. The projects benefit not only workers but also their employers. First, as the clinics allow workers to access services

[3]Parts of this section were adapted from McLaughlin et al. (2014).

[4]*Nervios*, or "attack of nerves" is a cultural-bound syndrome common among the Latin American community with symptoms similar to anxiety.

independently, without requiring the mediation and time of employers, and provide services outside of normal work hours, they are highly convenient to both groups. Second, these services can help to ensure that migrant workers have their health needs met, and promote preventative health measures. Ensuring optimal health benefits workers for obvious reasons, but it also benefits employers by facilitating healthy, fit and productive workforces. In this way, again, the interests of workers and employers can be aligned.

Labour Rights and Community Involvement

Scholars and critics have noted numerous labour rights issues affecting migrant workers (Faraday 2012; UFCW 2011), such as the Employment Standards Act exclusions outlined earlier (McLaughlin et al. 2014). The most contentious and perhaps the most important labour rights issue, however, is the current restriction on agricultural workers' right to bargain collectively. Migrant farmworkers, like all agricultural workers in Ontario, are *excluded* from the Labour Relations Act (LRA), which provides workers with the right to a union[5]. After a long-fought legal battle, led by the United Food and Commercial Workers Union and other interested parties, in 2012 the Supreme Court of Canada ruled that agricultural workers could continue to be excluded from the Act. In its place, agricultural workers are covered under the Agricultural Employees' Protection Act (AEPA), introduced in 2002. Although the AEPA extends some basic rights, including the right to join an employee association, without the right to bargain collectively, critics argue that the AEPA is largely meaningless, and fails to provide workers with the protections they need to effectively advocate for their rights (see Faraday et al. 2012; Raphael 2013). The International Labour Organization ruled that this exclusion constitutes a violation of human rights of agricultural workers (UFCW 2012).

In debates over labour legislation in the Ontario Assembly, legislators who voted in favour of the AEPA argued that migrant workers are well treated by most employers, and that the employee-employer relationship should not be "tampered with or jeopardized," as would be implied if workers had recourse under the Labour Relations Act. In fact one Member of the Provincial Parliament stated that, "*I say 99% of those individuals who rely on offshore labour treat their employees well*" (as quoted in Raphael 2013). Such rationales, which were based on anecdotal consults with employers rather than systematic research with workers, served to justify their exclusion from this labour right to which almost all other Ontario workers are entitled. If it is indeed the case that 99% of workers are treated well, employers should have little to lose from enshrining those protections in legislation.

[5]In May 2017 the Changing Workplaces Review (see: https://www.labour.gov.on.ca/english/about/workplace/) recommended to the Ontario government that agricultural workers gain inclusion under the Labour Relations Act, creating new optimism that their current exclusion may be lifted. It was not known at the time of writing of the Ontario government will adopt this recommendation.

Many employers nonetheless fear that allowing workers to join unions could jeopardize the financial viability of their operations. However, it would not be in the workers' or the union's interest to put employers out of operation and make workforces—and unions representing them—redundant. In the case of the twelve farms organized by the United Food and Commercial Workers (UFCW) in British Columbia and Quebec, where unionizing is legal, affected jobs have remained either steady or have risen, suggesting that these unionization efforts have not negatively impacted jobs or competitiveness (Stan Raper, UFCW Canada Organizer, email communication 2015). Rather than focusing on increased wages, these contracts have emphasized providing workers with increased job stability and improved grievance procedures (e.g. seniority/recall rights, negotiated rent, a formal grievance procedure, and the provision of Spanish-speaking union representatives) (Ibid). These are all areas that improve conditions for workers without causing major financial burdens for employers.

Despite not having the legal ability to unionize agricultural workers in Ontario, the UFCW and its affiliate association, the Agricultural Workers Alliance (AWA), have provided support and advocacy for thousands of workers each year. Their support centre staff perform a plethora of services, from assisting workers with benefit claims and facilitating medical appointments, to hosting social and cultural events. Yet many employers are suspicious of these AWA support centres, located in four agricultural "hot spot" regions in Ontario,[6] and some even threaten their workers not to associate with them.

Often this sense of mistrust spills over into other community groups, whether they be advocates, service-providers (e.g. health, language education), church-based or otherwise. Over the past decade, dozens of community-based initiatives have emerged to support and engage workers, including not only labour rights groups, but also initiatives targeting language and social services, legal supports, church and religious-based programs, etc. (see Hennebry 2012). These groups have made tremendous inroads in providing workers with a measure of social inclusion and facilitated access to many services that were otherwise out of reach without employer assistance. Despite these gains, many employers remain skeptical of any external support systems. In some cases employers forbid workers from receiving visitors, restrict their activities during their free time, or actively discourage them from interacting with any such groups. This general sense of unease and distrust of migrant support groups, and some employers' attempts to keep workers from interacting with "outsiders", has deep impacts on workers, whose social exclusion is already a major issue, and further compromises their community connectedness, access to services and social support (McLaughlin 2009; Preibisch 2003).

[6]These include: Virgil, Simcoe, Bradford and Leamington.

This disconnect not only places workers in an uncomfortable "middle" position, but has also caused an unnecessary breakdown of community support that could truly benefit workers and employers. Many employers I interviewed discussed the "burden" of being the primary person upon whom migrant workers rely to access services in the community. For example, they may have to miss an entire day of work if they offer to take a worker to investigate a medical complaint and end up waiting in an emergency room. By increasing partnerships with local groups with a genuine interest in helping workers, who are often willing to transport, translate for and otherwise support workers, employers could receive some of this much needed assistance and lessen the load on their own demands, while at the same time fostering a sense of good will between workers, community members and employers. Some employers realize this, and have even transported or accompanied their workers to community clinics, cultural and rights-based events. Too many, however, remain skeptical and create barriers, either real or perceived, between workers and these much needed services.

Advancing Workers' Rights Is the True Win-Win Scenario

Over the decade of my involvement in migrant workers' issues, I have repeatedly been frustrated by failed attempts to engage employers in productive dialogue about migrants' rights. Although some employers have demonstrated genuine compassion for their workers, most have remained hesitant to engage in debates about how to advance their rights, seeing such dialogue inherently threatening to their interests. Employers have raised two main concerns. The first is that employers are weary of scrutiny that could result in negative publicity for their industry in general, or their particular business. The second concern is that they fear improving workers' rights may hurt their economic interests. This, they assert, could happen in multiple ways. For example, instituting better housing conditions could mean farmers must pay for upgrades; allowing workers to unionize could result in paying increased wages; intensifying health and safety inspections could result in higher costs and compromise productivity; increasing migrants' access to benefits could result in raised premiums; permitting workers time to socialize and develop connections in their communities could compromise their absolute availability and productivity on the job, one of their distinct labour advantages upon which they rely to remain competitive.

In a tough economic climate, in which employers around the world rely on similar low-cost and highly controlled labour arrangements, many employers fear that they cannot accommodate additional costs and regulations and remain competitive. For smaller family farms that are already at risk of closure, such concerns are particularly serious. For larger farms making sizable profits, these concerns may be less acute, although they still wish to maximize profits and minimize inputs, as is the case of any business.

While the economic concerns of employers, many of whom are facing high levels of stress and economic competition, should be taken seriously, I have two main arguments against those who refuse to engage in the debate on workers' rights. First, I believe advancing workers' rights and paying attention to their needs and wellbeing need not add significant costs to employers, and could in some cases even benefit them. For example, providing fans and window screens would be inexpensive and would increase workers' comfort, thus potentially boosting their productivity. Likewise, linking with community partners to support workers could lessen pressure on employers while increasing workers' level of contentment. When both workers and employers are happy with a labour arrangement, this can result in longer-term relationships, allowing workers to hone specific skills that they can apply over time, lessening training costs associated with high turnover rates. Second, I have seen too many cases of workers who have endured difficult conditions, with dire consequences to their health and wellbeing, to believe that the status quo is acceptable. Simply put, the prevailing system fails to ensure the protection of the most vulnerable workers. The power imbalance between workers and employers is so skewed that even in the best of employment relationships, workers normally do not feel empowered to raise concerns over difficult issues. The fundamental rules governing the SAWP, rather than individual employer-employee relationships are at the root of these difficulties, which emerge consistently in the research (e.g. Basok 2002; Binford 2013; Hennebry 2006; McLaughlin 2009).

Given these challenges, I have attempted to propose a different vision, arguing that advancing workers' rights need not be at the cost of employers' sustainability. Although there are certainly things that individual employers can do to improve conditions (e.g. providing a fan or internet connection; allowing workers a day off when needed), the fundamental changes to protect workers' rights must come at the federal and provincial levels. A more just and equitable system, in which workers are empowered to safely raise concerns when needed, is required.

How can such changes benefit employers? Consumers, particularly those who pay attention to the origins of their food (as is in the case in local, sustainable and ethical food movements, as described in this volume), will likely be more inclined to support operations and systems open to scrutiny and found to provide workers with humane and just conditions. If Canada can be recognized as a leader in labour rights, this can benefit the agricultural industry as a whole and increase the competitiveness of its products. Further, workers who lead a more balanced life with fair wages and benefits, adequate rest periods, health and safety safeguards, community connections, a comfortable living and sleeping environment and access to good healthcare, will likely make happier, healthier, more loyal and ultimately more productive and stable workforces (see Akerlof and Yellen 1990; Luce 2014). Workers facing fewer risks and assaults to their health and safety can be more productive, and are less likely to miss work time due to illness and disability (Burton et al. 1999). No one wants to see employers put out of business, especially not the workers whose livelihoods depend on their success. Without a doubt, the fortunes of farmers and farmworkers are inextricably linked. For most workers, higher wages are always appreciated, but according to the participants in my

research, a stable, comfortable and respectful place of employment are most important. Most of the proposed changes would not warrant significant cost increases for employers, but could produce social and health benefits for entire workplaces. Employers who are treating workers well have nothing to fear from increased scrutiny in place to ensure that workers who may in a less harmonious relationship are protected.

I have proposed various examples of practices and policy changes. Many more policy changes have been discussed and are worth considering along a similar vein (see Faraday 2012; Hennebry and McLaughlin 2011; McLaughlin and Hennebry 2010; UFCW 2011). Individual employers can make many small and inexpensive changes to improve conditions for workers that need not threaten the viability of their operations. Some of these changes (e.g. connecting workers with existing health clinics and support services) may even save employers time and money.

Highlighting good practices through employer labelling (e.g. a labour rights-specific labeling system) enables exemplary employers to be rewarded with consumer confidence and preference. In some jurisdictions, such as Quebec and the United States, union-produced produce is labelled and promoted as a labour-friendly food choice. As awareness and concern around food system and labour issues become mainstream, many "foodies" are willing to pay a premium for products produced with labour conditions open to higher levels of scrutiny, regulation and certification, as the Fair Trade, and organic movements have shown. Many times when I have given talks on migrant workers, audience members ask me which farms they should support. I happily endorse the operations whose workers I have interviewed, and who I know are treated well. Consumers want to know more about their food's origins. Such endorsements should be formalized and participating employers should be rewarded with increased patronage. Governments too are starting to invest more in sustainable regional food systems, as evidenced by Ontario's 2013 Local Food Act. Improving the conditions for migrant workers would align better with social dimensions of sustainability and thus alleviate some of the concerns related to the paradox of local food relying on migrant labour.

The most fundamental and necessary change, however, is to empower workers to challenge negative conditions when they do occur, by changing the SAWP contract (e.g. revising provisions around employer-specific work permits, unilateral repatriation clause, restricting immigration rights, etc.). By rebalancing the power relationship within the SAWP system, the entire industry, which repeatedly faces criticism of worker exploitation, can benefit from ensuring that cases of abuse are minimized and when they do occur, are dealt with fairly and promptly. In short, it is in everyone's interest to ensure a local food system that is truly sustainable, supportive, healthy, and built on foundations of compassion and justice for farmers and workers alike. Rather than shying away from these debates—or dismissing them as inherently adversarial—workers, employers, advocates, and governments should come to the table and devise solutions that achieve these ends.

References

Akerlof, George A., and Janet L. Yellen. 1990. The fair wage-effort hypothesis and unemployment. *The Quarterly Journal of Economics* CV (2): 255–283.

Basok, Tanya. 2002. *Tortillas and Tomatoes: Transmigrant Mexican Harvesters in Canada*. Montreal: McGill-Queen's University Press.

Binford, Leigh. 2002. Social and economic contradictions of rural migrant contract labor between Tlaxcala, Mexico, and Canada. *Culture and Agriculture* 24 (2): 1–19.

Binford, Leigh. 2013. *Tomorrow we're all Going to the Harvest: Temporary Foreign Worker Programs and Neoliberal Political Economy*. Austin: University of Texas Press.

Binford, Leigh, Guillermo Carrasco Rivas, Socorro Arana Hernandez, and Soledad Santillana de Rojas. 2004. Rumbo a Canadá: La Migración Canadiense de Trabajadores Agrícolas Tlaxcaltecas. Mexico: Sociedad Cooperativa.

Burton, Wayne, Daniel Conti, Chin-Yu. Chen, Alyssa Schultz, and Dee W. Edington. 1999. The role of health risk factors and disease on worker productivity. *Journal of Occupational and Environmental Medicine* 41 (10): 863–877.

Castles, Stephen. 1986. The guest-worker in Western Europe—an obituary. *International Migration Review* 20 (4): 761–778.

Castles, Stephen. 2006. Guestworkers in Europe: A resurrection? *The International Migration Review* 40 (4): 741–767.

Castles, Stephen, and Mark J. Miller. 2003. *The Age of Migration*. Houndmills, Basingstoke, Hampshire: Palgrave Macmillan.

ESDC (Employment and Social Development Canada). 2016. Annual Labour Market Impact Assessment Statistics 2008-2015 Primary Agriculture Stream, https://www.canada.ca/en/employment-social-development/services/foreign-workers/reports/2014/lmia-annual-statistics/agricultural.html.

ESDC (Employment and Social Development Canada). 2017. Agreement for the Employment in Canada of Seasonal Agricultural Workers from Mexico. https://www.canada.ca/content/dam/canada/employment-social-development/migration/documents/assets/portfolio/docs/en/foreign_workers/hire/seasonal_agricultural/documents/saw .

Fairey, David, Christina Hanson, Glen MacInnes, Arlene Tigar McLaren, Gerardo Otero, Kerry Preibisch, and Mark Thompson. 2008. *Cultivating farmworker rights: Ending the Exploitation of Immigrant and Migrant Farmworkers in BC*. Canadian Centre for Policy Alternatives (CCPA): Vancouver.

Faraday, Fay. 2012. *Made in Canada: How the Law Constructs Migrant Workers' Insecurity*. Metcalf Foundation.

Faraday, Fay, Judy Fudge and Eric Tucker. 2012. *Constitutional labour rights in Canada: Farmworkers and the fraser case*. Toronto: Irwin Law.

Farmer, Paul. 2005. *Pathologies of Power: Health, Human Rights, and the new war on the Poor*. Berkeley: University of California Press.

Hennebry, Jenna L. 2006. Globalization and the Mexican-Canadian Seasonal Agricultural Worker Program: Power, Racialization & Transnationalism in Temporary Migration. PhD diss., University of Western Ontario.

Hennebry, Jenna L. 2012. Permanently Temporary? Agricultural Migrant Workers and Their Integration in Canada. *IRPP Study* No. 26, February.

Hennebry, Jenna, and Kerry Preibisch. 2010. *A Model for Managed Migration? Re-Examining Best Practices in Canada's Seasonal Agricultural Worker Program.* International Migration. ISSN 0020-7985.

Hennebry, Jenna L., and Janet McLaughlin. 2011. Key Problems & Recommendations for Canada's Temporary Foreign Worker Program—Reducing Vulnerabilities & Protecting Rights. *IMRC Policy Points* Issue II, February. International Migration Research Centre, Waterloo, ON.

Hennebry, Jenna, Kerry Preibisch, and Janet McLaughlin. 2012. *Health Across Borders—Health Status, Risks and Care among Transnational Migrant Farmworkers in Ontario*. CERIS Ontario Metropolis Centre, Toronto. Research summary. https://legacy.wlu.ca/documents/51248/Health_across_Borders.pdf.

Hennebry, Jenna, Janet McLaughlin, and Kerry Preibisch. 2016. 'Out of the loop': Improving access to health services for migrant farm workers in Canada. *Journal of International Migration and Integration* 17(2): 521-38.

Luce, Stephanie. 2014. *Labor movements: Global perspectives*. Cambridge, UK: Polity Press.

McLaughlin, Janet. 2009. *Trouble in our Fields: Health and Human Rights Among Canada's Foreign Migrant Agricultural Workers*. PhD diss.: University of Toronto.

McLaughlin, Janet, and Jenna Hennebry. 2010. Backgrounder on Health and Safety for Migrant Farmworkers, *IMRC Policy Points* Issue I, December. International Migration Research Centre, Waterloo, ON.

McLaughlin, Janet, and Michelle Tew. forthcoming. Migrant Farm Worker Health Care: Unique Strategies for a Unique Population. In *Pursuing Health: Intervening to Improve Health Care of Underserved Populations in Canada*, ed. Neil Arya, and Thomas Piggott. Scholars' Press.

McLaughlin, Janet, Jenna Hennebry, and Ted Haines. 2014. Paper versus practice: occupational health and safety protections and realities for temporary foreign agricultural workers in Ontario. *Perspectives interdisciplinaires sur le travail et la sante´* (PISTES) 16-2.

Mysyk, Avis, Margaret England, and Juan Arturo Avila Gallegos. 2008. Nerves as embodied metaphor in the Canada/Mexico Seasonal Agricultural Worker Program. *Medical Anthropology* 27 (4): 383–404.

Narushima, Miya, Janet McLaughlin, and Jackie Barett-Greene. 2016. Needs and risks in sexual health among temporary foreign migrant farmworkers in Canada: A pilot study with Mexican and Caribbean workers. *Journal of Immigrant and Minority Health* 18 (2):374–81.

National Center for Farmworker Health. 2012. *Farmworker Health Factsheet*. Demographics. http://www.ncfh.org/uploads/3/8/6/8/38685499/fs-facts_about_farmworkers.pdf.

OMOL (Ontario Ministry of Labour). 2008. Agricultural Workers Employment Standards Fact Sheet. http://www.labour.gov.on.ca/english/es/factsheets/fs_agri.html.

Otero, Gerardo, and Kerry Preibisch. 2009. Farmworker Health and Safety: Challenges for British Columbia. WorkSafeBC, Vancouver. http://www.justicia4migrantworkers.org/bc/…/Otero%20and%20Preibisch%202009,%20Farmworker%20Health%20and%20Safety.pdf, Draft report, October.

Preibisch, Kerry. 2003. *Social Relations Practices between Seasonal Agricultural Workers, Their Employers and the Residents of Rural Ontario*. Ottawa: North-South Institute.

Pysklywec, Mike, Janet McLaughlin, Michelle Tew, and Ted Haines. 2011. Doctors *within* borders: Meeting the health care needs of migrant farm workers in Canada. *Canadian Medical Association Journal (CMAJ)* 183 (9): 1039–1043.

Raphael, Philippe. 2013. *The Social Organization of Labour Rights in Ontario: Governing Migrant Agricultural Workers through the Agricultural Employees Protection Act*. Master's thesis, Ryerson University.

Rothenberg, Daniel. 2000. *With these Hands: The Hidden World of Migrant Farmworkers Today*. New York: Harcourt Brace and Co.

Russell, Roy. 2003. Jamaican Workers' Participation in CSAWP and Development—Consequences in the Workers' Rural Home Communities. *Canadian Migrant Agricultural Workers' Program Research Project*. Ottawa: North-South Institute.

Tucker, Eric. 2006. Will the vicious circle of precariousness be unbroken? The exclusion of Ontario farm workers from the Occupational Health and Safety Act. In *Precarious Employment: Understanding Labour Market Insecurity in Canada*, ed. L.F. Vosko, 256–276. Montreal: McGill-Queen's University Press.

United Food and Commercial Workers/Agricultural Workers Alliance. 2011. *Status of Migrant Workers in Canada 2010-2011*. ISBN 978-0-9809981-5-3.

UFCW (United Food and Commercial Workers). 2012. ILO rules "good faith" not good enough to guarantee labour rights of Ontario agriculture workers. http://www.ufcw.ca/.

Verduzco, Gustavo, and María Isabel Lozano. 2003. Mexican farm workers' participation in Canada's seasonal agricultural labor market and development consequences in their rural home communities. In *Canada's Seasonal Agricultural Workers' Program (CSAWP) as a Model Best Practices in the Employment of Caribbean and Mexican Farm Workers*. Ottawa: North-South Institute.

Verma, Veena. 2003. The Mexican and Caribbean seasonal agricultural workers program: Regulatory and policy framework, farm industry level employment practices, and the future of the program under unionization. In *Canada's Seasonal Agricultural Workers' Program (CSAWP) as a Model Best Practices in the Employment of Caribbean and Mexican Farm Workers*. Ottawa: The North-South Institute.

Wells, Don, Janet McLaughlin, Andre Lyn, and Aaraon Diaz. 2014. Sustaining North-South Migrant Precarity: Remittances and Transnational Families in Canada's Seasonal Agricultural Program. *Just Labour.* vol. 22, Autumn.

Chapter 3
Community Food Security in Pictou Landing First Nation

Pictou Landing First Nation and Irena Knezevic

Abstract In 2013 a participatory research project explored food security in Pictou Landing First Nation, a Mi'kmaq community geographically located in Canadian province of Nova Scotia. The project used photovoice—a qualitative research method that collects photographic data along with oral information from project participants. The findings revealed that pollution and ecological changes around Pictou Landing First Nation were the most significant community challenge to eating well. Community members shared photographs and stories to describe their experiences with food and point to their key concerns, which also included physical and economic access to healthy food. Participants also commented on a number of great assets in the community, such as the recent development of community gardens and the knowledge of traditional foods that still exists in the community. This chapter offers reflections on the project's findings and on the use of photovoice to examine social dimensions of food systems. The chapter also considers the larger implications of these findings to the issues of Indigenous community food security, cultural safety, and ecological consequences of industrialization.

Keywords Community food security · Pictou Landing First Nation · Cultural safety · Photovoice

The goals of the project described in this chapter involved specific research objectives and a research process that is culturally congruent with the participating community. We wanted to develop a better understanding of community food security in Pictou Landing First Nation in a way that foregrounds local knowledge and perspectives. This means ensuring that any resulting publications are accessible to broad audiences, including the members of the community in which this research took place. Unfortunately, research that foregrounds Aboriginal

Pictou Landing First Nation · I. Knezevic (✉)
Carleton University, Ottawa, Canada
e-mail: irena.knezevic@carleton.ca

Pictou Landing First Nation
e-mail: info@plfn.ca

I. Knezevic et al. (eds.), *Nourishing Communities*,
DOI 10.1007/978-3-319-57000-6_3

approaches sometimes runs counter to traditional conceptions of academic research. The narrative of this chapter is intentionally largely descriptive, but this, in our view, is necessary for readers seeking to learn more about the project and the approach to community engagement necessary when conducting research in Aboriginal communities. Research activities described in this chapter were conducted in compliance with the Mi'kmaw Ethics Watch Research Principles and Protocols and the Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans. The research activities were approved by both Mi'kmaw Ethics Committee and the Mount Saint Vincent University's Research Ethics Board. In accordance with the Mi'kmaw Ethics Watch Research Principles and Protocols, all copyright, authorship and data ownership rights rest with the community of Pictou Landing.

Background

Pictou Landing First Nation is a Mi'kmaq community located in what is officially the province of Nova Scotia in the Atlantic region of Canada. A community with just over 400 residents, it is nestled in Northumberland Strait, along Nova Scotia's northern shore and about a 20 min drive from New Glasgow. The fishery plays an important role in the local economy but, like many Aboriginal communities in Canada, Pictou Landing faces a variety of economic challenges and many residents work outside of the community, some as far away as the tar sands in Alberta. The community life is closely linked to Boat Harbour tidal estuary, a geographical and cultural feature so central to Pictou Landing that residents sometimes make references to its ancestral name—A'Se'K or "the other room", which alludes to the fact that the estuary was considered a part of the residents' home. Boat Harbour has been severely affected by a neighbouring pulp mill. The mill was contentious when it first opened in 1967, and continues to be a source of many community frustrations in Pictou Landing and more broadly in Pictou County. On hot and humid days, one need only drive through Pictou Landing to both see and smell the air pollution. The mill has been repeatedly identified as exceeding allowed pollution levels, and the provincially run water treatment facility in Boat Harbour (that handles much of the mill's waste water) is out of date (Henderson 2014).

The controversy surrounding the mill and the resulting pollution is a familiar story to many Aboriginal communities that have been affected by industrialization. From the "chemical valley" near Sarnia, Ontario, affecting reproductive health in the Aamjiwnaang First Nation (Mackenzie et al. 2005) to the continued mercury contamination at the Grassy Narrows First Nation in Ontario (the consequence of another pulp mill, see Sellers 2014), industrial development in Canada has had far-reaching consequences on Aboriginal communities. Industrialization has driven a wedge between Aboriginal communities and settler conceptions of economic development as well as the governments whose policies have facilitated such industrialization, and consequently the settler Canadians working in those

industries. At the same time it has pulled apart the Aboriginal communities and the ecosystems on which they had traditionally relied. The land that once nourished them has become the source of toxins and disease. The fracturing of the food system, that is one of the overarching themes of this book, is thus evident in Pictou Landing in multiple ways as the divides between Aboriginal and settler communities, between economic and cultural priorities, and people and the natural environment all play a role in the current challenges in Pictou Landing.

Issues relating to cultural sustainability and loss of traditional food practices have been clearly identified, especially in the Northern Aboriginal communities (Council of Canadian Academies 2014). Similarly, issues of diet-related disease, physical access to stores and markets and limited income, are concerns shared by many Aboriginal and non-Aboriginal communities. In particular, we know that there are several factors at play when it comes to food security. In Canada, 32.5% of households in the bottom 10% of income distribution are food-insecure, female-led households are at a greater risk of food insecurity, as are Aboriginal households (Canadian Community Health Survey 2008). Understanding how gender, race and ethnicity and socio-economic status all intersect with food insecurity (Sachs 2013; Munro et al. 2014) could be tremendously helpful in addressing some of the issues identified in this chapter and could facilitate knowledge sharing among communities that experience various forms of social marginalization that affects their food practices.

Environmental, economic and cultural issues are also intertwined in Pictou Landing and have had significant effect on the community's food system and health. Ongoing research in Pictou Landing has addressed some of the community health and well-being issues; for instance, Canadian Institutes for Health Research funded a 3 year (2102–15) project to better understand environmental contamination in the area (see "Current Projects" at http://www.heclab.com). At the same time, food security research in Nova Scotia has rapidly expanded in scope and intensity since the early 2000s (see for instance, Williams et al. 2012a; Green-LaPierre et al. 2012; The Nova Scotia Participatory Food Costing Project 2011, 2009, 2006 and 2002; Williams et al. 2010; Carlsson et al. 2008; Green et al. 2008;). Food security is identified as one of the key social determinants of health (Mikkonen and Raphael 2010) and is linked to such health outcomes as obesity (particularly for women: Lyons et al. 2008; Adams et al. 2003; Townsend et al. 2001), oral health (Mobley et al. 2009; Muirhead et al. 2009) and chronic disease (Seligman et al. 2010) including diabetes (Gucciardi et al. 2009; Seligman et al. 2007) and cardiovascular disease (Seligman et al. 2010), although some of those links remain in need of further research (Seligman et al. 2010).

Rates of food insecurity in Aboriginal communities have also been consistently higher than the Canadian average (as much as three times the rates for the non-Aboriginal population, Canadian Community Health Survey 2008), which is further compounded by the Nova Scotia rates also being high and exceeded only by those in Northern Canada (Canadian Community Health Survey 2010).

It is important to reiterate that these challenges are not only health-related—they carry with them a myriad of cultural and social implications as they are deeply

embedded in a poignant history of colonial Canada (Power 2007). Some of the most influential recent research (see, for example, Daschuk 2013 and Mosby 2013) points to deeply seated racism that historically coloured nutritional policies affecting Canada's Indigenous population. As Daschuk (2013) suggests, this was not necessarily unique to Canada, but rather representative of the patterns of poverty and population health left as a legacy of colonialism across virtually all continents. Nevertheless, food historian Ian Mosby (2013) indicates that this was not just an unfortunate byproduct of colonial developments, but a result of very specific policies that systematically (though not always intentionally) undermined Aboriginal health and well-being. Consequently, food security challenges of Canada's Aboriginal communities require a fundamental transformation in both research and policy as they cannot be adequately addressed if treated merely as addendums to mainstream food security efforts.

While food security research and activism in Nova Scotia is expansive, little of it has considered Mi'kmaq communities, the Aboriginal population that is indigenous to Nova Scotia and makes up all of the thirteen First Nations communities in the province. Aboriginal communities like Pictou Landing do experience unique challenges (e.g., compromised access to traditional foods and, for Pictou Landing, pollution concerns associated with Boat Harbour effluent and exhaust). However, Aboriginal communities also boast unique assets (such as an active fishing and hunting community and a wild meat distribution system). Through this work we attempted to identify both unique and shared characteristics of food security issues experienced in Pictou Landing, and chart some possible pathways to transformation.

Objectives and Research Process

In 2012 a local working group was formed to address issues of food insecurity in Pictou Landing. Supported by the diabetes prevention program of the Confederacy of Mainland Mi'kmaq, this working group identified the need to conduct a scan of key food-related issues in the community. The group connected with food security researchers in Nova Scotia and collaboratively developed a research proposal to explore community food security (CFS) in Pictou Landing First Nation. Our initial conversations took place as a result of the Activating Change Together for Community Food Security (ACT for CFS) project activities (see http://foodarc.ca/ActforCFS). Pictou County Food Security Coalition, with representation from the Confederacy of Mainland Mi'kmaq headed and facilitated all ACT for CFS community and research efforts in Pictou County. In the spring of 2012, the Coalition identified a need to better understand issues surrounding Aboriginal food security in Nova Scotia. Given the unique requirements of research in Aboriginal communities, it soon became apparent that additional resources would be required if a project focusing on CFS in Pictou Landing was to be developed. Researchers and community members came together and generated a research plan that would allow for

collaboration with ACT for CFS researchers and partner organizations. A community dinner was held in Pictou Landing on October 3, 2012 to discuss the draft proposal. Over 40 community members (in a community of just over 400) attended and contributed their thoughts and concerns further helping shape the proposal that eventually helped us secure funding for this work. We received funding from the Atlantic Aboriginal Health Research Program and the project was launched in the spring of 2013.[1]

The objectives of this research were four-fold. First, we wanted to gain a better understanding of food security issues in a Mi'kmaq community in Nova Scotia using qualitative and quantitative methods. Second, we wanted to provide direction for future CFS work in Pictou Landing and beyond. Third, we aimed to build capacity in the community to conduct research and use research findings for policy development. Finally, we intended to develop research models and tools that could be used in other Mi'kmaq communities.

The project posed the following research questions:

1. What are the key community concerns in Pictou Landing regarding food security?
2. What are some of the ways in which those issues can be addressed and community food security strengthened in Pictou Landing?
3. To what extent are the findings from this work relevant to other Mi'kmaq communities in Atlantic Canada?

The research consisted of four main components. We compiled an inventory of resources and programs available in the community and identified some key gaps in relation to CFS. We also tried to further contribute to dissemination of healthy eating resources (recipes, budgeting, cooking workshops). Additionally, we collaborated with the Nova Scotia Participatory Food Costing Project to design local food affordability scenarios to better understand accessibility of food in the community. Lastly, we conducted qualitative research (through story-sharing and photovoice) to better understand the experiences related to community food security and insecurity. In addition to these research activities, community input was sought through a project launch event (May 23rd, 2013), a community exhibit and dinner (October 18th, 2013), community newsletter announcements and inserts, and a Facebook page.

[1]Project funding allowed us to hire three individuals. Training undertaken by the community researchers included a basic introduction to research, research ethics, specific research methodologies and data analysis. Additionally, two community researchers completed the Community Food Mentor training through the Pictou County Health Authority. Two of the three employees worked on the project for several weeks each. The third, Jordan Francis, worked for the duration of the project, first as Research Assistant and then as Coordinator. She undertook the majority of project promotion, community outreach, data collection, transcription and dissemination. She also assisted in project planning, data analysis and report writing.

Inventory and Affordability Scenarios

The inventory of resources on healthy eating was compiled as an overview of existing programs, initiatives and other assets that contribute to food security in Pictou Landing. It involved multiple conversations with those who live and work in the community and it was revised several times to correct and add information. Consequently, we saw the inventory as a working document but one that would be helpful for reflecting on existing resources. Dissemination of healthy eating resources (such as recipes, budgeting and cooking workshops) was a need that was strongly identified by community members who attended the October 3, 2012 dinner in Pictou Landing. This is, however, the least developed component of our research. As our work progressed, we learned that many resources already existed but needed to be better promoted and utilized. For the most part, we simply integrated this effort into our other activities. We also found that the research sessions themselves proved to be excellent venues for sharing information. One of the qualitative sessions was organized as both a healthy cooking class and a photovoice session. We also ensured that all sessions and community meetings included healthy snacks. Our October 18th, 2013 community exhibit was also a full community meal where over 40 people attended and another 30+ meals were distributed throughout the community.

Draft affordability scenarios were developed in partnership with the Nova Scotia Participatory Food Costing Project based on their Participatory Food Costing model and methods for developing affordability scenarios (Williams et al. 2012b). That project has, for over a decade, been collecting and reporting data on the cost and affordability of food in Nova Scotia (see www.foodarc.ca/food-costing/ for more information). Using the National Nutritious Food Basket, project partners create various household scenarios (e.g., two parents with two children, both parents working for minimum wage). Standard (essential and typically inflexible) costs of living such as shelter and transportation are then calculated for those scenarios, along with the cost of the nutritious food basket for that family make-up. The total costs are then contrasted with the monthly household income to demonstrate the affordability of a basic nutritious diet for various households. The data are collected at the District Health Authority level, so Pictou County food costing data is useful in assessing food security in Pictou Landing. However, we expected that combining that data with community-specific scenarios[2] would generate more relevant information.

We developed five scenarios calculating affordability of nutritious diet for the following family compositions: "reference" family (two parent, two children) earning minimum wage; "reference" family on income assistance; lone mother with

[2]Cynthia Watt, former Food Costing Project Coordinator, prepared the Pictou Landing scenarios, building on the methods and model previously published related to scenarios (Williams et al. 2012a, b), and the Consumer Price Index adjustment tables (developed by Dr. Ilya Blum, Mount Saint Vincent University).

three children on income assistance; and two grandparents raising two grandchildren while earning minimum wage. However, community consultations that followed raised a number of questions about the accuracy of those calculations in reflecting the realities of life in Pictou Landing. Some community members were concerned that the scenarios would oversimplify the ongoing issues and overshadow our other findings, effectively removing the complex social-economic context of CFS in Pictou Landing. As a result, we decided that the scenarios would continue to be treated as "draft" and used only used for internal discussions in the community until further research development can be done. These findings, however, may prove very useful in future food costing work as they offer some insights about inadequacy of traditional research methods when conducting research in Aboriginal communities.

Qualitative Data: Story-Sharing and Photovoice

The qualitative components of this project included story-sharing and photovoice. Both methods involved group sessions where participants discussed one question: "When it comes to food, what do you think is the most important issue in Pictou Landing right now?"

Three story-sharing sessions took place with a total of twelve participants. The facilitator invited community members to share short stories about the research question. Participants then discussed their stories and were assisted by the facilitator who had some possible discussion questions already prepared (e.g., "What does your story tell us about life in the community?"). Two photovoice sessions with a total of six participants took place. Photovoice is a method of participatory research that involves participants taking photos to capture important issues visually (PhotoVoice 2012; Wang and Buris 1997). Like story-sharing, this method involved answering one question and then discussing it in a group, but here the initial responses came in the form of photos with captions, and were then supplemented by stories in discussion. We used the same research question ("When it comes to food, what do you think is the most important issue in Pictou Landing right now?"). The participants then came together to share their photos, select the ones they thought best represent their responses, discuss them, and write revised captions or stories to go with the photos.

Qualitative data from story-sharing and photovoice sessions were analyzed together and offered some of the most poignant findings of this project. Notes and transcripts from all sessions were coded as a whole to identify key themes. Quotes that effectively illustrate the themes were then selected and, where possible, matched to photos relating to those themes. Thematic posters were then developed to highlight key concerns and be used in community exhibits. The posters included images (examples of which are included in this chapter) as well as some key quotes

from the participants.[3] The community exhibit was launched on October 18th, 2013.[4] We also developed an online video presentation that combines images, quotes and some contextual narrative.[5]

Findings

Our comprehensive methodology yielded data that were rich in both breadth and depth of insights. One of our most significant findings had to do with the lasting consequences of industrialization. Residents of Pictou Landing pointed to Boat Harbour pollution (coming from the Northern Pulp Nova Scotia mill also known as the Pictou County Pulp Mill) as a continued issue that permeates many aspects of their lives. Participants explicitly identified Boat Harbour pollution as their most pressing concern "because I find the situation is what comes to mind first when I think of problems within the community, and I find it is the most disturbing problem… it does not allow [for] hunting and fishing, and picking berries… and everything from our land is being polluted more and more every day." Figure 3.1 visually reiterates this sentiment pointing to the community's relationship with the local landscape. In terms of food security, Boat Harbour pollution is perceived to severely limit both access to traditional foods (such as wild game, seafood and berries) and ability to grow food in the community (due to fears related to soil contamination). Participants noted that "people can't even trust growing their own garden because they're scared that boat harbor is going to get them sick" and observed:

> I'm not going to go out there and pick blueberries, or strawberries, or blackberries, or cranberries or any other berries out there because they are all polluted! I do not eat any fish from there 'cause it's polluted. I don't eat rabbits, I don't eat deer…anything that goes around here, any animals, there is no way that I would eat them, because of Boat Harbour.

Physical access to healthy food was also noted as problematic: "A lot of people … can't get there [to the grocery store]. It's not that they don't necessarily have the money to… buy the groceries but to pay twenty bucks for a taxi both ways… why would you wanna blow that kind of money?" There is only one convenience store in the community that carries mostly high-calorie, low-nutrient foods: "It's easy to see why the kids chose the junk food first. The first thing they see is that…

[3]For the complete set of posters see our project report at http://foodarc.ca/project-activities/pictou-landing-cfs/.

[4]Earlier on in the project, our Research Coordinator (Jordan Francis) also prepared a presentation to share preliminary findings more widely. She presented this work to an audience of 100+ on August 21st, 2013 at the ACT for CFS gathering in Halifax that included community food security researchers and activists from across Canada. On October 16th, 2013 that same presentation was also a part of *Research Remixed*, a two day research event at Mount Saint Vincent University.

[5]You can find the video presentation at https://www.youtube.com/watch?v=1aRLqBW4tUQ or by searching "Community Food Security in Pictou Landing First Nation" on YouTube.

Fig. 3.1 Boat Harbour—not just a pretty picture (Photovoice contribution). The photo illustrates a common sentiment in the community that the appearance of the harbour obscures the pollution, the fraught relationship that the community has with the mill, and the harbour as a site of fear and anxiety instead of a life-supporting ecosystem intertwined with life of the community

Fig. 3.2 The Inconvenient store (Photovoice contribution). The photo poignantly drives home the limited choices that are easily accessed in Pictou Landing

It's pretty sad that now junk food is more accessible than healthy foods… that you can walk to get these foods, but you have to get into a car and drive into town to get healthy foods." The image that this statement conjures is reiterated in Fig. 3.2, which humorously refers to the local stores as "inconvenient".

The closest grocery stores are a 20 min drive from Pictou Landing. There is a pressing need for creative alternatives that can improve access to safe and nutritious foods. This problem was further compounded by the ongoing concerns with pollution—as one participants explained: "There's no way to get healthy food really on the reserve anywhere except growing your own stuff, which is pretty risky with the amount of pollution we have." Another added: "If we didn't have the pollution problem, then there would be an opportunity for us to go fish, and hunt and plant and grow our own food, and then that would probably save a trip to the grocery store."

Fig. 3.3 Is this your reality? (Photovoice contribution) calls attention to the ongoing economic challenges in Pictou Landing

Economic access was also a challenge. A participant commented:

> We just need to find a way to make our money last longer so we can provide healthier snacks for our kids. I know what's good for them… but I just don't know how to do it, make it last… they say this stuff is good for you and that stuff but at the end of the day we end up buying stuff that's unhealthy and that's how we're all gaining weight.

And: "…talk to a dietician he'll take you somewhere and point this food guide out for you. They read that to you, they don't give you the price, they recommend that you eat fish… How can you afford fish, it cost about $9 a pound? How do you solve this problem when you don't have the money?" Figure 3.3 illustrates this concern very powerfully and interpolates the viewer to recognize that the empty fridge is a reality for many households.

Another participant described this conundrum as follows:

> [You] can talk until… blue in the face about healthy eating and Canada's Food Guide and stuff like that, but for most people that's not their reality of being able to go and buy that kind of food… It's not that they don't want to have healthy foods or eat more fruits and vegetables, but at the end of the day they usually say "Ok that's great, but this is what's real for me."

Fig. 3.4 Lettuce be healthy! Growing a healthy community… (Photovoice contribution) The photo sends an optimistic message that small interventions can have significant contribute to improving the community's nutrition

For those on income assistance in particular, it is not easy to afford a nutritious diet, and this can be compounded by the need for transportation, limited budgeting skills, limited cooking skills, and/or limited access to traditional foods: "The price of food is going way up and our welfare stays the same for how many years since 1985–86" and "It's pretty difficult for someone to survive on $68.15 for food for two weeks [actual food allowance for those on social assistance]. That doesn't cover much at all. That would only cover around three or four days if you were to eat right."

As with many Aboriginal communities in North America, Pictou Landing residents know all too well the pitfalls of diabetes, but the economic barriers make healthy eating a real challenge: "When it comes to diabetic food I know what you're supposed to eat and what you can't eat and what you're supposed to buy, but planning to afford it is something else."

Other concerns included: limited physical activity, link between good nutrition and learning (for school-aged children whose ability to learn and concentrate can be significantly affected by nutrition, see for instance *Canadian Journal of Public Health* 2010), need for more community gardens (see for example Fig. 3.4), relative accessibility of "junk" food, and need for more skill-building/skill preservation in budgeting, shopping, growing, harvesting (e.g., hunting; fishing; mushroom, berry and medicinal plant picking), meal-planning, cooking, canning, and so on.

Some older participants reminisced about the long-gone days when access to traditional foods was easier:

> Everybody else down here used to pick berries and have gardens, and they used to eat from the gardens, carrots, potatoes, corn, peas, tomatoes, whatever, and now these days, you can't do that. We'd eat a lot healthier then. We used to live off the land, and we used to swim down at the shore [now an unsafe swimming area] before pollution came, and we would never even go home for lunch. We'd have strawberries, and blueberries, and green apples, and sore stomachs after too! (Laughter) But all we would do is dig out clams at the shore, and bring a pot and cook clams [right] there.

This reminiscing also applied to the larger perceptions of community health: "… [a] guy from another reserve always used to comment on how healthy our kids looked unlike other reserves… this is no longer the case."

At the same time, a number of assets and resources were identified as already existing in the community. The Aboriginal Diabetes Initiative operates through the Confederacy of Mainland Mi'kmaq and carries a great deal of resources, as does the Pictou County Health Authority (including programs such as the Community Food Mentor training). The school meal program was also identified as a great resource as it is perceived to be run very effectively on a limited budget. This was also one of the key community concerns, as one participant described:

> When I was little… I remember being worried about food because three days in a row we ate creamed corn… I figure it is like a house: your foundation is your food and your shelter, next level is your learning. So if you can't have your foundation it's like the house would all crumble.

The ability of the school's staff to provide healthful meals was praised: "[School] breakfast program… it's open to everyone regardless if they need it or not but you don't feel the stigma of participating in the school lunch program and things like that so that's a definite positive thing."

The local knowledge embedded with elders and the school kitchen staff was seen as a great asset that could be better utilized in the broader community as well. There were also already several community gardens in Pictou Landing and participants wanted to see more of them, but they also recognized that some residents are not aware of the gardens and others were just too skeptical, with Boat Harbour once again influencing their perceptions:

> A lot of people are thinking that planting gardens is easy and will take care of our problem, but what we're seeing that that there's a lot of people who lack confidence in our environment for the gardens. They don't trust the air, they don't trust the soil, they don't trust the water because of Boat Harbour.

What was clear in the participants' contributions was that community members had a broad understanding of their food security concerns. They were not only skilled at identifying the key challenges, but also in assessing their larger social and political context. Boat Harbour pollution was understood as a failure of economic and environmental policy, particularly at the provincial level. Income levels were described as a federal failure in terms of the deeply entrenched socio-economic inequities that characterize the current conditions of Canadian Aboriginal communities. While distribution of social assistance funds is managed at the local level, the overall funds are determined by the federal government severely restricting the ability of local governments to improve the economic conditions of their communities. In general, the participants had a great deal of insights on who had the ability to improve the conditions in their community, but felt that they had little or no influence over those decision-makers, illustrated most clearly by the nearly five-decade long pulp mill controversy.

Limitations of the Research

Despite a relatively good response rate (18 participants from a community of just over 400) getting participants involved was no easy task. It was largely due to the extraordinary efforts of our Research Coordinator and the trust that she earned in the community that participants agreed to participate. Reasons for that likely include: low participation incentives (snacks; and expense reimbursements for travel and child-care, which no-one actually claimed); research fatigue (common in Aboriginal communities); and low expectations for the project to have concrete outcomes (this kind of research skepticism is also very common and should be acknowledged).

Methodologically, while story-sharing and photovoice proved to be engaging and effective methods, some participants still found them to be overly structured and less culturally congruent than desired. It will be an important task for any similar future research to make these methods more open and inviting while still ensuring rigorous data collection.

Discussion and Implications

Our work adds to the growing body of evidence that points to inadequate local, provincial and federal policies that continue to disadvantage Aboriginal communities and jeopardize their health and food security. The results point to community members' strong sense of being disconnected—from their traditional food practices, from the settler governments and economy that have long disregarded the local needs, and from the natural environment that was once life-giving and understood as part of the residents homes but now represents a source of anguish and lament. The failure of policy, at various government levels, to adequately address long-standing concerns in Pictou Landing was noted in all discussions. This illustrates the community's clear understanding of the political and economic divides brought on by industrialization, and more broadly neoliberalism, even if that understanding was not expressed in those specific terms. The participants' visions of solutions were both simple and sophisticated; simple in that they sought a range of small, achievable changes, and sophisticated in that they saw those changes as part of a complex transformation needed not only in Pictou Landing, but also in other Aboriginal communities in Canada.

Recommendations at the local level included such initiatives as: bringing back a road-side market (that operated for one summer in 2011 but discontinued for a variety of reasons); introducing more community gardens as well as freezers, greenhouse and raised bed gardens; establishing partnerships with local farms and bulk-buying of fresh produce to be distributed locally; creating a local food bank for emergency relief; offering more budgeting classes; promoting better use of the existing Food Mentoring Program; organizing more inter-generational events where youth can learn traditional food practices (e.g., hunting, fishing,

mushroom/berry/medicinal plant picking, etc.) from elders; and implementing a range of other local initiatives.

For higher levels of government (Mi'kmaq, county, provincial and federal) we identified a pressing need to take food insecurity more seriously, offer more programs that can support local initiatives in Pictou Landing and in other Mi'kmaq communities, and adjust social assistance rates for lone parent families to make a nutritious diet affordable. We also highlighted the need to take the issue of Boat Harbour pollution seriously at all levels of government and start to remedy the environmental damage through stricter mill regulation and clean-up initiatives that would more significantly include Pictou Landing residents into decision-making and implementation processes.[6]

While some of our findings are community specific (e.g., issues related to Boat Harbour pollution), others are highly relevant to other Mi'kmaq communities in Atlantic Canada, as well as other Aboriginal communities more broadly. For instance, our findings suggest that the concept of *cultural safety* needs to gain more traction at all government levels. Cultural safety, as used in health care delivery, is a concept that reminds policy makers and practitioners that many official practices have been culturally unsafe or threatening to Aboriginal communities (Brascoupe and Waters 2009). The concept "is used to express an approach to healthcare that recognizes the contemporary conditions of Aboriginal people which result from their post-contact history" (Brascoupe and Waters 2009: 6–7). Our findings support this concept as something that needs to be incorporated more broadly into a wider range of policy decisions. As Brascoupe and Waters suggest, "for cultural safety to become entrenched in professional practice in health and other policy areas, including education at all levels, justice, and social work, cultural safety has to be practiced not just by individuals but also by institutions" (29). This may be of particular importance when addressing the ecological consequences of industrialization and ongoing development initiatives that narrowly focus on economic development that favours industry (for instance the highly contentious resource extraction debates currently taking place all across Canada with respect to mining, logging and oil and gas extraction). A more deliberate consideration of how policies line up or clash with the needs of Aboriginal communities could be incorporated in the decision-making processes in social policy, planning and development, and economic polices—similarly to the way that some policy-making procedures require environmental audits or health equity impact assessments.

Methodologically, this study also offers several lessons. Involving community members in research planning and through community events created multiple opportunities for feedback to the research team. The approach addressed one form of fracturing—the divide between academic researchers and the communities they

[6]Since this study was completed, the provincial government in Nova Scotia has begun redressing some of the concerns identified here, including ordering the pulp mill in question to pay an environmental fine of 225,000 CAD for its 2014 spill of 47-million litres of mill effluent into Boat Harbour. A portion of the fine will be awarded to Pictou Landing Frist Nation.

study. But it also offered a pathway to transforming conventional research relationships and opportunities for community members to voice concerns and take ownership of the project. This increased community capacity to shape local policy and articulate the need for change at broader policy levels. However, the key capacity-building outcome of this project was the "experienced" researchers' expanded perspective on research in Aboriginal communities. As noted above, understanding the limitations of our usual research methods was an eye-opening process. Despite the research team's initial enthusiasm for story-sharing and photovoice—both considered non-traditional research methods—our participants still found the research approach more rigid than they had hoped for. Having to provide just one photo was for some a frustrating decision and the participants felt that the structured nature of story-sharing went against the typical community dynamics where individuals frequently interrupt each other and build on each other's story providing for a more collective account of an issue. Nevertheless, post-project discussions with community members indicated that these methods were still very beneficial for collecting open-ended oral data, as well as visual data. This approach not only allowed for collection of rich data but also facilitated our attempts to communicate the findings back to the community.

We believe this model can easily and effectively be adapted in other Mi'kmaq communities, and Aboriginal communities more generally, for research into food systems, environmental concerns and a range of other social and cultural research questions. However, we offer this observation with a caveat—that the concept of cultural safety needs to be widely and deliberately incorporated throughout all components of research process—something we wholeheartedly attempted and accomplished to varying degrees at different stages of the research. Engagement may be less frustrating for participants with a less structured process. For instance, encouraging participants to submit multiple photos, and allowing for interruptions and collective accounts would not jeopardize the validity of the data and yet would facilitate a more comfortable form of participation. Despite these limitations, we conclude with confidence that the project allowed for a better understanding of economic, environmental, cultural and social justice dimensions of community food security while also providing community-specific recommendations as well as identifying wider implications of our results.

Acknowledgements This project was funded by the Atlantic Aboriginal Health Research Program with additional support from the Confederacy of Mainland Mi'kmaq and Activating Change Together for Community Food Security (funded by the Social Sciences and Humanities Research Council, and led by FoodARC, Mount Saint Vincent University and the Nova Scotia Food Security Network). Time, energy and space were also generously donated by the community of Pictou Landing, Pictou County Health Authority, Pictou County Food Security Coalition, FoodARC and the Nova Scotia Participatory Food Costing and Activating Change Together for Community Food Security projects.

References

Adams, E.J., L. Grummer-Strawn, and G. Chavez. 2003. Food insecurity is associated with increased risk of obesity in California women. *The Journal of Nutrition* 133 (4): 1070–1074.

Brascoupe, S., and C. Waters. 2009. Cultural safety: Exploring the applicability of the concept of cultural safety to aboriginal health and community wellness. *Journal of Aboriginal Health*, 2009: 6–41.

Canadian Community Health Survey. 2008. *Household Food Insecurity In Canada in 2007–2008: Key Statistics and Graphics.* http://www.hc-sc.gc.ca/fn-an/surveill/nutrition/commun/insecurit/key-stats-cles-2007-2008-eng.php. Accessed 22 Sep 2013.

Canadian Community Health Survey. 2010. *Household Food Insecurity In Select Provinces and the Territories in 2009–2010.* http://www.hc-sc.gc.ca/fn-an/surveill/nutrition/commun/insecurit/prov_ter-eng.php. Accessed 22 Sep 2013.

Canadian Journal of Public Health. 2010. Supportive Environments for Learning (Supplement), vol. 101, No 8.

Carlsson, L., and P.L. Williams. 2008. New approaches to the health promoting school: Participation in sustainable food systems. *Journal of Hunger and Environmental Nutrition* 3 (4): 400–417.

Council of Canadian Academies. 2014. Aboriginal food security in Northern Canada: An assessment of the state of knowledge. Ottawa, ON: The Expert Panel on the State of Knowledge of Food Security in Northern Canada, Council of Canadian Academies.

Daschuk, J. 2013. *Clearing the plains: Disease, politics of starvation, and the loss of aboriginal life*. Regina: University of Regina Press.

Green, R., P.L. Williams, I. Blum, and C.S. Johnson. 2008. Can Canadian seniors on public pensions afford a nutritious diet? *Canadian Journal on Aging* 27 (1): 69–79.

Green-LaPierre, R.J., P.L. Willliams, T. Glanville, D. Norris, H.C. Hunter, and C. Watt. 2012. Learning from "knocks in life": Food insecurity among low-income lone senior women. *Journal of Aging Research*, 2012: 11, Article ID 450630. http://www.hindawi.com/journals/jar/2012/450630/. Accessed 1 Oct 2013.

Gucciardi, E., J.A. Vogt, M. DeMelo, and D.E. Stewart. 2009. Exploration of the relationship between household food insecurity and diabetes in Canada. *Diabetes Care* 32: 2218–2224.

Henderson, J. 2014. *Pictou County residents split on Northern Pulp mill: Province required the company to seek community feedback*. CBC News online, November 27.

Lyons, A.A., J. Park, and C.H. Nelson. 2008. Food insecurity and obesity: a comparison of self-reported and measured height and weight. *American Journal of Public Health* 98 (4): 751–757.

Mackenzie, C.A., A. Lockridge, and M. Keith. 2005. Declining sex ratio in a First Nation community. *Environ Health Perspectives* 113 (10): 1295–1298.

Mikkonen, J., and D. Raphael. 2010. *Social determinants of health: The Canadian facts*. Toronto: York University School of Health Policy and Management.

Mosby, I. 2013. Administering colonial science: Nutrition research and human biomedical experimentation in aboriginal communities and residential schools, 1942–1952. *Histoire sociale/ Social History* 46 (91): 145–172.

Mobley, C., T.A. Marshall, P. Milgrom, and S.E. Coldwell. 2009. The contribution of dietary factors to dental caries and disparities in caries. *Academic Pediatrics* 9 (6): 410–414.

Muirhead, V., C. Quiñonez, R. Figueiredo, and D. Locker. 2009. Oral health disparities and food insecurity in working poor Canadians. *Community Dentistry and Oral Epidemiology* 37 (4): 294–304.

Munro, J., B. Parker, and L. McIntyre. 2014. An intersectionality analysis of gender, indigeneity, and food insecurity among ultrapoor garo women. *International Journal of Indigenous Health* 10 (1): 68–82.

PhotoVoice. 2012. *About PhotoVoice.* http://www.photovoice.org/about/. Accessed 3 Oct 2013.

Power, E. 2007. *Food security for First Nations and Inuit in Canada: Background paper*. Health Canada: First Nations and Inuit Health Branch.

Sachs, C. 2013. Feminist food sovereignty: Crafting a new vision (Conference Paper #58). In *Food sovereignty: A critical dialogue.* International conference, September 14–15, Yale University 2013.

Seligman, H.K., A.B. Bindman, E. Vittinghoff, A.M. Kanaya, and M.B. Kushel. 2007. Food insecurity is associated with diabetes mellitus: Results from the National Health Examination and Nutrition Examination Survey (NHANES) 1999–2002. *Journal of General Internal Medicine* 22 (7): 1018–1023.

Seligman, H.K., B.A. Laraia, and M.B. Kushel. 2010. Food insecurity is associated with chronic disease among low-income NHANES participants. *The Journal of Nutrition* 140 (2): 304–310.

Sellers, P. 2014. Human and Ecological Health in Asubpeeschoseewagong Netum Anishinabek (Grassy Narrows First Nation). Report prepared for the ANA—Ontario Mercury Working Group. 61 p + appendices.

The Nova Scotia Participatory Food Costing Project. 2011, 2009, 2006, and 2002. Food costing Report. http://foodarc.ca/food-costing/resources-publications/. Accessed 1 Oct 2013.

Townsend, M.S., J. Peerson, B. Love, C. Achterberg, and S.P. Murphy. 2001. Food insecurity is positively related to overweight in women. *Journal of Nutrition* 131: 1738–1745.

Wang, C., and M. Burris. 1997. Photovoice: Concept, methodology, and use for participatory needs assessment. *Health Education Behavior.* 24: 369–387.

Williams, Patricia L., Lynn McIntyre, and N. Theresa Glanville. 2010. Milk insecurity: Accounts of a food insecurity phenomenon in Canada and its relation to public policy. *Journal of Hunger & Environmental Nutrition* 5(2):142–157.

Williams, P.L., M. Amero, B. Anderson, D. Gillis, R. Green-LaPierre, C.P. Johnson, and D.A. Reimer. 2012a. Participatory model for food costing in Nova Scotia: Sustainable community action for food security. *Canadian Journal of Dietetic Practice Research* 3 (4): 181–188.

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

Chapter 4
The US Experience in Planning for Community Food Systems: An Era of Advocacy, Awareness, and (Some) Learning

Samina Raja, Subhashni Raj and Bartholomew Roberts

Abstract The lack of public attention to community food systems is nowhere more apparent than in local and regional government policy and planning in the United States. More than 30,000 local governments in the United States are charged with ensuring provision of infrastructure and services to make communities livable. Yet given the neoliberal context within the United States, food has largely been absent from local government planning and policy agenda. Fortunately, public efforts to plan for stronger food systems—or food systems planning or community and regional food systems planning—are emerging. Drawing on experiences of local and regional governments in the United States, the chapter describes the extent to which local, regional, and metropolitan (LRM) governments are planning for stronger community food systems. Although a growing number of LRM are engaged in planning for community food systems, the engagement remains limited. Against a bleak national landscape, the chapter traces the trajectory of a planning process in the Buffalo Niagara metropolitan region that is beginning to address food systems through local government planning and policy. The chapter concludes with cautionary notes about the use of local and regional government planning in strengthening communities' food systems.

S. Raja (✉) · S. Raj
Food Systems Planning and Healthy Communities Lab., Department of Urban and Regional Planning, University at Buffalo, The State University of New York (SUNY), Buffalo, USA
e-mail: sraja@buffalo.edu

S. Raj
e-mail: subhashn@buffalo.edu

B. Roberts
University at Buffalo Regional Institute, Buffalo, USA
e-mail: bjr8@buffalo.edu

I. Knezevic et al. (eds.), *Nourishing Communities*,
DOI 10.1007/978-3-319-57000-6_4

Keywords Community food systems planning · Local government planning · Food inequities · Buffalo-Niagara region · Public policy

The lack of public attention to community food systems is nowhere more apparent than in local and regional government policy and planning in the United States. More than 30,000 local governments in the United States are charged with ensuring provision of infrastructure and services to make communities livable. Yet given the neoliberal context within the United States, food has largely been absent from local government planning and policy agenda. Fortunately, public efforts to plan for stronger food systems—or food systems planning or community and regional food systems planning—are emerging. Drawing on experiences of local and regional governments in the United States, the chapter describes the extent to which local, regional, and metropolitan (LRM) governments are planning for stronger community food systems. Although a growing number of LRM are engaged in planning for community food systems, the engagement remains limited. Against a bleak national landscape, the chapter traces the trajectory of a planning process in the Buffalo Niagara metropolitan region that is beginning to address food systems through local government planning and policy. The chapter concludes with cautionary notes about the use of local and regional government planning in strengthening communities' food systems.

Introduction

Planning to strengthen communities' food systems—known as community and regional food systems planning or simply food systems planning—is a nascent but growing field in the United States. In 2000, a now landmark article by planning scholars urged planners to recognize food as a vital part of planning (Pothukuchi and Kaufman 2000). At the time, concerns about communities' food systems were not a part of mainstream planning practice, although historical analyses suggest that, in fact, city builders were concerned about ensuring supply of food for urban dwellers (Donofrio 2007; Brinkley 2013; Vitiello and Brinkley 2013). Nonetheless, at the turn of the 21st century, mainstream planning practice was largely 'food blind' (Raja et al. 2008a; Raja et al. 2014b).

Concerted efforts by food advocates over the last 15 years have, however, led to a growing visibility of food systems within planning, especially as practiced by local and regional governments (Caton Campbell 2004; Soma and Wakefield 2011; Morgan 2009; Wekerle 2004; Raja et al. 2014a). Now, a great number of local and regional governments in the United States have created and adopted food systems plans (Hodgson 2012), a number of communities have established food policy councils (Hodgson 2012), and a number of academic programs in the US are training planners in this new sub-field (Greenstein et al. 2015). Food systems planning is no longer "a stranger to the planning field" in the United States.

In this chapter, following a brief review of why local government planners must engage in the food system, we draw on a national survey of local governments to describe the extent to which local and regional governments in the United States are engaging in food systems planning. To illustrate the *process* by which food emerges as a planning issue, we include a case study of the Buffalo-Niagara Region where, for the first time in the history of formal planning efforts in the region, an official sustainability plan was developed with explicit attention to the region's food system (2014).

The chapter argues that while the growing attention to local government planning for food systems in the last 15 years is laudable, advocates need to remain watchful about the extent and direction of local government engagement in food systems planning on four related fronts. First, food systems planning remains a specialized, rather than mainstream, planning preoccupation. Second, local governments' planning response to problems in the food systems is dominated by adoption of regulations rather than public investments in the food system (Raja et al., Under Preparation). Third, a great deal of planning and policy attention is devoted to *symptomatic* concerns—such as bringing food retail to so called 'food deserts'—rather than remedying the underlying *systemic* problems such as disconnects in the food system. Finally, planning responses to problems in the food system fail to squarely address concerns about economic, social, and racial inequities in the food system.

Place-Based and People-Based Inequities in the Food System

Decades of 'food blind' planning decisions and the acceptance of markets to determine allocation of food-related infrastructure and services has exacerbated place-based and people-based inequities in the food system. Currently 49 million Americans are reported to be food insecure, a signal that the conventional food systems, driven largely by market forces, are malfunctioning (Coleman-Jensen et al. 2014). Food insecurity is concentrated among particular places and among particular population groups. According to the Unites States Department of Agriculture (USDA), 29 million Americans do not have access to a full service food retail in their neighborhood[1] (Ver Ploeg et al. 2012). The disparity in supermarket/grocery store availability is more pronounced in lower income neighborhoods and communities of color in the United States (Raja et al. 2008; Zenk et al. 2009; Diao 2014). Poorer neighborhoods have fewer grocery choices and people have to pay more for food (Zenk et al. 2009; Smith et al. 2010; Raja et al. 2008).

[1]The definition supplied by the USDA measures food retail availability as having a full service food retail or supercenter within one mile of homes in an urban area or within 10 miles of homes in rural areas.

Geographic access is further impeded by the absence of a well-functioning transit service and/or lack of vehicle ownership (Hendrickson et al. 2006; Clifton 2004).

The quality of a poor food environment impacts people's access to healthful foods and is associated with poor health outcomes (Smith et al. 2010; Keita et al. 2009; Moore et al. 2008; Raja et al. 2010). A multi-city cohort study of American adults found that living in the worst-ranked food environment reduces the likelihood of having a healthy diet by 22–35% (Moore et al. 2008). Additionally the limited availability and access to healthy retail places health burdens on communities of color (Morland et al. 2002). Children living in disadvantaged neighborhoods have a poorer diet than children from resource-endowed neighborhoods (Keita et al. 2009). These inequities in the conventional food system call for transformative changes to realign class and power structures, leverage local farm-consumer connections and meet the food needs of limited resource communities.

Local Government Planners' Response to Failures in the Food System

As outlined in the previous section, and in other chapters in this book, the food system in North American communities is not working. In the US, the emergency food system—through its vast network of food banks and pantries—has provided an important safety net to address short-term hunger, especially in the face of waning public policy safety nets during the Reagan era (Poppendieck 1998, 1999; Caton Campbell 2004). However, thoughtful public policy, including at the local, regional, and metropolitan government levels, is required to alleviate structural and institutional impediments to long-term food security. LRM governments have both the public responsibility as well as the public authority to achieve more equitable, just, and economically stable local food systems (Morgan 2009; Caton Campbell 2004). Yet until about 15 years US local governments had minimal engagement in the food system (Pothukuchi and Kaufman 2000). This lack of local government involvement has been attributed to a lack of knowledge, resources, and political support in engaging in food issues (Clancy 2004; Raja et al. 2008a; Pothukuchi and Kaufman 2000). Local government planners' lack of engagement is also attributable to a neoliberal context where the food system is relegated to the purview of private market forces (Raja et al. 2008b).

Despite local governments' limited explicit attention to food system, their day-to-day operations have an imprint on communities' food systems. Food systems are affected by regulations that local governments craft and enforce; by official plans that serve as blueprints for present and future land development; and by capital investments in physical infrastructure such as roads and public markets (Pothukuchi 2004; Raja et al. 2008a; Soma and Wakefield 2011; Wells et al. 2010). Yet, segmentation of neoliberal bureaucracy and over-reliance on market forces to

plan for and distribute resources in the food systems continues to perpetuate inequities in the food system and reinforce fragmentation within the food system.

One example of local government policy and planning impact is evident in people's geographic access to food retail. In land use patterns observed across most of the United States, which are regulated in part by local government policy, grocery retail stores are often located far from residential neighborhoods, making food accessible only to those who have access to automobiles (Soma and Wakefield 2011; Pothukuchi and Kaufman 2000). Such land use patterns are especially problematic because low-income individuals often do not have access to vehicles, and public transit lines are rarely planned to meet food-related travel needs (Clifton 2004; Smith et al. 2010; Diao 2014). Other examples of LRM policy impact includes local government ordinances and bylaws that prohibit urban agriculture, limit operation of farmers markets in some neighborhoods, and hinder co-location of land uses that would allow bundling of food production and processing within a local food economy (Feenstra 1997; Wells et al. 2010; Pothukuchi and Kaufman 1999).

To be sure, the profession of planning also has the potential to strengthen a community's food system (Raja et al. 2008b; Pothukuchi and Kaufman 2000; Soma and Wakefield 2011; Caton Campbell 2004; Raja et al. In Progress).

And, instances of LRM governments' use of planning tools to strengthen the food systems appear to be growing (Neuner et al. 2011). Examples of LRM government support for community food system is evident in post-industrial cities such as Buffalo (NY), in financial centers such as New York (NY), and in technology hubs such as Seattle (WA) (Hodgson and Fodor 2015, 2016; Whitton et al. 2015).

A key planning tool available to LRM governments is the development and implementation of official plans to strengthen local food systems. Through official plans, communities articulate a shared future, detail the steps to reach this future, and dedicate resources required to enact these steps (Myers and Kitsuse 2000). Official plans vary in scope, purpose, and statutory power. A comprehensive plan, also called a master plan, offers the broadest articulation of a community's goals. These plans typically address a broad set of community concerns, including land use development, natural resources, housing, and transportation. In addition, communities also prepare stand-alone plans on these topics, often as complements to the comprehensive plans.

Quite a few LRM governments in the United States have prepared, and are in fact, implementing official plans to strengthen community food systems. We report the extent to which LRM governments are engaging in this effort by drawing on data from a national on-line survey, of the members of the American Planning Association, the largest professional association of practicing planners in the United States.[2] The survey, administered in 2014, asked a series of questions to gauge the degree to which LRM governments were engaged in using planning tools to

[2]The University at Buffalo developed the survey, and APA distributed it to all its members via an e-mail containing the weblink to the survey in 2014.

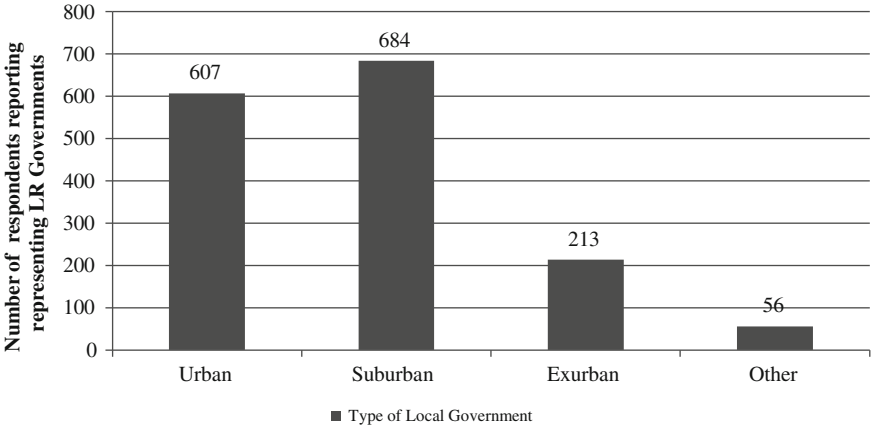

Fig. 4.1 Respondents represent varied types of jurisdictions

strengthen food systems. Of all survey recipients, 3,103 APA members responded to the survey, and of these 1,169 respondents reported working for local, regional, and/or metropolitan governments. We use this data extract, representing local, regional, and metropolitan governments in a variety of geographies ranging from urban, suburban, and exurban communities (see Fig. 4.1) for this section.[3] Survey respondents were asked to assess whether their jurisdictions are addressing food systems in their official plans, to identify the types of plans that addressed food, and the degree to which these plans strengthened their communities' food systems.

The results suggest that food system planning, although growing, is still in its infancy in the United States. Respondents frequently report that in official plans food is *not* mentioned at all, signaling the continuing food-blind approach among LRM governments in the United States. In the instances when respondents report that official plans do address food-related concerns, food appears to be most frequently addressed and *strengthened* in communities' comprehensive plans, followed by land use plans, agricultural and farmland protection plans, and sustainability plans, respectively (see Fig. 4.2). This pattern is not entirely surprising given that comprehensive plans are among the broadest in scope. In what appears to be a missed opportunity, few respondents report that food is being addressed in transportation plans, despite widespread concern about limited transportation access to food destinations in the United States, especially among low-income individuals. Moreover, respondents also point to transportation plans—and economic development plans—as the types of official plans that most often hinder communities' food systems (Fig. 4.2). In summary, broad trends from across the United States suggest that food systems planning remains far from being

[3]The total number of respondents on this graph is 1,560 (higher than the sample of 1,169) because respondents could represent multiple types of jurisdictions.

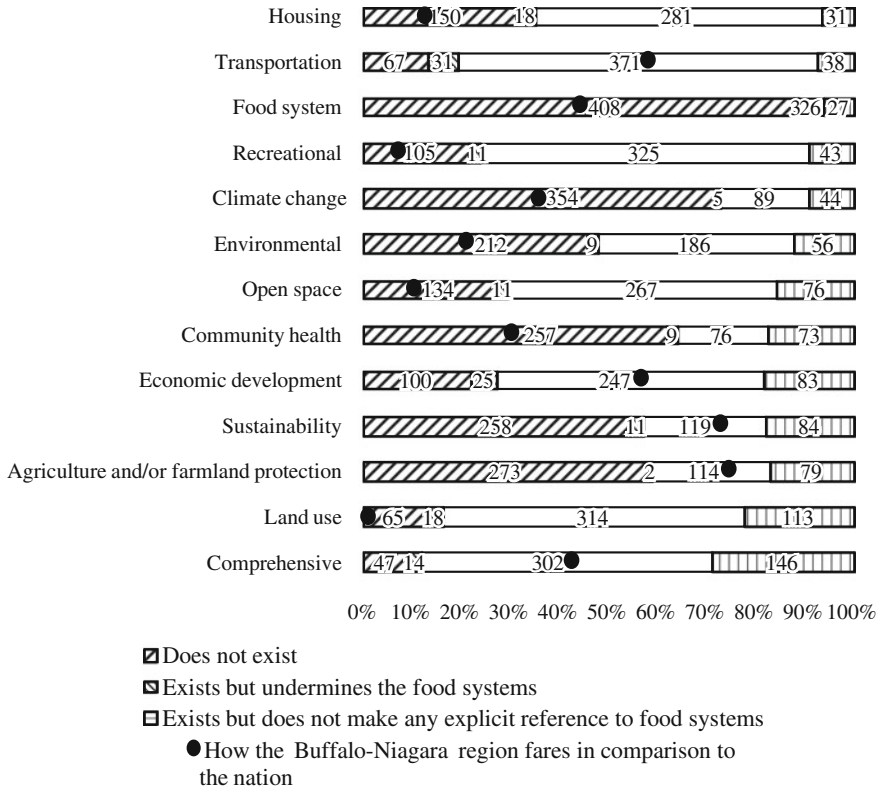

Fig. 4.2 Support for community food systems in official plans in the United States

mainstream planning practice. As a result, "food-blind" planning not only fails to offer communities pathways for food system transformation but also inadvertently impedes such transformation.

Moreover, while the innovative practices by (a handful) of local governments to address food through planning is welcome, the extent to which these plans have been implemented and resulted in more just food systems is unclear. Simply planning for food systems is not a guarantee for reducing inequities in the food system (Krumholz 2015; Passidomo 2013). For example, little attention has been paid to the intersection between racism and food injustices in food systems planning practice (Passidomo 2013). Ensuring just and equitable outcomes in the food system require planning that incorporates values of justice into the food system planning process (Krumholz 2015).

Case Study of Buffalo Niagara Metropolitan Region: Where Community-Led Practices Motivated Food Systems Planning

The Buffalo-Niagara metropolitan region in New York State has historically held a significant place in the US food system, and indeed in the world. The region, comprised of two counties—Erie and Niagara—and the post-industrial cities of Buffalo and Niagara Falls, was once a hub for transporting grain from the mid-western United States to the eastern seaboard via the Erie Canal (see Fig. 4.3). The 2,383 square mile bi-county region is home to about a million residents (Raja et al. 2014a). Although rich in natural resources, only 28% of the region's prime farmland is actively farmed, and 35% has been developed and sits under homes (Raja et al. 2014b). The pace of land development in the bi-county region has, in fact, outpaced population growth with little thought to protecting the food system for the residents (University at Buffalo Regional Institute 2014). Still, the food system—like in other parts of the world—is a lifeline in the region. Apart from the essential work of feeding people, the region's food system is a major economic driver, contributing 10.6% to the total GDP of the region, and generating $4.16 billion annually across all the sectors (Raja et al. 2014b).

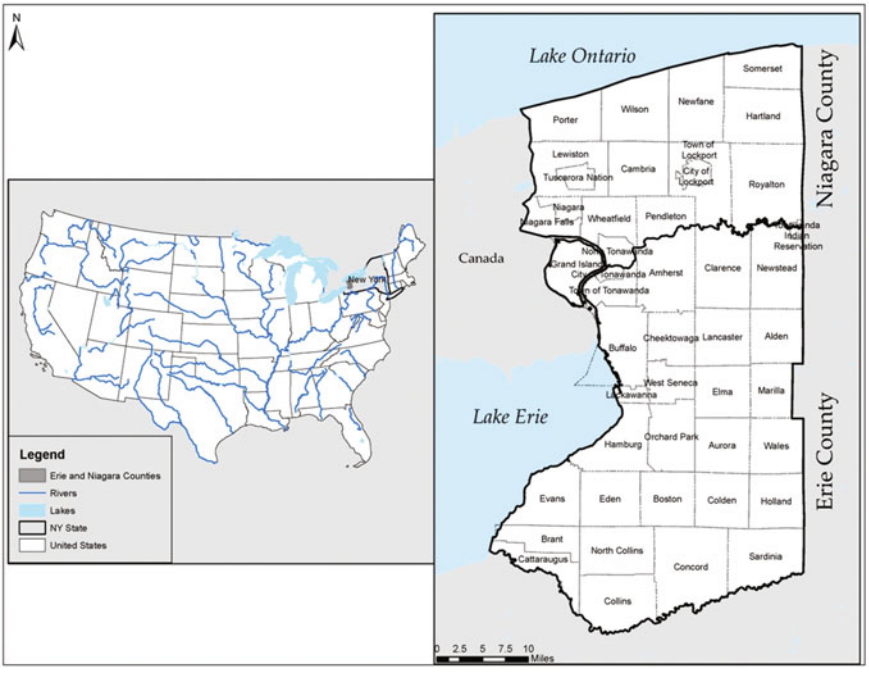

Fig. 4.3 Location of the Buffalo-Niagara region

Food insecurity and its determinants remain a challenge in the region. Fourteen percent of the population was reported to be living below the poverty line, with poverty concentrated among people of color, single parents, and children (Raja et al. 2014a). In 2010, the unemployment rate was about 8%, and the annual per capita income of $24,118 in the region is lower than that of the country (Raja et al. 2014b). Not surprisingly, about 12% of the region's households are enrolled in the Federal Supplemental Nutrition Assistance Program (SNAP), and many depend on emergency sources of food (Raja et al. 2014b). Recent assessments in the region suggest that 56,000 households (or, 12% of all households) who do not own a vehicle also live farther than walking distance[4] to a supermarket (Raja et al. 2014b). Conditions in particular neighborhoods, such as the predominantly African American neighborhoods on the east side of the City of Buffalo, are even worse.

Despite the challenges and opportunities in the region's food system, the local and regional agencies in the bi-county region paid limited attention to food as a public policy issue. In the late nineties and early 2000s, tired of limited public action, Buffalo residents and civic organizations began to organize and work to strengthen the food system—as well as address other community concerns such as lack of affordable housing in the city. This was the era of a quiet, grassroots-led resurgence in the city of Buffalo. Community gardens flourished, urban farms were established, and youth development programs focused on food emerged (Raja et al. 2014a). These civic actions were, at best, tolerated by the municipal and county governments, with little by way of systemic public policy support—although particular elected officials (council members) in whose neighborhoods this resurgence was unfolding, were supportive of the work of civic organizations.

Over the subsequent decade, many of the civic organizations, along with the local university (where the author is based), coalesced into the Healthy Kids, Healthy Communities-Buffalo coalition—to advocate for policy and systemic change to create a healthier environment in the city of Buffalo (Raja et al. 2014a). The coalition was supported initially through funding from national philanthropic organizations, but also received financial and in-kind support from local organizations. The coalition mounted a coordinated effort to address policy reform in support of community food systems. For example, in 2011 the coalition convened a public food policy summit, which was well attended by public officials as well as the broader public. Following advocacy by the coalition partners, in 2013 city of Buffalo and Erie county legislators passed a law to create a city-county food policy council. In part due to the advocacy of civic organizations and coalitions, food is now squarely a public policy in the city of Buffalo and surrounding region.

As a testament to this change in the public policy landscape, in 2011—when the federal Department of Housing and Urban Development awarded a grant to the region's transportation agency, the Niagara Frontier Transportation Authority, to develop a regional sustainability plan—the leaders of the planning process *chose* to

[4]0.4 miles or 650 m.

include food as a topic in the sustainability planning process. It is the first time in recent history that a formal publically-sponsored planning process has addressed food in the region.

Incorporating Food into the Sustainability Planning Process

The initiative to prepare a sustainability plan in the region, an effort locally labeled as One Region Forward, kicked off in 2012. The planning process, facilitated by the University at Buffalo's Regional Institute, involved extensive public engagement. Overall, the One Region Forward process touched about seven hundred local organizations, more than five thousand residents in the bi-county region, over a hundred subject matter experts and representatives from local governments, business leaders and employers. This engagement happened via a deliberative governance structure for the planning process that included a cross-sectional steering committee, a local government council, a private sector council, and five topical working teams comprised of community stakeholders. Notably, one of the working teams focused explicitly on food access and justice and included, among others, representatives from the agricultural sector, urban agriculture advocates, extension educators, and anti-hunger advocates.[5] The Food Access and Justice working group was responsible for drafting a vision and recommendations for the region's food system, while vetting and incorporating information from a technical food assessment into their deliberations.

To assist the Food Access and Justice working group, the University at Buffalo's Food Systems Planning and Healthy Communities Lab, the research lab of the chapter authors, was charged to prepare a technical assessment of the region's food system. The assessment, *Growing Together*, documents conditions in the region's food system, focusing especially on the two most underserved stakeholders: low income residents and the region's farmers. Low-income residents' have limited access to fresh and nutritious foods, especially in communities of color which were reported to have fewer supermarkets in comparison to predominantly white neighborhoods in Erie County (Raja et al. 2008). Concurrently, farmers in the region struggle to keep farms viable: on average the region has lost thirty-three farms per year since 1969, despite the region being rich in natural resources including prime farmland (University at Buffalo Regional Institute 2014). Because of these twin challenges, the technical assessment focused squarely on food insecure residents and farmers. The assessment includes analyses of the food access needs of residents, the potential of the region's farming sector to meet these needs, and an economic analysis of the region's food system. Drawing on these analyses, the deliberations of the Food Access and Justice Working Group, and ideas from

[5]The other working groups included land use and development, transportation and mobility, housing and neighborhoods, and climate change action.

communities across the nation, the assessment describes thirty-eight tentative ideas for strengthening the region's food system (Raja et al. 2014a). Information generated from the technical report was continually shared with the Food Access and Justice Working Group through brief presentations to inform their deliberations. Subsequently, the Food Access and Justice Working Group developed and prioritized a set of recommendations to strengthen the food system that were incorporated into the overall regional plan—*One Region Forward: A New Way to Plan for Buffalo Niagara* (2014). The *Growing Together* report serves as a technical assessment in support of the overall regional plan.

Progress and Challenges

The *One Region Forward* plan is but one example of how food policy and planning is emerging in the Buffalo Niagara region. A recent review of official plans suggests that food is increasingly being recognized as a public policy issue (see solid black dots in Fig. 4.2). The success of the '*One Region Forward'* sustainability plan and other food planning efforts in the region depends on an engaged and informed citizenry who wish to see the plan be successfully implemented. Being a region in a home rule state, Buffalo Niagara lacks a central decision-making authority to adopt the plan and oversee its implementation. Further, the political appetite to form such an organization did not exist. With this in mind, One Region Forward aimed its efforts toward building a plan, programs, and a range of tools that could empower and energize citizens and organizations to advance the principles of One Region Forward.

The primary vehicle for advancing that agenda is the One Region Forward Citizen Planning School, a program launched in 2014. The program held regular learning sessions bringing together citizens, community activists, academic experts (including authors of this chapter), and other area subject matter experts to participate in facilitated panel discussions on issues related to the plan, like land use, transportation, food access, and climate change. Free and open to all, the sessions attracted a wide range of individuals including block club leaders, nonprofit staff, concerned citizens, and local planning and zoning board members.

While the Citizen Planning School "teaches the plan" to about 100 citizens each year, a smaller cohort is recruited to participate in a hands-on leadership development track called "Champions for Change." Champions work over the duration of the Citizen Planning School semester to develop a plan for a small scale project in their community that advances the regional vision of One Region Forward. Prospective Champions must apply for consideration and are evaluated based on the applicability of their project idea, how they would contribute to the program's diversity goals, and the degree to which they are engaged with an organization(s) that can help implement their project.

Because food access is one of the five topical themes of One Region Forward, it has become a key organizing principle for the Citizen Planning School. Food is one

of the curricular topics covered in the learning sessions and each year applicants are selected that address food access issues in underserved and distressed neighborhoods. Examples include a project idea to bring a small grocery store to the city's northeast neighborhood and a shared commercial kitchen to serve food entrepreneurs on the city's East Side.

Over 2 years, the program trained more than 300 "Citizen Planners" and cultivated projects with 25 Champions for Change. The University at Buffalo's School of Architecture and Planning will continue to host the program and integrate food access issues for continued exploration, drawing on the expertise at the Food Systems Planning and Healthy Communities Lab. Food advocates will continue to be recruited from underserved neighborhoods and be trained on community-level planning skills and connected to organizations and individuals that can expand their capacity.

It is also plausible that the food-related ideas reported in the *Growing Together* document filter into existence through food system stakeholders, irrespective of whether or not the overall plan is adopted in the region. One potential stakeholder group that may be able to implement the plan is the newly formed Buffalo-Erie Food Policy Council. However, some challenges remain on this front. The Buffalo-Erie Food Policy Council came into existence *after* the One Region process had already launched. Although some members of the FPC served on the Food Access and Justice Working Group of One Region Forward regional planning process, several members of the FPC were relatively new to food work, and certainly new to the regional planning process. Moreover, the current Buffalo-Erie County FPC serves one county whereas the regional plan encompasses a bi-county area. The dissonance in scales and timing of planning efforts may impede the degree to which food actors will invest in the implementation of the plan. Ultimately, the implementation of Growing Together will depend on collaboration and synergies across diverse constituencies to repair fractures in the food system.

What Explains the Emergence of Food as a Public Policy Issue in Buffalo Niagara

Although food systems planning is still not mainstream planning practice, planners and leaders in particular communities are beginning to recognize the crucial role of food systems in a community. As an illustration, whereas only about 20% of respondents in the national survey of APA members reported that the sustainability plans prepared by their local/regional/metropolitan governments addressed food systems concerns the Buffalo Niagara region is squarely addressing food in its sustainability plan. What has enabled communities such as Buffalo Niagara to stand apart in the national landscape?

Although a number of explanations are plausible, a key among these is the strong presence of food-friendly coalitions that preceded the launch of the *One*

Region Forward process, including the Western New York Environmental Alliance (which includes a GROW group focused on agriculture) and the Healthy Kids, Healthy Communities-Buffalo Coalition. Although membership in these groups' ebbs, flows, and overlaps, food concerns continue to draw attention.

When the sustainability planning process was launched in 2011, many food stakeholders had *already* engaged in an extraordinary number of practices and programs to strengthen the region's food system (Raja et al. 2014b). Since the early 90s civic organizations had engaged in programmatic and advocacy work to address food inequities as well as other social justice concerns—high unemployment, youth development, distressed neighborhoods—that stymied the public sector for years. Also, in the mid-2000s the farm-to-table movement burgeoned in the region. The not-for-profit Farm-to-field network was established in 2008 to build connections among consumers and producers in an eight county region, including Erie and Niagara. The organization currently leads the effort to establish a food hub in Western New York. Both food justice organizations as well as farm-to-table organizations were engaged in the sustainability planning process. In other words, planning for food systems was preceded and informed by on-the-ground work of diverse food stakeholders in the region. The Buffalo Niagara experience clearly articulates the need for collaboration and coalitions as integral to driving transformative change in the food system.

Another key factor for the region's success is the presence of champions within and outside the government structures that help advocate for policy change. Within city government, council members have supported food policy formation through dedication of in-kind and monetary resources. One city councilmember's staff person, for example, shepherded the process to form the Buffalo-Erie Food Policy Council, served on the Food Access and Justice Steering Committee, and supports local organizations in their work to strengthen the local food system. Outside of local government, area universities, including the University at Buffalo, Buffalo State College, and a number of other smaller colleges, have faculty and students who engage in participatory research to support food policy work. Collectively, these champions are able to amplify the work of food organizations in the region.

Conclusion

Although the LRM governments in the United States are beginning to plan for food systems, food justice is far from emerging as a top public priority. As the national survey data reported in this paper reveals, food is being addressed in LRM plans in only a small number of communities. Where food systems planning is underway, the effort is largely the result of push from advocates from *outside* of LRM governments. Although planning/public policy *should* be driven by community aspirations for improvement in the food system, there is little evidence that LRM governments are actively paying attention to calls from communities. In Buffalo Niagara, too—a more open and responsive example than many jurisdictions in the

country—no governance structure existed for staff of city and county agencies to have systematic engagement with food system stakeholders prior to the creation of the Buffalo Erie Food Policy Council in 2013. We remain concerned that LRM governments in the United States are largely unaware of—or apathetic to—the good food work unfolding in their communities. Even in the Buffalo Niagara region, the impetus for addressing food in One Region Forward did not *directly* come from the LRM governments, but rather from the University at Buffalo Regional Institute, a university organization charged to facilitate the *One Region Forward* planning process, and its community partners. The magnitude and pace of LRM governments' engagement does not match the opportunities presented by the food movement in their backyards.

Finally, we are concerned that regulation—the exercise of state control over what food-related activities are allowed in their jurisdictions—is the predominant means by which US local governments engage in food systems reform (Raja et al. In Progress). A more productive approach would view food systems activities as critical to regional infrastructure, and invest in food infrastructure the way LRM governments invest in other infrastructure, such as transportation. Favoring regulation and control over other, more collaborative, community-led ways of strengthening food systems, described later in this book, is a missed opportunity that will dampen civic innovations in food systems.

References

Brinkley, Catherine. 2013. Avenues into food planning: A review of scholarly food system research. *International Planning Studies no.* 18 (2): 243–266.

Caton Campbell, Marcia. 2004. Building a common table: The role for planning in community food systems. *Journal of Planning Education and Research* 23 (4): 341–355. doi:10.1177/0739456x04264916.

Clancy, Kate. 2004. Potential contributions of planning to community food systems. *Journal of Planning Education and Research no.* 23 (4): 435–438.

Clifton, Kelly J. 2004. Mobility strategies and food shopping for low-income families a case study. *Journal of Planning Education and Research no.* 23 (4): 402–413.

Coleman-Jensen, Alisha, Christian Gregory, and Anita Singh. 2014. *Household Food Security in the United States in 2013*, vol. ERR-173. U.S. Department of Agriculture, Economic Research Service.

Diao, Mi. 2014. Are inner-city neighborhoods underserved? An empirical analysis of food markets in a US metropolitan area. *Journal of Planning Education and Research.* doi:10.1177/0739456X14562283.

Donofrio, Gregory Alexander. 2007. Feeding the city. *Gastronomica: The Journal of Food and Culture* 7 (4): 30–41.

Feenstra, G.W. 1997. Local food systems and sustainable communities. *American Journal of Alternative Agriculture* 12 (1): 28–36.

Greenstein, Rosalind, Amanda Jacobson, Meredith Coulson, and Alfonso Morales. 2015. Innovations in the pedagogy of food system planning. *Journal of Planning Education and Research*.

Hendrickson, Deja, Chery Smith, and Nicole Eikenberry. 2006. Fruit and vegetable access in four low-income food deserts communities in Minnesota. *Agriculture and Human Values* 23 (3): 371–383.

Hodgson, Kimberley. 2012. *Planning for food access and community-based food systems: A national scan and evaluation of local comprehensive and sustainability plans*. Chicago, IL: American Planning Association.

Hodgson, Kimberley, and Zsuzsi Fodor. 2015. Mayoral Leadership Sparks Lasting Food Systems Policy Change in Minneapolis, Minnesota. In *Exploring stories of innovation*, ed. by Kimberley Hodgson and Samina Raja, 3. Growing Food Connections Project.

Hodgson, Kimberley, and Zsuzsi Fodor. 2016. Philadelphia, Pennsylvania: A Mayor's office and health department lead the way in municipal food policymaking. In *Exploring Stories of Innovation*, ed. by Kimberley Hodgson and Samina Raja, 3. Growing Food Connections Project.

Keita, Akilah Dulin, Krista Casazza, Olivia Thomas, and Jose R. Fernandez. 2009. Neighborhood-level disadvantage is associated with reduced dietary quality in children. *Journal of the American Dietetic Association no.* 109 (9): 1612–1616.

Krumholz, Norman. 2015. An optimistic comment. *Journal of Planning Education and Research*. doi:10.1177/0739456X15582212.

Moore, Latetia V, Ana V Diez Roux, Jennifer A Nettleton, and David R Jacobs. 2008. Associations of the local food environment with diet quality—A comparison of assessments based on surveys and geographic information systems the multi-ethnic study of atherosclerosis. *American journal of epidemiology* 167 (8): 917–924.

Morgan, K. 2009. Feeding the city: The challenge of urban food planning. *International Planning Studies no.* 14 (4): 341–348.

Morland, Kimberly, Steve Wing, and Ana Diez Roux. 2002. The contextual effect of the local food environment on residents' diets: The atherosclerosis risk in communities study. *American journal of public health no.* 92 (11): 1761–1768.

Myers, Dowell, and Alicia Kitsuse. 2000. Constructing the future in planning: A survey of theories and tools. *Journal of Planning Education and Research no.* 19 (3): 221–231.

Neuner, Kailee, Sylvia Kelly, and Samina Raja. 2011. *Planning to eat: Innovative local government plans and policies to build healthy food systems in the United States*. Buffalo, NY: University at Buffalo, The State University of New York.

Passidomo, Catarina. 2013. Going "beyond food": Confronting structures of injustice in food systems research and praxis. *Journal of Agriculture, Food Systems and Community Development no.* 3 (4): 89–93.

Poppendieck, Janet. 1998. Want amid plenty: From hunger to inequality. *Monthly Review* 50 (3): 125.

Poppendieck, Janet. 1999. *Sweet charity?: Emergency food and the end of entitlement*. Penguin.

Pothukuchi, Kameshwari. 2004. Community food assessment a first step in planning for community food security. *Journal of Planning Education and Research no.* 23 (4): 356–377.

Pothukuchi, Kameshwari (Kami), and Jerome L. Kaufman. 2000. The food system: A stranger to the planning field. *Journal of the American Planning Association* 66 (2): 113–124.

Pothukuchi, K., and J.L. Kaufman. 1999. Placing the food system on the urban agenda: The role of municipal institutions in food systems planning. *Agriculture and Human Values* 66 (2): 122–124.

Raja, Samina, Branden Born, and Jessica Kozlowski Russell. 2008a. *A Planner's Guide to Community and Regional Food Planning: Transforming Food Environments, Building Healthy Communities*. vol. 54, *Planning Advisory Service*. Chicago, IL: American Planning Association.

Raja, Samina, Changxing Ma, and Pavan Yadav. 2008b. Beyond food deserts: Measuring and mapping racial disparities in neighborhood food environments. *Journal of Planning Education and Research* 27 (4): 469–482. doi:10.1177/0739456x08317461.

Raja, Samina, Li Yin, James Roemmich, Changxing Ma, Leonard Epstein, Pavan Yadav, and Alex Brian Ticoalu. 2010. Food environment, built environment, and women's BMI: Evidence from Erie County, New York. *Journal of Planning Education and Research no.* 29 (4): 444–460.

Raja, Samina, Jessica Hall, Travis Norton, Patrick Gooch, Subhashni Raj, Taylor Hawes, and Jennifer Whittaker. 2014a. Growing together: Ensuring healthy food, viable farms, and a properous Buffalo Niagara. In *Forward*, ed. One Region. Buffalo, NY: Food Systems Planning Healthy Communities Lab.

Raja, Samina, Diane Picard, Solhyon Baek, and Cristina Delgado. 2014b. Rustbelt radicalism: A decade of food systems planning in Buffalo, New York. *Journal of Agriculture, Food Systems, and Community Development* 4 (4).

Smith, Chery, Jamie Butterfass, and Rickelle Richards. 2010. Environment influences food access and resulting shopping and dietary behaviors among homeless Minnesotans living in food deserts. *Agriculture & Human Values no.* 27 (2): 141–161. doi:10.1007/s10460-009-9191-z.

Soma, T., and S. Wakefield. 2011. The emerging role of a food systems planner: Integrating food considerations into planning. *Journal of Agiculture, Food Systems, and Community Development* 2 (1): 53–64.

University at Buffalo Regional Institute, State University of New York at Buffalo, School of Architecture and Planning. 2014. One region forward: A new way to plan for Buffalo Niagara. Buffalo, NY: University at Buffalo Regional Institute.

Ver Ploeg, Michele, Vince Breneman, Paula Dutko, Ryan Williams, Samantha Snyder, Chris Dicken, and Phil Kaufman. 2012. Access to Affordable and Nutritious Food. *Economic Research Report* 143:1–39.

Vitiello, Domenic, and Catherine Brinkley. 2013. The hidden history of food system planning. *Journal of Planning History*. doi:10.1177/1538513213507541.

Wekerle, Gerda R. 2004. Food justice movements policy, planning, and networks. *Journal of Planning Education and Research no.* 23 (4): 378–386.

Wells, Nancy M, Gary W Evans, and Yizhao Yang. 2010. Environments and health: planning decisions as public-health decisions. *Journal of Architectural and Planning Research,* 124–143.

Whitton, Elizabeth, Jeanne Leccese, and Kimberley Hodgson. 2015. A food in all policies approach in a post-industrial city: Baltimore City, MD. In *Exploring stories of innovation*, ed. Kimberley Hodgson and Samina Raja, 3. Growing Food Connections Project.

Raja, Samina, Chunyuan Diao, Maryam Khojasteh, and Kimberley Hodgson. In Progress. Overregulation and underinvestment: Planners' response to challenges in agriculture and food systems.

Zenk, Shannon N., Laurie L. Lachance, Amy J. Schulz, Graciela Mentz, Srimathi Kannan, and William Ridella. 2009. Neighborhood retail food environment and fruit and vegetable intake in a multiethnic urban population. *American Journal of Health Promotion no.* 23 (4): 255–264.

Part II
Pathways to Transformation

In Part II, the chapters define in more concrete terms how this fracturing can be countered to offer pathways towards food system transformation. Chapter 6 provides an historical review and context for School Food Gardens and summarizes their current transformative potential through Canada-wide interviews with school garden leaders. Chapter 7 explores the potential of crowdfunding and crowdsourcing to build resilient local food initiatives in north-western Ontario. In Chap. 8, the Franklin Food Policy Audit provides an example of how community engagement through targeted tools can help address the "civic-political divide" as more and more Americans become civically engaged and fewer and fewer become politically engaged. The initiatives discussed in Chaps. 6–8 all offer pieces needed for a broad, integrated cultural shift that can facilitate change.

Chapters 9–11 offer examples of transformations in progress and conclude this book with insights into capacity building and the change this can create. Chapter 9 looks at an innovative solution to current and potential problems in supply management, as local food markets scale up in Southern Ontario. Chapter 10 tells the story of the Mexican Network of Local Organic Markets and its work to influence the national policy governing Mexico's organic sector. Part II concludes with a chapter on food network capacity building as a tool for transformation. This research investigates the increasing collaborations among alternative food initiatives (AFIs) occurring through provincial food networks in Canada. In this way, *Nourishing Communities* takes the reader from the urgent challenges and needs precipitated by the dominant food system through the creation of capacity to ultimate transformation.

Chapter 5
Can Community-Based Initiatives Address the Conundrum of Improving Household Food Access While Supporting Local Smallholder Farmer Livelihoods?

Peter Andrée, Patricia Ballamingie, Stephen Piazza and Scott Jarosiewicz

Abstract Community food security (CFS) is widely defined as "a situation in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance and social justice" (Hamm and Bellows 2003, 37). The CFS concept has also been widely adopted in Canada by community-based organizations, including public health units across Ontario, in their efforts to tackle household-level food insecurity while also supporting local efforts to (re)build sustainable agriculture. This chapter explores this conundrum at the heart of CFS: Can community-based initiatives help address household food insecurity *and* support fair livelihoods for local smallholder farmers? Our research shows that responding to both sets of needs through community-based initiatives is possible, and could be seen as an important step towards broader food system transformation based on a more cooperative approach to economic relations. However, the evidence also shows that these initiatives can prove challenging to organize and administer, and should not be seen as a substitute for income support provided by the state to the food insecure.

P. Andrée (✉)
Department of Political Science, Institute of Political Economy, Carleton University, Ottawa, Canada
e-mail: Peter.Andree@carleton.ca

S. Piazza · S. Jarosiewicz
Institute of Political Economy, Carleton University, Ottawa, Canada
e-mail: Steve.l.piazza@gmail.com

S. Jarosiewicz
e-mail: scott.jaro@gmail.com

P. Ballamingie
Department of Geography & Environmental Studies, Institute of Political Economy, Carleton University, Ottawa, Canada
e-mail: patricia_ballamingie@carleton.ca

I. Knezevic et al. (eds.), *Nourishing Communities*,
DOI 10.1007/978-3-319-57000-6_5

Keywords Community food security · Farmer livelihoods · Household food access · Eastern Ontario

Introduction

Proponents of local and sustainable food systems in North America seek to advance food access for all (Gross 2011; Hinrichs and Krener 2002), and many have adopted the concept of community food security (CFS) to guide them in these efforts (see Chaps. 3 and 5). CFS is widely defined as "a situation in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance and social justice" (Hamm and Bellows 2003, 37). The CFS movement emerged in the 1990s in the United States (Allen 1999), and the concept has also been widely adopted in Canada by community-based organizations, including public health units across Ontario, in their efforts to tackle household-level food insecurity while also supporting local efforts to (re)build sustainable agriculture. But how will we ensure that sustainable, locally-produced food is accessible to all, as the definition of CFS assumes? This chapter explores this conundrum at the heart of CFS: Can community-based initiatives help address household food insecurity *and* support fair livelihoods for local smallholder farmers?[1]

Our research shows that responding to both sets of needs through community-based initiatives is possible, and could be seen as an important step towards broader food system transformation based on a more cooperative approach to economic relations. However, the evidence also shows that these initiatives can prove challenging to organize and administer, and should not be seen as a substitute for income support provided by the state to the food insecure. One of the community health centre representatives we interviewed sums up our response to the question in this chapter's title: "I think it is possible to do both at once… I think that we need to do both, and I think that there [are] models existing… [through which] we can do both right away."

The conundrum we address in this chapter came to the fore through conversations with our community-based research collaborators in Eastern Ontario—for these purposes, the area of Ontario delineated to the south by the United States border, to the east by the Quebec border, and to the north by the Ottawa River/Québec border (see Fig. 5.1). Its western border runs roughly north from Port Hope and continues north until it intersects with the Ottawa River. This area includes significant urban and rural portions of the province, including: Ottawa, Kingston, Belleville, Pembroke, Peterborough, and Port Hope.

[1]In Eastern Ontario, most local sustainable agricultural production occurs on smallholder farms. Larger farms tend to be involved in commodity production for wider markets. While other regional forms of food production and harvesting (e.g. hunting, fishing) take place, we focus on efforts to build links with smallholder farmers.

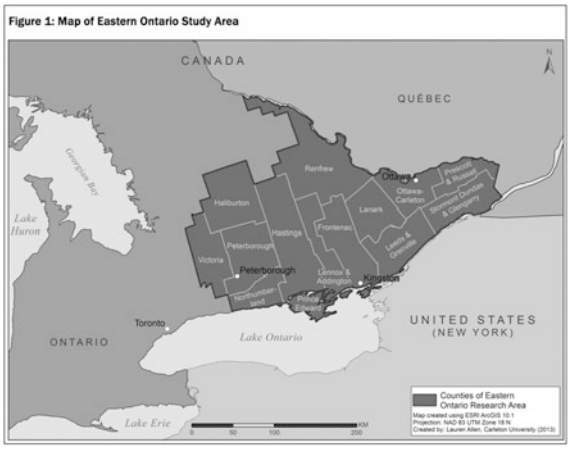

Fig. 5.1 Map showing the boundaries of Eastern Ontario for the purposes of this research (Created by Lauren Allen 2014)

Our Eastern Ontario collaborators include public health professionals, anti-poverty activists and farm organization representatives, among others. In the spirit of community-based research, our collaborators were involved in all aspects of this research, from positing the initial question, to showing us how they work on both of these issues together, and helping interpret results.[2]

Our research process began with a study of peer-reviewed literature and evaluations made by local, provincial/state, and national organizations—in the United States and Canada—of programs designed to directly link local smallholder farmers and low-income populations. Once we combed this literature to identify programs that have shown promise elsewhere, we turned to our regional context for a series of interviews. These were designed to gather details on whether and how community-based initiatives have adapted these models in Eastern Ontario, and the lessons learned. This regional approach identified specific relationships, choices, and place-based contingencies that enable instances of 'success.' This chapter is based on our literature review as well as a total of eighteen interviews with representatives of food access organizations and six interviews with farmers who sell food to some of them, undertaken between 2012 and 2014.[3]

Initial research showed us just how important developments in the United States have been to CFS work undertaken in Canada. As a bridging concept, CFS originated in the US, and specific programs developed there have been widely adapted in Canada, despite a markedly different political context. This chapter thus begins

[2]Thank you in particular to Louise Livingstone of Harvest Hastings, Sue Hubay and Carolyn Doris of the Peterborough County-City Health Unit, Carole Lavigne of the Eastern Ontario Agri-Food Network, Trissia McAllister of Northumberland County Economic Development and Moe Garahan of Just Food in Ottawa.

[3]Our focus excludes initiatives that increase access to local, sustainably-produced food in ways that do not contribute to farmer income, such as community gardening and post-harvest field gleaning activities.

with a brief overview of the historical and political background of CFS in the US. The section which follows outlines what we mean by 'success' in addressing food insecurity and farmers' income needs simultaneously. We then present three categories of programs that have proven successful in various parts of the US and look at their uptake in Canada. Our results and discussion sections analyze in more detail programs which fit the typology which emerged from the literature that we found in Eastern Ontario. The details provided by our interviewees allow us to identify some of the conditions under which direct links between producers of local, healthy and sustainably-grown food and consumers with insufficient income are being made in this specific regional context.

Community Food Security

The CFS movement emerged in the 1990s in the United States at the intersection of the efforts of those working to mitigate income-related food insecurity and proponents seeking to rebuild sustainable local food systems (Allen 1999). In response to the critique that food security initiatives only address hunger at the household level, the CFS framework presents a more comprehensive vision, based on a whole-system approach that attends to the ecological, social and economic dimensions of food systems—to re-build sustainable, place-based, local food systems (Anderson 2008; Anderson and Cook 1999; Feenstra 2002; Hamm and Bellows 2003). However, it is important to recognize that the CFS perspective, as summed up in the Hamm and Bellows (2003) definition (noted above), remains primarily aspirational. Whether all aspects of CFS can be achieved simultaneously, in the context of political and economic forces pulling in other directions, is neither asked nor addressed in the definition; the definition simply assumes that its collection of aims *can* be met together.

Why is the definition of CFS mainly aspirational? Notably, CFS was a politicized concept from the outset, gaining traction in the mid-1990s as a way of conceptualizing a range of household food security efforts that involved improving access to locally-produced foods. Specifically, in 1994, the Community Food Security Coalition sought to unite all of the "anti-hunger, small farm and sustainable agriculture, environmental, community development, farm labor, and health and nutrition forces" lobbying to influence the 1996 Farm Bill—aimed at supporting US agriculture—in an effort to present a "unified alternative food and agricultural message" (Gottlieb and Joshi 2010: 83). The concept of CFS, including the language of community self-sufficiency, held this coalition together as they brought new government funds to bear on a continuum of food-related issues, from farmer income to food insecurity. Although US policy-makers reduced funding for traditional federal food programs in the 1996 Farm Bill, they did establish a competitive grants program for community food projects, authorizing $16 million over 7 years (Allen 1999).

This history is important in the context of our research for two reasons. First, governments and community organizations in Canada modeled some of the initiatives for which the Coalition successfully secured funds. As an example, from 1996 onwards, various US Farm Bills funded programs that enabled Supplemental Nutrition Assistance Program (SNAP) beneficiaries to redeem their benefits (formerly known as "food stamps") at farmers' markets and farm stands across the US (Oberholtzer et al. 2012). The US Farmers' Market Nutrition Program (FMNP) is another federally-funded coupon program in the US designed to encourage access to fresh fruits and vegetables for low-income populations while also supporting farmer income (USDA 2014). While these programs have no national equivalent in Canada, they have inspired provincial and local programs that utilize similar mechanisms such as coupons.

Second, this history shows that CFS was adopted as an aspirational vision—a bridging concept[4] that held a coalition together. The CFS model *assumes* that community-based initiatives *can* succeed in addressing household food insecurity while also supporting fair livelihoods for local smallholder farmers, but whether this assumption is valid deserves careful study in specific contexts. Before we share the results of such research in Eastern Ontario, it is important to define 'smallholder farmers' as well as what we mean by 'supporting' fair livelihoods and 'improving' food security.

Definitions

The notion of 'smallholder farmer' varies around the world, depending on level of economic development and type of agro-ecological zone (Dixon et al. 2004). The Eastern Ontario farmers interviewed for this research operate farms from less than one hectare to roughly 59 ha, with annual sales (not incomes) of less than $100,000 CDN. As context, in 2011, the average Canadian farm area was roughly 315 ha (up from 242 ha. in 1991) and average farm receipts (including government subsidies) were over $240,000 CDN.[5] Smallholder farmers also appear to hold to specific shared values. Among the producers interviewed, all cited personal motivations for farming: connection to the earth; a lifestyle that affords time with family; and, cooperative aspects of farming and market gardening (relationships with customers, other farmers, suppliers, and co-workers/business partners). While these non-economic values may not only be held by smallholders, in an increasingly business- and export-oriented farming environment, the smallholder cohort we

[4]Following Baggio et al. (2015; Table 1), we define a bridging concept as "a concept that actively links field and stimulates dialogue.".

[5]Figures adapted from Statistics Canada CANSIM Tables 004-0001, 002-0001 and 004-0237.

interviewed clearly hold dear these values. They also employ relatively less capital-intensive approaches to farming and are more likely to sell directly to their customers through, for example, farmers' markets.

Determining a 'fair livelihood' for farmers in the Canadian context is challenging. There has been a farm income crisis since at least 1985, when net farm income was first reported as zero (NFU 2011a; Qualman 2011). While the price of food has risen gradually over the last 30 years, farmer incomes have not (NFU 2011b). Of the average farmers' income in 2011, 76% came from off-farm income, while government program supports and adjustments for capital costs (i.e. depreciation) represented another 22% (Statistics Canada 2014). Furthermore, the 'sustainable livelihoods' approach, that our choice of the term "livelihood" alludes to, considers market-based income (which increases financial capital) as just one of five types of 'capital' which people draw on in various ways to make a living. The other forms include human, natural, social, and physical capital (FAO n.d.; Scoones 1998) [NB Flora and Flora (2008) extend the notion of community capital to *also* include political, cultural and built capital.] We don't fully explore this broader set of capitals that successful farms depend on. Instead, we have chosen to deal with the question of a fair livelihood by deferring to the farmers as to whether selling to (or through) these programs makes sense in terms of their own financial (and/or other) goals. In other words, is selling food to (or through) these initiatives seen by the farmers involved as a component of a viable farm strategy? We fully recognize that this is a crude measure because farmers face significant challenges to earning a truly sustainable livelihood, and that such a livelihood depends on more than cash income.

Chapter 2 demonstrates that household-level food insecurity remains a significant issue, recently worsened in many parts of Eastern Ontario. In this evaluation, we primarily consider one of the five "A's" of food security: physical and economic accessibility [the others include availability, acceptability, adequacy and agency (Ryerson Centre for Studies in Food Security 2015)]. In other words, we narrow the question of whether a specific initiative or approach 'improves household food access' by asking whether it improves access to healthy foods, especially to fresh fruits and vegetables? Along with the organizers of community-based food initiatives, we recognize the many factors that limit accessibility at a household level, including the ability to build and mobilize community networks around the issue of food access (ActNow BC 2006) and the time and skills needed to work with fresh, local produce, among others. We do not explore those challenges here.

A Typology of Community-Based Initiatives

Our literature review identified three major categories of initiatives designed to link smallholder farmers and low-income consumers at the community level: farmers' market coupon programs; farm-fresh food access programs; and 'food bank innovations'. Here we summarize the key characteristics of each, including what we might learn from attempts to establish them in Canada.

Farmers' Market Coupon Programs

A number of charitable organizations work to increase the benefits of shopping at farmers' markets for low-income participants. In the US, these market incentive programs typically match Supplemental Nutrition Assistance Program (SNAP) benefits to a certain dollar value (e.g., $25) for each market day. For example, the Wholesome Wave Double Value Coupon Program (DVCP), now in 24 states and Washington D.C., matches the amount of federal nutrition benefits spent at farmers' markets to incentivize shopping (Wholesome Wave 2014). Evaluations of these programs show that both farmers and low-income coupon recipients benefit. For example, Oberholtzer et al. (2012a) reveal increased sales for small- to medium-sized farms (i.e., under $250,000 USD), while Oberholtzer et al. (2012b) conclude that fresh fruit and vegetable consumption increased during the market season and remained elevated for 2 months after.

The Farmers' Market Nutrition and Coupon Program (FMNCP) is an adaptation of these US programs in 47 communities across the Canadian province of British Columbia (BCAFM n.d.). Administered by the BC Association of Farmers' Markets, and funded largely by the provincial government, the program supports up to 50 families and up to 10 seniors per community (provided they enroll in cooking and skills building classes). It provides participating families with a minimum of $15 CDN and seniors with $10 CDN of coupons each week, which can be used as cash equivalents at the farmers' market. A 2013 evaluation of the program indicates that 92% of distributed coupons were redeemed, and that 90% of participants believe that the coupons make farmers' markets more accessible (BCAFM 2013). In 2013, 642 farms redeemed $359,559 CDN in coupons, while program participants were estimated to have spent an additional $100,000 CDN of their own money at those markets.

Fresh Food Access Programs

This category includes a variety of community-based programs intended to increase direct access to farm-fresh, locally-produced, foods in low-income neighbourhoods. Initiatives include locating farmers' markets, stands and/or mobile markets in low-income neighbourhoods.

Why does proximity matter? For coupon programs to increase access to fresh, nutritious, locally-produced foods, individuals living in low-income neighbourhoods must have physical access to farmers' markets. However, those living on low incomes often have inflexible work schedules and limited or no access to vehicle transportation. Further, grocery chains eschew low-income areas, creating food deserts (Markowitz 2010). As early as the 1980s, U.S. community organizers worked to mitigate this gap by encouraging farmers to set up stalls at markets in low-income neighbourhoods. One interesting model to arise for encouraging

farmers to sell in such neighbourhoods was developed in Pasadena, California. When the Villa Parke Pasadena Certified Farmers' Market opened in 1980 in a poor, predominantly African-American and Latino neighbourhood in Pasadena, organizers subsidized farmers' earnings by opening a partner farmers' market in the upscale Victory Park neighbourhood. They required farmers to sell at both markets, with the higher profit margins earned at one subsidizing prices at the other (Fisher 1999).

Neighbourhood produce stands and mobile markets also bring local food (especially fresh fruits and vegetables) into low-income communities. In Kitchener-Waterloo (in South-Western Ontario), two neighbourhood pilot projects were designed to bring locally-produced food to low-income areas: St. Mary's General Hospital and the Mill Courtland Community Centre. Proponents from a collaboration of municipal organizations, public health agencies, farmer associations and the City of Kitchener undertook these projects. The area public health agency served as lead, the Lyle S. Hallman Foundation made a notable contribution ($200,000 CDN), and community partners made various in-kind contributions. Unlike a market where farmers sell their own produce, the pilot markets bought produce from a nearby food co-operative and sold the food that same day, since there were no storage facilities on site (Miedema 2008).

A 2007 report on the pilots identified numerous obstacles to setting up the markets and sites (e.g., obtaining vendor licenses and re-zoning) (Miedema and Pigott 2007). The Courtland Community Market sold food at cost, while the St. Mary's General Hospital Market had a more affluent clientele and marked up prices by 10%. Both projects recovered costs during most weeks of operation, but required significant volunteer time to operate, and utilized coupon programs to increase sales, thereby raising questions about their long-term sustainability.

Food Bank Innovations

This final category involves a number of innovations adopted by food banks to step out of their traditional models in order to work directly with local farmers. For instance, the Bellingham Food Bank in Bellingham, Washington, operated a successful farm for 5 years before shutting it down to rely on a contract system. Their Food Bank Fresh program (funded by corporate donations) now contracts food production out to local farmers (who sell produce for 10% below wholesale price) (Ralayea 2012).

In Canada, Community Food Centres, an important emerging model built on the 30-year experience of The Stop in Toronto, completely re-envisions the traditional food bank. The Stop Community Food Centre brings together a food bank, urban agriculture, skills training, meal programs, community kitchens, perinatal and family support, farmers' markets, food policy advocacy, and more (Saul and Curtis 2013). The Stop Community Food Centre sees itself to be "at the forefront of dignified, innovative programs that provide access to healthy food; build skills,

health, hope, and community; and confront the underlying issues that lead to poverty and hunger."[6] Like the Bellingham Food Bank, Community Food Centres contract local farmers for much of the food they use in their programs, while also promoting smallholder farmers by running farmers' markets as well as festivals that promote local agriculture.

Results: The Eastern Ontario Experience

Our typology provided categories of initiatives to look for in Eastern Ontario, but we did not find examples of each type in action. For example, neither a province-wide farmers' market coupon program (as in BC), nor any examples of full-fledged farmers' markets in low-income neighbourhoods exist. This section focuses on what we did find, providing detail on good food markets, mobile market experiments, food box programs, and community food centres. Our interviews revealed important insights concerning the relationships emerging between food access programs and local farmers.

First, Ottawa's Good Food Markets represents one innovative program from Eastern Ontario. These pop-up non-profit markets, run by Ottawa's Poverty Hunger Working Group, are located in low-income neighbourhoods. This program buys from local farmers "when possible," according to one of the program leads. However, this interviewee explained: "it's been challenging, because we absolutely cannot sacrifice the affordability and low-cost side of it to bring in farmers that would be local and cost much more". As a result, their main source of fresh produce has become a national grocery store chain, which provides produce at cost. Notably, in addition to fresh produce, these markets offer dry goods (such as beans, nuts, rice, etc.).

Second, building on similar 'mobile market' efforts in the US and Toronto (e.g., FoodShare's Mobile and Good Food Markets[7]), Ottawa's MarketMobile, also run by the Poverty Hunger Working Group, sells food in low-income neighbourhoods on a modified bus provided by Ottawa's public transit authority. To date, this program has relied heavily on start-up funding and volunteer labour, thereby raising questions about long-term financial sustainability. However, its organizers recognize that the benefits of this program go far beyond access to healthy affordable food, and include building community, developing food skills, and facilitating better access to service providers for marginalized populations in the city.

The most common farm-fresh food access programs we found in Eastern Ontario are variations on the 'good food box' program originally developed by FoodShare in Toronto in 1994 (Laporte Potts 2013). Food box programs vary according to the

[6]See: http://thestop.org/about-us/about-the-stop/.

[7]FoodShare buys 50 percent of its produce from local farmers, paying them fair market rate. See: http://www.foodshare.net/good-food-markets.

organizations and communities involved. We focused on programs organized by community-based non-governmental organizations (NGOs), like the YWCA, as a kind of wholesale buying club. Food boxes are ordered and paid for by customers in advance, typically on a monthly or bi-weekly basis. Organizers buy produce at wholesale prices (from wholesalers and/or local farmers), which volunteers then distribute in reusable boxes to neighbourhood pickup points. Boxes often include recipes for new or unusual/unfamiliar items. Some programs choose to purchase directly from local smallholder farmers. In her 2013 study of twenty-one food box programs across Canada, Laporte Potts found that six always included food purchased directly from local farmers, and fourteen indicated that they routinely included locally-produced food in their boxes.

According to an environmental scan of Ontario food box programs, almost ninety percent rely on volunteer labour for packing and delivering boxes, as well as donated space (like a church basement) for packing days (CVCG 2011). Most programs also receive some funding from foundations, municipal governments, private donors, churches, or local charities to pay for administration. Such funding even allows some programs to provide an additional subsidy for some or all of the boxes they distribute. As a result, in Ottawa, for example, a box priced at $20 CDN offered an estimated retail value of $37 CDN (Community Health Centre representative interview). While programs primarily cater to low-income individuals, most make boxes available to anyone who wants to buy one to avoid stigmatizing customers (CVCG 2011). FoodShare, in Toronto, runs the largest food box program in Ontario, serving about 4000 households/month (CVCG 2011).

What did our research reveal about how these programs can buy locally, given that sometimes smallholder producers ask higher prices than wholesale channels? One organizer explains the cooperation required: "We always try to make it mutually beneficial for farmers. We always make sure they receive the price that they need to make it viable. But at the same time, they know that we have a certain finite budget that I have to meet every time I order."

Conversely, how do smallholder producers—who often otherwise rely on specialty markets that pay a premium price—make it work? Partly, food box program buyers prove less picky. One producer explains:

> [For me] it is almost impossible to get into a grocery store. If I wanted to sell green cucumbers… they would all have to meet a certain size, say 8 inches… But when you grow cucumbers, for every 100 you grow, you get 25 or maybe 30 that meet that standard. So, you're stuck with 60 or 70% that are not meeting that standard. Now… there's nothing [necessarily] wrong with [those standards], but there's nothing wrong with a 6 inch cucumber either.

Thus, the ability to sell "inglorious" fruits and vegetables to food access programs augments farm income, reduces food waste, and improves access to perfectly healthy food.

Another farmer interviewed grows a large quantity of organic garlic, for distribution through two main channels: the big bulbs go to high-end Toronto restaurants that are "happy to pay more" and the small bulbs go to the food box program that is

"looking for a better price break." The latter pays "a little bit less, but the small bulbs are actually better for them because there is more room in the boxes to fill them with variety." This farm sells 25% of their annual production through the food box program. However, smallholder producers who sell to these programs face a key challenge: they must provide unusually large orders (for their scale of business) on only one or two specific days of each month during the growing season and many lack the refrigerated storage capacity to fill orders of this size.

To overcome storage issues, at least one food box program plans their purchases with local producers for the following summer. Interviewees described this meeting as highly valuable: "I liked it because we get together in the winter time. Prices are set… Also, they'll phone me a week or so before the drop-off, and if I have a lot of one thing, I might be able to give them a deal on something… That usually happens once or twice a year… and it benefits us and it benefits them." Selling through the food box program represents an estimated 6–8% of this farmer's annual gross sales of $50,000–100,000 CDN.

Cooperation also occurs between producers. As one farmer explains, "… there is a bit of pressure to try and meet their deadlines to grow, but for… those programs there are backup growers as well. So, it's about cooperating with other producers. You talk about what you're good at growing, what you're bad at growing and who wants to grow what. You kind of divvy it up that way, and it really works well, I think. It's a super-awesome model! "Similarly, another producer relayed: "I've even had a couple of times where [the buyer's] been looking for some product, I've had it, but there's another farming group or couple that's just starting up into vegetable production. So, that sale for them is hugely important. So I've said… 'if you can buy it from so and so, buy it from them.'"

One potential glitch remains: Even with planning to predetermine price and quantity, NGOs depend on uncertain funding—a challenge perhaps unique to the non-profit sector. A producer explains: The NGO is "always waiting to find out about funding. So we can't count on them until we know for sure about their funding, especially for perishables. So the biggest farms are not going to get into this market because they have huge volumes. While for me, what [the organization] buys is a fair volume."

We must also recognize potential trade-offs. One organizer described buying half a bunch of organic chard, perceived by her to be more nutritious than conventional chard: "Let's say that you are a farmer and you are growing something using much more organic methods… What we might do in your case, instead of ordering a whole big bunch, we might order a half bunch… That way you're getting the price you need and we're also meeting our budget and we're… getting a good bunch of chard in the box." This example illustrates the trade-offs (such as quality over quantity) that are sometimes made to meet the twin goals of food access and farmer livelihood support in food box programs.

Like elsewhere in the United States and Canada, the food bank model is changing in Eastern Ontario. For example, the Ottawa Food Bank now has a permanent staff member who grows food locally with volunteer support and in

cooperation with local farmers.[8] The farmers involved in the Food Bank's Community Harvest program are neither paid for the "food bank crops" they help grow, nor do they receive rent for their land (Ottawa Food Bank 2015, p. 1). However, they do benefit directly through positive media exposure (which can radically boost sales of CSA shares according to one farmer interviewee), rental of equipment (tractor), purchase of seeding and irrigation equipment (which the farmer could use on other fields) and payment for the farmers' labour to support the initiative (Ottawa Food Bank interview).

There is also strong interest regionally in the Community Food Centre model in Eastern Ontario, including a pilot called The Table in Perth, a small town about 100 km from Ottawa. The Table strives "to increase access to healthy food in a manner that maintains dignity, builds community and challenges inequality." They operate a small Good Food Bank through a "grocery store" model to give people choice and selection. An organizer with The Table explains: "We're seriously at the edge on fresh food, including a selection of local food." They also serve community meals three times a week to between 60 and 90 people; build skills through innovative programming (such as "Dads in the Kitchen" and "Good Food for Healthy Babies"); maintain several large community gardens, a greenhouse, and two food forests; and work with "low-income communities to help them speak out on issues with local agencies on the services they need, to make a stand and march on."

When asked if sourcing food from local farmers proves more expensive, the organizer responds: "Of course, absolutely, but we're willing to pay the price because we think it's good for the community, and we think we're getting better food. We think it's better value." In 2013, The Table spent the bulk of their $15,000 CDN local food budget on meat and cheese—an amount they hoped to double in 2014. Their commitment clearly extends beyond program recipients to farmers: "We pay market value, that's our philosophy." The Table also uses outdoor fundraising events to further promote local farmers.

One of the main challenges faced by this Community Food Centre (and other food access programs that buy directly from local farmers) remains limited processing and storage capacity—lost in recent decades in rural Ontario. This begs the question: How and where would it be most appropriately rebuilt? This is where community food hubs might provide a missing link (see Chap. 11).

Community Food Centres also build skills to improve household-level food security by incorporating "collective kitchens." These programs encourage participants to prepare food together for their families. Fano et al. (2004) surveyed participants in the Calgary Health Region Collective Kitchen Program and found that while they entered the program for social interaction and support, their nutritional habits also improved. However, Tarasuk and Reynolds (1999: 11), reviewed

[8]Phil Mount and Emily French of Project Soil detail the Ottawa Food Bank's Community Harvest at the Black Family Farm: http://projectsoil.ca/project-overview/case-studies/black-farm-case-study/.

10 community kitchens, and cautioned: "in some cases, community kitchen participation may enhance coping skills and provide valuable social support. However, the programs have limited potential to resolve food security issues rooted in severe and chronic poverty because they do not alter households' economic circumstances in any substantial way." Community kitchens may thus serve a role in improving household food security for some and offering other benefits, but they hardly represent a panacea.

Discussion

We sought to examine initiatives that address the conundrum at the heart of community food security. Our results show some that make a difference, but temper expectations otherwise. At the community level, food box programs and Community Food Centres that choose to buy directly from smallholder producers appear especially promising at bridging the needs of farmers and low-income consumers.

But is this really a step towards food system transformation? One smallholder cautioned: "We have got to figure out these issues… but it cannot be on the backs of farmers." While we concur, our research reveals that farmers, as rational economic actors, can and do benefit. The fact that some farmers willingly sell their product to food access programs confirms the value of this strategy for them. Our research also reveals that producers derive other benefits from engaging with food access organizations. As one explains:

> I like doing it for the benefit of [others] … I'd rather give them deals than anybody else… I'd rather funnel [left-over] product [at the end of a market day] to organizations… that I know are helping under-privileged persons access quality food, than to the guy who pulls up to the farmers' market in a Mercedes and is looking for a dollar discount on corn.

A growing number of Eastern Ontario smallholder farmers, as elsewhere in the global north, connect with food access organizations because it allows them to realize personal commitments to their communities and to the environment. One farmer described this as: "not charity, but community-based cooperation: I like what they're doing—providing fresh food to families who otherwise might not buy it." A second producer stressed: "Accessibility to all is super, super important to me." Another further explained:

> We can't really afford to sell things at a lower price, and we want to value the food we produce. But I also have to make a living, so we try and do things like donate surplus to food banks, or we do some work shares on our farm… Also we do sell to the food box program which offers subsidized boxes, so it's not money out of our pockets that's helping, but it's a non-profit, so we can still get fair prices for our food, and people can receive food boxes at a subsidized rate… I think it's really important that local food is in those boxes. [But] I can't afford to necessarily give away that food or sell it at a reduced rate.

Our results show that these distribution channels do allow producers to realize, if only in part, their goals as citizens. This is a dimension of the growing phenomenon of the "citizen-farmer" (Andrée 2014). However, some within the farm community feel strongly that this must be voluntary: "As long as when they come together the farmer is not required to be a social service agency… They are… a business, just like every other business, and they are permitted to make personal decisions and sometimes that includes volunteer work that they might do. Somebody could be in the business of farming, and decide never to give away free food. You don't have to do that."

Next, do community-based food access initiatives truly have an impact on household-level food security? Tarasuk (2001) argues that their contribution represents a drop in the bucket because they generally fail to address the underlying problems of poverty and inequality. In their own analysis of initiatives that try to address the CFS conundrum, Guthman et al. (2006: 664) conclude: "Our findings show that while they can in some ways meet the twin goals, they are in no way a solution to the problem of food insecurity faced by low-income people, thereby casting doubt on the 'win-win' that has been taken up by the community food security movement." To truly address food insecurity in a meaningful way, structural change that addresses household income is urgently required as a first step. These limitations underscore the necessary role for the state to work in concert with community-based organizations, and government-funded programs for nutrition assistance (e.g., SNAP in the US) and farmers' market coupons are just a starting point.

For a deeper level of engagement, we look to Belo Horizonte, Brazil, where the Secretaria Municipal Adjunta de Abastecimento institutionalized food security as a state responsibility (and fundamental right of citizenship). Specifically, its Department of Promotion of Food Consumption and Nutrition is mandated to fight hunger and malnutrition, while the Department of Incentives to Basic Food Production aims to create direct links between food producers and consumers through initiatives like mobile farm stands (Rocha and Lessa 2009).

Canada currently has an opportunity to move in this direction as its government is in the process of developing its first national food policy/strategy as we write. We hope this policy effort will, at a minimum, include new measures to address household food insecurity, as a product of inadequate basic income guarantees, wage levels, and social security levels. We also hope it will have the vision to include a fund for transformative innovation to support community-level experiments of the type discussed in this chapter—innovations which seek to creatively bridge the interests of local farmers and low-income consumers. To date, inadequate governance (e.g., the lack of national policy) has only contributed to the market fragmentation seen elsewhere in this volume.

A few additional observations about such experiments are worth noting. First, our data shows that context matters. The connection between local farmers and low-income customers depends on specific conditions in each community (e.g., regional productive capacity and economic vitality). Second, infrastructure matters. Making the types of links discussed relies on community capacity for storage, refrigeration and transportation, whether provided by the private, public or

non-profit sectors, or some combination thereof. The presence of local food hubs for aggregation and distribution and/or cooperative storage facilities might help mitigate these challenges. Third, diversification of income streams matters. Producers interviewed generally do not rely on these types of initiatives for more than 25% of their sales (and usually much less). Most sell to a range of markets, including high-end markets that provide a higher margin of return. Finally, external funding and volunteers matter. Access to local food for low-income people often relies on third-party funding—to offset the price—and almost always relies on high levels of volunteer support. These observations further substantiate our point that these types of initiatives should be seen as supplementary to traditional forms of support for people living on low incomes, such as basic income guarantees and social assistance, and not as a replacement, at least not in the near term.

Conclusion

This chapter explored innovative ways to improve the physical and economic accessibility of local food for low-income people while also supporting farmer livelihoods—attempting to reconcile the interests of farmers and eaters. All of the examples given require extra-market financial support (e.g., start-up funding from the state, philanthropic foundations or some other source), charitable donations, subsidized sales, and volunteer labour. This requirement should not be underestimated in attempts to construct food access programs elsewhere. Notably, at the same time, many of these programs have community benefits, which extend well beyond the goals of improving food access and supporting fair farmer livelihoods, and represent a less fragmented and more holistic understanding of the market (i.e., more of a community economy approach).

This research provides insights into the path—or rather paths—to transformative social change (Levkoe 2011). It shows how a collective, collaborative response from seemingly unlikely partners can help to mitigate challenges generated by the dominant food system. For broader change to take effect, food access organizations must consider local and sustainable food production, and producers must consider equity. However, it may be unreasonable to expect these organizations and individuals to work equally on both fronts, all of the time, especially given the complex neoliberal terrain they must constantly negotiate (including income stratification, and resultant social segmentation and power imbalances). Indeed, our research speaks to the challenges of addressing the various aspects of sustainability simultaneously. We point to examples in which these groups *can* work together successfully when one another's needs and priorities are carefully understood, however, we also believe that the state (at all levels) must provide better resources and more supportive policy to make the bigger links.

Just as the ideals expressed in the CFS concept are aspirational, the initiatives discussed in this chapter can inspire. Our literature review shows that across the United States and Canada both producers and food access organizations have taken

conscious steps towards working together. Our Eastern Ontario research casts light on some of the specific contextual factors and choices that enable the relationships to succeed. Our work shows that producers engage not only out of a sense of altruism, personal responsibility and societal concern, but also for pragmatic and economically rational reasons. These actors have established mutually beneficial arrangements (e.g., exchanging less-than-perfect produce for a fair price). The net result is threefold: augmented farm income, reduced food waste, and improved food access for lower-income people. The bonds forged along the way embody a caring or community economy (Gibson-Graham 2006)—challenging neoliberal economic assumptions by manifesting more cooperative economic relations.

References

ActNow BC. 2006. Perspectives on community based food security projects: A discussion paper. Provincial Health Services Authority Imprint: Vancouver, BC.

Allen, Patricia. 1999. Reweaving the food security safety net: Mediating entitlement and entrepreneurship. *Agriculture and Human Values* 16 (2): 117–129.

Anderson, M.D. 2008. Rights-based food systems and the goals of food systems reform. *Agriculture and Human Values* 25 (4): 593–608.

Anderson, M.D., and J.T. Cook. 1999. *Agriculture and Human Values* 16 (2): 141–150.

Andrée, Peter. 2014. The new citizen-farmers: The challenges and possibilities of australia's emerging alternative agri-food networks. In *Globalization and food sovereignty: Global and local change in the new politics of food*, ed. Peter Andrée, Jeffrey Ayres, Michael J. Bosia, and Marie-Josée Massicotte, 141–172. Toronto: University of Toronto Press.

Baggio, J.A., K. Brown, and D. Hellebrandt. 2015. Boundary object or bridging concept? A citation network analysis of resilience. *Ecology and Society* 20 (2): 2. doi:10.5751/ES-07484-200202.

BCAFM (British Columbia Association of Farmers' Markets). 2013. Farmers market nutrition program: program results. https://bcafm.files.wordpress.com/2014/02/program-results-_-fmncp.pdf.

BCAFM (British Columbia Association of Farmers' Markets). n.d. Coupon program. http://www.bcfarmersmarket.org/coupon-program/about-program. Accessed 15 May 2015.

Community Voices Consulting Group (CVCG). 2011, Environmental scan report: The future of the good food box project. http://www.ohcc-ccso.ca/en/webfm_send/500.

Dixon, J., A. Tanyeri-Abur, and H. Wattenbach. 2004. Framework for analyzing impacts of globalization on smallholders. In *Smallholders, globalization and policy analysis*, ed. J. Dixon, K. Taniguchi, H. Wattenbach and A. Tanyeri-Abur. Food and Agriculture Organization, AGSF Occasional Paper 5. http://www.fao.org/docrep/007/y5784e/y5784e00.htm#Contents.

FAO (Food and Agriculture Organization). n.d. Sustainable livelihoods: Theoretical framework of the sustainable livelihoods approach. http://www.fao.org/ag/againfo/programmes/en/lead/alive_toolkit/pages/pageB_livelihoods.html.

Fano, T.J., S.M. Tyminski, and M.A. Flynn. 2004. Evaluation of a collective kitchens program: Using the population health promotion model. *Canadian Journal of Dietetic Practice and Research* 65 (2): 72–80.

Feenstra, G. 2002. *Agriculture and Human Values* 19 (2): 99–106.

Fisher, Andy. 1999. *Hot peppers and parking lot peaches: Evaluation farmers' markets in low income communities*. Venice, CA: Community Food Security Coalition.

Flora, Cornelia and Jan Flora. 2008. Community capitals framework. Department of Sociology, Iowa State University. http://www.soc.iastate.edu/staff/cflora/ncrcrd/capitals.html.

Gibson-Graham, J.K. 2006. *A post-capitalist politics*. Minneapolis: University of Minnesota Press.
Gottlieb, R., and A. Joshi. 2010. *Food Justice*. Cambridge, MA: MIT Press.
Gross, J. 2011. Constructing a community food economy. *Food and Foodways* 19 (3): 181–200.
Guthman, J., A.W. Morris, and P. Allen. 2006. Squaring farm security and food security in two types of alternative food institutions. *Rural Sociology* 71 (4): 662–684.
Hamm, M., and A. Bellows. 2003. Community food security and nutrition educators. *Journal of Nutrition Education and Behavior* 35 (1): 37–43.
Hinrichs, C., and K. Kremer. 2002. Social inclusion in a Midwest local food system project. *Journal of Poverty* 6: 65–90.
Laport Potts, S.L. 2013. Opening up the box: Exploring the scaling out of the good food box across Canada. Master's thesis, University of Montana. Missoula, Montana. http://foodshare.net/custom/uploads/2015/11/LaportePotts_Stephanie_Thesis.pdf.
Levkoe, C.Z. 2011. Towards a transformative food politics. *Local Environment: The International Journal of Justice and Sustainability* 16 (7): 687–705.
Markowitz, L. 2010. Expanding access and alternatives: Building farmers' markets in low-income communities. *Food and Foodways* 18 (1): 66–80.
Miedema, J.M. 2008. Neighborhood market imitative: Evaluation report. Waterloo Public Health. http://chd.region.waterloo.on.ca/en/clinicsClassesFairs/resources/NM_Evaluation.pdf.
Miedema, J.M., and K. Pigott. 2007. A healthy community food systems plan. Waterloo Public Heath. http://chd.region.waterloo.on.ca/en/researchResourcesPublications/.
NFU (National Farmers Union). 2011a. Farmers, the food chain and agriculture policies in Canada in relation to the right food. Submission to the Special Rapporteur On The Right To Food.
NFU (National Farmers Union). 2011b. The state of Canadian agriculture by the numbers. http://www.nfu.ca/sites/www.nfu.ca/files/farm_income_debt.pdf.
Oberholtzer, L., C. Dimitri, and G. Schumacher. 2012a. Linking farmers, healthy food and underserved consumers: Exploring the impact of nutrition incentive programs on farmers and farmers' markets. *Journal of Agriculture, Food Systems, and Community Development* 2 (4): 63–77.
Oberholtzer, L., C. Dimitri, and M. Zive. 2012. Double value coupon program diet and shopping behaviour study. Wholesome Wave. http://www.oecd.org/site/agrfcn/Double-Value-Coupon-Program-Diet-Shopping-Behavior-Study-.pdf.
Ottawa Food Bank. 2015. Community harvest. http://www.ottawafoodbank.ca/community-harvest/.
Qualman, Darrin. 2011. Advancing agriculture by destroying farms? The state of agriculture in Canada. In *Food sovereignty in Canada: Creating just and sustainable food systems*, ed. Hannah Wittman, Annette Aurélie Demarais and Nettie Wiebe, 20–42. Halifax and Winnipeg: Fernwood Publishing.
Relayea, Kie. 2012. Bellingham food bank shuts down its farm, shift to paying local farmers to grow produce. *The Bellingham Harold* http://www.bellinghamherald.com/2012/12/05/2792400/bellingham-food-bank-shuts-down.html.
Rocha, Cecilia, and Iara Lessa. 2009. Urban governance for food security: The alternative food system in Belo Horizonte, Brazil. *International Planning Studies* 14 (4): 389–400.
Ryerson Centre for Studies in Food Security. 2015. The Five A's of food security. http://www.ryerson.ca/foodsecurity/our-approach.html. Accessed 3 Aug 2015.
Saul, N., and A. Curtis. 2013. *The stop: How the fight for good food transformed a community and inspired a movement*. Toronto, ON: Random House.
Scoones, Ian. 1998. Sustainable rural livelihoods: A framework for analysis. IDS Working Paper 72. https://www.staff.ncl.ac.uk/david.harvey/AEF806/Sconnes1998.pdf.
Statistics Canada. 2014. Farm families, average total income, by province. Summary Table for CANSIM Table 002-0024. http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/agri119a-eng.htm. Accessed 15 Jan.
Tarasuk, Val. 2001. Critical examination of community-based responses to household food insecurity in Canada. *Health Education & Behavior* 28 (4): 487–499.

Tarasuk, V., and R. Reynolds. 1999. A qualitative study of community kitchens as a response to income-related food insecurity. *Canadian Journal of Dietetic Practice and Research* 60 (1): 11–16.

USDA (United States Department of Agriculture). 2014. WIC farmers' market nutrition program. http://www.fns.usda.gov/sites/default/files/wic/WICFMNPFactSheet.pdf. Accessed 13 Aug 2015.

Wholesome Wave. 2014. Double value coupon program. http://www.wholesomewave.org/wp-content/uploads/2014/07/2014_double_value_coupon_program.pdf. Accessed 13 Aug 2015.

Chapter 6
Nourishing Learning Environments: School Food Gardens and Sustainable Food Systems

Elizabeth Nowatschin, Karen Landman and Erin Nelson

Abstract School Food Gardens are experiencing resurgence across North America and Europe. Through a review of the literature, we outline various iterations of school garden movements and present some of their philosophical and theoretical underpinnings. There have been inter-related and overlapping motivations for the establishment of these gardens over the past 120 years. With an understanding of these motivations, we conducted Canada-wide interviews with 18 school garden leaders. Analysis and synthesis of the results confirm that these school gardens use food as a connecting theme to provide community building and engagement, social development, curriculum and learning opportunities, a sense of place and connection to the environment, increased food literacy and health, and an effective link to local food and sustainable agriculture.

Keywords Food gardens · Food literacy · Sustainable agriculture · Community engagement

This chapter is the result of a perceived need and, as outlined in the Preface, "the pursuit of practical solutions to issues of pressing concern to people" (Reason and Bradbury 2001, 1). The Landscape Architecture programs at the University of Guelph are contacted frequently by schoolteachers and parents for help in designing school gardens; these gardens are considered to be, by schoolteachers and parents alike, places for learning and for teaching diverse curricula. Food plants are always seen as an important element, with various reasons offered as to why this should be

E. Nowatschin · E. Nelson
University of Guelph, Guelph, Canada
e-mail: enowatsc@alumni.uoguelph.ca

E. Nelson
e-mail: enelson@uoguelph.ca

K. Landman (✉)
School of Environmental Design & Rural Development, Landscape Architecture Rm 105, University of Guelph, Guelph, ON N1G 2W1, Canada
e-mail: klandman@uoguelph.ca

I. Knezevic et al. (eds.), *Nourishing Communities*,
DOI 10.1007/978-3-319-57000-6_6

so. Landscape Architecture at the University of Guelph has a long history of community outreach, fitting well with the Nourishing Communities research team's efforts to generate research questions that produce knowledge for the benefit of partner communities. With the interest in the creation of school food gardens (SFGs), we asked ourselves: How can landscape architects contribute to the school gardens movement, and aid in the development of SFGs? For this research, we set out to create site-design guidelines for multipurpose, inclusive, community-engaged SFGs that meet the needs of the primary users as well as the greater community. Our objectives were to understand the current motivations behind the implementation and use of SFGs, drawing from the literature and from 18 interviews with key informants who are leaders in SFGs across Canada. In this chapter, we provide a historical context to school gardens in Canada and outline motivations for creating and sustaining them as revealed in recent literature and through our key informant interviews. The resulting site-design guidelines are not included in this chapter but are available on the Nourishing Communities website: http://nourishingontario.ca/blog/2015/01/28/designing-educational-food-landscapes-guidelines-for-schools/.

The Historical Context for Canadian School Gardens and Garden-Based Learning

SFGs are currently gaining in popularity here in Canada but they are not a new phenomenon. A long history of garden-based learning in Europe and the United States has influenced and shaped Canadian SFGs; the reverse is also true. In this section, we outline the historical context for the development of SFGs in Canada, describe various iterations of school garden movements and present some of the philosophical and theoretical underpinnings of those movements.

Current education theory linked to school gardening includes experiential learning, multiple intelligence theory, and integrated curriculum; however, there has been a long tradition of valuing gardening in the history of educational ideas (Bowker and Tearle 2007; Desmond et al. 2004). This is evident in the writings of several theorists and philosophers of education who supported gardening as an educational tool and observed their ideas at work in practical situations with children in schools (Marturano 1999).

Early School Garden Movement

Emerging from multiple and often discordant ideologies, SFGs at the turn of the last century used diverse methods of landscaping, gardening, and education to teach children about nature, green the industrial city, reduce juvenile delinquency, grow vegetables and flowers for sale and local consumption, and instil the ethics of hard

work and patriotism (Trelstad 1997). In Europe, SFGs were implemented in Germany as early as 1814. In 1839, German educator, Friedrich Fröbel (1782–1852) coined the term 'kindergarten' to describe his preschool education program that used gardens for learning and as a living metaphor for his educational philosophy (Herrington 1998). From 1869 to 1880, school gardening spread across Europe, with gardening and agriculture curricula increasingly available and sometimes mandatory. Simultaneously, Fröbel's kindergarten concept gained ground in Europe and North America (Greene 1910; Lawson 2005). Inspired by the nature study movement and educational reformers, North American educators began adopting ideas from Europe to make learning more interactive (Kohlstedt 2008; Lawson 2005; Trelstad 1997). Simultaneously, rural families, concerned that their children were not receiving enough practical or relevant instruction in school, wanted more focus on agriculture and the appreciation and understanding of nature. These concerns led to the development of 4-H—a youth-focused organization that continues to operate today—with members participating in projects that are mutually educational and relevant to their everyday lives (Enfield 2001). While rural students often had ready access to nature, SFGs in cities were a means of providing this access for urban-based children (Trelstad 1997).

The nature study, progressive education and social reform movements were all instrumental in the school gardening movement of the early twentieth century. Children's gardening programs had existed before this, but were individual and locally focused rather than part of a concerted national effort to promote gardening as part of public school education (Lawson 2005). Writing frequently on the subject of SFGs, the American philosopher and educational reformer John Dewey (1859–1952) proposed connecting academic and practical elements by blurring the boundaries between a student's classroom learning and contact with the natural environment (Dewey 1900). Also believing in the potential of gardens in fostering an appreciation of nature, and to play a role in developing patience, increasing responsibility, and enhancing moral education, the Italian educator Maria Montessori (1870–1952) was one of the first to recognize that children are experiential learners (Alexander et al. 1995).

While the nature study movement had been about education, the progressive reform movement was about social engineering. Progressive reformers expanded American school gardening into a nation-wide program, targeting social aims such as city beautification, reduction of juvenile delinquency, improved public health and nutrition, Americanization of immigrant children, and the creation of hard-working citizens (Trelstad 1997). A key moment in the development of this movement was the opening of The Children's School Farm in New York City in 1902. Run by teacher, reformer and philanthropist Fannie Griscom Parsons until 1931, the Farm was a means to teach important values that were believed to increase a child's potential for success and happiness in urban society and to help them become good citizens (Warsh 2011).

Originally concentrated in rural schools, the waning use of Canadian SFGs in the late 1800s was addressed by the Macdonald movement with gardens being re-established in the eastern provinces (Greene 1910; Lawson 2005). The

Macdonald schools and teacher training institutes, with financial support from philanthropist Sir William Macdonald (1831–1917), targeted the teaching of scientific agriculture and domestic science, and were often referenced by American school garden promoters of the time to further their cause (Lawson 2005). Evidence of a Canadian school gardening movement in the early twentieth century is also demonstrated in government pamphlets such as *The School Garden: As Regarded and Carried on in the Different Provinces,* published by the Canadian Department of Agriculture in 1916.

Early twentieth century North American SFGs were versatile, serving to meet a wide range of educational aims, including but not limited to the study of science, promoting an appreciation of nature, providing practical agricultural training, and developing civic pride (Gunston and Hawks 1922; Kohlstedt 2008). Education was seen to contribute to the development of good citizens: "The moral influence of a properly conducted school garden cannot be estimated too highly" (David C. Jones in Osborne 2000, 11). The movement had a broad base of supporters which included teachers, government agencies, institutions, gardening clubs, social reformers and civic groups, who used gardens to address an equally broad spectrum of educational, social, moral, recreational, and environmental agendas (Lawson 2005). However, schooling was also seen as a potential instrument of emancipation by the political left; "hegemony is as much a process of negotiation as it is of imposition" (Osborne 2000, 9).

The War Years

The American school gardening movement peaked and changed significantly, during WWI, with the formation of the U.S. School Garden Army (USSGA). Organized by the Bureau of Education and funded by the War Department, the USSGA was a national program that encouraged local production and consumption (Hayden-Smith 2007; Lawson 2005). As newly enlisted soldiers of the soil, American children were considered valuable contributors to the wartime food production campaign. In addition to increasing food production and food availability, the USSGA contributed to achieving educational goals of the time, such as training children in thrift, industry, patriotism and responsibility. War gardening efforts were to instil a traditional 'producer' ethic in urban populations who were increasingly removed from the food system due to the onset of mass culture and consumerism (Hayden-Smith 2007). By the time the Armistice was signed in 1918, several million American youth were enlisted in the USSGA, and twenty-one states required agriculture and domestic arts instruction in rural schools. The program was discontinued after the war.

During WWII, school gardening in the U.S. experienced another peak; children were once again encouraged to garden for the war effort (Lawson 2005). Unlike during the previous war, there was no organized school garden army; however, the Office of Education did encourage school victory gardens and gardening for the

school-lunch program (Lawson 2005). Canadian children were also encouraged to participate in victory gardens either at home or through their school or church (Mosby 2014). As labour shortages affected production, U.S. urban youth were recruited as Victory Farm Volunteers to assist on farms during summer holidays. In Canada, the province of Ontario organized a Farm Service Force that mobilized youth to assist farmers (Coke 1943; Lawson 2005).

Decline in Popularity Post-world Wars (1945–1980s)

While a small contingent of schools continued to offer gardening programs, school gardening declined following WWII. Two of the most notable programs that persisted were the Cleveland School Garden Program that ran from 1904 to 1978, and the Brooklyn Botanical Garden's children's garden program that has been running since 1914 (Lawson 2005; Mader 2010). A handful of new initiatives emerged from the counter-culture, environmental, and community garden movements of the 1960s, 70s and 80s, helping to lay the foundation for the resurgence of school gardening as a national movement in the 1990s (Desmond et al. 2004; Lawson 2005).

Resurgence of School Gardens

As with the movement of the late 19th and early 20th centuries, the current school garden movement is national and international in scope, reflecting a rebirth of progressive education and a growing interest in the educational opportunities of garden-based learning (Bowker and Tearle 2007; Desmond et al. 2004). California has led this resurgence, establishing over 3000 SFGs in the state; this growth was facilitated in part by the Garden in Every School program, which followed the enactment of school legislation bills promoting instructional gardens in 1995 (CDE 2013).

Current critique of the school food garden movement cautions that SFGs, as part of agri-food activisim, may contribute to neoliberalization (Guthman 2008; Pudup 2008). These scholars argue that the issues of 'choice' and 'localism' mute the transformative potential of SFGs. Guthman (2008) argues that agri-food activism's concerns with "knowing where your food comes from" and "making choices" is problematic in that responsibility for healthy food is devolved to individual consumers and indicates a potential failure of the state to act on behalf of its citizens. Localism, while being "assumed to be the place of caring" can also be "a turn away from the state" (Guthman 2008, 1177). Pudup (2008) offers critical analysis of the famous Edible School Yard (ESY) at Martin Luther King School in Berkeley, which is associated with the famous chef, Alice Waters. Pudup observes that the ESY makes claims for being resistant, but finds instead that it is emphasizing a certain hegemonic ideology and "cultivating specific kinds of citizen subjects" (1238).

Hayes-Conroy (2010, 66), however, in her analysis of 2 SFGs, one also in Berkeley and one in Nova Scotia, focuses not on what SFGs "might represent or mean as instruments of alternative food activism, but rather what they do—or what they are capable of doing." She argues that other scholars have found little evidence supporting a concern for neoliberalization, and cautions against the simplification of food practice "down to any ideological or intellectual claim" (76). "[W]e can easily make room for multiple explanations" (92), she states, and calls on an insistence and promotion for the potential of SFGs "to be ever more resistant to neoliberalization" (92). Our interest in developing design guidelines was to assist teachers, parents and students in creating SFGs *to do what they wish them to do, and what they are capable of doing*.

Current Motivations for School Food Gardens

Based on a review of garden-based education over the last two centuries, we set out to understand the current motivations for the creation of SFGs in Canada through the use of the academic and grey literature from the last three decades, and interviews with school garden leaders across Canada. Of the 18 key informants (coded in this chapter as KIA-KIR), seven are project-lead teachers, six are involved through a non-profit organization partnering with a school, four are garden educators/facilitators who partnered with a school through a non-profit organization to deliver programming, and one is a community volunteer who assists with construction and design. These KIs are from five provinces across Canada and represent both public and private schools, working with both primary and secondary students located in municipalities that range from under 1,000 to over 1,000,000 residents.

Our research revealed six inter-related and overlapping motivations for SFGs: community building and engagement; social development; curriculum and learning; environmental education; food literacy and health; and local food and sustainable agriculture linkages. As a site for social and community development, SFGs can enhance the social value of schoolyards and promote engagement within the school and beyond to the broader community. In supporting the curriculum, SFGs have been shown to boost academic achievement, provide hands-on and applied learning opportunities, and enhance the pedagogical value of schoolyards. As part of environmental education, SFGs can help instil a connection to nature and an environmental stewardship ethic, and enhance the ecological value of schoolyards. As a public health initiative, SFGs can increase healthy lifestyles, food literacy and nutrition education. With the rise of the local food movement, SFGs are also considered to be sites for producing food, teaching sustainable agriculture, and delivering food systems education.

Motivation 1: Community Building and Engagement

Because everyone needs to eat, has a connection to food and can relate to others through food, Harvey (2011) describes food as the great connector, bringing people together over growing, cooking and eating food. He argues that food-based social-capital-building is an opportunity to improve public space by using food as an engagement tool (see also Chaps. 7 and 11 for commentary on food and social capital). This opportunity easily transfers to SFGs that envision community engagement as a means of improving place-based social capital.

Most North Americans define community in terms of specific relationships with family, friends and co-workers, illustrating a deficiency of community connection and breakdown of social ties that form social capital, the consequence being a community without location (Boyes-Watson 2005; Coleman 1988; McCold and Wachtel 1998; Putnam 2001). The lack of place-based community social capital is a common characteristic of modern life; personal connectedness among people who live near to one another is taken for granted or nonexistent (Boyes-Watson 2005). This results in neighbourhoods losing a vital asset, which in turn can diminish public safety on streets, the quality of shared spaces, or place-based activities, such as neighbours lending one another a hand. SFGs with a community focus lend themselves to addressing this loss because they contribute to place-based affiliation, creating a venue for community gathering and engagement in neighbourhoods that are lacking other kinds of neutral ground. They may also help to build strong communities by improving attitudes toward the neighbourhood they serve. For example, Armstrong (2000) associates the presence of a community garden in a neighbourhood to the improved attitudes of residents toward their neighbourhood in 51% of the 63 New York state gardens studied.

As well as the expected benefits of physical exercise and having fresh food, community garden members in a study by Kingsley and Townsend (2006) identified benefits such as increased social cohesion, social support, and social connections through the development of social bonds and networks. SFGs, as part of the school and broader community, can act as a tool and a venue for grounding people in a common purpose, either to improve the schoolyard and the curricula, campaign for funds, buy plants and tools, build facilities such as a bake oven, or rally volunteers to help plant, weed, and harvest. Whatever the ultimate goal, food —and particularly the growing of food—is an effective tool of engagement.

For our key informants, the success of many SFGs relied heavily on community participation and engagement. Gardens provided a physical space for community members to interact, and connected the school community to the greater neighbourhood community. Effective SFGs were both supported by communities and supportive of communities. KIA explains why parents were involved in an elementary school garden, and how the garden serves as a bridging space:

> They wanted to participate, they wanted to contribute to the community, they wanted to socialize, they wanted to connect with others and it has served really well as that sort of bridging space. In the last few years the school has drawn some more middleclass families and now they're becoming more involved and I heard from one of the dads that the garden is the only place where the two communities come together, the middle class and the lower income community.

Community response to SFGs has been overwhelmingly positive. KIE reported that neighbours have told him that the garden is the best thing they have in their neighbourhood. He also describes the garden as a teaching tool for the greater community. Many of the SFGs we investigated give back to the community actively. One project shared the harvest with a neighbouring church for weekly community meals. Two others donated some of the produce to local food banks. Summer and after-school programs also featured in several of the SFGs. Many schools hosted annual community events such as a garden festival, a harvest feast for the community, or a community garden launch where people from the area could participate in planting the garden for the growing season.

Motivation 2: Social Development

SFGs offer social development opportunities such as life skills, self-understanding, increased self-esteem and moral development. For example, youth participants in a year-long garden program improved both their teamwork skills and self-understanding, while increasing their overall life skills such as leadership, decision-making, communication, and voluntarism (Robinson and Zajicek 2005). Alexander et al. (1995) found that children in the Master Gardener Classroom Garden Project in the San Antonio Independent School District appeared to have many opportunities to learn valuable lessons about life that included delayed gratification, independence, cooperation, self esteem, enthusiasm/anticipation, nurturing living things, motivation, pride in their activities, and exposure to role models. Similarly, students taking part in a school-to-farm initiative in Norway strengthened their co-operation skills; learned to work together and help each other; took collective responsibility for the work; learned how to behave in new situations, with new people; learned empathy through caring for young animals; learned of the local cultural heritage; and developed respect for nature and positive attitudes towards farming (Risku-Norja and Korpela 2008). School gardening has also been shown to improve students' behaviour and attitudes toward school. Ruiz-Gallardo et al. (2013) reported on the positive outcomes from utilizing garden-based learning with at-risk high school students in Spain, including decreased disruptive episodes in the classroom, increased self-esteem and self-confidence, and a decrease in failure and drop-out rates.

Our own research supports the assertions that SFGs help create more socially inclusive spaces and contribute to social development and life skills. For example, KIM reported that students "learned to co-operate, work as a team and to respect

each other." At one school, the garden and greenhouse were places where students of all abilities—who would not usually interact—could work with each other. At another, KII described the garden as a safe haven:

> Our first growing season, I was pretty much floored by the response from the kids. When we asked for feedback about what they thought about it, it went beyond responses like, 'I get to go outside, it's cool', to really what we were hoping it would be, 'it's safe, I'm comfortable, I feel accepted', it went far beyond… it went really into what we were hoping it would be and [the students] were able to articulate that back to us, which really surprised me, to be honest.

Motivation 3: Curriculum and Learning

SFGs provide for different types of learning. Teachers may use garden-based education in the form of student gardens or farm visits in a broad range of subjects —including math, social studies, language arts, environmental studies, nutrition, physical education, and agriculture—and as part of community service projects (Desmond et al. 2004; Graham et al. 2005; Risku-Norja and Korpela 2008).

Literature on the subject of SFGs and garden-based instruction often present the benefits of experiential learning, including hands-on or learning-by-doing (Blair 2009; Vallianatos et al. 2004). For example, according to Risku-Norja and Korpela (2008: 7)

> Active participation and learning by doing with their own hands and together with other pupils allows the pupils to use their abilities and skills comprehensively and to learn through their own experiences. When learning is based on positive experiences and on concrete situations, even the difficult matters become understandable with practical examples.

Bramwell et al. (2011, 107) describe student farms as an agrarian version of experiential education that includes many transformations through physical exertion, team building, tactile and gastronomic experiences, and encounters with what the authors call "the basic, gritty underpinnings of human sustenance". Experiential learning is a way to ground theory and practice in garden and farm settings (Sayre and Clark 2011).

SFGs can also provide both a venue and subject matter for learning that uses the theory of multiple intelligences proposed by Gardner (1985), a critic of the standard view of intelligence. Gardner's eight intelligences are linguistic, logical-mathematical, musical, bodily-kinesthetic, spatial, interpersonal, intrapersonal and naturalistic (1985; 1999). Gardner (1999, 45) suggests that teachers use a range of diverse pedagogical approaches to reach more students in more effective ways because "no two people have the exact same intelligences in the same combination".

SFGs can provide both a focus and a setting for integrating and delivering many aspects of school curricula by supporting real-life problem solving rather than traditional subject-based learning (Bowker and Tearle 2007; Subramaniam 2002). This integrated approach offers benefits to students (1) developing a higher level of

thinking; (2) transferring learning to the real world; and (3) acquiring the skills to become lifelong learners (Drake 1998).

Our key informants revealed that SFGs are used to teaching a variety of subjects at every grade level, and that primary level classes integrate curricula and garden-based learning more frequently , while secondary-level classes become more specialized. For example, KID integrates the weekly garden class into the curriculum:

> The teachers totally see the value in how the curriculum can be transformed into teaching everything the students need to know through gardening and stewardship. I just have a copy of the Grade 3 curriculum and I devise the program around that and it was so easy. You can get into math, science, history, English, French… with school gardens.

At the high school level, gardens are often regularly used and managed by one class or program, such as a sustainable resources class, or a home economics or Green Industries program. Some teachers use the gardens for specific lessons such as a social studies lesson on ancient cultures that includes demonstrating how to thresh grain, a math lesson that requires the students to figure out how much soil to order by calculating planting bed volumes, or a science class that uses garden vegetables to study how plant roots function. SFGs offer many opportunities for technical programs and art class projects, and are used to teach students with a wide range of educational needs.

Motivation 4: Environmental Education

Because of what some view as a growing disconnect from nature and the environment, what Kellert (2002, 120) describes as "the contemporary erosion of direct and spontaneous contact with relatively undisturbed nature, especially among urban and suburban children, and a corresponding substitution of more artificial and symbolic encounters," environmental education is seen as increasingly important. Orr (1991) argues that contemporary society's declining knowledge of the land is due to the industrialization of agriculture which results in the loss of direct nature-experience through farms; farms are now larger and less ecologically-diverse, and therefore less interesting and less instructive places. Accordingly, the on-going loss of small farms has meant that the direct learning experiences that they used to offer—such as experiencing the relationship between our food and soil, rainfall, animals, biological diversity, and natural cycles—have also been lost (Orr 1991). Moore (1995) contends that there is a need to recreate viable educational habitats where students can learn lessons about nature on a daily basis; a SFG is a good start.

SFGs can help counter the trend of what Louv (2006) refers to as nature deficit disorder by exposing students to the lessons that previous generations learned on farms, engaging students in their surrounding environment, and effectively bringing the outside world into the classroom and vice versa (Kozak and McCreight 2013). Similarly, Desmond et al. (2004, 76) believe that garden-based learning can provide

a "unique contribution not replicated in other pedagogies" because of student engagement in a stewardship relationship with other living organisms; this teaches not only the science of life but also the interconnected nature of the web of life and how everyday actions can have profound effects on the long-term health of an ecosystem.

Blair (2009, 17) suggests that "gardens ground children in growth and decay, predator–prey relations, pollination, carbon cycles, soil morphology, and microbial life: the simple and the complex simultaneously". Teaching students about ecological systems, helping them become more environmentally aware of global issues and solutions, contributing to ecological intelligence, and developing an environmental ethic and sense of land stewardship are some of the possible outcomes of SFG-based environmental education (Blair 2009; Bowker and Tearle 2007; Orr 1991; Ozer 2007). SFGs can be a local strategy to influence environmental understanding in light of growing concerns over environmental problems (Johnson 2012).

Our research revealed that composting is a common component of SFGs and a useful tool for environmental learning to illustrate waste diversion and make linkages to sustainable agriculture. In addition to growing produce, SFGs also have designated areas to provide habitat and/or food for insects and animals, such as pollinator gardens, which both increase the ecological value of the schoolyard and create spaces for learning about the environment. For example, one highschool garden is classified as a bee-friendly farm. Reusing and repurposing materials is common at many of the SFGs, as is using the garden to learn and discuss environmental stewardship ideas, to demonstrate sustainable/conservation techniques such as rain harvesting and green roofs, and for innovative student projects such as planning and building a greenhouse.

Motivation 5: Food Literacy and Health

Food literacy encompasses a range of food-related knowledge and skills, which many in our highly urbanized society are lacking, resulting in poor health. Food literacy is the process of creating healthier connections with food by enhancing food-related skills, knowledge, attitudes and behaviours. Knowing how food is grown and where it comes from can be an important step toward how individuals value food. For this reason, SFGs can play an important role in contributing to increased food literacy that positively affects students' food knowledge, attitudes and eating habits by both broadening and personalizing their perspectives on food (Blair 2009; Canaris 1995; Koch et al. 2006; Parmer et al. 2009). Thorp and Townsend (2001, 357), who conducted an ethnographic study of a school garden, explain:

> Gardening changes the status of food for all involved. When one gardens, food can no longer be viewed as a mere commodity for consumption; we are brought into the ritual of communal goodness that is found at the intersection of people and plants. Food that we grow with our own hands becomes a portal for personal transformation.

SFGs also contribute to increased agricultural literacy when students learn about food production and become more aware of the overall food system (Lyson and Raymer 2000, in Saldivar-Tanaka and Krasny 2004).

Along with increasing food literacy, SFGs can be used to address diet-related health concerns by teaching healthful eating habits and nutrition (Blair 2009; Graham et al. 2005). Langellotto and Gupta (2012) argue that gardens are prime sites for health interventions that aim to promote such outcomes as healthy BMI and reduced risk of childhood obesity; garden-based learning has the potential to positively influence eating habits and increase physical activity in children. Libman (2007, 94) identified SFGs as "tools for improving the eating habits and health of youth," stating "positive social interaction through the processes of growing, sharing, and consuming vegetables may positively influence young gardeners' food consciousness and nutrition". Ratcliffe et al. (2011) report that gardening students were better able to identify vegetables, experienced increased preference for vegetables, and were more willing to taste vegetables. Ozer (2007, 853) makes an interesting observation in noting that, "eating vegetables in a school garden program is a peer group activity, with the potential benefit of drawing on peer social influence to promote the view of consuming fresh produce as a normative practice". In other words, peer pressure may be a useful tool for encouraging healthy eating.

Our key informants frequently linked garden production to food literacy and nutrition to hands-on food education; students were exposed to fresh food and were given the opportunity to both prepare and taste food. Promoting healthy eating was an important goal of many of the programs, with visible results. For example, KII explained:

> I think there's no end to what they can learn and be exposed to and, I think, just eating healthy. We see that there is an increase. The kids want to eat healthy and know where their food came from and, just… more interest in food, healthy food, organic food, and liking to eat in a way that promotes wellness.

Motivation 6: Local Food and Sustainable Agriculture Linkages

As opposed to formal playgrounds or sports fields, which may delimit many children's experiences in nature, a well-designed school garden, according to Blair (2009, 17) "can readily improve on the complexity of that experience and provide

the repetitive access, meanings, and associations needed to create a bond with a place". SFGs can provide a daily experience of local nature for students.

> Gardens are intensely local. Everything except possibly the purchased plants and seeds are part of the natural local environment. The clouds, rain, and sun, the seasonal cycle, the soil and its myriad organisms, the insects, arachnids, birds, reptiles, and mammals that visit the garden teach about place. Even if some of the weeds, insects, and birds are not native to a place, these immigrant flora and fauna are as locally adapted as the children themselves (Blair 2009, 17).

In some cases, SFGs are part of the larger Farm to School conversation, which is an international movement that aims to connect schools with local and regional farmers in a mutually beneficial relationship beyond the primary aim of getting locally- and regionally-grown food into school cafeterias (Vallianatos et al. 2004). As a facet of the local food movement, SFGs also address sustainable agriculture and food systems education and can help support local food procurement by supplying food and generating interest in local food. Connecting students to local food is a way to counter students' limited awareness of food systems and to increase their understanding of how their actions relate to those systems (Bissonnette and Contento 2001; Carlsson and Williams 2008; Harmon and Maretzki 2006). Put more succinctly, it is a useful approach for linking food consumption to sustainable agriculture (Ozer 2007).

People's disconnect from the food system is not only a North American phenomenon. Dillon et al. (2003) found that school-aged children in the UK appeared to have poor knowledge and understanding about food and farming. This, along with other research findings, supported making improvements to teaching and learning about food, farming and land management, with SFGs being one of the potential approaches to do so. Growing concerns for the state of our food system and the detrimental effects of industrial agriculture are evident by the increasing interest in the study of sustainable agriculture and food systems at post-secondary institutions, which has coincided with an increase in both the number of programs available and the number of student farms (Parr and Trexler 2011).

Our key informants support the idea that SFGs are prime sites for making the connection between agriculture and food. Some garden programs combined a food component to help make the connection, while in other cases the opposite was true —a foods course or culinary program added an agricultural literacy component. Growing foods based on the cultural food heritage of students and their parents was very common; in some communities these foods are either difficult to find or very expensive. Learning food production skills is common throughout the SFGs we studied. KIK explained that she really wanted the students to develop practical skills in the garden especially after observing how little they seemed to have.

A key informant at a highschool in Nanaimo, BC, is connecting local food and sustainable agriculture to a SFG through a unique Sustainable Resources class that can be taken as a science credit. Initially, the school was selected as a prime site to establish a farm-to-school program due to its proximity to both farmland and fast food retailers. Many students were not eating in the cafeteria at all and the majority

of the cafeteria's offerings were highly processed foods. Due to difficulty in sourcing local food for the cafeteria, a garden was established to grow food at the school so that the students would have access to fresh vegetables and some fruits. While it is still a work in progress, the goal is to collaborate with the Sustainable Resources class to plan the crops for use in the cafeteria.

Farmers in the Playground, a non-profit edible education program and NGO in partnership with several elementary schools in Ontario, brings in local experts to enhance the programming—such as a beekeeper who comes to speak about bees and pollination, and brings honey with which the students prepare food. According to KID:

> We go as far as discussing big seed companies and the pesticides they're using to enhance their own crops yet it's killing all the bees. We get into the political side of where our agriculture is going and we always bring it back to why it's so important to grow your own and to support your local farmers and try to get to know your local farmers.

The same program takes the students on a field trip to a working farm where they have a barbeque and eat food produced on that farm as a way to make a memorable connection between food production and food consumption.

Green Industries is a technical program in Ontario through which many high school SFGs are designed, built and run. At a Kitchener-Waterloo high school, our key informant identified that, through the Green Industries program, students do all the landscape maintenance on the school grounds. They also manage a vegetable garden that grows mainly heritage varieties; a greenhouse; an orchard with a variety of fruit trees; food-producing native plants, such as serviceberry and elderberry; and other food-producing shrubs. There is also a hospitality program at the school that prepares food with some of the SFG harvest.

Some key informants stated that their SFG programs actively contribute to the local food movement by producing for their own cafeteria or selling to the community through markets, fundraising sales, or other means. Other programs also address issues of food security, as KIR reports:

> One of the rationales behind the foods program is to definitely bring up food security issues. We're on an island and if there was the zombie apocalypse on the mainland and the ferry couldn't come anymore - what would we do? That's the way you present it to students because they jump all over that. Protein is not a problem on the island between salmon, halibut, crabs, clams, and deer, even for the pickiest of eaters… vegetables on the other hand, with a greenhouse that's covered, you can be growing your vitamins easily.

Conclusion

Through an understanding of the history of school garden development, a review of the literature, and interviews with key informants who provide leadership at SFGs across Canada, we found that, while the SFG is not a new idea, it is still a good idea. SFGs have been shown to provide community building and engagement;

social development for the students who work and play in these gardens; curriculum and learning that is relevant and layered; an awareness of the environment, linked to place; increased food literacy and health for the garden participants; and an effective means to link to local food and sustainable agriculture. The benefits of SFGs reach well beyond the immediate student body; SFGs have been shown to be a site for building productive relationships within the greater community as well. There is no doubt that creating SFGs requires effort and coordination; however, teachers, parents, school boards and policy-makers need to be aware of the expanded educational opportunities as well as the contributions that can be made to the greater community.

References

Alexander, Jacquelyn, Mary-Wales North, and Deborah Hendren. 1995. Master gardener classroom garden project: An evaluation of the benefits to children. *Children's Environments* 12 (2): 256–263.

Armstrong, Donna. 2000. A survey of community gardens in upstate New York: Implications for health promotion and community development. *Health & Place* 6 (4): 319–327.

Bissonnette, Madeline Monaco, and Isobel Contento. 2001. Adolescents' perspectives and food choice behaviors in terms of the environmental impacts of food production practices: Application of a psychosocial model. *Journal of Nutrition Education* 33 (2): 72–82.

Blair, Dorothy. 2009. The child in the garden: An evaluative review of the benefits of school gardening. *The Journal of Environmental Education* 40 (2): 15–38.

Bowker, Rob, and Penni Tearle. 2007. Gardening as a learning environment: A study of children's perceptions and understanding of school gardens as part of an international project. *Learning Environments Research* 10 (2): 83–100.

Boyes-Watson, Carolyn. 2005. Community is not a place but a relationship: Lessons for organizational development. *Public Organization Review* 5 (4): 359–374.

Bramwell, Stephen, Martha Rosemeyer, and Melissa Barker. 2011. Evergreen State College (1972): Interdisciplinary studies in sustainable agriculture. In *Fields of learning: The student farm movement in North America*, ed. Laura Sayer, and Sean Clark. Lexington: Kentucky University Press.

California Department of Education (CDE). 2013. *A Healthy nutrition environment: Linking education, activity, and food through school gardens*. http://www.cde.ca.gov/ls/nu/he/gardenoverview.asp. Accessed 26 Nov 2013.

Canaris, Irene. 1995. Growing foods for growing minds: Integrating gardening and nutrition education into the total curriculum. *Children's Environments* 12 (2): 264–270.

Carlsson, Liesel, and Patricia Williams. 2008. New approaches to the health promoting school: Participation in sustainable food systems. *Journal of Hunger & Environmental Nutrition* 3 (4): 400–417.

Coke, J. 1943. Farm Labour Situation in Canada. *Journal of Farm Economics* 25 (1): 287–294.

Coleman, James. 1988. Social capital in the creation of human capital. *American Journal of Sociology* 94: S95–S120.

Desmond, Daniel, James Grieshop, and Aarti Subramaniam. 2004. *Revisiting garden-based learning in basic education*. Food and Agriculture Organization of the United Nations.

Dewey, John. 1900. *The school and society*. Chicago, IL: Chicago University Press.

Dillon, Justin, Mark Rickinson, Dawn Sanders, Kelly Teamey, and Pauline Benefield. 2003. *Improving the understanding of food, farming and land management amongst school-age children: A literature review*. London: National Foundation for Educational Research and King's College London.

Drake, S. M. 1998. *Creating integrated curriculum: Proven ways to increase student learning*. Thousand Oaks, CA: Corwin Press.

Enfield, R. P. 2001. Connections between 4-H and John Dewey's philosophy of education. *Focus*.

Gardner, Howard. 1985. *Frames of mind: the theory of multiple intelligences*. New York: Basic Books.

Gardner, Howard. 1999. *Intelligence reframed: Multiple intelligences for the twenty-first century*. New York: Basic Books.

Graham, Heather, Deborah Lane Beall, Mary Lussier, Peggy McLaughlin, and Sheri Zidenberg-Cherr. 2005. Use of school gardens in academic instruction. *Journal of Nutrition Education and Behavior* 37 (3): 147–151.

Greene, Louise. 1910. *Among school gardens*. Philadelpia: WMF Fell.

Gunston, Herbert, and Charles Hawks. 1922. *Principles and practice of school gardening and connected handwork*. Toronto: Pitman and Sons.

Guthman, Julie. 2008. Neoliberalism and the making of food politics in California. *Geoforum* 39: 1171–1183.

Harmon, Alison, and Audrey Maretzki. 2006. Assessing food system attitudes among youth: Development and evaluation of attitude measures. *Journal of Nutrition Education and Behavior* 38 (2): 91–95.

Harvey, David. 2011. *Fertile ground for new thinking: Improving Toronto's parks*. Toronto: Metcalf Foundation.

Hayden-Smith, Rose. 2007. 'Soldiers of the Soil': The work of the United States School Garden Army during World War I. *Applied Environmental Education and Communication* 6 (1): 19–29.

Hayes-Conroy, Jessica. 2010. School gardens and 'Actually Existing' neoliberalism. *Humboldt Journal of Social Relations* 33 (1/2): 64–96.

Herrington, Susan. 1998. The garden in Fröbel's Kindergarten: Beyond the metaphor. *Studies in the History of Gardens & Designed Landscapes* 18 (4): 326–338.

Johnson, Susan. 2012. Reconceptualising gardening to promote inclusive education for sustainable development. *International Journal of Inclusive Education* 16 (5–6): 581–596.

Kellert, Stephen. 2002. Experiencing nature: Affective, cognitive, and evaluative development in children. In *Children and nature: psychological, sociocultural, and evolutionary investigations*, ed. Peter H. Kahn Jr. and Stephen R. Kellert, 117–51. Cambridge: MIT Press.

Kingsley, Jonathan, and Mardie Townsend. 2006. Dig in'to social capital: Community gardens as mechanisms for growing urban social connectedness. *Urban Policy and Research* 24 (4): 525–537.

Koch, Shari, Tina Waliczek, and Jayne Zajicek. 2006. The effect of a summer garden program on the nutritional knowledge, attitudes, and behaviors of children. *HortTechnology* 16 (4): 620–625.

Kohlstedt, Sally Gregory. 2008. 'A Better Crop of Boys and Girls': The school gardening movement, 1890–1920. *History of Education Quarterly* 48 (1): 58–93.

Kozak, Melissa Scott, and Jennifer McCreight. 2013. We Grew It!: Enrichment through gardening in elementary school. *Applied Environmental Education & Communication* 12 (1): 29–37.

Langellotto, Gail, and Abha Gupta. 2012. Gardening increases vegetable consumption in school-aged children: A meta-analytical synthesis. *HortTechnology* 22 (4): 430–445.

Lawson, Laura. 2005. *City bountiful: A century of community gardening in America*. Berkeley: University of California Press.

Libman, Kimberly. 2007. Growing Youth Growing Food: How Vegetable Gardening Influences Young People's Food Consciousness and Eating Habits. *Applied Environmental Education and Communication* 6 (1): 87–95.

Louv, Richard. 2006. *Last child in the woods: saving our children from nature-deficit disorder*. New York: Algonquin Books.

Lyson, T. A., and A. L. Raymer. 2000. Stalking the wily multinational: Power and control in the US food system. *Agriculture and Human Values* 17(2): 199–208.

Mader, Joel. 2010. *Cleveland school gardens*. San Francisco, CA: Arcadia Publishing.

Marturano, Arlene. 1999. The educational roots of garden-based instruction and contemporary gateways to gardening with children. *Kindergarten Education: Theory, Research and Practice* 4 (1): 55–70.

McCold, Paul, and Benjamin Wachtel. 1998. Community is not a place: A new look at community justice initiatives. *Contemporary Justice Review* 1 (1): 71–85.

Moore, Robin. 1995. Children gardening: First steps towards a sustainable future. *Children's Environments* 12 (2): 222–232.

Mosby, Ian. 2014. *Food will win the war: The politics, culture and science of food during Canada's Second World War*. Vancouver: UBC Press.

Orr, David. 1991. Biological diversity, agriculture, and the liberal arts. *Conservation Biology* 5 (3): 268–270.

Osborne, Ken. 2000. Public schooling and citizenship education in Canada. *Canadian Ethnic Studies/Etudes ethniques au Canada* 32 (1): 8–37.

Ozer, Emily. 2007. The effects of school gardens on students and schools: Conceptualization and considerations for maximizing healthy development. *Health Education & Behavior* 34 (6): 846–863.

Parmer, Sondra, Jill Salisbury-Glennon, David Shannon, and Barbara Struempler. 2009. School gardens: An Experiential learning approach for a nutrition education program to increase fruit and vegetable knowledge, preference, and consumption among second-grade students. *Journal of Nutrition Education and Behavior* 41 (3): 212–217.

Parr, Damian, and Cary Trexler. 2011. Students' experiential learning and use of student farms in sustainable agriculture education. *Journal of Natural Resources & Life Sciences Education* 40 (1): 172–180.

Pudup, Mary Beth. 2008. It takes a garden: Cultivating citizen-subjects in organized garden projects. *Geoforum* 39: 1228–1240.

Putnam, Robert. 2001. *Bowling alone*. New York: Simon and Schuster.

Ratcliffe, Michelle, Kathleen Merrigan, Beatrice Rogers, and Jeanne Goldberg. 2011. The effects of school garden experiences on middle school-aged students' knowledge, attitudes, and behaviors associated with vegetable consumption. *Health Promotion Practice* 12 (1): 36–43.

Reason, P., and H. Bradbury. 2001. *Handbook of action research: Participative inquiry and practice*. London: Sage Publications.

Risku-Norja, Helmi Vieraankivi, and Elli Korpela. 2008. Farms as learning environment–experiences from school-farm co-operation. *Maataloustieteen Päivät* 10 (11).

Robinson, Carolyn, and Jayne Zajicek. 2005. Growing minds: The effects of a one-year school garden program on six constructs of life skills of elementary school children. *HortTechnology* 15 (3): 453–457.

Ruiz-Gallardo, José-Reyes, Alonso Verde, and Arturo Valdés. 2013. Garden-based learning: An experience with 'At Risk' secondary education students. *Journal of Environmental Education* 44 (4): 252–270.

Saldivar-Tanaka, Laura, and Marianne Krasny. 2004. Culturing community development, neighborhood open space, and civic agriculture: The case of Latino community gardens in New York City. *Agriculture and Human Values* 21 (4): 399–412.

Sayre, Laura, and Sean Clark. 2011. Conclusion: Starting a student farm. In *Fields of learning: The student farm movement in North America*, ed. Laura Sayre, and Sean Clark, 323–331. Lexington, KY: Kentucky University Press.

Subramaniam, Aarti. 2002. Garden-based learning in basic education: A historical review. Davis, CA: University of California 4-H Center for Youth Development Monograph.

Thorp, Laurie, and Christine Townsend. 2001. Agricultural education in an elementary school: An ethnographic study of a school garden. *Paper read at proceedings of the 28th annual national agricultural education research conference*, New Orleans, LA.

Trelstad, Brian. 1997. Little machines in their gardens: A history of school gardens in America, 1891 to 1920. *Landscape Journal* 16 (2): 161–173.

Vallianatos, Mark, Robert Gottlieb, and Margaret Haase. 2004. Farm-to-school strategies for urban health, combating sprawl, and establishing a community food systems approach. *Journal of Planning Education and Research* 23 (4): 414–423.

Warsh, Marie. 2011. Cultivating citizens: The children's school farm in New York City, 1902–1931. *Buildings & Landscapes* 18 (1): 64–89.

Chapter 7
Using a Complexity Lens to Address Local Food Dilemmas in Northern Ontario: The Viability of Crowdsourcing and Crowdfunding

Mirella Stroink, Connie H. Nelson and Adam C. Davis

Abstract Using the lens of complex adaptive systems theory, we review the emergence of the local food movement within the broader systems of the industrial approach to food and in the unique context of northern Ontario. We argue that this systems thinking perspective reveals potential pathways to supporting transformative change and food system resilience. Crowdsourcing, a form of distributed problem solving, is reviewed as a potential tool for enhancing both engagement and innovation when tackling complex problems. Crowdfunding, an online approach for leveraging financial support from a broad group of people, is reviewed as a unique tool for supporting local initiatives while also enhancing engagement. These approaches are explored through two case studies. Recommendations for future work with these tools are provided. We conclude by discussing the value of the systems thinking perspective for both understanding complex problems in the food system context and identifying innovative solutions.

Keywords Complex adaptive systems theory · Crowdsourcing · Crowdfunding · Systems thinking · Food systems

M. Stroink (✉)
Department of Psychology, Lakehead University, 955 Oliver Rd, Thunder Bay, ON, P7B 5E1, Canada
e-mail: mstroink@lakeheadu.ca

C.H. Nelson
School of Social Work, Lakehead University, 955 Oliver Rd, Thunder Bay, ON, P7B 5E1, Canada
e-mail: cnelson@lakeheadu.ca

A.C. Davis
Faculty of Education, University of Ottawa, 200 Lees Ave. Rm E113, Ottawa, ON, K1N 6N5, Canada
e-mail: adavi154@uottawa.ca

I. Knezevic et al. (eds.), *Nourishing Communities*,
DOI 10.1007/978-3-319-57000-6_7

The social, economic, and ecological damage wrought by the dominant industrial food system speaks to its inherent complexity. The highly interconnected, multi-faceted, and emergent issues that both underlie and flow from the industrial food system render it a wicked problem, one that by its nature is highly resistant to resolution. To conceptualize and approach wicked problems like this, a complex way of perceiving and thinking is required (Nelson and Stroink 2014). A systems lens that honours this complexity can be a particularly useful tool through which practitioners and researchers alike can better understand and grapple with food system issues. Just as the dominant approach to food constitutes a complex system, so too do the innumerable local food systems nested within its overarching framework. These localized and alternative models of food production, distribution, and consumption have emerged in response to, and co-evolved alongside, the numerous deficiencies of the dominant food regime (Nelson and Stroink 2014; Stroink and Nelson 2013). However, many local food systems face the seemingly insurmountable barrier of achieving economic viability amidst a system structured to support large-scale, global food operations (Mount et al. 2013). Crowdsourcing and Crowdfunding respectively represent innovative problem solving and financing tools that may aid in overcoming the hurdles that prevent local food initiatives from transforming into resilient and sustainable systems capable of thriving in the shadow of the industrial food regime.

Global and Local Food Regimes as Complex Adaptive Systems

Food systems exist on many levels along social, economic, and ecological parameters and across space simultaneously, and these levels mutually influence one another. They form through the dynamic interconnections among people, organizations, communities, and economies. They mutually interact with the ecosystems of specific places and with the values and beliefs of communities of people (Mars 2015; Mount and Andree 2013; Stroink and Nelson 2012). As such, food systems, both global and local, have been described as complex adaptive systems (CASs) (Stroink and Nelson 2013). A CAS is an aggregation of numerous component parts (agents, nodes, elements) that assemble to form a cohesive whole with stable but "fuzzy" boundaries. The agents within a CAS interact with each other locally to produce spontaneous and emergent global outcomes (Gunderson and Holling 2002; Walker and Salt 2006).

CASs are sensitive to the initial conditions in which they emerge, adapt to their unique circumstances, are comprised of feedback loops, and self-organize to produce patterned behaviour without the aid of a central authority (Edson 2012; Mitchell 2009). They themselves contain smaller-scale nested sub-systems (e.g.,

farmers' markets, organic agriculture, local food hubs, collective kitchens, community gardens, etc.), and are also contained within other larger-order CASs (e.g., the climate, culture, global governing bodies, etc.). These nested systems operate at varying spatial and temporal scales but remain intricately intertwined with one another, a phenomenon known as panarchy (Gunderson and Holling 2002). As a consequence of this dynamic relationship, changes at one scale of the system consequently results in changes at another, at times producing transformative outcomes. However, the direction of this cross-scale change is disproportionate as the smaller bottom-up linkages, although cycling quickly, do not tend to exert the same influence as top-down linkages (Gunderson and Holling 2002). For example, a small segmented group advocating against the inhumane treatment of livestock is unlikely to suddenly vault the agricultural regime into a new pattern of behaviour. This example is representative of the segmentation encouraged by the dominant food regime, which impedes transformative change from being achieved.

In this chapter, we build on earlier work that articulated how CAS theory (Gunderson and Holling 2002; Walker and Salt 2006) may be helpful in understanding the dynamics of food systems, particularly in relation to how the local food movement in northern Ontario has evolved amidst the dominant food regime and within its unique context (Stroink and Nelson 2013). We argue that a complexity perspective provides a better means of identifying and pursuing potential pathways to transformative change that fundamentally alter the core trajectories and resilience of food systems. Through CAS theory, innovative tools that support growth and generate novel solutions to complex problems can be identified and used to meet the challenges imposing on the viability of the local food movement (Nelson and Stroink 2014). The alternative fundraising and problem-solving models of crowdfunding and crowdsourcing represent two such innovative tools, both born out of a complexity mindset (Zou et al. 2014). We first review crowdfunding and crowdsourcing as potential tools in the local food movement. Secondly, we present findings from two case studies in which we explored these approaches to building local food capacity and citizen engagement in northern Ontario.

Identifying alternative pathways to transformation for local food systems requires describing the factors that led to the emergence of the dominant industrial approach to food. As a CAS, the dominant food system manifested out of the collective influences of neoliberal capitalism, colonialism, and industrialization, which all stressed efficiency and optimization in the unfettered pursuit of hegemony and corporate gain (Patel 2007; Albritton 2009). These social, economic and political movements were influenced by, and arose concurrently with, a perception of "man" as a separate autonomous agent with a divine right to command and control the natural world (Koger and Winter 2010). Simultaneously, a mechanistic and atomistic pattern of thinking, denoting nature as a machine composed of fixed individual physical parts (Wulun 2007), has contributed greatly to the perception of nature as a linear and static entity with predictable and controllable properties. In contrast, systems thinking, born out of intellectual soil of CAS theory, represents a

counterposition to this neoliberal and mechanistic mindset that pervades Western society. It is a mental framework associated with an implicit understanding that the world is comprised of interdependent socio-ecological systems formed through the communication of individual component parts that produce emergent wholes (Davis and Stroink 2015). Some level of systems thinking is necessary in order to acknowledge and adequately understand the emergent and patterned behaviour of CASs like the dominant food regime and its nested local food system.

Complex Adaptive Systems Theory and the Adaptive Cycle

A key insight from CAS theory is that CASs are not static; they continuously adapt and change over time, and these changes can be depicted as having four phases, known collectively as the adaptive cycle (Fig. 7.1). The adaptive cycle is a four-phase cycle in which CASs, such as local food organizations, (1) grow by exploiting and organizing capital and increasing structure, connectedness and resilience (exploitation phase) to a point where (2) they consume all resources in simply conserving that structure while maximizing efficiency (conservation phase).

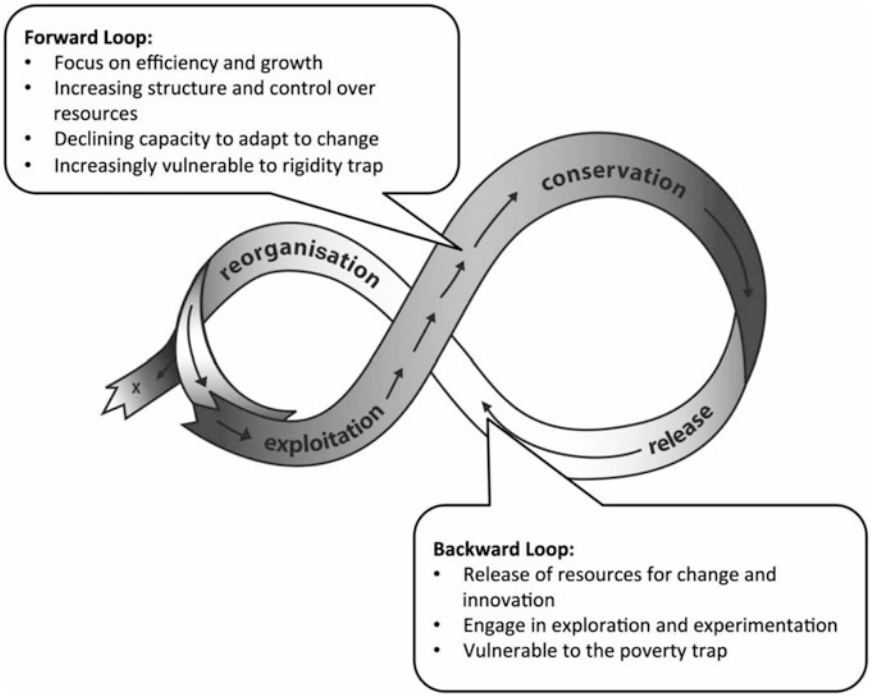

Fig. 7.1 The adaptive cycle (Stroink and Nelson 2013)

At this point, the system's resilience declines as it becomes overly rigid and unable to adapt or respond to changing circumstances. They then (3) undergo a release whereby the system's structure collapses and capital is freed up (release phase). (4) New connections then form using capital and structural components from the collapsed system, with the potential for a diverse abundance of new entities or ideas to emerge. This is a time of experimentation and innovation (reorganization phase). Exploitation and conservation are considered the forward loop and release and reorganization are considered the back loop of the adaptive cycle (Gunderson and Holling 2002; Holling 1973).

The capacity of CASs to move throughout the stages of the adaptive cycle within a richly interwoven panarchy denotes its resilience, defined as the degree to which a CAS is able to absorb disturbances and shocks while maintaining essential function, structure, and identity (Walker, Holling, Carpenter and Kinzig 2004; Walker and Salt 2006). Thus, The adaptive cycle facilitates an examination of the resilience of CASs as they change and adapt over space and time; providing insight into system vulnerabilities and how to best manage perturbations (Walker and Salt 2006). Adaptive capacity is a central feature of resilience and concerns the ability of a CAS to adapt to changing internal demands and external influences (Carpenter and Brock 2008). Thus, the adaptive cycle may be a useful tool to examine a food system's current state of resilience and how to best foster future viability and/or sustainability.

The Adaptive Cycle and Local Food Hubs in Northern Ontario

Stroink and Nelson (2013) scanned and reviewed the local food system in northern Ontario by conducting interviews with twenty-six active food initiatives, and following up with more in-depth case study analysis with five of these initiatives. They subsequently mapped the experiences and stories of the studied local food organizations in northern Ontario onto the adaptive cycle. For example, while the conservation phase was evidenced only in specific projects of the studied local food organizations, the industrial food system exemplifies the conservation phase; thick with infrastructure and displaying variable levels of resilience to maintain their dominant market position. As the local food system grows in strength, the industrial food system adapts by mimicking local food initiatives, positioning environmental sustainability and nutrition within existing frameworks (e.g., Mitchell 2012). Examples include Burger King removing soft drinks from its children's menu boards (Horovitz 2015), or A&W only sourcing beef that has no added growth hormones or steroids (McKenna 2013). One of these studied local food organizations emerged as an experiment following the collapse of a tree seedling business, demonstrating the release and reorganization phases. Of particular note however, each of the five local food hubs was at some point in the exploitation phase,

characterized by the effort to secure key resources such as funding, staffing, skills and knowledge to support growth.

The local food hubs employed various strategies to support growth in the exploitation phase, such as diversifying funding sources and strategic partnerships. However, they also faced numerous barriers to growth, such as a lack of sustained funding, geographic distance among communities in northern Ontario and the lack of context-relevant provincial food policies and regulations. These barriers demonstrate a poverty trap, a state where a CAS at the transition from the reorganization phase to the exploitation phase of the adaptive cycle is able to support an abundance of diverse but only small-scale experiments, and lacks the internal connectedness (e.g., policy relevance) and resources to launch any one of those ideas into the exploitation phase.

Based on this research, Stroink and Nelson (2013) positioned the local food system in northern Ontario as a whole in the reorganization phase, dealing largely with the challenges of the poverty trap (Allison and Hobbs 2004; Carpenter and Brock 2008). Indeed, even the successful initiatives reviewed in the case studies were highly vulnerable, as they sought to piece together numerous sources of often time-limited funding (e.g., project-based grants, summer student funding) to operate in a policy landscape largely designed with a view to resource extraction in the north (Morgan 2015) and regulation more favourable to industrial food production in the south (Nelson et al. 2015). The purpose of the current research was to build on these findings by exploring the value of crowdfunding and crowdsourcing as social innovation tools to facilitate the transition from the reorganization phase to the exploitation phase for local food initiatives in northern Ontario.

Crowdfunding and Crowdsourcing

Crowdfunding

Most businesses and organizations in the reorganization phase of the adaptive cycle need infusions of capital in order to launch and grow their ideas. A lack of financial backing in the early stages of development can be a significant barrier to innovation for new ventures (Cosh et al. 2009). Crowdfunding represents a relatively new—but increasingly popular—alternative fundraising model wherein organizations and individuals procure capital in the form of donations, loans, investments, and/or equity, from a large number of undefined and typically unrelated people labelled "the crowd" (Belleflamme et al. 2014). In fact, global crowdfunding experienced an increase of 167% in 2014, reaching an estimated $16.2 billion of raised capital (Massolution 2015). The crowdfunding process typically occurs through an advertisement on behalf of an entrepreneur, detailing a concept, project, or business plan, the amount needed to fund the initiative and a comprehensive plan on how

money will be allocated (Mitra 2012). Although the present manifestations of crowdfunding campaigns are relatively recent, the process of crowdfunding has a long history extending back to the eighteenth century (Bradford 2012). However, the popularization of crowdfunding came approximately a decade ago in 2006 when it was likened to the process of crowdsourcing.

Crowdsourcing

Crowdsourcing is the act of outsourcing work to a large, undefined, and distributed group of workers, through an open call that often makes use of an online platform (Howe 2006). The strength of crowdsourcing lies in its ability to attract an engaged and diverse crowd of people from around the world to lend their expertise to the challenge. Although it can be used in ways that undermine the employment security of traditional workers, and can also reproduce some social inequality (Brabham 2008, 2009), crowdsourcing has produced solutions of superior quality and quantity than in-house workers in many fields (Appadurai 1996). With crowdsourcing, ideas may be brought into consideration that are more "outside the box," having been formed from a different perspective, or perhaps without the formalized training that at times constrains how the problem domain is perceived and understood (van Herzele 2004). Another effect of crowdsourcing is that it animates and engages the public directly in a challenge and perhaps a policy domain for which their views may not ordinarily be considered. In this way, when crowdsourcing is used for community challenges, it can have beneficial effects on community engagement, in addition to possibly revealing new approaches to unresolved challenges (Burby 2003).

Indeed, the growth of both crowdfunding and crowdsourcing reflects a shift toward collaborative and plural rather than traditional models of one-client problem solving (Aitamurto and Landemore 2013). Both crowdfunding and crowdsourcing involve appealing to a large group of independent agents (i.e., the crowd), and both have gained momentum with the expanding capacity of the Internet to connect people from around the world. A crowd of people interconnected with one another through their computers and devices, all exchanging information, ideas, and resources, as they exert mutual influence on each other, reveals a CAS. As such, crowdfunding and crowdsourcing represent unique ways of reconnecting the multitude of food system actors, whose ties have been severed by the dominant food regime. The knowledge and cultural artefacts that emerge from these interactions as higher-order patterns likewise reveal properties of a CAS (Buckley 2008). Furthermore, growing interest in crowdfunding and crowdsourcing—as well as in social innovation—is grounded in an intellectual environment that is influenced by CAS theory (e.g., Hurst 2012; Rogers et al. 2005). Indeed, Zou et al. (2014, 408) argued that crowdsourcing is "a complex system composed of interactive distributed agents, based on which the global pattern emerges". Given that the food

system is likewise a CAS, exploring the use of crowdfunding and crowdsourcing in the context of growing local food initiatives may reveal intriguing cross-system dynamics.

Present Research

In the current research we (the authors) report on the findings of two case studies. In the first, we worked with a local food co-operative in northern Ontario to tap the potential of crowdfunding to support one of their initiatives. In the second, we explored the use of distributed problem solving in a crowdsourcing contest aimed at identifying solutions to the unique challenge of local food distribution in the geographically dispersed communities of northwestern Ontario.

Case Study 1: Crowdfunding and the Cloverbelt Local Food Co-op

The first case study involved the observation of a crowdfunding campaign employed by the Cloverbelt Local Food Co-op (CLFC) in Dryden, Ontario. The CLFC is a non-profit food-cooperative and online farmers' market that is democratically governed by its members. The CLFC also constitutes a local food hub wherein food production and distribution are pooled from a number of interdependent stakeholders, with an attempt to directly link producers and consumers (Blay-Palmer et al. 2013; Stroink and Nelson 2013).

The CLFC is comprised of a diversity of consumers, producers, distributors and community organizations from inside and outside of the city of Dryden, who assist in providing access to fresh, nutritious and affordable food. Like other local food hubs (Mount et al. 2013), the CLFC increases interactions among producers, distributors, retailers, and consumers, promotes small scale, holistic farming practices, and holds a commitment to social-ecological elements of responsible and sustainable food production and distribution. Since its inception in 2013, the CLFC has attracted over 600 consumer members and eighty producer members. The CLFC facilitates annual conferences and community workshops centered on environmental awareness, agriculture, gardening, nutrition and cooking.

The CLFC turned to crowdfunding in an effort to raise the capital to build a community greenhouse in the spring of 2014. The purpose of the greenhouse is to support the local agricultural community by providing a space to extend the growing season while also providing training and support in sustainable farming. Importantly, half of the greenhouse space is dedicated to CLFC member consumers/producers and half is used as a community garden for residents, schools and other local agricultural groups, making it available for teaching, demonstrations, field trips and tours.

Method

The research team was in contact with the board of directors of CLFC for several months prior to the crowdfunding campaign and several months afterward. Prior to the campaign, the research team provided some information and resources on crowdfunding, though the impetus for pursuing crowdfunding came from the CLFC group and they managed all aspects of the campaign. The case study is based on the observations of the research team, online materials, CLFC's annual general meeting notes, and from a focus group conducted following the crowdfunding project.

Crowdfunding Campaign and Results

CLFC chose the reward-based crowdfunding model because it is particularly useful for cause-based philanthropic projects (Mitra 2012) and has been successful with other local food projects (Meijers 2013). Indiegogo was chosen as the online crowdfunding platform because it is one of the two most popular online crowdfunding portals and allows the organizer to collect whatever amount of funding is raised, even if the goal amount is not reached (Mitra 2012). In the months prior to the online launch of the crowdfunding campaign, CLFC developed a brief and engaging pitch describing the CLFC and its greenhouse initiative. A detailed explanation of how the money would be spent and a list of tiered rewards were prepared. Rewards ranged from a virtual hug for a donation of $5 to a painted rain barrel ($500) and a pig roast for forty people ($1,000). CLFC, high school students from Dryden and a local firm created a short video to engage potential funders and reveal in a more personalized manner the purpose of the project and the need for the funding.

Over a period of two months, 53 funders collectively contributed a total of $10,845 to the CLFC greenhouse on Indiegogo, which was $845 beyond the funding objective. Donors included 2 businesses who contributed $3060, 33 individuals or families who raised $5020 and 18 anonymous donors who raised $2265 (Pollard, Springett, and Wood 2014). Interestingly, while most donations were made online using the Indiegogo platform, the organizers found that several local residents preferred to make their donation directly to CLFC, who in turn added it to the online system. In addition, companies such as the local mill made major donations directly to CLFC in cheque presentations. Other local businesses engaged their own forms of incentive-based crowdfunding to contribute to CLFC. For example, a hairdresser donated a percentage of her revenue on certain days to the campaign, and a yoga instructor also donated a percentage of money raised from a set of classes to the campaign.

The City of Dryden leased the land for the greenhouse to CLFC for twenty years, for an annual $100 administrative fee. Ground was broken for building the greenhouse in fall of 2014, and its grand opening was celebrated in spring of 2015.

The CLFC's Youth Ambassador held a workshop on composting on opening day, and other information sessions have been held since for community gardeners. Additional funding has been obtained for ventilation blinds and a sprinkler system, and further funding is being raised to purchase the permanent plumbing needed to install an advanced hydroponics system for the greenhouse.

Discussion

The success of this initiative reveals the utility of crowdfunding to leverage meaningful amounts of capital to support growth in a local food co-op. Furthermore, the funding generated through the CLFC crowdfunding initiative demonstrates the capacity of this innovative financing model to push a complex local food system from the reorganization phase toward the exploitation phase of the adaptive cyclce. An additional advantage of a crowdfunding campaign is that it can raise community awareness of the initiative and its mandate in a way that may also foster a sense of community ownership and engagement. Thus, crowdfunding was in this case a valuable alternative means of generating investment from the wider community.

In addition to its stated objectives of increasing local food production while providing training in sustainable farming, CLFC is also building social capital. Feelings of trust, reciprocity, and interdependence emerge through the community engagement and social networking provided by the garden experience as well as the crowdfunding campaign itself (Alaimo et al. 2010). Other unintended outcomes of this crowdfunding campaign include CLFC members at the annual general meeting sharing ideas for how to expand local food production, including the potential benefits of a cold storage cellar. People's sense of what is possible may have been broadened with the success of this crowdfunding campaign.

Crowdfunding increases the diversity of support with which local food initiatives can develop, opening the door for potential donors to support the initiative from around the world. Interestingly, while the online platform was useful in reaching many donors, there were still a number who preferred to show their support in more traditional ways and directly to the CLFC staff. Thus one important insight from the success of this project is to ensure that opportunities to contribute are made in a number of ways, and to ground crowdfunding campaigns in a thorough knowledge of the local community.

Crowdfunding may be advantageous as a strategy for generating capital to grow a local food initiative. Key factors that led to the success of this case study initiative are summarized in Table 7.1.

Table 7.1 Cloverbelt crowdfunding campaign insights

Key Insights	
The pitch	Well-prepared, professional and engaging pitch was essential for successfully promoting the campaign in its fledgling stages
	Advertising materials with a local, community-specific feel and personal touch was critical for this "cause-based" crowdfunding initiative
Ease of contribution	Remaining flexible to accommodate funders' desires maximized the funding potential of the initiative
Encouraging self-organization	Prior to launching the campaign, pre-emptively creating a buzz with potential investors attracted other interested parties
The platform	Choosing Indiegogo was beneficial to increase visibility and also ensured that if the total amount was not fundraised, CLFC would still be able to retain what they had accrued

Case Study 2: Crowdsourcing and Local Food Distribution in the North

The second case study involved designing and launching a crowdsourcing campaign seeking to find solutions to the problem of unsustainable and inadequate local food distribution networks in northwestern Ontario. Northwestern Ontario presents some unique challenges to the task of sustainably distributing local food. Prior research revealed that while there are clusters of highly committed people throughout the region producing and selling local food in their communities, they face significant barriers to distributing food more broadly around the region, such as geographic distance, constraining regulations, lack of road access, limited receptor capacity and infrastructure in receiving communities. These challenges to reaching wider markets limit the growth and sustainability of local food ventures in the region (Nelson and Stroink 2013).

The purpose of this case study research was to better understand crowdsourcing as a potential tool for enhancing innovation in resolving the challenges of local food distribution in northwestern Ontario. Specifically the research team initiated and ran a crowdsourcing challenge on the question of how to support and increase local food distribution in northwestern Ontario. Through this crowdsourcing challenge, we sought to observe the process of promoting and running the challenge, the nature of participant engagement, and the process and quality of proposal submissions.

Method

The research team engaged professional assistance to develop a name, logo, website, and social media presence for the crowdsourcing campaign. The goal of

the visual identity was to present the contest as professional, engaging, fresh, and relating to food distribution. The name NWO FoodEx was chosen and the website was developed to position the contest as a product of the Food Innovation northwestern Ontario project. Using social media, online forums, flyers and brochures, the project team distributed an invitation to participate in the project to contacts throughout the University and College campuses and some high schools in Thunder Bay. Several local and provincial organizations involved in alternative food initiatives were also contacted to help solicit and spread advertisement materials.

Potential participants were directed to the project webpage, which detailed the problem of local food distribution in northwestern Ontario, the proposal criteria, and a number of resources to assist in proposal writing. After reviewing a screen of informed consent that outlined how the contest was also a research project, participants were asked to first submit a brief description of their idea along with contact information using the online form. They were informed that follow-up information, resources, and team support would be provided to assist them in developing their final proposals. Participants were also informed that their submissions would become public intellectual property and that the ideas that most closely approximated the project submission criteria would receive a monetary reward. Specifically, the winning submission would receive a $300 prize, the second place submission would receive $200 and each runner up (up to a total of ten) would receive $100 each. Participants were contacted after the campaign had closed to participate in a semi-structured telephone interview.

Over a period of one month over twenty individuals expressed interest in the contest; however, only four submissions were received from an engineering student at Lakehead University, a waste water technician from Calgary, Alberta, a vice president of marketing for a large firm from Manitoba and a birthing coach from Thunder Bay, Ontario. Each of these participants provided their proposed solution in full either by email or by using the online form near the proposal deadline, thus declining the offered support for proposal completion. Of the four participants, one individual agreed to participate in a follow-up semi-structured telephone interview. Three judges familiar with food system dynamics and not otherwise involved in this project rated the proposals using a rubric created by the research team. Judges were instructed to rate the quality of the submissions on their level of creativity, feasibility, potential effectiveness, organization and clarity. Judges gave each submission a score out of 25 and the mean score for the four submissions was 10.08. A general description of each project idea will be provided below.

Crowdsourcing Campaign Proposals and Results

Summary of the proposals. The first proposal centered on a community greenhouse initiative intended to reduce the need to transport food across significant geographic distances in northwestern Ontario. The second proposal was a community garden initiative; however, it attended to food distribution in the city of

Calgary, Alberta, as opposed to northwestern Ontario. This proposal involved splitting the city into quadrants and having a large community garden dedicated to each sector. The third proposal generally focused on educating community members about identifying, collecting, and preserving wild edibles with a focus on various species of mushroom that are native to northwestern Ontario (e.g., morel, chanterelle). The fourth proposal involved flying food in from larger cities on commercial tourist flights for sport fishing on Pickle Lake in northwestern Ontario. The food could then be shipped out on smaller flights to neighbouring communities (e.g., Red Lake, Kenora, Dryden). This fourth submission received the winning prize in the crowdsourcing contest.

Research team observations. The research team met several times throughout the contest and afterward to share observations of the process and outcomes. Based on these observations, we developed a set of recommendations for future crowdsourcing campaigns relating to local food. These are summarized in Table 7.2.

Table 7.2 Recommendations for Crowdsourcing Contests Aimed at Local Food

Recommendations	
Visibility of host organization	Having an organization that is established and visible in the community run the contest through its own branding and website may increase the visibility and perceived legitimacy of the contest
Balance between technicality and approachability	Providing enough information for contestants to understand the problem is essential, but not so much so that the task seems daunting
Contest prize	Monetary rewards have been found to be important for motivating participation in crowdsourcing contests (Brabham 2010). Larger rewards may increase the quantity and length of the submissions but not necessarily the quality (Mason and Watts 2009). Larger rewards may also generate the perception that the task is daunting
Research process	The research component of the crowdsourcing contest required ethical approval, which limited recruitment and increased demands on contestants. Balance concerning research benefits and costs with careful planning is needed
Aggressive marketing	Use a range of different and proactive advertising mediums to promote the contest (e.g., posters, digital messages, paid advertising)
Tiered submissions	Inviting participants to submit an idea before further developing their proposals with team support for a subsequent full submission did not yield the desired result in this study
Maintaining an online presence	Encouraging ongoing lively dialogue among potential contestants and between contestants and the project team would attract and maintain interest and engagement

Discussion

The purpose of this case study was to explore the utility of crowdsourcing as an alternative tool for soliciting innovative solutions to the problem of local food distribution in northwestern Ontario. While the crowdsourcing campaign only resulted in one proposal that directly related to food distribution specifically (the other three related to local food production), and they were all relatively simple, several important insights were gathered through the process. It was of interest that our Facebook social media page elicited interest from over twenty people but only four submitted a proposal. Translating interest from the crowd into completed proposals has been noted to be a challenge in previous crowdsourcing initiatives (e.g., Kazman and Chen 2009). One of the strengths of crowdsourcing can be that it engages a whole population in a problem domain that they may not ordinarily have the opportunity to consider. Given the complexity of the challenge of food distribution in northwestern Ontario, people may have needed more time and assistance to become engaged with the problem domain in this case.

It can be difficult to solicit proposals through an open call to a dispersed and unrelated crowd of individuals. As has been noted elsewhere (e.g., Wagorn 2014), web-based crowdsourcing tends to replicate social barriers to participation in that the "crowd" has to be people with access to computers, as well as the information and resources to prepare a response. The people being directly affected by the challenge of local food distribution in northwestern Ontario may face additional barriers to participation in terms of their access to these resources (Chayko 2008).

The solutions provided by the crowd through the process of crowdsourcing can be understood as emergent phenomena that result from the collective interactions amongst a multitude actors; sharing ideas, knowledge, and resources collectively. Thus, as a CAS itself, crowdsourcing, much like food systems, may become less resilient when actors are disconnected from one another. This point speaks to the importance of maintaining a lively and interactive forum (see Table 7.2) wherein members of the crowd are encouraged to collaborate with one another.

One option for reaching a wider audience through an online crowdsourcing campaign would be to use an established platform. For example, a project can be uploaded to Amazon's Mechanical Turk to receive responses from thousands of online global patrons for a small monetary incentive, or to Innocentive to reach a higher level of expertise in science and engineering. However, complex tasks are especially prone to users "gaming the system," putting in minimal amounts of effort or responding randomly to the task to receive a quick reward (Kittur 2010). This approach to crowdsourcing also lacks the ability to empower the community members primarily affected by the problem that the crowdsourcing contest seeks to overcome, and may even be perceived as paternalistic (Brabham 2009).

Overall Discussion and Conclusions

The dominant, industrial food system emerged in a mutually reinforcing process of co-evolution alongside capitalism, colonialism, neo-liberalism, and a mindset characterized by a mechanistic view of people and planet. Collectively, these socio-political and psychological processes have severed the connections between food system actors and disconnected people from the environment upon which their very survival depends. The current state of this food system, with its numerous impacts on social, economic, and ecological well-being, and its multifaceted roots built deeply into societal and economic processes, institutions, and policy frameworks, reveals a wicked problem. A systems thinking mindset is required to address these problems. Complex adaptive systems (CAS) theory provides a valuable lens and set of conceptual tools with which to perceive and understand both the problem and possible innovative solutions. Such a shift to systems thinking represents a release from the mindset through which the dominant industrial food system emerged, and could provide a framework around which alternative approaches to human food systems may take form.

The adaptive cycle and its effects on resilience is one aspect of CAS theory that can be a useful lens through which to understand the dynamics of rise and fall across the nested layers of the food system. Through this lens it appears that the dominant food system is well into the conservation phase and that various releases and processes of reorganization occur to enhance innovation and resilience. Alternative food systems struggle with limited financial, social, and knowledge capital to launch through the reorganization and exploitation phases (Nelson and Stroink 2013; Stroink and Nelson 2013). Recognizing that food systems exist within other nested systems, the current research explored how crowdfunding and crowdsourcing could be helpful in leveraging the connectedness of alternative food systems with these other "crowd" systems to transition to the exploitation phase.

The crowdfunding case study with Cloverbelt Local Food Co-op revealed that crowdfunding could be a useful tool for attracting the funding needed to grow an initiative. Among the strengths of this approach is that it enables the initiative to attract support from a greater diversity of donors, though the importance of local connections and providing opportunities for people to use more traditional methods of support were important insights from this research. The potential for crowdfunding to support local food initiatives is attracting attention, and the need for online platforms geared specifically for crowdfunding in the food sector has been identified (Plevin et al. 2015).

The crowdsourcing case study revealed that a successful campaign can be challenging to run, requiring a strong outreach and marketing component, and a clear sense of the best crowd to source. With the recommendations noted from this research in mind, crowdsourcing remains a potentially powerful tool for sourcing diverse talent and ideas in developing solutions to the complex problems of emerging local food initiatives. It is noteworthy from our findings that the best proposal received, which was to use sport fishing transportation, as a network with

which to move local food, was an idea that had not previously occurred to anyone in the research team. This observation underscores one of the strengths of crowdsourcing, in tapping diverse and previously underutilized talent to the problem domain.

In sum, CAS theory reveals that the food system emerges into patterns as a result of the interactions and exchanges among networks of independent agents at every level. Through the adaptation of these networks to context over time, the system as a whole grows, releases, and reorganizes repeatedly. In northern Ontario, the local food system is struggling to launch from reorganization to growth, and many initiatives struggle at the poverty trap, unable to attract the capital needed to grow, and dealing with policy and infrastructure poorly suited to context. At another level —parallel to, but dependent on, the food system for energy—are networks of people interconnected via online tools and social media. The current research reports on two efforts to leverage these online networks of diverse agents to support local food initiatives and to suggest several insights that may enable future initiatives to make best use of these tools.

References

Albritton, Robert. 2009. *Let them eat junk: How capitalism creates obesity and hunger*. Winnipeg: Arbeiter Ring Publishing.

Aitamurto, Tanja, and Hélène Landemore. 2013. Democratic participation and deliberation in crowdsourced legislative processes: The case of the law on off-road traffic in Finland. In *The 6th conference on communities and technologies (C&T). workshop: large-scale idea management and deliberation systems*. http://cochette.xrce.xerox.com/comtech13/papers/paper1_aitamurto_landemore.pdf.

Alaimo, Katherine, Thomas M. Reischl, and Julie Ober Allen. 2010. Community gardening, neighborhood meetings, and social capital. *Journal of Community Psychology* 38 (4): 497–514. doi:10.1002/jcop.20378.

Allison, Helen, E., and Hobbs, Richard J. Resilience. 2004. Adaptive capacity, and the 'lock-in trap' of the Western Australian agricultural region. *Ecology and Society* 9 (1): 3. http://www.ecologyandsociety.org/vol9/iss1/art3/.

Appadurai, Arjun. 1996. *Modernity at large: Cultural dimensions of globalization*. Minneapolis: University of Minnesota Press.

Belleflamme, Paul, Thomas Lambert, and Armin Schwienbacher. 2014. Crowdfunding: Tapping the right crowd. *Journal of Business Venturing* 29 (5): 585–609. doi:10.1016/j.jbusvent.2013.07.003.

Blay-Palmer, Alison, Karen Landman, Irena Knezevic, and Ryan Hayhurst. 2013. Constructing resilient, transformative communities through sustainable 'food hubs'. *Local Environment* 18.5: 521–528. http://www.tandfonline.com/doi/abs/10.1080/13549839. 2013.797156.

Brabham, Daren C. 2008. Crowdsourcing as a model for problem solving an introduction and cases. *Convergence* 14 (1): 75–90. doi:10.1177/1354856507084420.

Brabham, Daren C. 2009. Crowdsourcing the public participation process for planning projects. *Planning Theory* 8 (3): 242–262. doi:10.1177/1473095209104824.

Brabham, Daren C. 2010. Moving the crowd at threadless: Motivations for participation in a crowdsourcing application. *Information, Communication & Society* 13 (8): 1122–1145. doi:10.1080/13691181003624090.

Bradford, C. Steven. 2012. Crowdfunding and the federal securities laws. *Columbia Business Law Review 2012.1*. http://papers.ssrn.com/sol3/Papers.cfm?abstract_id=1916184.

Buckley, Walter. 2008. Society as a complex adaptive system. *Emergence: Complexity and Organization* 10 (3): 86. http://search.proquest.com/openview/af15da12c68cfb8b69a5e56d92c5109c/1?pq-origsite=gscholar.

Burby, Raymond J. 2003. Making plans that matter: Citizen involvement and government action. *Journal of the American Planning Association* 69 (1): 33–49. doi:10.1080/01944360308976292.

Carpenter, Stephen R., and William A. Brock. 2008. Adaptive capacity and traps. *Ecology and Society* 13 (2): 40. http://www.ecologyandsociety.org/vol13/iss2/art40/.

Chayko, Mary. 2008. *Portable communities: The social dynamics of online and mobile connectedness*. Suny Press.

Cosh, Andy, Douglas Cumming, and Alan Hughes. 2009. Outside entrepreneurial capital. *The Economic Journal* 119 (540): 1494–1533. doi:10.1111/j.1468-0297.2009.02270.x.

Davis, Adam, and Mirella L. Stroink. 2015. The relationship between systems thinking and the new ecological paradigm. *Systems Research and Behavioral Science*. doi:10.1002/sres.2371.

Edson, Mary C. 2012. A complex adaptive systems view of resilience in a project team. *Systems Research and Behavioral Science* 29 (5): 499–516. doi:10.1002/sres.2153.

Gunderson, Lance H., and Crawford S. Holling. 2002. *Panarchy: Understanding transformations in human and natural systems*. Washington, DC: Island Press.

Holling, Crawford S. 1973. Resilience and stability of ecological systems. *Annual Review of Ecology and Systematics* 4: 1–23. doi:10.1146/annurev.es.04.110173.000245.

Horovitz, Bruce. 2015. Burger king drops soft drinks from kids' meals, USA Today. http://www.usatoday.com/story/money/2015/03/09/burger-king-fast-food-restaurants-soft-drinks-beverages/24661959/. Accessed 10 Mar 2015.

Howe, Jeff. 2006. The rise of crowdsourcing. *Wired Magazine* 14 (6): 1–4. http://archive.wired.com/wired/archive/14.06/crowds.html.

Hurst, David K. 2012. *The new ecology of leadership: Business mastery in a chaotic world*. New York: Columbia University Press.

Kazman, Rick, and Hong-Mei Chen. 2009. The metropolis model a new logic for development of crowdsourced systems. *Communications of the ACM* 52 (7): 76–84. doi:10.1145/1538788.1538808.

Kittur, Aniket. 2010. Crowdsourcing, collaboration and creativity. *XRDS* 17 (2): 22–26. doi:10.1145/1869086.1869096.

Koger, Susan M., and Deborah Du Nann Winter. 2010. *The psychology of environmental problems*, 3rd ed. New York, NY: Psychology Press.

Mars, Matt M. 2015. From bread we build community: Entrepreneurial leadership and the co-creation of local food businesses and systems. *Journal of Agriculture, Food Systems, and Community Development*. http://dx.doi.org/10.5304/jafscd.2015.053.005.

Mason, Winter, and Duncan J. Watts. 2009. Financial incentives and the performance of crowds. *ACM SIGKDD Explorations Newsletter* 11 (2): 100–108. doi:10.1145/1600150.1600175.

Massolution. 2015. *Global crowdfunding market to reach* $34.4B in 2015, Predicts Massolution's 2015CF Industry Report. April 7, 2015. http://www.crowdsourcing.org/editorial/global-crowdfunding-market-to-reach-344b-in-2015-predicts-massolutions-2015cf-industry-report/45376.

McKenna, Nialla. 2013. *Ranchers have a beef with new A&W Hamburger Campaign*, CBC News. http://www.cbc.ca/news/canada/edmonton/ranchers-have-a-beef-with-new-a-w-hamburger-campaign-1.2426659. Accessed 14 Nov 2013.

Meijers, Nina. 2013. *Foodie crowd funding helps startups raise capital*. http://www.foodtechconnect.com/2013/10/10/foodie-crowd-funding-helps-food-startups-raise-capital/. Accessed 10 Oct 2013.

Mitchell, Melanie. 2009. *Complexity: A guided tour*. Oxford University Press.

Mitchell, Stacy. 2012. Walmart's greenwashing: How the company's much publicized sustainability Campaign Falls short. *While its relentless growth devastates the environment*. Institute

for Local Self-Reliance. http://ilsr.org/wpcontent/uploads/2012/03/walmart-greenwash-report.pdf.

Mitra, Devashis. 2012. The role of crowdfunding in entrepreneurial finance. *Delhi Business Review* 13 (2): 67–72. http://www.delhibusinessreview.org/v_13n2/v13n2g.pdf.

Morgan, Shauna. 2015. The true price of a resource economy in Canada's North. Penbima Institute. http://www.pembina.org/op-ed/the-true-price-of-a-resource-economy-in-canadas-north. Accessed 28 Jan 2015.

Mount, Phil, and Peter Andrée. 2013. Visualising community-based food projects in Ontario. *Local Environment* 18 (5): 578–591. doi:10.1080/13549839.2013.788491.

Mount, Phil, Shelley Hazen, Shawna Holmes, Evan Fraser, Anthony Winson, Irena Knezevic, Erin Nelson, Lisa Ohberg, Peter Andrée, and Karen Landman. 2013. Barriers to the local food movement: Ontario's community food projects and the capacity for convergence. *Local Environment* 18 (5): 592–605. doi:10.1080/13549839.2013.788492.

Nelson, Connie H., and Mirella L. Stroink. 2013. Northern Ontario. In *Models and best practices for building sustainable food systems in Ontario and beyond*, ed Irena Knezevic, Karen Landman, Alison Blay-Palmer and Connie H. Nelson, 16–67. Guelph, ON: Ontario Ministry of Agriculture, Food and Rural Affairs. http://nourishingontario.ca.

Nelson, Connie H., and Mirella L. Stroink. 2014. Accessibility and viability: a complex adaptive systems theory approach to a wicked problem for the local food movement. *Journal of Agriculture, Food Systems and Community Development* 4 (4): 191–206. doi:10.5304/jafscd.2014.044.016.

Nelson, Connie H., Mirella L. Stroink, and Kerk, K. 2015. Northern Ontario: A resilient connected food hub. Case study, Lakehead University. http://casestudies.fsrn.ca/.

Patel, Raj. 2007. *Stuffed and starved: Markets, power and the hidden battle for the world's food system*. Toronto: Harper Collins.

Plevin, Julia, Goel, Vidhi, and Green, Lance. 2015. Farmhand: A crowdsourcing platform for farmers and local food producers-products of design. *Products of Design.* Accessed 12 Jan 2015. http://productsofdesign.sva.edu/farmhand/.

Pollard, Chris, Jen Springett, and Kate Wood. Cloverbelt local food co-op community greenhouse. *Indiegogo*. Accessed 23 May 2014. https://www.indiegogo.com/projects/cloverbelt-local-food-co-op-community-greenhouse/story.

Rogers, Everett M., Una E. Medina, Mario A. Rivera, and Cody J. Wiley. 2005. Complex adaptive systems and the diffusion of innovations. *The Innovation Journal: The Public Sector Innovation Journal* 10 (3): 1–26. https://www.innovation.cc/volumes-issues/rogers-adaptivesystem7final.pdf.

Stroink, Mirella L., and Connie H. Nelson. 2012. Understanding local food behaviour and food security in rural first nation communities: Implications for food policy. *The Journal of Rural and Community Development* 7 (3): 65–82. http://www.jrcd.ca/viewarticle.php?id=670&layout=abstract.

Stroink, Mirella L., and Connie H. Nelson. 2013. Complexity and food hubs: Five case studies from Northern Ontario. *Local Environment* 18 (5): 620–35. http://www.tandfonline.com/eprint/pdPhN2FtTy9KDNiZJu3G/full#.UkjFGWRAR15.

Van Herzele, Ann. 2004. Local knowledge in action: Valuing nonprofessional reasoning in the planning process. *Journal of Planning Education and Research* 24 (2): 197–212.

Wagorn, Paul. 2014. The problems with crowdsourcing and how to fix them. *Idea Connection*. Accessed 8 Apr 2014. http://www.ideaconnection.com/blog/2014/04/how-to-fix-crowdsourcing/.

Walker, Brian, and David Salt. 2006. *Resilience thinking: Sustaining ecosystems and people in a changing world*. Washington, DC: Island Press.

Wulun, Jin. 2007. Understanding complexity, challenging traditional ways of thinking. *Systems Research and Behavioral Science* 24: 393–402. doi:10.1002/sres.840.

Zou, Guangyu, Alvaro Gil, and Marina Tharayil. 2014. An agent-based model for crowdsourcing systems. In *Proceedings of the 2014 winter simulation conference*, 407–418. IEEE Press. http://dl.acm.org/citation.cfm?id=2693910.

Chapter 8
The Local Food Policy Audit: Spanning the Civic-Political Agrifood Divide

Jill K. Clark, Caitlin Marquis and Samina Raja

Abstract Transformation of the food system rests, in part, on changing the rules by which all actors play. Many of these rules take the form of public policy, whether they be laws, regulations, government spending or other tools used to impact markets. So concerns are raised when local groups in the food movement are reluctant to politically engage to change these rules. This chapter begins by outlining the concepts of food democracy, civic agriculture and civic food networks and their relevance to the advocacy coalition framework (ACF). Then the ACF is used to organize a case study of the Franklin County Local Food Council and its transition from a civically-oriented group to an advocacy coalition through the use of a technical tool—the food policy audit. The chapter concludes by suggesting that community-based food groups have a responsibility to span the civic-political divide and bring food system governance back into balance.

Keywords Food policy council · Political engagement · Policy audit · Advocacy coalition · Governance

Introduction

Transformation of the food system rests, in part, on changing the rules by which all actors play. Many of these rules take the form of public policy, whether they be laws, regulations, government spending or other tools used to impact markets. The

J.K. Clark (✉)
John Glenn College of Public Affairs, Ohio State University, Columbus, USA
e-mail: clark.1099@osu.edu

C. Marquis
Healthy Hampshire, Northampton, USA
e-mail: cmarquis@collaborative.org

S. Raja
Department of Urban and Regional Planning, University at Buffalo, Buffalo, USA
e-mail: sraja@buffalo.edu

I. Knezevic et al. (eds.), *Nourishing Communities*,
DOI 10.1007/978-3-319-57000-6_8

public policy changes that make it onto the political agenda are partially a result of political engagement by citizen groups, coalitions, businesses and other stakeholders in the food system. Some scholars are concerned that political engagement is decreasing in the United States (US), as more and more citizens turn to other forms of engagement to address societal concerns (Levine 2007; Zukin et al. 2006). When political engagement by civic society is not used as a tactic for change, activities move from the public realm to the private realm—and changing the rules that guide the food system is no longer on the table. The fault line between political and civic engagement as methods to address problems facing society is termed the "civic-political divide" by Zukin et al. (2006).

The divide is evident in the work of the US alternative agrifood movement (Allen et al. 2003; Goodman 2003; Schiff 2008) where individual consumer action (i.e. "voting with your fork") has become a common adage instead of citizens collectively working towards broader food systems policy change. Even some local food *policy* councils have put more focus on discrete short-term projects than policy change (Center for a Livable Future 2014; Schiff 2008). Discrete and isolated individual projects often cannot create sustainable systemic change because gaps and barriers in the local public policy environment make replication or long-term sustainability of projects difficult. To some degree this move away from systemic and policy change represents a sense of disenfranchisement with the neo-liberal system within which the food system is embedded (as described in the earlier parts of the book). Frameworks such as food democracy, civic food networks and civic agriculture outline alternatives to this type of piecemeal project work (see also the discussion of transformative food politics in Chap. 11). These frameworks recognize that building an environment within which a sustainable food system[1] can thrive requires collective action and a policy agenda. We take these frameworks a step further and suggest that achieving food *system* change requires an engaged citizenry knowing where to start, what to work on next, and how to evaluate their progress.

This chapter presents the possibility of using a local food policy audit as a process that can be adopted by citizen initiatives to transition a civically-oriented group and their collaborators into a policy advocacy coalition. A food policy audit is a type of assessment that inventories policies—and the potential roles of local governmental and non-governmental actors—that influence the food system. Food groups associated with the alternative agrifood movement (AAM) share beliefs in the problems and consequences of the global, industrialized food system, in addition to a sense of a desired alternative (Allen et al. 2003; Friedland 2010). The deployment of the food policy audit translates these values and beliefs into strategies aimed at policy change. By engaging stakeholders from throughout the food system in its completion, the audit enables groups to develop broader

[1]By food system we mean the inter-connected network of activities, resources, industries, public and private stakeholders and policies that play a role in the production, processing, distribution, acquisition, consumption and management of food-related waste.

coalitions with like-minded groups and individuals. The use of the audit can, in turn, increase local governance (and government) capacity to transform the food system and address sustainability objectives.

The centerpiece of this chapter is an experience in Franklin County, Ohio, used as a case study that resulted from participatory action research, to discuss policy change potential through the development and use of a local food policy audit by the Franklin County Local Food Council (or "food council," for short). First we provide further background on the civic-political divide and the AAM and then we outline the concepts of food democracy, civic agriculture and civic food networks and their relevance to the advocacy coalition framework, which is our overall approach to the case study. After presenting the case study, we conclude by suggesting that community-based food groups have a responsibility to span the civic-political divide and bring food system governance back into balance.

The Civic-Political Divide

For half a century, the US government has tracked various aspects of civic and political engagement as part of the Current Population Survey administered monthly by the US Census Bureau. The motivation for the survey is that engagement is correlated with individual, community and broader society's functionality and well-being (Prewitt et al. 2014). Civic engagement can be described as organized, voluntary activity within civil society focused on problem solving and helping others (Zukin et al. 2006). Examples include school service projects, donating money to a charity, and volunteering, all of which continues to be strong in the US (NCoC and CIRCLE 2013). Political engagement is activity that has the intent or the effect of influencing government action—either directly by affecting the making or implementation of public policy, or indirectly by influencing the selection of the people who make those policies (Zukin et al. 2006). Activities associated with political engagement include voting, keeping up with political news, volunteering on campaigns, contacting elected officials on issues and joining advocacy coalitions. Despite a couple of slight bumps in voting, Americans—especially young Americans—are becoming much less politically engaged while civic engagement holds steady.

Trends in civic and political engagement are often associated with devolution of government and neoliberalization (Ilcan 2009). During the 1980s, as conservatives came into greater power, federal and state governments increasingly devolved their functions not only to lower levels of government, but also to the private and non-profit sectors. At the same time there was a turn to the market as the organizing force for society with diminishing attention to social, ecological, and economic well-being for all citizens. As a result, not-for-profit organizations stepped into action to fill the void at a greater degree than ever before. Further, as the market became commonplace as an organizing construct, seemingly political and civic activities such as buycotting or boycotting became more popular. The work of

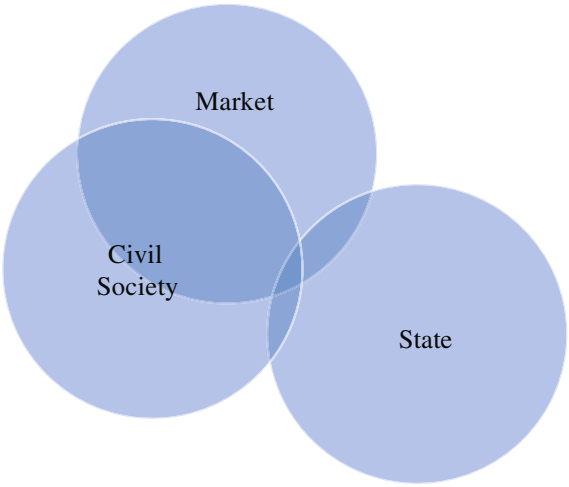

Fig. 8.1 Imbalanced governance triangle

not-for-profits and activities aimed at the market, such as ethical consumerism, became tactics to influence society, shifting activities aimed at addressing societal problems from the public realm to the private realm.

As a result, the lines between civic and political engagement blur. Figure 8.1 illustrates the *imbalanced* governance triangle made up of the state, market and civil society (the informal and formal organized groups outside of the state and market). The shift from actors in civil society engaging with the state (political engagement) to engaging with other actors in civil society or with the market is creating an imbalance in the governance triangle.

The growing civic-political divide, and the imbalance of civil society engagement between the state and the market, concerns some scholars. The duties of citizenship are not at the forefront of the minds of US citizens, especially younger ones. There is limited attention paid to political events and government decisions and few citizens contact decision-makers regarding issues of broader societal concern. Rather, citizens see activities associated with citizenship as optional (Zukin et al. 2006).

Civil society's engagement with the state can result in stronger democracies for several reasons. Civil society plays a watchdog role, holding governments accountable. When civil society engages with the state, it can create greater political equity by expanding participation, address a greater variety of needs and reduce political polarization. Political engagement also teaches people the skills and virtues they require as voters and jurors. Those who are politically engaged receive training for future political careers and even for resistance when the state is corrupt or repressive. In short, government and what it does matters, so political engagement matters. Thus, civic activities, such as volunteering, while important, cannot replace political engagement.

Government actions set rules by which the food system functions. If problems in the food system require transformation of the system, who is defining the problem and mobilizing support for change? Lack of political engagement raises concerns around who is setting the public policy agenda for food system transformation.

The growing civic-political divide is reflected in the ways civil society engages in the food system. Initiatives associated with the AAM and focused on the food system go by the labels of fair trade, civic agriculture, sustainable agriculture, food sovereignty, slow food, community food security and local food campaigns (Friedland 2010; Hendrickson and Heffernon 2002). The AAM "represent(s) a broadly based alternative movement juxtaposed to the conventional agri-food system" (Friedland 2008, pg. 197) seeking social, ecological and economic sustainability in the food system. In practice, more energy has been put into food initiatives and projects focused on the market and less on policy and politics around food. This is evidenced by the rise of farmers' markets and sales of organic and local food. While aspects of these activities can be originated or influenced by the state, popular rhetoric holds alternative food *purchases* as a primary and desirable tactic for citizens to achieve food system transformation (Pollan 2006).

Food studies scholars point to various reasons for this de-emphasis on the state (Allen 1999; Goodman 2003; Mendes 2008; Harper et al. 2009). One example is the restriction on funding sources for local groups limiting political engagement. Additionally, advocates and policy makers have a limited understanding of tools and their impact as a result of food being a new policy area for local government (Mendes 2008). For advocates and policy makers alike, there is uncertainty about which local government departments address, or should address, food concerns. For advocates, there has been far greater focus on establishing alternatives to the conventional food system instead of changing the policies that shape the system. And, finally, like the general state of political and civic engagement in the country, there is a rise of volunteerism and charity-related activities in the alternative agri-food movement. Even the civil society-related food groups such as coalitions, non-profits, and task forces that self-identify as food policy councils, which profess to be a space to field test food democracy, have not always worked on policy initiatives, and many have instead taken on discrete market-oriented food projects (Hassanein 2003; Chen et al. 2015; Scherb et al. 2012).[2] Ironically, these discrete projects are not designed to create the systemic food system change that these groups often seek (Allen et al. 2003; Goodman 2003).

Food policy councils (FPCs) are groups of food system stakeholders that examine how the food system is working and recommend ways to fix it. FPCs are generally organized to address local weaknesses resulting from the global conventional food system. Their structure varies from grass-roots organized to government initiated (Harper et al. 2009). A recent census of FPCs finds about 250 currently operating in North America and suggested that 85% of respondent councils were involved in policy in some way (Center for a Livable Future 2014;

[2]See Chen, Clayton and Palmer (2015) for a recent food policy council literature review.

Scherb et al. 2012). Involvement ranges from problem identification, to education and lobbying, to development of policies and implementation. A number of local and regional governments in the US, too, rely on these FPCs to deliver what could ostensibly be public responsibilities around food. However fewer respondent FPCs (20%) report evaluation of policies as a task in which they are engaged (Scherb et al. 2012; Center for a Livable Future 2014). Furthermore, little evaluation exists on the role that FPCs play in the policy process or their overall effectiveness (Scherb et al. 2012; Chen et al. 2015).

Concepts of Civic and Political Engagement in the Food System Meet Advocacy Coalitions

Several scholars have written about civic and political engagement in the food system (Lyson 2000; Renting et al. 2012; Lang 1998; Hassanein 2003). Food democracy is the political practice of citizens engaging to co-create a food system that serves the social, economic, and ecological needs of all who participate in it. Food democracy includes both rights and responsibilities. In the case of the AAM, rights include access to nutritious, safe and culturally acceptable foods available from a system that is ecologically sound, socially just and economically viable. Responsibilities include being knowledgeable about food system issues, sharing ideas with others, increasing ones' efficacy and working towards a common good (Hassanein 2003). Food democracy is therefore the process of exercising these rights and responsibilities through collaboration with others towards community goals.

The type of food system that is best for society will inevitably include conflicting perspectives based on differing values. Hassanein (2003) argues that politics is the arena in which these disagreements should be dealt with and the best possible solution will be found by active participation of citizenry in that arena. Instead of acting as passive consumers, citizens who are actively participating have the knowledge and the skills to collectively use power to shape food policies and practices. Lang (2009) stresses the effective practice of a food democracy depends on the extent to which all participants in the food system are engaged, this includes at-risk populations, such as the food insecure, who are often less engaged or left out of the process. We add to Lang's note by recognizing that not all people in the US are US citizens. For example, an estimated 50% of farm workers are not citizens (Sachs et al. 2014). The concept of food democracy needs to be expanded to envision how undocumented workers and immigrants without formal citizenship can engage (see Chap. 2).

More recently, Renting, Schermer and Rossi (2012) forward the idea of civic food networks, or civil society-based governance mechanisms. Building off food

democracy, and the related concept of civic agriculture,[3] the authors note the rise of civil society's role in food governance. Within civic food networks, citizen eaters and citizen producers actively reconstruct the food system through a mutually beneficial dynamic "in which market and non-market activities are continually embedded in each other" (Goodman and Dupuis 2002, p. 13). They make explicit that for good governance civil society needs to engage with both the market and the state to achieve socially desirable outcomes. Although not stressed by Renting et al. (2012), Lyson's (2000) work on civic agriculture emphasizes that engagement is embedded in community and aimed at problem solving. Completing the governance triangle, Renting et al.'s conceptualization also includes civil society engaging with other actors such as state actors and shaping of policies and institutions, through lobbying, political activism and communication strategies.

The act of shaping institutions and policy can be characterized via the advocacy coalition framework (ACF) (Sabatier and Jenkins-Smith 1999; Weible and Sabatier 2007). The ACF assumes that members of a coalition share normative beliefs about general policies needed to achieve shared goals. Developed by Paul Sabatier et al. (1999), the ACF posits that in a complex policy world, change occurs in policy subsystems defined by specialized policy issues. These subsystems contain coalitions made up of interest groups and government actors and agencies in addition to researchers, consultants and the media. According to the ACF, coalitions are defined by their shared beliefs on the causes and consequences of a problem. Rather than coalescing around shared understanding of technical information, coalitions under the ACF filter technical and scientific information through their belief system (Sabatier and Pelkey 1987). For example, a coalition seeking to combat obesity may contain members whose understanding of the problem is framed by their knowledge of public health issues, as well as members whose understanding is framed by their background in social justice, and a myriad of childhood nutrition knowledge in between. In this context, technical information, often introduced from within the coalition, serves as a resource to solidify coalition members and convince decision-makers (Weible and Sabatier 2007). Coalition actors have the greatest ability to make consistent change in a policy subsystem, but to realize policy changes is often a decades-long process.

The ACF is a particularly useful frame for examining AAM civil society groups. In new policy areas, such as local food policy, civil society groups have the responsibility to increase local governance capacity by helping to form the policy agenda (Mendes 2008). Groups like FPCs are often based on shared beliefs of what is wrong with the global food system and a shared understanding that action needs to address the interrelated issues of food insecurity, access to food, local economic development, sustainable agriculture, and diet-related disease (Scherb et al. 2012).

[3]Civic agriculture is concerned with embedding agriculture and food production in community values to meet consumer demands for fresh, safe and locally produced food and to create jobs, encourage entrepreneurship and strengthen community identity. While Lyson (2000) conceptualized the relationships between citizens and the state for the purposes of community well-being, he emphasized the relationship between citizens and the market.

While the ACF is typically used to describe the observed behavior of advocacy coalitions, we propose here that the ACF can be used as a tool to guide advocacy coalitions through a process of obtaining technical information to define a policy agenda, thereby aiding their transition from a civically-oriented to politically-oriented advocacy coalitions.

The following case study illustrates the transition of the Franklin County Local Food Council from an advocacy coalition that was wary of policy work to a coalition that readily engages with and shapes local food policy. This transition is attributed to the use of a policy-based assessment tool, the food policy audit, to establish a shared understanding by which to set a policy agenda. As described by the ACF, the Franklin County Local Food Council came together around a shared understanding of the causes and consequences of a fractured local food system. However, using the ACF as an action frame,[4] we illustrate how the food policy audit provided technical information to the council that guided unified action around local policy issues, which were formerly not on the council's agenda.

The Local Food Policy Audit as Process and Tool

We developed the case study of the Franklin County Local Food Council and the Franklin County Food Policy Audit utilizing participant observation and document analysis. We focused on the process of designing and conducting the audit, knowledge creation and knowledge utilization in coalition formation. This case study reflects community-based participatory research. The two leading authors served on the food council and the empirical observations are based on the participatory role of these authors. As such, the information about the council comes from firsthand observations of over three dozen full council meetings, nearly 20 policy working group meetings, several public events, and one-on-one briefings with elected leaders. The document analysis includes review of three-and-a-half years of full council and policy working group meeting minutes, administrative documents and the policy audit. Next we provide background on the food council, followed by information on the local food policy audit tool and the audit process. Finally, we discuss what took place after the audit, from its completion in 2012 until spring 2015.

Establishing the Franklin County Local Food Council

The Franklin County Local Food Council came together for the first time in 2011 in Franklin County, Ohio. Home to Ohio's capital city of Columbus, the County's

[4]See Ashwill, Flora and Flora (2011) for other examples using the ACF as an action frame.

population is about 1.2 million. In 2010, the Mid-Ohio Regional Planning Commission (MORPC), which oversees a range of planning efforts for twelve counties including Franklin County, released the *Central Ohio Local Food Assessment and Plan* (MORPC's Agriculture and Food Systems Working Group 2010). While not formally adopted by any constituent local governments, the plan included a recommendation to establish a regional food policy council. Part of this process, facilitated by MORPC, was to establish food policy councils in each of the twelve counties that make up the Central Ohio region. As a result, the Franklin County Local Food Council was established in September of 2011. It represents members from the local government, agriculture, education, retail, distribution and advocacy sectors of the local food system. This council is an all-volunteer grassroots group with no formal affiliation to local government.

When the food council formed, the overwhelming majority of members did not want to work on policy issues. Although the Central Ohio Local Food Assessment and Plan contained five recommendations under the goal of "…removing] policy barriers to a local food system," many members of the food council were hesitant because they understood the goals they set as a council to focus more on practices, processes and education than on policy (MORPC's Agriculture and Food Systems Working Group 2010). In addition, food council members were worried that funders would be hesitant to fund policy work. This aversion to policy work resulted in the word "policy" being left out of the food council's name, in spite of the group intentionally modeling itself after food *policy* councils throughout the country.

Nonetheless, the food council established a mission to "expand, strengthen, and maintain a resilient local food system in Franklin County and the surrounding area." The council also agreed on four main strategies: (1) linking food and farm businesses, non-profit organizations and local government entities in a common effort to support a resilient local food system; (2) improving the availability of safe and healthful local food at affordable prices for all; (3) addressing barriers and opportunities to strengthen connections among producers, processors, distributors, retailers and recyclers; and (4) ensuring through education that citizens, agencies, organizations and local businesses consider a healthful and resilient local food system to be an essential part of all policy, planning and decision-making (Franklin County Local Food Council 2014). While the membership, priorities and work of the council have fluctuated, the mission and strategies have remained the same.

The FCLFC Food Policy Audit

In mid-2012, one of this chapter's authors (Marquis), working as an intern at MORPC, developed a proposal to conduct a local food policy audit based broadly on the recommendations of the regional food system plan. The audit was pitched as a type of food system assessment (Freedgood et al. 2011), perhaps making it more palatable to the council members. In spite of initial reluctance to work on policy, members of the food council were interested in scanning the policy environment to

discover barriers and opportunities that may present themselves in the council's work and to benchmark their future work as a council. In July of 2012, the council voted by consensus to conduct a food policy audit to take inventory of policies affecting the food system in Franklin County and the potential roles of governmental and non-governmental stakeholders.

The Franklin County Food Policy Audit[5] (hereafter referred to as the "Franklin County audit" or, simply, "audit") was modeled after an audit tool designed and piloted by students and faculty at the University of Virginia (UVA) (O'Brien and Denckla Cobb 2012). The food policy audit model is intended to identify best practices in food policy and measure a locality's progress toward achieving those practices. The faculty and students at UVA conducted a good deal of research into best practices identified by food planning and policy experts and, therefore, much of the UVA model was maintained by the Franklin County audit. Like the UVA model, the Franklin County audit items were categorized and framed as "yes" or "no" questions, such as, "Does the locality participate in a food policy council?" While many of the audit items remained the same, the primary difference between the Franklin County audit and the UVA model was that the Franklin County audit contained an assortment of questions that reflected best practices and goals valued specifically by the Franklin County Local Food Council, such as urban agriculture, food waste and zoning for local food systems. The final audit tool used by the food council to assess the local food policy environment contained 100 items divided into four broad categories and eighteen subcategories. The broad categories included Promoting Local Food, Sustainability and Community Food Security; Strengthening Zoning and Land Use; Addressing Public Health and Food Access; and Fostering Social Equity.

The process of conducting the audit, led by Marquis, included document research and interviewing key stakeholders with knowledge about the local food policy environment. Documents scanned included established codes, plans, ordinances and resolutions. During the interviews of key stakeholders, Marquis and the interviewee jointly completed areas of the audit pertinent to the interviewees' role. Ultimately, fifteen stakeholders were interviewed representing eleven public agencies and two private not-for-profit organizations. For example, the Franklin County Department of Planning and Economic Development and the Franklin Soil and Water Conservation District were interviewed, as were a local food education non-profit and a local community and economic development non-profit. Although individuals from for-profit companies were contacted—for instance, a company that collects and processes food waste—no for-profit stakeholders ultimately contributed to the audit. The process of conducting document research and interviewing stakeholders was iterative, as the stakeholders interviewed were encouraged to suggest additional stakeholders or documents that could offer information pertaining to the audit items.

[5]A copy of the FCFPA can be found on the FCLFC website: http://www.fclocalfoodcouncil.org/.

Audit Results

The audit ultimately produced a food policy score of 53 out of 100 for Franklin County (Marquis 2012). A score of 53 indicates that out of 100 possible food policy items, only 53 policies were in existence at the time of the audit. This score clarified for the food council that, while Franklin County had a relatively favourable policy environment for fostering social, economic and ecological sustainability in the food system, many opportunities still existed to improve upon that policy environment. A report detailing the audit results made recommendations for policy action, which the food council voted on and prioritized into a list of eleven ultimate priorities to pursue.

The audit findings and resulting recommendations may have been the turning point that began to transform the Franklin County Local Food Council from a civically-oriented advocacy coalition into a politically-oriented one. In September of 2012, shortly after the audit was completed, the food council convened to engage in strategic planning for the coming year. During the strategic planning session the audit was used to establish background for the work of the council. Ultimately, the council voted to form three working groups, one of which became the Policy Working Group, in addition to an Access Working Group and a Supply Chain and Economic Development Working Group.

Since the affirmation of policy as one of the Council's three main areas of work, the Policy Working Group has made great strides in achieving policy-related actions and objectives. The working group made it an immediate priority to schedule regular briefings with the Franklin County Commissioners, facilitated by a local government staff person who was a food council and Policy Working Group member. Initial meetings with the Commissioners focused on the results of the audit with particular emphasis on the highest priority identified by the food council: to work with the Commissioners to pass a comprehensive resolution prioritizing public health, ecological sustainability and economic development objectives with regards to the local food system. Fortunately, the president of the Commission had already bought into local food issues, having supported a community garden initiative with local refugee populations, as well as a county-funded healthy corner store pilot program. This commissioner was enthusiastic about the comprehensive resolution and cooperated with the food council on the creation and passage of the resolution in time for National Food Day in October of 2013. Although a non-binding policy, resolution No. 0809-13 explicitly articulates "Franklin County's commitment to a strong and resilient local food system" and expresses support for the mission and vision of the food council while including a commitment to continue supporting the council's work in Franklin County (Greer 2013).

Briefings with the Franklin County Commissioners not only yielded the resolution, but also produced ongoing local government support for the work and objectives of the council. The president of the Commission committed to encouraging other local governments to adopt strategies and policies similar to the food policy audit and resolution, spurring broad-based support for the food council's

values as a policy advocacy coalition while emphasizing the importance of policy in achieving food system goals. Additionally, the outward expression of support for local food economies embodied in the resolution led to the Commissioners soliciting a local food economic development plan for Franklin County. That plan is now in progress and is being guided by a coalition of partners that includes Franklin County Planning and Economic Development, Columbus Public Health and a local food education non-profit.

Prioritizing policy work also allowed the food council to expand its policy advocacy coalition through a series of public listening sessions focusing on food policy and planning issues. The first of these listening sessions was focused on nutrition incentive programs that would enhance the value of SNAP (Supplemental Nutrition Assistance Program) benefits at farmers' markets and other outlets selling fresh, healthy food. Establishment of such a program was not only a priority emerging from the audit, but had also drawn interest from the county government. At the listening session, the food council's Policy Working Group invited stakeholders who were advocates for nutrition incentive programs to share the benefits that these programs would bring to the community. Community members were invited to listen and ask questions, and the food council asked the 40 participants who attended to record their level of support for such a policy on a form at the end of the session. The idea received overwhelming support, and the Policy Working Group wrote a subsequent brief to present to the Commissioners on the issue, need and community will for establishing the program. In the summer of 2014 the County—in partnership with Columbus Public Health and local farmers' market managers—launched a pilot program under the name Veggie Snaps. The Veggie Snaps program now allows SNAP recipients to receive double value for redeeming their benefits at participating local farmers markets spread throughout the city and county.

Later listening sessions—led by the food council's two other working groups—focused on food mapping initiatives taking place throughout the county and the role of kitchen incubators and community kitchens in fostering economic development in the food system. The council presented summaries from both of these listening sessions to the County Commissioners in order to keep the Commissioners abreast of issues that were important to the Franklin County local food system. With about eighty attendees between the two sessions, these listening sessions also allowed the food council to continue expanding its advocacy coalition by involving local stakeholders who were interested in a variety of strategies for local food system change.

While the transition of the food council from a civically-oriented coalition to a politically-oriented coalition produced a great deal of benefits for the local food policy environment as a direct result of the council's work, ripple effects have also occurred as a result of the expansion of a policy advocacy coalition that is now seen as a valuable partner in local food policy work. For example, the group of partners that initiated the healthy corner store pilot program in 2011 has now expanded the program and is looking toward implementation of a healthy retail policy as a next step. Such a policy could create a city- or county-wide retail certification program,

in which retail partners would receive incentives for carrying a certain amount of healthy food, or could employ a number of other strategies, such as tying retail licensure to the commitment to carry healthy food (Change Lab Solutions 2013). The group of partners advocating for this policy sees the food council as a valuable partner in exploring and implementing the idea.

Using the Advocacy Coalition Framework to Span the Civic-Political Divide

The ACF provides a useful frame to understand the food council engaging in the process of food democracy (i.e., exercising shared responsibility for food system rights) through the development of civic food networks that increase governance capacity aimed at community-based problem solving. First, the ACF recognizes the role of shared beliefs and places these beliefs as primordial to the coalition. Second, the ACF recognizes the important role of technical information and that this information is filtered through those beliefs. Third, within the ACF, technical information often comes from within the coalition. The ACF deliberately includes specialists and researchers, in addition to decision-makers, as members of the coalition.

Applying this framework to the Franklin County audit, the process was designed by translating the mission and guiding principles of the food council into the components of an ideal policy environment to support the food council's vision for a positively transformed local food system. Furthermore, the audit was conducted and directed by a researcher who was a member of the coalition. By translating concern for the food system into technical information about how to improve it, the audit provided the process and platform that increased the policy interest, knowledge and efficacy of the council. In the most practical sense, it provided the food council with a place to start and direction on where to go next, while providing a method to evaluate their progress.

The audit process and the final product enabled the Franklin County Food Council to grow the coalition to bring others into political engagement strategies. The audit process was built around intentional conversation with local government and other community organizations about their role in an idealized food system. As a result, the process built relationships with sympathetic decision-makers and agency staff. Then, once the food council prioritized policy items in the audit, they had an agenda with which they grew their coalition further. The agenda identified topics for community listening sessions, which identified experts, agency staff and other community groups with similar policy priorities. Because the audit was developed using food council's mission and principles, the agenda reflected their beliefs. Therefore, all the council's coalition building with other groups was premised on shared beliefs and a common set of policy issues.

The shared beliefs of the coalition are the basis for engagement in policy–engagement that is not about individual consumption or production, but rather about citizens (see Chap. 10). By applying the ACF, food citizens come together as a civil society coalition to not only identify what rights in the food system they stand for, but also their collective responsibilities in gaining those rights. Further, the shared beliefs were also the starting point by which the coalition gained knowledge and skills to apply to their issues of concern.

The process of gaining knowledge and skills included co-discovering the roles that agency staff and decision-makers play in the food system, which is a form of political engagement. In addition, once the audit was complete the food council could engage in further political work. Engagement of the food council with the state (read: local government) builds governance capacity and brings the balance needed as suggested through the work of civic food networks. A unique feature of the ACF is the explicit incorporation of agency staff and decision-makers in coalitions, suggesting there is not a clear separation between civil society and the state. In the daily work of the Franklin County Local Food Council, therefore, the state can be engaged as regular coalition-building practice. Finally, together, members of the coalition focus on community problem solving in the food system by engaging with one another on solutions embedded in the community.

Despite the promise that a policy audit process offers, some limitations regarding the output and the process should be noted. First, any assessment is dated once it is complete. The policy environment is constantly changing and windows of opportunity are often opening. A retrospective audit does not take into account either of these issues. For the audit document to live on, it must be revisited on a regular basis, perhaps during an annual evaluation that both checks progress and reprioritizes issues to develop a current platform. In addition, as the coalition grows, new members will need to be indoctrinated into the audit process of translating beliefs into strategies. This process will need to be taken on as a regular course of action. Another limitation is that the audit format of "yes" or "no" answers only illustrates what policies do and do not exist, failing to take into account ongoing policy processes. The audit also does not assess the potential impact of policies, weigh alternatives, or consider policies that may be in the development stage.

Finally, food policy councils are heralded as an example of food democracy. The Franklin County Local Food Council does integrate citizens and other stakeholders in the process of creating its policy agenda to impact the community food environment. Yet, no one has asked exactly whose opinions are reflected in FCLFC's ultimate policy agenda that resulted from the audit process, and if the voices of at-risk populations or non-US citizens (e.g., recent refugees) are represented. The ACF as a frame for action and as applied to this case does not ask these questions either.

As interest in food systems continues to increase, and the number of civil society food groups continues to grow, we suggest a deliberate focus should be on these groups envisioning their work in policy terms (see Chaps. 10 and 11 in this volume for related discussion). As local food policy is a nascent AAM area of focus, food groups have an additional responsibility in terms of building local governance

capacity to address sustainability over the long-term. Envisioning work in policy terms includes: having knowledge of the policy landscape that impacts their work and the players involved; articulating the desired policy environment within which their group's work can thrive; understanding the strategies and having the skills to work towards this policy environment; and, bringing in additional potential partners to share their beliefs and who can help them through mobilizing resources to get there. The ACF is a useful and transformative construct when beginning to envision community food project work in policy terms–envisioning voting with political engagement instead of just forks.

References

Allen, Patricia. 1999. Reweaving the food security safety net: Mediating entitlement and entreprenuership. *Agriculture and Human Values* 16: 117–129.

Allen, Patricia, Margaret Fitzsimmons, David Goodman, and Keith Warner. 2003. Shifting plates in the agrifood landscape: The tectonics of alternative agrifood initiatives in california. *Journal of Rural Studies* 19: 61–75.

Center for a Livable Future. 2014. Food Policy Council (FPC) Directory. Accessed 19 Dec 2014.

Change Lab Solutions. 2013. *Licensing for lettuce: Model ordinance and guide for licensing healthy food retailer*. Oakland, CA: Change Lab Solutions.

Chen, Wei-ting, Megan L. Clayton, and Anne Palmer. 2015. *Community food security in the United States: A survey of the scientific literature*. Baltimore, MD: The Johns Hopkins Center for a Livable Future.

Franklin County Local Food Council. 2014. About. http://www.fclocalfoodcouncil.org/. Accessed Apr 20.

Freedgood, Julia, Marisol Pierce-Quiñonez, and Ken Meter. 2011. Emerging assessment tools to inform food system planning. *JAFSCD Journal of Agriculture, Food Systems, and Community Development* 83–104.

Friedland, W.H. 2008. "Chasms" in agrifood systems: Rethinking how we can contribute. *Agriculture and Human Values* 25(2): 197–201. doi:10.1007/s10460-008-9116-2.

Friedland, William H. 2010. *New ways of working and organization: Alternative agrifood movements and agrifood researchers*. Wiley-Blackwell.

Goodman, David. 2003. The quality 'turn' and alternative food practices: Reflections and agenda. *Journal of Rural Studies* 19 (1): 1–7. doi:10.1016/S0743-0167(02)00043-8.

Greer, Hannah M. 2013. Commissioners approve new policy resolution, solidify commitment to local food system: Franklin County Board of Commissioners.

Harper, A., A. Shattuck, E. Holt-Giminez, A. Alkon, and F. Lambrick. 2009. Food policy councils: Lessons learned. In *Development Report 21*. Oakland, CA: Food First/Institute for Food and Development Policy.

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

Hendrickson, Mary K., and William D. Heffernon. 2002. Opening spaces through relocalization: Locating potential resistance in the weaknesses of the global food system. *Sociologia Ruralis* 42 (4): 347–369.

Ilcan, Suzan. 2009. Privatizing responsibility: Public sector reform under neoliberal government. *Canadian Review of Sociology* 46 (3): 207–234. doi:10.1111/j.1755-618X.2009.01212.x.

Lang, Tim. 1998. Toward a food democracy. In *Consuming passions: Food in the age of anxiety*, ed. Sian Griffiths, and Jennifer Wallace. Manchester; New York, New York: Manchester University Press.

Lang, Tim, David Barling, and Martin Caraher. 2009. *Food policy: Integrating health, environment and society*. Oxford; New York: Oxford University Press.

Levine, Peter. 2007. *The future of democracy: Developing the next generation of American citizens*. Medford, Mass, Hanover, NH, Tufts University Press; University Press of New England.

Lyson, Thomas A. 2000. Moving toward CIVIC agriculture. *Choices: The Magazine of Food, Farm & Resource Issues* 15 (3):42.

Marquis, Caitlin. 2012. *The Franklin County Food Policy Audit*. Columbus, OH: Franklin County Local Food Council.

Mendes, Wendy. 2008. Implementing social and environmental policies in cities: The case of food policy in vancouver, Canada. *International Journal of Urban and Regional Research* 32 (4): 942–967.

MORPC's agriculture and food systems working group. 2010. *Central Ohio local food assessment and plan*. Columbus, OH: Mid-Ohio Regional Planning Commission.

NCoC, and CIRCLE. 2013. millennials civic health index. Washington, DC.

O'Brien, Jennifer, and Tanya Denckla Cobb. 2012. The food policy audit: a new tool for community food system planning. *JAFSCD Journal of Agriculture, Food Systems, and Community Development* 177–191.

Pollan, M. 2006, May 7. Vote with your fork. *The New York Times*. Retrieved fromhttp://pollan.blogs.nytimes.com/2006/05/07/voting-with-your-fork/

Prewitt, Kenneth, Christopher D. Mackie, and Hermann Habermann. 2014. *Civic engagement and social cohesion: Measuring dimensions of social capital to inform policy*. National Academies Press.

Renting, Henk, Markus Schermer, and Adanella Rossi. 2012. Building food democracy: Exploring civic food networks and newly emerging forms of food citizenship. *International Journal of Sociology of Agriculture & Food* 19 (3): 289–307.

Sabatier, Paul A., and Hank C. Jenkins-Smith. 1999. The advocacy coalition framework: An assessment. In *Theories of the policy process*, vol. 188.

Sabatier, Paul A., and Neil Pelkey. 1987. Incorporating multiple actors and guidance instruments into models of regulatory policymaking: An advocacy coalition framework. *Administration & Society* 19 (2): 236–263. doi:10.1177/009539978701900205.

Sachs, Carolyn, A. Patricia Allen, Rachel Terman, Jennifer Hayden, and Christina Hatcher. 2014. Front and back of the house: Socio-spatial inequalities in food work. *Agriculture and Human Values* 31 (1): 3–17. doi:10.1007/s10460-013-9445-7.

Scherb, A., A. Palmer, S. Frattaroli, and K. Pollack. 2012. Exploring food system policy: A survey of food policy councils in the United States. *Journal of Agriculture, Food Systems, and Community Development* 2 (4): 3–14.

Schiff, Rebecca. 2008. The role of food policy councils in developing sustainable food systems. *Journal of Hunger & Environmental Nutrition* 3 (2/3): 206–228. doi:10.1080/19320240802244017.

Weible, Christopher, and Paul Sabatier. 2007. The Advocacy coalition framework: Innovations and clarifications. *Theories of the policy process* 189–200.

Zukin, Cliff, Scott Keeter, Molly Andolina, Krista Jenkins, and Michael X. Delli Carpini. 2006. *A new engagement? Political participation, civic life, and the changing American citizen*. Oxford; New York: Oxford University Press.

Chapter 9
Supply Management as Food Sovereignty

Phil Mount

Abstract Against all odds, and an ongoing neoliberal barrage of criticism, Canada has maintained support for agricultural supply management programs instituted in the 1960s and 70s. The supply management organizations—and many academics—see supply management as one means by which to achieve food sovereignty, given the programmatic emphasis on the protection of family farms and restriction of unnecessary imports. However, to achieve this, supply management systems must balance a tendency for exclusion with the needs of small-scale, diversified producers. This chapter provides an assessment of one attempt to address this balance in Ontario, Canada, where small-flock chicken farmers looking to supply the new local food market ran up against the limits of the supply management system. Province-wide research with local food initiatives and consultations with our multi-stakeholder advisory groups determined that transformation of the supply management program was worth pursuing. In order to challenge potential policy solutions, I sought a series of frank, candid conversations with those intimately involved with the issues, from leaders of farm organizations and NGOs pushing for increased small-flock exemptions, to spokespersons for supply management organizations—as well as current and former provincial regulators. What follows is a brief history of the intersection of food sovereignty and supply management, a discussion of the challenges and potential policy solutions to integrate the two concepts in practice, and an analysis of the new Artisanal Chicken policy that has been developed in response—and which may offer a sustainable model to which other jurisdictions could aspire.

Keywords Supply management · Gestion de l'offre · Food sovereignty · Import controls · Quota · Artisanal chicken · Small-scale farms

P. Mount (✉)
Just Food, Ottawa, Canada
e-mail: phil@justfood.ca

I. Knezevic et al. (eds.), *Nourishing Communities*,
DOI 10.1007/978-3-319-57000-6_9

The recent rise of the local food movement in Canada was accompanied by complaints in many quarters that the existing supply management system, with its limits on small-scale producers who did not hold quota, was stifling the opportunity to serve growing direct-to-consumer markets. While many tempered their critique with a general support for the idea of supply management, some of these voices advocated wholesale changes or dismemberment of the system. Since I was born and raised on a dairy farm—and experienced first-hand the benefits and protections that this system afforded to small family farms—I was naturally drawn to this debate, with visions of babies and bathwater in my head.

This chapter is part of a broad-scale effort to (re-)evaluate potential methods to institutionalize food sovereignty. As a first step, the research presented here pays closer attention to the groundwork that has been laid, to establish the implications for other jurisdictions, than it does to an analysis of the theoretical implications. This is another example of foregrounding the needs and utility for practitioner-academics, with the understanding that the assessment of academic-practitioners will follow.

Supply management provides an interesting terrain for debate. The segmentation and stratification that authors have described in previous chapters is, in this instance, partially caused and then magnified by a structure put in place to protect and support small-scale family farm production. Because the system has been under three decades of constant attack by neoliberal proponents of 'free trade', a siege mentality has set in. In chickens (and eggs) this has led to a situation whereby producers working within the system are predisposed to define as existential threats not only the flood of exports from outside their borders, but also the very smallest producers who are their neighbours.

Against all odds, and an ongoing neoliberal barrage of criticism, Canada has maintained support for agricultural supply management programs instituted in the 1960s and 70s. The supply management organizations—and many academics—see supply management as one means by which to achieve food sovereignty, given the programmatic emphasis on the protection of family farms and restriction of unnecessary imports. However, to achieve this, supply management systems must balance a tendency for exclusion with the needs of small-scale, diversified producers. This chapter provides an assessment of one attempt to address this balance in Ontario, Canada, where small-flock chicken farmers looking to supply the new local food market ran up against the limits of the supply management system. From province-wide research with local food initiatives, and consultations with our multi-stakeholder advisory groups, the Nourishing Communities research collective determined that changes to the current supply management program was one policy adaptation worth pursuing. In order to devise, develop and challenge potential policy solutions, I sought a series of frank, candid conversations with those intimately involved with the issues, from leaders of farm organizations and NGOs pushing for increased small-flock exemptions, to spokespersons for supply management organizations—as well as current and former provincial regulators, and key players in other commodity organizations with similar experiences.

What follows is a brief history of the intersection of food sovereignty and supply management, a discussion of the challenges and potential policy solutions to integrate the two concepts in practice, and an analysis of the new Artisanal Chicken policy that has been developed in response. While it is very much a work in progress, the new Ontario policy for small-flock producers has the potential to offer a solution—a mechanism by which to integrate food sovereignty within the formal supply management program, and create a sustainable model to which other jurisdictions might aspire.

Food Sovereignty as Supply Management

> Food sovereignty is the right of peoples to healthy and culturally appropriate food produced through ecologically sound and sustainable methods. More importantly, it is the right to define and control our own food and agriculture systems, including markets, production modes, food cultures, and environments (Wittman and Desmarais 2012, n.p.).

In recent years, some descriptions of food sovereignty have been faulted for their broad depiction of goals, many of which have expanded to embrace the goals of food security and food justice, and to demonstrate the interconnectedness of food movement aspirations. This note of caution suggests that without a roadmap for transition, and without practical tools to actualize these concepts, they will remain as loose goals held together only by their critique of the existing global food system (Edelman 2014; Bernstein 2014). That said, many food sovereignty proponents have offered specific tools to transition toward food sovereignty, including tariffs, redistributive agrarian reform, control over seeds, a moratorium on agrofuels, and support for agroecological technologies (Holt-Giménez and Altieri 2013; Rosset 2008). As discussed in Chap. 10, participatory organic certification has been proposed as another vehicle for enhancing food sovereignty.

Supply management is one of the tools consistently advanced by food sovereignty proponents (Desmarais 2002; Pimbert 2009; Rosset 2008), mainly because its three pillars—production planning and discipline, producer pricing, and import controls—resonate with food sovereignty's broader goals of farmer control and state support of small-scale agriculture. Under supply management, farmers produce a specific amount that represents their share of the market; all farmers receive the same fair price, based on the average cost of production; and the government establishes trade barriers to protect this regulated market from outside interference. This extent of farmer control over their market is seldom seen in other expressions of food sovereignty, and is dependent on enforceable compliance and market regulation. Farmers agree to quota-based control of their production volumes only because they understand that—in return—they will be guaranteed a price that is slightly higher than their cost of production, in a market that is protected from the

distortion that would follow free market access of those who have not agreed to control their production (Chicken Farmers of Ontario (CFO) 2015b; Dairy Farmers of Canada 2015; McMurchy 1990). In Canada, this system was introduced piecemeal by commodity in the 1960s and 1970s, starting in some provinces, then coordinated across the country.

There are some interesting lessons in the story of the ongoing development of supply management in Ontario, about the difficulties of integrating flexibilities that would allow for change and inclusion, within structures that—by their nature—are designed to control change and market share. There are no secrets here: all producers, all farm organizations, all regulators, all policy-makers understand that for agricultural producers—regardless of commodity or sector—the 'free market' includes huge swings in supply, prices and returns. This is why the Ontario government has recently supported "risk management" programs—that provide support for farmers when agricultural commodity prices are low—in many different sectors (from grains to beef), and is advocating for the federal government to do likewise. The supply management sectors do not ask for or need "risk management" subsidies, since supply management was developed explicitly to avoid these risks.

However, a brief history of the Ontario experience will show that the process of the institutionalization of supply management encouraged increased scale and specialization of production, which in turn has discouraged the very farmers—and the small-scale, mixed agricultural farming practices—that are associated globally with the concept of food sovereignty. I argue that both food sovereignty and supply management require carefully managed, exclusionary markets. However, both also require careful and ongoing scrutiny of the nature of those exclusions—and the rationales upon which they are based—to avoid the appearance or the reality of cartelization (Girouard 2015).[1] This is a critically important exercise because the maintenance of the formal supply-managed sectors demands political support in an era when such support is increasingly challenged as 'protectionism'.

The sections that follow contain many candid observations from those in leadership positions—past and present—in the supply management system, and those most intimately involved in the discussions to adapt these systems to accommodate small-scale local food production. Interviews took place in 2013, lasted an hour on average, and the process concluded when participants could not suggest other key players for inclusion. Observations that follow are from 23 present and past leaders of NGOs; farm and supply management organizations (indicated by FO); and provincial ministries, including regulators (indicated by GOV).

[1]Girouard (2015: 12–18) supplies evidence of the concentration of quota, the decline of farm numbers, and the discouragingly high price of quota for chickens, eggs and milk across the country.

Supply Management in Canada

The formal supply management system in Canada grew out of three interconnected circumstances in the post-war period: fluctuating supply had caused wild swings in prices for producers; concentration of the transportation and processing links in the food chains had dramatically reduced farmers' control of commodities and pricing; and governments of the day were responsive to the collective voices of farmers facing market crisis (Muirhead and Campbell 2012; Muirhead 2014). What came out of these circumstances would today be seen as a textbook food sovereignty solution. In the dairy, egg and chicken sectors, power was redistributed to producers through control over the product—from farm to processor—and pricing based on farmers' average cost-of-production. At the same time, the federal government supported these sectors through a combination of direct subsidies and increased tariffs to keep out excessive foreign competition and dumping. In return, producers agreed to market only a specific amount of product—controlled by a quota system—and to regularize the supply so that product would consistently meet consumer needs throughout the year. Dairy producers demanded this solution in 1963, leading to the creation of the Canadian Dairy Commission (Muirhead 2014), while chicken producers in Ontario voted in favour of this solution in 1965 (CFO 2015f).

A number of factors led farmers to advocate for constraints on their own market opportunities. In the 1960s and early 70s there was a period of time when the price of poultry and eggs was below the cost of production of more than half of the producers. "In 1961 alone, production volumes increased by 23 per cent, live prices dropped as low as 12 cents a pound while the cost of feed and chicks stood at 17 cents a pound" (CFO 2015a: 15). As one farm organization policy advisor (FO3)—involved in this discussion at the time—made clear, technology advances exaggerated the normal swings and disruptions of the market. The bottom producers were failing because they were not making any money, but even with their exit the price did not rebound: the rapid pace and productivity gains of new technologies enabled early adopters to produce so much more that there was still a surplus, continued low prices, and more farm failures. The pace of change—how many eggs a hen was laying in a year, and how many days of the year a hen was laying eggs—reflected new developments in medication; the quality of feed; the genetics in the hen; and the feed storage and delivery technology.

Supply management was implemented to guarantee a price that would cover the cost of production for most producers, taking into account rising input costs. The three interconnected pillars of supply management—import control, producer pricing and production discipline—have proven remarkably effective. In the intervening years, direct subsidies have been completely removed, and farms in these sectors have remained viable without excessive growth, while prices for processors, retailers and consumers have remained steady and reasonable.

Canadian supply management organizations have been strong supporters of food sovereignty positions at WTO negotiations (GO5 2015), supporting the joint declaration of the Food Sovereignty Summit in 2007 which included the statement

"*Québec and Canada offer unique and effective market regulation tools to achieve the objectives of food sovereignty, including supply management, marketing and collective cooperation*" (Paré 2009). These organizations were among the organizers of the Food Sovereignty Coalition, whose primary purpose is "*to promote public national initiatives and international agreements concerning the right of the people to define their own food and agricultural policies, in order to preserve their right to food and food security*" (Paré 2009, 2).

However, while these Canadian organizations are keen to develop mutual support through such advocacy, to imagine the institutionalized version of supply management as food sovereignty picks at the scabs of both concepts—particularly when faced with the question "…for whom?" Or, to put it another way, who or what is sovereign in 'food sovereignty' and 'supply management'? To whom does food sovereignty extend the rights to define and control, within a system based on exclusion? These questions expose sore points and blemishes on both concepts that are too often ignored but, when poked at, quickly show themselves as open wounds.

Regularized supply was one pillar of the formal supply management programs. Only quota-holders could now sell their product, and each farm had to hold a specified minimum amount of quota. For many farms, this meant increasing herd or flock size, accelerating a general trend toward increased scales and specialization of production. Small-scale, mixed farms—by far the majority at the time—had to choose between the only alternatives available; joining the quota system and producing only for home use. For those who committed to the formal supply management system this meant years of focused, careful growth and investment. As the system matured and technology advanced, productivity and efficiency demanded more expensive inputs, and quota became capitalized.[2] Even small-scale expansion—to meet the needs of a successor generation, for example—required significant capital investment. This was by no means a free ride. However, there can be no doubt that the maturing system also discouraged new farmers and diversified farm production models, and favoured those same existing quota-holders (Desmarais and Wittman 2014), who have the benefit of income stability through guaranteed markets, and the access to loans backed by capital holdings and that stability. Left out of this equation today are those who would join this structure, but lack the required capital, and those who already produce eggs and poultry, but have no desire to do so on the scale required for admission to the formal supply-managed sectors.

[2]The capitalization of quota is a sore point for many critics of the current supply management system. While some would suggest that recognition of the monetary value of quota was an inevitable outcome of the system, it is surely equally true that a system that formally rejected the sale of quota would have produced outcomes significantly different in nature. An alternative system could have mandated that quota—initially 'free' to farmers—would revert to an open pool should a producer decide to sell their farm or scale back production. Whether such a system would have survived the early onslaught of neoliberal reforms remains a matter for speculation. However, two facts are clear: there was very little appetite among producers for a quota with no monetary value (FO3); and the extraordinarily high monetary value of quota has acted as a barrier to the critics of supply management, whose arguments for scrapping the system run aground on the high cost of compensating farmers for their investment in quota.

When the supply management systems were created, it was clear that it would be exceptionally difficult to embrace all chicken and egg producers within the quota system, as most farms—including those specializing in other commodities—had a few chickens. This also meant that it would be impossible to suggest that those without quota would no longer be able to raise chickens. As such, every province created a small exemption for home or on-farm use—in Ontario this number was 102 meat birds and 100 laying hens. In the intervening years, as the price of quota and the minimum quota holding rose, and the local food movement began to thrive, small-scale producers increasingly protested at these low exemption numbers. In order to serve differentiated local food markets, they needed space in the supply management system between the 102 bird maximum under the exemption, and the minimum quota allotment of 14,000 units—or roughly 170,000 kg of chicken production per year, or about 90,000 birds in 6+ production cycles (CFO 2015d). In 2006, Chicken Farmers of Ontario (CFO) acknowledged this problem, and by 2008 had a pilot project in place whereby farms could register to raise as many as 300 birds for home use or to market from the farm gate, under the 'Small Flock Exemption' program. Unlike the Nova Scotia exemption (Sooksom 2012), the CFO exemption did not consider farmers' markets an extension of the 'farm gate': off-farm sales were not permitted. Over 8,000 farmers registered for the exemption under this pilot (Better Farming 2008), and by 2015 that number had grown to just under 15,000 (CFO 2015a).

With an average flock of 65, it is clear that not all of these small flock producers are anxious to produce more than 300 birds—and that is a good thing, because more than 4.5 million chickens would flood the local markets, crashing the price and leading to the failure of local producers. But for those who want to develop a viable local market, the limit of 300 chickens per year and the prohibition from selling beyond the farm gate are seen as too restrictive. As well, the limit prevents local producers and markets from developing the critical mass in certain regions—particularly in Northern Ontario—required to support viable local processing. And from the number of farm organization campaigns to raise the exemption in the last decade alone, it has been clear to CFO for a long time that the system required an adjustment, and their excessively patient contemplation of the alternatives has exasperated many producers.

Supply management is ultimately about protecting farmers from the vagaries of the market: fluctuations in market prices, and costs (inputs, transportation, new technologies) that drive them through highs and lows in the same ways that we've seen in other agricultural commodities over the years. And while other commodity sectors rely on risk management programs to subsidize farmers—and protect them against those very same market effects—supply management provides protection of high quality, safe and cost-effective perishable farm products with very little input or costs on the part of government or consumers (Muirhead 2014). But supply management cannot do this while at the same time preserving those benefits only for a select few over time. Supply management is by its very nature exclusionary.

But that exclusion must be made permeable, not only inter-generationally, but also to new producers that enable the system as a whole to adapt to the circumstances—and new markets—that present themselves.

Challenges

Four significant challenges have arisen in recent years, each providing a different threat to the stability of the formal supply management programs in Canada. The first and most powerful is an increasingly vocal 'free trade' message delivered by an intelligentsia of professional neoliberals who target supply management as an 'anachronism'. Supply management provides a handy foil for those looking to polish their public homage to the free market (Ibbitson 2012; McKenna 2013; Watson 2011), or take a radical stance that sets them apart from the—largely supportive—political consensus (Hall Findlay 2012, 2014). The second is a wave of bilateral and multilateral trade deal negotiations, each of which provides a fresh reason for the free trade intelligentsia to pull out their 'free trade good, supply management bad' stock media articles.[3] The third challenge is a generational shift, which comes at a time when the price of both quota and land have climbed to heights that make entry into these sectors—for new farmers—prohibitive. The fourth challenge—and the focus of this chapter—has come with the rise of the local food movement, and the growing number of diversified farmers interested in serving this new, local, direct market.

These farmers typically operate on a scale that makes participation in the formal supply management system unreasonable. And while it is possible to operate outside of those systems—particularly in poultry and eggs—the formal supply management organizations also limit the scale of production for those who do not hold quota. In Ontario, the limits to flock size mean that these farmers cannot take advantage of scale efficiencies to expand their direct sales, even where the market exists. At the same time, the options for small-scale processing continue to shrink. Processing infrastructure for the supply-managed sectors is geared to the relatively much larger supply-managed producers, and regulations aimed at large-scale processors have driven many smaller processors out of business. Compounding this challenge, local food consumers—a growing, vocal, and fairly influential force—have pushed producers to supply a diverse set of products, and therefore have a natural affinity to diverse, small-scale, direct-marketing producers, and a limited understanding of or patience for the legitimate challenges of the formal supply managed sector to accommodate diversification (Sustain Ontario 2013).

[3]The latest trade deal to stir their passion is the Trans-Pacific Partnership, resulting in predictable pieces from Watson (2015), McKenna (2015), Ibbitson (2015), Hall Findlay (with Mintz 2015), Manley (2015), Coyne (2011), and someone from the CD Howe Institute (Schwanen 2015). A similar set of articles was produced in advance of the recent Canada-EU Comprehensive Economic and Trade Agreement.

Local Food and Supply Management

> The whole notion of product differentiation is a challenge to the supply management system that we have constructed in the province, and 'local' just adds to the pressure, and makes it harder to be flexible, and adapt to new circumstances. (GOV1)

> There is no room to work inside the system with these alternatives. The system is designed for a White Rock chicken – it's all cookie-cutter. I think if you interviewed supply-managed farmers and asked them what they do differently from the other supply-managed farmers, they would say 'nothing'. And that's the beauty of the system. They have 1,100 people producing the exact same product: same genetics, same feed, same housing facilities – you have a monoculture of chicken happening. (FO1)

Specialization and scale of production are key differences between existing supply-managed producers and those wishing to produce chicken for local markets. Small-scale farmers suggested that, to be successful producing local food, they need to be able to have a diverse offering of products—so that they have cash flow through the year, and can utilize their facilities and land assets to the maximum. Others who prioritize ecologically sound production practices or minimizing risk from adverse market events also find that diversified livestock and crop production is the best fit for their needs, as it provides both an organic fertilizer and multiple annual income streams. They are not interested in specializing in one sector of agriculture. As a consequence, most small-scale farmers do not qualify for and are not involved in government subsidy programs, and find ways to make a living from their farm.

For these farmers, local, direct marketing is an obvious choice, as are chicken and egg production. However, because they are outside of the quota system, in Ontario these producers have been limited to 300 meat birds—per year—and 100 layers under the 'small flock exemption' programs, intended for on-farm consumption and farm gate sales. These were among the smallest exemptions in the country, and for years farm organizations that represent these farmers—Ecological Farmers Association of Ontario, National Farmers Union and Practical Farmers of Ontario—have run campaigns to have the exemptions increased, supported by similar campaigns from NGOs such as Sustain Ontario and Eat Local Sudbury. Their common point of concern was that local markets were not being served by the supply management system.

It was clear to outside observers that 'local food'—because of the small, poorly defined nature of the market—was an inconvenience to supply management organizations, who were simply hoping that it was a fad that would go away. The local food market—with small-scale, diverse production and direct markets—is outside of their comfort zone. Their producers and processors operate on a scale that means they not only have no direct connection to local food consumers, they also have no interest in identifying this consumer, because they have little means of meeting that market—and processors have little desire to provide an alternative stream, or disrupt their lines, to meet the needs of small-scale producers.

> Processors have more control over and get more benefit from supply management than producers. They have a share of a captive market with limited supply. [They] won't be expected to give away a portion of the market to those who can't prove there's a market not being served: without enough market share, the processors can't survive. On the other hand, the processing industry is not innovative enough: there are too few companies who are already benefitting from supply management, without any incentive to innovate. (GOV2)

Processors play a significant role in the current system, and in any changes that occur. The poultry supply management organizations rely heavily on processors to identify markets and understand their needs. However, it has long been recognized that innovation is not easily identified from 'inside the system', and innovation that does not complement or integrate with existing system components is very rarely recognized as beneficial or necessary (Schumpeter 1943). Edelman (2014: 14) identified the relevance of this message for supply management when he pointed out that micromanaged production systems suffered from fundamental problems, "including the failure of the microeconomic signals from end users to be heard or to correspond to the specific products needed or desired." While the board of CFO concluded that there were markets that were not being met, they still looked to their processors to identify and fill these markets—as was the norm in such circumstances. This guaranteed that the only markets that would be identified would be those that were cohesive, large and stable enough to be served through familiar and/or existing distribution and retail structures.

The Farm Products Marketing Commission (FPMC) has the oversight and regulatory responsibility for all types of regulated marketing in Ontario, including the responsibility to ensure that, if there is a market that is not being fulfilled by supply-managed organizations, changes are introduced to meet that market (GOV2). In practice FPMC has sidestepped this obligation by adopting wholesale the interpretation of the supply management organizations: processors are the marketers of the finished product, and therefore in the best position to determine whether markets exist, and what is required to fill those markets (GOV3).

As such, the local food market for chicken remained undefined and officially unrecognized. Some organizational administrators and even their provincial regulators suggested that because chicken farmers were not developing this niche, it did not exist (FO2; GOV3)—carefully ignoring the facts that small flock growers were largely prohibited from serving this market, and their quota-holding producers[4] were uninterested in developing direct markets. Alternatively, some suggested that 'local food' was simply an alternative 'marketing channel', not a 'market' (GOV3). That is, local food consumers were simply accessing different channels to source their food, not creating an alternative market. This interpretation represents a fundamental misread of market signals: the new market is indicated by the reason for the consumer's choice of the—less convenient, more expensive—alternative marketing channel, not by the channel itself. Consumers are switching to these markets because these are not identical or even similar products: what is sold through direct

[4]The exception among quota holders would be the small number granted special dispensation to operate at below the provincial minimum quota unit requirement (14,000).

markets is far more than the product, it is a set of relations and values attached to the product and the exchange, and therefore something that conventional supply managed operations cannot easily supply (see Chap. 10 for a parallel discussion of alternatives to conventional organic certification geared towards local markets and small-scale producers).

Where there was recognition that the system is not flexible enough to allow for rapid growth or adaptation to changing markets, inflexibility was seen as a function of the national system of quota allocations, which stood in the way of faster and more appropriate growth that would meet the needs of new markets. The national allocation is negotiated between the various provincial marketing boards. Ontario has 39% of the population and is allocated 33% of the national chicken quota. While many other provinces raised their exemptions and simply accounted for the resulting sales within their quota allocation, Ontario and Quebec must deal with a different context, with many more small, non-quota-holding farms, and therefore a greater potential for raised exemptions to result in dramatically increased sales. With years of little or no increase in quota allocation, CFO was hesitant to take this step if it meant asking existing quota-holders to reduce their production. However, in 2014 a new national agreement guaranteed that Ontario would see 10 years of growth in its allocation, including an immediate 3.5% increase in quota (CFO 2015a), and changed the way quota would be allocated in future, addressing many of CFO's concerns (Mann 2014).

This opened a door to address the small-flock issue without impinging on existing quota allocation within the province, and CFO began immediate consultations with stakeholders provincially to determine what should be done with future growth potential. What remained to be answered was the question 'if there is a local market that is not being served, what is the best way to serve it?' …Or, put another way, 'is there room to include small-scale farms in the sovereignty provided by our system of supply management?'

Framing the Question

> For people who want to change the system, they usually come at it [saying] "the system sucks, let's change it". We like to think of it as "the system is working, but we realize that we have to evolve". (FO2)

Critics of the current, highly capitalized, commodified quota system understand that the system is working for a small number of large producers, but are struggling to understand how it could overcome significant barriers in order to also work for small-scale producers. Many suggested that the practices and supporting framework of large-scale production is incompatible with diversified, ecologically sound production models, and that those incompatibilities are real barriers to the participation—and therefore the sovereignty—of small-scale producers. The fact that quota—initially free to existing producers—gained a dollar value and became a

commodity in itself was seen by many (FO1; FO3; FO4) to be the start of the system's problems. This was compounded by the lack of a cap on per farm quotas (FO1), allowing an ever-increasing scale of production, which in turn had implications for cost-of-production calculations, and pushed the system towards infrastructure and rationales—such as minimum quotas—that supported large-scale production. Many of the farmers who hold these critical views philosophically support supply management, but are opposed to the model that has developed (FO1; FO4; see also Girouard 2015; Ashraf and Konforti 2010), with too much power in the hands of the marketing boards, who appear to only look out for the interests of a small number of producers, and take positions that to small-scale farmers often appear completely inflexible—even intransigent (FO1; FO3; FO4).

For their part, the supply management organizations have as their first priority the preservation of supply management in an increasingly hostile environment, framed by media critiques—particularly related to trade negotiations. The second priority is making that system work effectively for their quota holders, both farm members and processors. Their system only functions effectively when quota-holding producers accept and abide by the common position adopted by the organization, even if they disagreed with that position prior to adoption (McMurchy 1990). This also means that, once the membership and/or the board adopts a position, the staff and leadership of the organization can only publicly advance the adopted position. If the position of CFO toward small-flock farmers may occasionally seem intransigent, it is usually because the decisions are being filtered through these priorities.

Biosecurity is one issue that reflects this context. For the 1,100 large-scale, quota-holding producers, production safety and disease prevention takes the form of an On-Farm Food Safety Assurance Program, following international standards and Hazard Analysis Critical Control Point (HACCP) protocols.

> If this is a measurable standard then we need to… work at finding a way that even small producers can afford to be part of the measurement. But if this is just about establishing a routine that gives a strong perception of safety—which is what HACCP is—then different sizes of enterprises should have different processes to establish that.
>
> For me there is a huge difference between a measurable standard of safety, and the notion of having a vigorous perception of safety. I am a supporter of HACCP: we do these things, but let's not misunderstand what we are doing. (FO3)

These systems have been developed for the management of large barns with confined flocks, and designed to keep all outside pathogens from entering the buildings. The notion that the chickens might themselves leave the buildings is not even contemplated in these protocols. Needless to say, regulations that interfere with or prohibit pasturing would severely limit the viability of both organic and small-scale producers, and efforts to include small-scale farmers will require different metrics from a system whose basic standards preclude their production practices.

CFO held that biosecurity was a serious issue not fully appreciated by those outside of the sector, and that one outbreak on a small, unregulated farm could

cause severe disruption for the entire Ontario industry. Several observers from outside of the system questioned the illusory 'safety' of protocols for large-scale confinement facilities, and instead spoke of a clear advantage to diffusing the production system into smaller units—to *enhance* biosecurity. "*Bigger units are more inherently unsafe—safe is not the same as 'easier to regulate'*." (FO5)

However, the existing food safety assurance approach has become an important part of how CFO members talk about their product. The tension will come at the critical point where they decide, as an organization, whether to present the existing industry standards as *what is required to produce safe chicken*, or *what is required to produce safe chicken in large-scale confinement facilities*.

The food production safety standard is only one of the fundamental distinctions that will frame the question of the future shape of the system of supply management, and what transitions are possible, including the extent to which small-scale producers can be accommodated within the sovereignty created by that system. As indicated by the biosecurity discussion, these conversations are shaped by rationales and justifications—from all parties—practiced over the course of previous debates, as much as by objective realities, facts, or the merits of the proposed solutions.

Solutions

Of the possible solutions on offer, three were raised consistently as worthy of discussion: special reduced quotas that would allow small flock producers to continue to raise chickens seasonally and expand their markets within the quota system; a small flock license that would allow production above the exemption numbers for specific producers, outside of the quota system; and an increased quota exemption that would apply across the board to all small flock producers.

Quota Holding

In the past, CFO granted quota to a small number of producers, which allowed them to produce a reduced number of birds annually (e.g. 2,000)—well below the 'minimum' allotment of about 90,000 birds. In theory, the possibility has existed for any producer to apply for these reduced quota holdings, but there was little appetite or support to grant additional quotas (NGO1): with no official policy, and decisions made on an ad hoc basis by the CFO board, very few applied (FarmStart 2010). There was not much faith in quota-based production as a solution for small-scale farmers, who would be hard pressed to recoup the additional expense in a product that—because of their alternative practices—was already far more expensive to produce. And while the CFO favoured a solution where all

commercial production would be regulated, they recognized that quota production might not be the solution that would both find a general consensus and work for the regulatory body (FO2).

Licensed Production

At the time of the interviews, only one province in Canada—Nova Scotia—had developed a licensing system as a solution for small flock production and alternative marketing. Under this model, the producer applies to produce 500 chickens for free-range or organic markets. After a year of successfully demonstrating the market, the producer can apply to increase the license up to 10,000 birds (Sooksom 2012). While this alternative had been proposed elsewhere (FarmStart 2010) many research participants were unfamiliar with the licensing option. But once introduced to the concept, several saw this as a possible solution, balancing regulatory oversight and flexibility (FO1; FO2; FO4; FO6; GOV2).

Increased Small Flock Exemption

The historical description showed that, as the supply management system evolved, the only space for diversified producers was under the small flock exemption program. The 2014 Annual Report (CFO 2015c) revealed that CFO had 1,138 quota-holding producers, and the number of registered small flock growers who purchased chicks had increased from 8,000 in 2008 to just under 15,000 in 2014. While this is a formidable number, and could produce alarming speculation on the outcome of increased exemptions ("what if they all want 2,000 birds?"), the average small flock size in 2014 was 65 birds. Of course, this figure includes backyard 'flocks' of 2 chickens, as well as those producing at the 300-limit. While CFO does not release the number of small flocks that are raising the maximum under the exemption, these figures tell us that number is under 3,200, almost certainly less than 2,000, and more than likely under 1,000. What remains uncertain is how many small flock growers would increase their flocks beyond 300, given the opportunity.

Since all small flock farmers were also therefore exemption-holders, it is understandable that for many the discussion of solutions focused on the potential for a raised quota exemption. Small-scale farmers also looked for all forms of direct marketing—not just off-farm sales—to be accepted as approved market channels (FO1). In 2012, Practical Farmers of Ontario requested a 2,000 bird exemption. With minimal resources, the campaign generated some immediate support, including the signatures of over 400 farmers (FM4). Sustain Ontario attempted to advance the conversation with their 'More Flocking Options' campaign, which Eat Local Sudbury supported with a regional 'We Want Northern Chicken' campaign.

For a number of reasons, CFO was hesitant to adopt the increased exemption model. The exemption was not intended as a commercial program. While they were willing to open the door to small-scale commercial sales, they felt the need for more control to better support the success of the initiative, to maintain regulatory and food safety oversight, and to ensure that the program did not significantly harm the interests of their existing quota-holders (FO2).

The Artisanal Chicken Program

In July 2015, CFO introduced a new program designed to "support expanded business opportunities for chicken farmers and offer Ontario consumers even more choice in accessing locally grown chicken" (CFO 2015e). While the 300-bird exemption—renamed the Family Food Program—remains in place with the same restrictions, small flock producers now have an opportunity to apply for a license under the Artisanal Chicken Program. In their own words, CFO expects this program to "appeal to smaller, independent, family farmers looking to support local markets" (CFO 2015e). For about $0.25 per chick, these farmers can apply for a license to raise between 600 and 3,000 chickens, in partnership with other members of the artisanal supply chain (hatchery, processor, market, etc.).

The release of this new policy prompted a flurry of tempered enthusiasm on social media, where the initial program description raised many questions. Small-scale famers with pastured chickens were immediately concerned with whether their traditional practices were incompatible with food safety and biosecurity demands. CFO anticipates that the On Farm Food Safety Assurance Program's 'Free Range' option will reconcile these concerns (CFO 2015g). While some raised the possibility that this program was intended as a means to help quota-holders access the local market, CFO has now clearly indicated that quota-holders cannot also hold a license. Similarly, those with established direct-to-consumer markets wondered if they would be disadvantaged without a more conventional market partner on their application. CFO has provided reassurance that most forms of local sales—including direct-to-consumer—are acceptable market partners (CFO 2015g).

The new Artisanal Chicken program appears to offer an opportunity for small flock farmers to grow their markets within the supply management system, and without the need to purchase quota—an elegant solution to a problem that has vexed local food proponents in the province for years.

Aftermath

> I don't like the word supply management, I like the word 'market sharing'—to me it is about sharing the marketplace. And when you've committed to sharing the marketplace, it comes with some things that you have to do in order for your share to be fair with everybody else in the market (FM3).

I have often wondered how these conversations over the years might have been different if all chicken producers were automatically members of the supply management organizations—or if the processors were not. The disconnect between supply management as a program and food sovereignty as an ideal has been the lack of accommodation of small-scale farmers. The particular institutionalization of supply management in Canada—with market-based quota and minimum production levels—created barriers to the participation of small-scale, diversified farmers. These barriers became a pressing issue only with the growth of local food markets that could not easily be met through the system's structures, and which were tailor-made for these same small-scale farmers.

Transition in the supply management system will involve creating a balance between the needs of existing producers and the needs of new producers that would like to join the system, irrespective of their scale of production—without dismantling that system completely. If the formal supply management institutions perceive trade negotiations and public rhetoric as a threat to their institutions—and to supply management itself—this can easily become a defence against any and all change, since to open the door to any kind of reassessment of supply management might result in the demise of the system And this is a legitimate concern. The Canadian federal government recently completed a trade deal with Europe that opened the door to increased non-tariff dairy products, circumventing one of the pillars of supply management—and looks set to open that door even wider in the Trans-Pacific Partnership trade deal.

With the Artisanal Chicken Program, CFO has taken a bold step that has the potential to deliver "proactive, relevant and meaningful system evolution"—a goal of their latest mandate 'Evolving Responsibly in a Changing World' (CFO 2015a). By getting in front of the issue and creating space within the system for producers who use different production approaches, prioritize different values, and serve the needs of an emerging, differentiated consumer market, CFO has taken a step to redress the imbalance of sovereignty in their system. Careful, considered, collaborative, supportive and flexible application has the potential to make the new Artisanal Chicken Program a leading example of both 'supply management 2.0' (Girouard 2015) and the new movement for food sovereignty in Canada.

References

Ashraf, K., and L. Konforti. 2010. *Scaling up local food systems in Quebec and Ontario: Actors, institutions, and change in the governance of two regional food systems*. Équiterre.

Bernstein, H. (2014). Food sovereignty via the peasant way: a sceptical view. *Journal of Peasant Studies* 41 (6): 1031–1063.

Better Farming. 2008. Quota exemption for Ontario's small chicken farmers. Ag Media Inc. http://www.betterfarming.com/online-news/quota-exemption-ontario's-small-chicken-farmers-1484.

Chicken Farmers of Ontario (CFO). 2008. Small flock and farm gate marketing. http://smallflock.ca/FAQ2.aspx.

Chicken Farmers of Ontario (CFO). 2015a. Evolving responsibly in a changing world. *2014 Annual performance report*. http://www.ontariochicken.ca/Farmer-Member-Resources/Publications.aspx.

Chicken Farmers of Ontario (CFO). 2015b. Responsible supply management. http://www.ontariochicken.ca/About-CFO/Responsible-Supply-Management.aspx.

Chicken Farmers of Ontario (CFO). 2015c. Artisanal chicken program. http://www.ontariochicken.ca/Programs/Artisanal-Chicken-Program.aspx.

Chicken Farmers of Ontario (CFO). 2015d. Quota info. http://www.ontariochicken.ca/Farmer-Member-Resources/Quota-Info.aspx.

Chicken Farmers of Ontario (CFO). 2015e. Artisanal chicken policy No. 212-2015. http://cfoprograms.ontariochicken.ca/About/Artisanal-Grower-Program/Artisanal-Chicken-Policy-No-212-2015.aspx.

Chicken Farmers of Ontario (CFO). 2015f. How the system started. http://www.ontariochicken.ca/News-Events/Events/50th-Anniversary/50th-History.aspx.

Chicken Farmers of Ontario (CFO). 2015g. FAQs for farmers. http://cfoprograms.ontariochicken.ca/About/Artisanal-Grower-Program/FAQS.aspx.

Coyne, A. 2011. The $25,000 cow. Maclean's, August 15. http://www.macleans.ca/general/the-25000-cow/.

Dairy Farmers of Canada (DFC). 2015. Maintaining supply management during trade negotiations. http://www.dairyfarmers.ca/what-we-do/international-trade/maintaining-supply-management-during-trade-negotiations.

Desmarais, A.A. 2002. Peasants speak-the vía campesina: Consolidating an international peasant and farm movement. *The Journal of Peasant Studies* 29 (2): 91–124.

Desmarais, A.A. and H. Wittman. 2012. Food sovereignty in canada: Movement growing to control our own food and agriculture. *Canadian Centre for Policy Alternatives.*. Accessed at https://www.policyalternatives.ca/publications/monitor/food-sovereignty-canada

Desmarais, A.A., and H. Wittman. 2014. Farmers, foodies and First Nations: getting to food sovereignty in Canada. *The Journal of Peasant Studies*. doi:10.1080/03066150.2013.876623.

Edelman, M. (2014). Food sovereignty: forgotten genealogies and future regulatory challenges. *Journal of Peasant Studies*, 41 (6): 959–978.

FarmStart. 2010. New farmers and alternative markets within the supply-managed system. Metcalf Foundation. http://metcalffoundation.com/publications-resources/view/new-famers-and-alternative-markets-within-the-supply-managed-system/.

Girouard, B. 2015. Toward supply management 2.0 in Canada. Union Paysanne. http://www.unionpaysanne.com/supply-management-2-0.

GO5. 2015. WTO and agriculture—Joint declaration. http://www.go5quebec.ca/en/declaration.php.

Hall Findlay, M. 2012. Supply management: Problems, politics—and possibilities. *School of Public Policy Research Papers* 5 (19): 12–19.

Hall Findlay, M. 2014. Why your milk costs so much, and what to do about it. Maclean's, May 12. http://www.macleans.ca/economy/economicanalysis/why-your-milk-costs-so-much-in-canada/.

Hall Findlay, M., and J. Mintz. 2015. Here's Canada's way forward on supply management, June 10. http://www.theglobeandmail.com/report-on-business/rob-commentary/heres-canadas-way-forward-on-supply-management/article24878498/.

Holt-Giménez, E., and M. Altieri. 2013. Agroecology, food sovereignty and the new green revolution. *Agroecology and Sustainable Food Systems* 37 (1): 90–102.

Ibbitson, John. 2012. Why protecting dairy, poultry farmers is no sacred cow for Harper, March 12. http://www.theglobeandmail.com/news/politics/john-ibbitson/why-protecting-dairy-poultry-farmers-is-no-sacred-cow-for-harper/article2366116/.

Ibbitson, John. 2015, July 29. Everything you need to know about the Trans-Pacific Partnership. Retrieved from http://www.theglobeandmail.com/news/politics/everything-you-need-to-know-about-the-trans-pacific-partnership/article25769342/.

Manley, J. 2015. John Manley: If Ottawa truly wants to tear down provincial trade barriers, it should start with supply management, January 13. http://news.nationalpost.com/full-comment/

john-manley-if-ottawa-truly-wants-to-tear-down-provincial-trade-barriers-it-should-start-with-supply-management.
Mann, S. 2014. More chicken quota for Ontario growers on the way. *Better Farming*. Ag Media Inc. http://www.betterfarming.com/online-news/more-chicken-quota-ontario-growers-way-56630. Accessed 21 Nov 2014.
McKenna, B. 2013. Fowl play: How supply management is thwarting Canada's agri-food industry, March 23. http://www.theglobeandmail.com/report-on-business/economy/fowl-play-how-supply-management-is-thwarting-canadas-agri-food-industry/article10234073/.
McKenna, B. 2015. Pitchfork politics: The latest front in the supply-management war, May 31. http://www.theglobeandmail.com/report-on-business/pitchfork-politics-the-latest-front-in-the-supply-management-war/article24716094/.
McMurchy, J.C. 1990. A history of agricultural marketing legislation in Ontario. http://www.omafra.gov.on.ca/english/farmproducts/factsheets/history.htm.
Muirhead, B. 2014. Crying over spilt milk: The history of dairy supply management and its role in recent trade negotiations. CIGI Papers No. 30.
Muirhead, B., and H. Campbell. 2012. The worlds of dairy: Comparing dairy frameworks in Canada and New Zealand in light of future shocks to food systems. In *Rethinking agricultural policy regimes: Food security, climate change and the future resilience of global agriculture*, ed. R. Almås, and H. Campbell, 147–168. Emerald Group Publishing Limited.
Paré, F. 2009. What is food sovereignty? *Dairyman's Digest* 10 (3): 2.
Pimbert, M. (2009). *Towards food sovereignty*. London: International Institute for Environment and Development.
Rosset, P. (2008). Food sovereignty and the contemporary food crisis. *Development* 51 (4): 460–463.
Schumpeter, J.A. 1943. Capitalism in the postwar world. In *Postwar economic problems*, ed. S.E. Harris, 113–127. New York: McGraw-Hill Book Company.
Schwanen, D. 2015. Canada can manage dairy supply without breaking its TPP promises. The Globe and Mail, July 27. http://www.theglobeandmail.com.
Sooksom, R. 2012. Getting started in small flock poultry in Nova Scotia. ThinkFARM. Nova Scotia Department of Agriculture. http://novascotia.ca/thinkfarm/documents/SmallFlockPoultry.pdf.
Sustain Ontario. 2013. Supply management 101: What are Ontario's flocking options? Video webinar. https://vimeo.com/72679774.
Watson, W. 2011. William Watson: Time to end supply management, April 1. http://business.financialpost.com/fp-comment/william-watson-time-to-end-supply-management.
Watson, W. 2015. William Watson: On milk, follow the EU lead, July 8. http://business.financialpost.com/fp-comment/william-watson-on-milk-follow-the-eu-lead.
Wittman, H., and A.A. Desmarais. 2012. Movement growing to control our own food and agriculture. *The Monitor*, Sept 2012. Canadian Centre for Policy Alternatives. https://www.policyalternatives.ca/publications/monitor/food-sovereignty-canada.

Chapter 10
Navigating Spaces for Political Action: Victories and Compromises for Mexico's Local Organic Movement

Erin Nelson and Laura Gómez Tovar

Abstract In recent years, a plethora of spaces have been created that allow citizens and civil society organizations to participate in governance processes at local, regional, national and international levels. This chapter tells the story of one civil society organization's efforts to navigate such newly opened space in an effort to facilitate transformations aligned with its alternative agri-food system agenda. Specifically, it is the story of the Mexican Network of Local Organic Markets and its work to influence the national policy governing Mexico's organic sector. The case study highlights how the development of a network structure helped build the kind of social capital necessary for the country's relatively small-scale local organic movement to engage in effective collective action, and how that action was translated into political support for its work. However, this story is also one of compromises, limitations and frustrations that raises questions regarding the implications of acting within spaces that may be new but still subject to old power dynamics.

Keywords Participatory governance · Social capital · Local markets · Organic agriculture · Mexico

E. Nelson (✉)
Department of Sociology and Anthropology, University of Guelph,
50 Stone Road East, Guelph, Ontario N1G 2W1, Canada
e-mail: enelson@uoguelph.ca

L.G. Tovar
University of Chapingo, Texcoco, Mexico
e-mail: gomezlaura@yahoo.com

I. Knezevic et al. (eds.), *Nourishing Communities*,
DOI 10.1007/978-3-319-57000-6_10

We are very, very few. I mean, we are maybe a few hundred producers, out of 128 000. We don't cover more than a few hundred hectares and in Mexico there are almost 400 000 under organic production. But even so, The Network has taken on the role – and how great that they have because, if they hadn't, no one would – of discussing publicly the deficiencies that exist in terms of support from the state … the need for political promotion of organic farming, and of the local organic sector specifically.

(Mexican Network of Local Organic Markets organizer, 2009)

I personally feel that the more independently from the government we work, the better it is … But it's complicated because, at the same time, it can be useful to take advantage of official channels to facilitate our work, like we did in the case of participatory certification. So political involvement is not really desirable, but at the same time it's necessary.

(Mexican Network of Local Organic Markets producer, 2009)

Introduction

In a 1997 report on good governance, the United Nations Development Program (UNDP) cited participation as one of its cornerstones. This was reflective of a growing consensus during that decade that a diversity of actors—particularly those marginalized by top-down practices—can and should play an active role in making decisions and directing their own development (Fung and Wright 2001; Gaventa 2006). In the years that have followed, a plethora of spaces have been created that allow citizens and civil society organizations to participate in governance processes at local, regional, national and international levels. According to Cornwall (2002: 1, italics in original), "[l]evering open spaces once closed off to citizen voice or public scrutiny and creating new interfaces and institutions, these moves are about *positioning* citizens in newly emergent political and policy arenas, and *repositioning* them with regard to older structures, of 'traditional' governance as well as of the 'modern' state."

This chapter tells the story of one civil society organization's efforts to navigate such newly opened space in an effort to facilitate transformations aligned with its alternative agri-food system agenda. Specifically, it is the story of the Mexican Network of Local Organic Markets (referred to hereafter as The Network) and its work to influence the national policy governing Mexico's organic sector. Founded in 2003, The Network represents more than 20 local organic market initiatives across the country. As will be elaborated upon below, these markets provide opportunities primarily to small- and medium-scale ecological producers and food processors, and help increase Mexican consumers' access to locally produced organic goods.

The case study highlights how the development of a network structure helped build the kind of social capital necessary for the country's relatively small-scale local organic movement to engage in effective collective action, and how that action was translated into political support for its work. However, as the ambivalent voice of the local organic market organizer cited in the epigraph above suggests, this story

is also one of compromises, limitations and frustrations that raises questions regarding the implications of acting within spaces that may be new but still subject to old power dynamics.

Such questions are not unique to the Mexican context; rather, they are integral to the work being done around the world by the Nourishing Communities network, as we strive to better understand how we can most effectively achieve transformation toward more sustainable food systems. Overall, in this specific case, it is argued that the benefits of The Network's collaboration with the government in the crafting of Mexico's organic legislation outweighed the risks. However, it is important to pay careful attention to the balance between achievement and compromise as grassroots initiatives such as the Network strive to scale up the reach of their efforts through actions within and outside official political channels.

The chapter draws on collaboration with The Network dating back to 2005, with a focus on data collected during an in-depth participatory action research project carried out in 2008 and 2009. That work included surveys with 80 of The Network's producers and 48 of its consumers, along with 31 in-depth interviews with Network members and affiliates, and participation in a variety of meetings and workshops focused on a range of issues, including policy development.[1] We begin the chapter with an overview of new spaces for civil society participation in politics, followed by a description of The Network and its involvement in the development of Mexico's organic legislation. We then discuss how high levels of social capital facilitated The Network's ability to engage effectively in political action. The latter part of the chapter includes analysis of both the benefits and limitations of that engagement.

Spaces for Civil Society Participation in Politics

The opening of new spaces for participation in political processes is predicated on the idea that meaningful citizen involvement cannot be limited to the periodic election of governments, but rather should consist of a series of complex, layered, multiscalar processes that include a wide variety of formal and informal institutions, and imply a reordering of traditional state-market-society relationships (Gaventa 2006; Flora and Flora 2006, see also the chapter by Clark et al. in this volume). In her nuanced discussion of how such complex, layered processes are put into practice, sometimes to serve contradictory purposes, Cornwall (2002) provides a useful framework for conceptualizing different kinds of spaces, each characterized by a unique set of opportunities and constraints.

[1]All direct quotes included in the chapter are drawn from that data, and I have translated them from the original Spanish.

The first category of the framework consists of more formal, structured spaces that allow for invited citizen representation in decision-making processes. This may include, for example, local co-management committees or deliberative councils. While these spaces can create opportunities for productive dialogue, "[t]heir purposes, mandate and remit tend to be circumscribed by the agendas of implementing agencies and are rarely, if ever, open to negotiation by citizens…" (Cornwall 2002: 18). By contrast, the second category refers to "fleeting formations" that are irregular, time-bounded opportunities for citizen participation, such as consultative workshops. Their temporary nature has the potential to render them "sites of radical possibility" (Cornwall 2002: 18); however, they can also be used to maintain the status quo, and there is often no guarantee that the input provided will actually alter decision-making. Whereas these two categories involve formal authorities *inviting* specified kinds of civil society participation, the third and fourth represent civil society *claiming* space for itself. One way in which this happens is through more formal institutions, including NGOs and citizen associations that work to fill needs not met by the state. The other is through less institutionalized social movements that coalesce at particular moments. Although both can be sites of radical voices for transformation, they can also be conservative spaces, with the latter being the least subject to co-option by state agendas.

From a food systems perspective, action occurring across Cornwall's framework points to the potential for productive use of these new spaces as well as to some of their limitations. For example, the rise of food policy councils and roundtables across North America and their ability to insert sustainable food systems thinking into policy discourse (Roberts 2010) provides an example of the powerful opportunities that can be capitalized upon through more formal, institutionalized relations, particularly at the local scale. In the province of Ontario, Canada, the 2013 passage of a Local Food Act following a series of consultative workshops with civil society organizations demonstrated how fleeting formations can contribute to policy victories, although some demands may be left unsatisfied (Singh 2013). This latter experience bears much in common with the Mexican case presented in this chapter.

In terms of civil society acting *upon* (as opposed to in some measure of collaboration with) the state, there are also myriad examples to learn from. Notably, *Via Campesina*, a global food sovereignty movement with which The Network strongly identifies, explicitly positions itself outside of the state, but with a distinctly *political* agenda for food system change (Pimbert 2008). In Mexico, more radical, pluralistic manifestations of that movement have coalesced around the *Sin Maíz no Hay Pais* (Without Corn There is no Country) campaign, which has organized numerous mass demonstrations across the country in an effort to promote its political agenda (including a call for restrictions on GMO seeds and a renegotiation of NAFTA to better protect Mexico's corn-producing peasants). Although affiliated with this broader movement, The Network is more directly representative of an institution seeking to fill a gap as it focuses its efforts on building capacity (and markets) for sustainable food production and consumption. Consistent with Cornwall's framework, this kind of work has been subject to harsh critique for its

over-attention to individuals (and to consumption) as the locus for change, and the consequent muting of more systemic, transformational critiques of the conventional food system model (Allen and Kovach 2000; Allen et al. 2003; Guthman 2008).

The Importance of Social Capital

In analyzing whether and how different spaces for participation in political processes can be and are being used, the concept of social capital provides a useful tool. Defined as "the set of norms, networks, and organizations through which people gain access to power and resources, and through which decision-making and policy formulation occur" (Grootaert 1998: 2), at its most basic level social capital refers to the creation, maintenance and strengthening of linkages, which can be of either the bonding or bridging variety. Bonding social capital refers to connections between like actors (such as members of a geographically bounded community), while bridging social capital involves linkages that make connections between diverse actors (such as people representing different sectors of society) (Flora and Flora 2006).

In relation to this case study, the presence of social capital is widely considered a prerequisite for meaningful citizen participation in governance (Putnam 1993; Flora and Flora 2006). This is largely due to the relationship between social capital and collective action. The presence of social capital can empower community actors to perceive themselves (and be perceived by others) "as active agents and creators of their social world, not as passive victims of fate or government policy" (Onyx and Bullen 2000: 109). In so doing, collective agency is fostered and the potential for collective action is created (Flora and Flora 2006). Without such agency, participation in political processes is significantly thwarted. Notably, however, "the distribution of social capital within any given community is unequal and often stratified, meaning that [it] can function as a mechanism of exclusion as well as inclusion" (Dudwick et al. 2006: 1). For example, in cases where bridging linkages significantly outnumber bonding ones, decision-making power and influence can become concentrated in the hands of community elites and, although collective action may occur, more marginalized voices may be excluded (Flora and Flora 2006).

The Mexican Context

There is a long history in Mexico of civil society being distrustful of institutions and disenfranchised from politics and, when compared to Canada and the United States, the country is characterized by very low levels of political participation, especially by rural and low income populations (Camp 2007; Holzner 2010). However, recent decades have seen a significant increase in the importance of—and

power possessed by—Mexican civil society. Although the degree to which Mexico's relatively new multi-party democracy can be considered fully functional is the subject of much ongoing debate, even a minimal increase in political pluralism has helped social movements gain strength on the national stage. For decades, these non-state actors were subject to co-option and clientelism by the single ruling party; however, over time groups such as farmer associations, non-profit organizations, and other citizen coalitions have been able to gradually gain a greater measure of representativeness and independence, and thus increase their capacity for political action (Foweraker 1990; Camp 2007; Holzner 2010).

Increased political activism by civil society actors has targeted a number of issues, including corruption, drug violence and land disputes; however, most relevant to this chapter has been the growing movement for food sovereignty in the country. In 2003, civil society organizations specifically dedicated to that issue solidified a coalition under the slogan '*el campo no aguanta mas*' (the countryside can't take it anymore). By 2007, that coalition had broadened into the aforementioned *Sin Maíz no Hay País* (Without Corn There is no Country) movement, representing more than 300 civil society associations and peasant organizations. Although the movement lobbies for a number of policy positions—including, for example, a strengthening of the restrictions on GMO corn—its primary political demand has been a call for a renegotiation of the North American Free Trade Agreement, and a more general retreat away from a neoliberal policy framework in order to protect the viability of Mexico's small-scale *campesino* agriculture. To that end, in collaboration with *Via Campesina,* a number of large-scale marches on Mexico City's *zócalo* (central square) have been organized in recent years, representing an important "(re)appropriation of public and political space by the [Mexican] people" (Foweraker 1990: 7).

The Network and Mexico's Organic Products Law

Against the backdrop of a growing food sovereignty movement, recent decades have also seen very rapid expansion of Mexico's organic agriculture sector. This growth has been heavily characterized by foreign investment in crops such as coffee that are predominantly destined for export markets (Gómez Cruz et al. 2009); however, as a challenge to that more conventionalized, neoliberal model of organics, a local organic movement has also been developing, albeit more slowly. The first local organic market project in the country began in 1996 in the city of Guadalajara and, in 2004, four initiatives joined together to form The Network, a civil society organization based out of Chapingo. By 2015, The Network had grown to represent 20 fully functioning markets across ten states, along with a number of other market initiatives in various stages of development.

While The Network's member markets all have their own distinctive features, in general each could be considered:

> a place (micro-space) where direct contact between producers and consumers is promoted. It is a public space, accessible to all, in which the producers offer foods that they themselves have produced using clean (ecological) techniques, or techniques that are in transition toward that ideal. In addition, it is a space where consumers can find high quality food items, and learn the stories behind their production. In this way, a face is put on the food that consumers take to their homes, and this allows for a revalorization of that food and the work implied in its production. In many cases, the market is also a space for education and reflection about food consumption, and for the facilitation of interpersonal relationships that are closer, more human, and built on more solidarity, than is typical in a market setting (Escalona 2009: 227–228).

Taking these inter-related principles as its foundation, the main objectives of The Network are to: facilitate information-exchange amongst the individual member markets; increase consumer awareness about and confidence in local organic products; provide capacity-building opportunities regarding organic production; build solidarity within—and act as a strong voice for—Mexico's local organic movement; and support the creation of new local organic markets.

During the same time period that The Network was consolidating, the Mexican government was crafting a piece of national legislation to govern the country's organic sector. Passed in 2006, the *Ley de Productos Orgánicos* (or Organic Products Law) laid out a series of ground rules for the functioning of organic production and sale, largely to comply with requirements imposed by importing nations. In what was widely regarded as a significant victory for Mexico's local organic movement, the Organic Products Law (2006) officially recognized participatory certification—an alternative organic certification system being used by The Network[2]—as a valid option for producers. Specifically, Article 24 stated that (italics added):

> *Participatory organic certification of production by family and/or small-scale producers organized to that end will be promoted.* For this purpose, the Secretary [of Agriculture] taking into account the opinion of the [National] Council [of Organic Production] will issue the necessary legal requirements for its regulation, in order that said products maintain compliance with this Law and other applicable requirements and *can be sold as organic within the national market.*

In addition to securing legal recognition for its alternative certification process, The Network was invited to be an active participant in a series of workshops held in 2008 and 2009 that were designed to develop a complete set of regulations (including a national organic standard) to enable the full enacting of the 2006 law. These workshops were jointly organized by a branch of the Ministry of Agriculture and the University of Chapingo's *Centro de Investigación Interdisciplinaria para el*

[2]The International Federation of Organic Agriculture Movements (IFOAM) defines Participatory Guarantee Systems (or participatory certification) as "locally focused quality assurance systems [that] certify producers based on active participation of stakeholders and are built on a foundation of trust, social networks and knowledge exchange." They are increasingly being used by local or regional marketing associations as a means of making the organic label more accessible to small-scale producers, as well as for capacity-building and community development (Nelson et al. 2015).

Desarrollo Rural (Centre for Interdisciplinary Research for Integrated Rural Development, or CIIDRI). As we will elaborate later in this chapter, The Network's close ties to CIIDRI allowed it to have a strong presence at these workshops, and its members were able to provide substantial input, not only for the regulation of participatory certification (although that was their primary focus), but also for the broader regulatory framework created to enact the Organic Products Law. The Network's involvement in this legislative and regulatory conversation is evocative of Cornwall's (2002) discussion of "fleeting formations", as Network actors—along with other representatives of the organic sector—were *invited* by the state to participate in a *particular* set of activities with a *specific* policy-making purpose.

Leveraging Social Capital for Political Influence

Estimates based on 2011 data put the number of producers and organizers participating in The Network's markets across the country at approximately 1000. If consumers, extended family members and other stakeholders were added to that figure, a generous guess would be that, at the time of its participation in the development of Mexico's organic legislation, the organization represented approximately 5000 people. In a country with 128 000 organic producers participating in a multi-million dollar heavily export-oriented industry (Gómez Cruz et al. 2009), how was The Network able to occupy such a prominent space in establishing national agri-food policy? At least part of the answer appears to lie in the extensive social capital possessed by the organization and, specifically, in the balance between bonding and bridging linkages. This section outlines the various ways in which The Network was able to construct—and capitalize upon—both bonding and bridging relationships in its efforts to further its alternative agri-food agenda.

Bonding Linkages and the Development of a Unified Voice

One of the key roles that The Network has played within Mexico's local organic movement has been as a facilitator of a sense of collective identity and shared vision. This has partly been achieved through the development of cultural materials such as a widely used and highly recognizable logo, branded clothing and other merchandise, audio-visual resources and an online presence that includes a website and active Facebook page. These materials provide a platform for articulating and promoting (as well as continuously contesting and negotiating) The Network's alternative food system vision. Knowledge-exchange activities carried out by The Network serve a similar function. For example, a local market organizer describes how peer learning visits created spaces to debate one aspect of The Network's vision (acceptable organic practices), and increase understanding of, and commitment to, a shared vision:

> [The visits] helped the producers trust [the coordinators] more, because some of them I think had been wondering, 'why do they give us so much trouble about having to make compost instead of applying fresh manure like we used to do' and then [a producer from Guadalajara] came and talked about his experiences, and explained the importance of compost and how it had worked for him in Jalisco, and the producers started to say 'ah, it isn't just these crazy people here trying to promote this way of doing things, but this is happening in other places too.' And it was important that that information came from another producer.

As this example alludes to, the development of a shared identity and vision requires relationships of trust that are, in turn, essential for translating social capital into effective collective action (Putnam 1993; Flora and Flora 2006). Speaking to the relationship-building that occurs at the market level, one producer explained, "I love being here because we are participating in the development of a community." As an organization, The Network actively fostered similar relationships as, in the words of one participating producer, it served as "a meeting point for the whole local organic movement." One market organizer went even further, suggesting that The Network's power lies in the fact that "we are a family more than anything else." That familial feeling was evident when, at a 2008 General Assembly, a market coordinator opened the meeting with an exercise in which attendees formed a circle and took turns embracing each other. A co-founder of the organization who was present at the meeting recalled:

> There are very few places where you can do that kind of thing. If they obligate you to do it, you can give a hug to anyone, but in this case I didn't feel obligated. You know practically everyone there, so you embrace them with a sense of real pleasure, because some of them you haven't seen in three months, five months, a year, but each time you do see them you feel that friendship, that trust, and I think with very few groups of people you have the opportunity to feel that. Of course with family, but The Network is family. That's how I see it.

According to Kramer et al. (2001: 182), such public displays of friendly, trusting relationships within a group serve an essential function, as they "signal to others the importance [that group members] assign to the preservation of collective trust", while simultaneously generating positive emotional responses and reaffirming members' dedication to work toward group success.

The Network's ability to foster such a solid sense of collective identity and vision, founded upon relationships of trust, has been key to its ability to speak as a clear, strong, unified voice in policy discussions. One market coordinator drew a direct connection between networking within the local organic movement and influencing public policy in the face of a strong agri-business lobby: "I think that each local organic market is like a cell, and if that cell joins with another and another, then soon we are a fabric, and like that we can grow, not like [big agri-business], but rather as many small markets, and we can strengthen each other in that way and that will help us have a greater voice and a say in public policy." This is consistent with the suggestion that cohesive groups, held together by strong bonds of trust and possessing a shared—if to some extent contested—vision may be best positioned to effectively engage in governance activities (Putnam 1993; Onyx and Bullen 2000; Flora and Flora 2006, see also Chap. 8 in this volume).

Bridging Linkages and Making Your Voice Heard

The development of the kind of bonding social capital—or linkages amongst like actors—described above may have created a unified voice for Mexico's local organic movement; however, The Network's high levels of bridging social capital were largely responsible for that voice gaining access (by invitation) to official political space. The presence of strong bridging linkages was closely related to the organization's headquarters being located at the University of Chapingo (Mexico's national agricultural university) and to the political connections of the Chapingo-based Network leadership. For example, although The Network is not directly represented on the government-run *Consejo Nacional de Producción Organica* (National Council for Organic Production), one of its co-founders, who is also a professor at Chapingo was invited to sit on the council as an academic representative (along with almost 30 other representatives from government, academia and industry). Similarly, in spite of representing a tiny portion of Mexico's organic industry in terms of number of producers, land cultivated, and sales value, The Network was a founding member of the *Sociedad Mexicana de Producción Orgánica* (Mexican Society for Organic Production), a non-governmental coalition formed in 2007 to represent the interests of the country's organic sector, particularly in communications with policy-makers. Again, its role in this organization was heavily facilitated by prominent actors from Chapingo.

In addition to these examples, Chapingo also served as the administrative hub for The Network, managing its finances, maintaining linkages with international funding agencies and, in many cases, representing the organization on the global stage. Its role was so central to the functioning of The Network that one market coordinator suggested, "The Network is Chapingo, no?" This centralization of power and decision-making was the subject of critique by some Network members[3]; however, even those most disapproving of Chapingo's central role recognized the advantages offered by that positioning. One of the most frequently referenced benefits was the way Chapingo's reputation, and the relationships based out of the institution, allowed The Network to amplify its voice and have it heard by actors with the power to make policy decisions. For example, one particularly vocal critic of Chapingo's role acknowledged that it permitted "very effective action before [the Ministry of Agriculture]" because of "all of the contacts with *diputados* [representatives sitting in the national legislature] and senators." A number of

[3]Criticism of Network centralization in Chapingo became the subject of increasing conflict that, in the aftermath of the political work discussed in this chapter, eventually led to significant shifts toward a more decentralized governance structure. The challenges associated with Chapingo's powerful role are reflective of Flora and Flora's (2006) caution that an over-abundance of bridging social capital, while useful in some ways, can contribute to elite capture of a group's agenda and the marginalization of other voices.

fellow producers agreed that the close association between Chapingo and The Network helped increase the "credibility" of Mexico's local organic movement. As one producer explained, "they involve us in the whole legislative process, and if we are ever going to have anything to say about public policy it is going to be through an organization like that." This is in keeping with observations by Benn and Onyx (2005) that the allocation of power to a relatively small group of elite actors can, in some ways, benefit an organization by facilitating access to resources, power and legitimacy in the eyes of external, particularly institutional authorities.

What Has Been Gained Through Political Action?

From a practical perspective, the most significant achievement of The Network's involvement in crafting of Mexico's organic legislation was undoubtedly the inclusion of participatory certification as a valid option for producers selling within the national market. This legal recognition has made it possible for the primarily small- and medium-sized producers who participate in The Network to sell their goods under the organic label without having to go through third party certification, which, with its high costs and extensive bureaucratic requirements, is not a viable option for most (Nelson et al. 2015). A representative of the Ministry of Agriculture explained that the inclusion of participatory certification would not have happened without the direct involvement of The Network: "It did not simply occur to people in the government to create something like [the article supporting participatory certification]; it was purely the result of pressure." Indeed, with the passing of its organic law, Mexico joined a very small group of countries (including Brazil, Bolivia and Costa Rica) that explicitly recognize the validity of participatory certification in national legislation. In the rest of the world, use of the organic label is generally restricted to those who can afford third party certification, and are able to navigate the complex bureaucracies involved in the process (Nelson et al. 2010).

Beyond those very practical implications, The Network's ability to directly engage with state actors in public policy development and, specifically, to secure recognition for one of the cornerstones of its work, could be viewed as a perceptible —albeit relatively minor—nod to food sovereignty advocates in Mexico. This is particularly true because participatory certification represents far more than a simple market guarantee system; rather, it is both explicitly and implicitly grounded in a set of alternative values that reflect a food sovereignty orientation. These include: encouragement of ecological production that goes beyond an input-substitution model of organics; support for and empowerment of small-scale producers; prioritization of locally-focused markets; devolution of power to local-scale actors; and reorientation of trade dynamics based on values of trust and fairness (Nelson et al. 2015). Because these values represent such a contrary position to much of Mexico's

broader agri-food policy framework, the inclusion of participatory certification is a particularly striking achievement for advocates of food system change.

The government's acceptance of The Network's position on participatory certification is also notable as it is a direct acknowledgement of the credibility of the organization and, by extension, its membership base and their work. One participating producer directly linked that achievement with the potential for future impacts:

> Right now we [The Network] have proven that we can have some impact on the government because of the [Organic Products] Law and our involvement in the creation of its regulations. But this process is not over; we have to think about going the distance. And we might not know exactly where it's going to go, but we have to hope that more spaces will open and that we will be able to take advantage of them and establish a real national program to promote what we stand for.

This hopefulness that more spaces may open and that broader political action may be achieved is evocative of Cornwall's (2002) assertion that, even in cases where political participation might be initially constructed as "fleeting formations", the potential for more transformative and more permanent institutional change may be created.

What May Have Been Compromised by Engaging with the State?

In his discussion of political participation, Gaventa (2006: 25) draws on Cornwall, suggesting that "[s]imply opening new spaces for engagement does not mean they will be filled by different voices. Rather, spaces are imbued and filled with prior power relations, affecting who enters them, with what knowledge and with what effects." Indeed, while some representatives of The Network were able to gain access to political space, the most marginalized members of the organization—particularly small-scale, resource poor producers with low levels of formal education—generally remained excluded. As one explained, "[i]t can be hard for us to participate because we lack [formal] education. We don't know how to express ourselves; we feel ignorant. I mean, we know things, but often we can't explain what we know." Although their views and interests may have still been reflected by their somewhat more privileged or elite Network counterparts, their overall exclusion did risk alienating the organization's base and also, at least to some extent, runs counter to its overall vision of fostering fairness and empowerment.

If some of the more traditionally marginalized voices may have been absent from policy discussions, the more radical elements of the organization's agenda were similarly muted. For example, Nelson et al. (2015) discuss how the process of legislating the use of participatory certification required some compromise, as the different world visions and different values inherent in participatory certification did not fit easily into relatively rigid institutional structures and norms. Of significantly

greater concern was the fact that the state's recognition of participatory certification did little or nothing to shift the overarching direction of Mexico's agri-food policy framework, which remained (and remains) heavily biased in favour of a conventional model of both production and trade. Consistent with Tetrault's (2010: 72) assertion that "peasant organizations are welcome to participate in political processes as long as they go along with the neoliberal agenda", Network members' passionate critiques of agrochemical subsidies, funding that disproportionately supports large-scale producers, and trade policies that encourage export-orientation were generally excluded from policy conversations. Rather, the space that was opened for participation remained subject to traditional power dynamics and conventions that "circumscribe the possibilities for public engagement" (Cornwall 2002: 3) based on the extent to which state partners were willing (or not) to challenge existing structures.

The circumscribing of spaces for civil society engagement in policy-making stands in stark contrast to the freedom and influence enjoyed by transnational agri-business. As Perez-Ferrer et al. (2010: 47) explain, in Mexico "the largest food industries form a powerful lobbying group which historically has been central in influencing nutrition and food policy." Notably, this is reflective of broader global trends for agri-business to exert considerable influence over public policy (Clapp 2003, 2005). One regular local organic market consumer expressed her deep frustration with perceived linkages between transnational agri-business and state governance of the agri-food sector:

> Our governments have dedicated themselves to removing all support for our agricultural sector. They allow foreign powers to dominate our markets, to come and sell everything they want, and we have to buy it, no matter what, whether it is produced poorly, leads to health problems, impoverishes us, because it's a business, and the politicians are part of it, that's how they stay in power.

Noting similar concerns about corporate influence, another consumer declared: "I have absolutely no hope that our agricultural policy can be changed for the better, none." In many cases, any feelings of achievement regarding the Organic Products Law policy "victory" were more than offset by this sense that corporate interests continue to hold much more sway when it comes to influencing Mexican agri-food politics than actors, most often from within civil society, advocating for an alternative perspective.

As noted, such frustrations are not unique to the Mexican context; rather, they illustrate how, even when new spaces are created to allow for a degree of civil society engagement in the policy sphere, they are inevitably situated "within existing relationships of patronage and power" (Cornwall 2002: 14). What is somewhat unique to Mexico, however, is the extent to which these relationships of patronage and power extend beyond the ability of powerful actors to lobby for conventional agri-food policies, to include widespread perceptions of systemic corruption, record low levels of trust in public institutions, and exceedingly little belief in the potential for political efficacy on the part of civil society (Camp 2007). Expressing a viewpoint reflective of the majority of research participants, one local

organic market organizer suggested: "Politics here in Mexico is absolutely disgusting. I have no hope. None at all. It is evil, perverse and entirely corrupt, and for any of that to change there would have to be a miracle." A regular Network consumer began to cry when discussing the issue: "We have 'dis-government'; we do not have government. Before [the shift to multi-party democracy] we didn't have government, but even when we only had one party the rats were less rat-like than they are now. Now they are incredible; their actions are unforgiveable. The worst part is, I have no hope at all that we can do anything to change the situation. It's our reality."[4]

Within this context, it should not be surprising that many Network members are highly ambivalent about any collaboration with a state that, in the words of one participating producer "has, at all levels, lost all credibility, if they ever had any." On a micro scale, abhorrence of government structures perceived as corrupt has led a number of Network producers to turn down state supports they might be personally eligible to receive. One, for example, could have had an artisanal-scale mill partially paid for through a government program but, due to concerns about corruption decided: "With supports like that, it's better to just say no, don't you think?"

At a broader level, approximately half of all research participants expressed a preference to, as far as possible, avoid engaging with the state for fear of granting it undeserved legitimacy. In the words of one market organizer, "everything has to come from the people, from civil society, because with the government … no!" This perspective evokes Cornwall's (2002: 25) suggestion that, in some cases, "… [c]itizen groups… may represent the interests of the public more effectively by remaining outside attempts to include them [in the political sphere]…" In so doing, organizations may be able to "exert pressure in ways that collaborating with state or supra-state authorities might preclude, as the dance of diplomacy and the dangers of losing opportunities to influence put out of reach more active tactics to hold powerful institutions to account" (Cornwall 2002: 26). Recognizing the power inherent in *claiming* space to act *upon* the state, as opposed to being *invited* to act *with* it, many Network members actively participate in more radical manifestations of alternative agri-food politics, for example the large-scale public demonstrations organized by the aforementioned Without Corn There is no Country movement.

[4]Cynicism regarding government in Mexico has only worsened in the years since the research presented here was conducted. For example, incidents such as the murder of 43 students in Ayotzinapa have highlighted the linkages between organized crime and political institutions at all levels, and allegations of corruption against President Enrique Peña Nieto and a number of close colleagues demonstrate that the corruption and clientelism associated with Mexico's days as a one-party state have not been eradicated.

Conclusions

Gaventa (2006: 8) suggests that true democracy-building cannot simply be achieved through "the adoption of a standard recipe of institutional designs", but rather must be conceived of as "an ongoing process of struggle and contestation." The story of The Network's engagement in Mexican agri-food politics certainly represents such an ongoing process, as the organization's efforts to advance its agenda in the political arena have been characterized by important victories, but also significant compromises.

The most important political achievement for The Network has been its ability to directly shape Mexico's organic agriculture policy in a way that reflects—at least to an extent—the values and priorities of the country's local organic movement. This accomplishment, which has both practical and ideological significance, is all the more notable given the long tradition of Mexican civil society being disenfranchised from political action, the strongly conventional orientation of Mexico's overall agri-food policy framework, and the relatively limited scale of The Network's work in terms of the people, land and money involved. The organization's work to develop a clear sense of collective identity was integral to its success, as it enabled it to speak with a strong, unified voice. However, it was the existence of bridges between The Network's leadership and high level political actors that were, though subject to some criticism, directly responsible for the organization being invited into policy-making spaces.

While its impacts in the policy arena were not insignificant, in the eyes of many members of Mexico's local organic movement, the 'victory' of the Organic Products Law was perceived as a somewhat pyrrhic one that—far from representing the realization of "radical possibility"—did nothing to counter the most deeply problematic aspects of Mexican (agri-food) politics. Those most typically disenfranchised from political activity in Mexico—the small-scale farming population—generally remained absent from the conversation, which was dominated by their more formally-educated, in many cases urban-dwelling, higher-income Network colleagues. Similarly, the strong systemic critique of the conventional agri-food model that underlies The Network's philosophy and work was muted, as dialogue focused instead on more technical aspects of the organic sector's governance. An inability to address these broader systemic issues, combined with a perception of ongoing corruption at all levels of government, left many Network members viewing engagement with the state as, at best, a necessary evil and, at worst, an activity that lent undeserved legitimacy to fatally flawed institutional structures.

In the final analysis, The Network's work to navigate spaces for political action may not represent a fully satisfying transformational effort, but neither is it a complete maintenance of the status quo. Something of value was certainly achieved and traditional political power structures were nudged, if not radically challenged, by civil society actors. However, that nudging was highly circumscribed by state authorities who, at all times, controlled the rules of engagement. Fortunately for The Network, its engagement with agri-food politics need not be confined by the

invitations it receives to collaborate with the state; rather, it can and does act *both with and on* the state, in ways that are, by turns, more conservative and more radical. In order to maintain its efficacy in this work, it will be important for the organization to continue cultivating social capital of both the bonding and bridging variety so that its voice can be both clear and amplified. And, in order to maintain credibility in the multiple spaces within which it is active, The Network would do well to be both self-reflective and transparent about the different objectives, expectations and compromises that characterize different manifestations of its political engagement.

References

Allen, P., and M. Kovach. 2000. The capitalist composition of organic: The potential of markets in fulfilling the promise of organic agriculture. *Agriculture and Human Values* 17: 221–232.

Allen, P., M. FitzSimmons, M. Goodman, and K. Warner. 2003. Shifting plates in the agrifood landscape: The tectonics of alternative agrifood initiatives in California. *Journal of Rural Studies* 19: 61–75.

Benn, S., and J. Onyx. 2005. Negotiating interorganizational domains: The politics of social, natural, and symbolic capital. In *A dynamic balance: Social capital and sustainable community development*, ed. A. Dale, and J. Onyx, 87–104. Vancouver: UBC Press.

Camara de Diputados del H. Congreso de la Union de los Estados Unidos Mexicanos. 2006. Ley de Productos Orgánicos. http://www.diputados.gob.mx/LeyesBiblio/pdf/LPO.pdf.

Camp, R.A. 2007. *Politics in Mexico: The democratic consolidation*, 5th ed. Oxford: Oxford University Press.

Clapp, J. 2003. Transnational corporate interests and global environmental governance: Negotiating rules for agricultural biotechnology and chemicals. *Environmental Politics* 12 (4): 1–23.

Clapp, J. 2005. Global environmental governance for corporate responsibility and accountability. *Global Environmental Politics* 5 (3): 23–34.

Cornwall, A. 2002. *Making spaces, changing places: situating participation in development*. IDS Working Paper 170. Brighton: Institute of Development Studies.

Dudwick, N., K. Kuehnast, V.N. Jones, and M. Woolcock. 2006. *Analyzing social capital in context: A guide to using qualitative methods and data*. Washington: World Bank Institute.

Escalona, M.A. 2009. *Los Tianguis y Mercados Locales de Alimentos Ecológicos en Mexico: Su Papel en el Consumo, la Producción y la Conservación de la Biodiversidad y Cultura*. Doctoral dissertation. Universidad de Cordoba, Cordoba, Spain.

Flora, C.B., and J.L. Flora. 2006. *Rural communities: Legacy and change*, 3rd ed. Philadelphia: Westview Press.

Foweraker, J. 1990. Popular movements and political change in Mexico. In *Popular movements and political change in Mexico*, ed. J. Foweraker, and A.L. Craig, 3–21. Boulder: Lynne Rienner Publishers.

Fung, A., and E.O. Wright. 2001. Deepening democracy: innovations in empowered participatory governance. *Politics and Society* 29 (1): 5–41.

Gaventa, J. 2006. *Triumph, deficit, or contestation? Deepening the 'Deepening Democracy' debate*. Brighton: Institute of Development Studies.

Gomez Cruz, M.A., R. Schwentesius Rindermann, L. Gomez Tovar, J. Ortigoza Rufino, and E. Nelson. 2009. Mexico. In *The world of organic agriculture. Statistics and emerging trends 2009*, ed. by H. Willer, and L. Kilcher, 216–218. Bonn/Geneva: IFOAM/FiBL/Frick/ITC.

Grootaert, C. 1998. *Social capital: The missing link?*. Washington: World Bank Social Development Department.

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

Holzner, C.A. 2010. *Poverty of democracy: The institutional roots of political participation in Mexico*. Pittsburgh: University of Pittsburgh Press.

Kramer, R.M., B.A. Hanna, S. Su, and J. Wei. 2001. Collective identity, collective trust, and social capital: Linking group identification and group cooperation. *Groups at work: Theory and research* 173:196.

Nelson, E., L. Gomez Tovar, R. Schwentesius Rindermann, and M.A. Gomez Cruz. 2010. Participatory organic certification in Mexico: An alternative approach to maintaining the integrity of the organic label. *Agriculture and Human Values* 27: 227–237.

Nelson, E., L. Gomez Tovar, E. Gueguen, K. Landman, S. Humphries, and R. Schwentesius Rindermann. 2015. Participatory Guarantee Systems and the re-imagining of Mexico's organic sector. *Agriculture and Human Values* 32 (2).

Onyx, J., and P. Bullen. 2000. Sources of social capital. In *Social capital and public policy in Australia*, ed. I. Winter. Australian Institute of Family Studies: Canberra.

Perez-Ferrer, C., K. Lock, and J.A. Rivera. 2010. Learning from international policies on trans-fatty acids to reduce cardiovascular disease in low- and middle-income countries, using Mexico as a case study. *Health Policy and Planning* 25: 39–49.

Pimbert, M. 2008. *Towards food sovereignty: Reclaiming autonomous food systems*. London: International Institute for Environment and Development.

Putnam, R. 1993. *Making democracy work: Civic traditions in modern Italy*. Princeton: Princeton University Press.

Roberts, W. 2010. Food Policy encounters of a third kind: How the Toronto food policy council socializes for sustain-ability. In *Imagining sustainable food systems: Theory and practice*, ed. A. Blay-Palmer. Burlington, VT: Ashgate.

Singh, R. 2013. Ontario Passes Local Food Act. http://sustainontario.com/2013/11/06/20107/news/ontario-passes-local-food-act.

Tetrault, D.V. 2010. Alternative pathways out of rural poverty in Mexico. *European Review of Latin American and Caribbean Studies* 88: 77–94.

UNDP (United Nations Human Development Program). 1997. Governance for Sustainable Human Development: A UNDP Policy Document. http://mirror.undp.org/magnet/policy/.

Chapter 11
Communities of Food Practice: Regional Networks as Strategic Tools for Food Systems Transformation

Charles Z. Levkoe

Abstract A diversity of alternative food initiatives (AFIs) have emerged amidst concerns about the corporate-led industrial food system. While there have been significant successes, critics suggest that many AFIs are an inadequate response to the complex problems within the food system. Specifically, studies point to the way that many AFIs have adopted localized self-provisioning models that promote neoliberal ideals and facilitate retrenchment of the state, ignore the interconnected nature of problems within the food system, and idealize the local scale as having inherently positive characteristics. While critical research has identified important challenges, it also tends to consider place-based AFIs as operating independently or in isolated sectors of the food system. Despite circumstantial evidence, there has been little documentation or analysis situating AFIs within broader communities of food practice. In this chapter, I describe the ways AFIs in Canada have been involved in provincial food networks engaging in actual-existing collaborations that are making a broader impact within the food system. I draw on the theoretical framework of a transformative food politics to analyze the networks' activities. While recognizing the important challenges, I point to specific examples that highlight where transformative work is already happening and identify the opportunities and areas for improvement within these collaborations. I argue that robust collaborative networks can act as communities of food practice, providing strategic opportunity for AFIs to mobilize and develop transformative orientations, but that these efforts have some significant limitations that must be addressed.

Keywords Alternative food initiatives · Communities of practice · Food movements · Networks · Social movements

C.Z. Levkoe (✉)
Canada Research Chair in Sustainable Food Systems, Department of Health Sciences, Lakehead University, 955 Oliver Rd, Thunder Bay, ON P7B 5E1, Canada
e-mail: clevkoe@lakeheadu.ca

I. Knezevic et al. (eds.), *Nourishing Communities*,
DOI 10.1007/978-3-319-57000-6_11

Introduction

In recent years there has been an increase of alternative food initiatives (AFIs) in both number and scope. They have emerged amidst concerns about the ecological, socio-political and economic implications of the corporate led industrial food system (Patel 2007; Albritton 2009; Roberts 2013). AFIs can be broadly described as the multiplicity of self-governed, food-related initiatives that originate primarily from within civil society but also include actors from the public and private sectors. Coordinated by individuals and organizations, AFIs cover a wide range of activities, from educating about and growing food to developing formal policy and infrastructure. Considering the interaction between these initiatives, there is substantial evidence of sustained collaboration through growing and increasingly powerful food movements (Allen 2004; Holt-Giménez 2011; Wittman et al. 2011; Levkoe and Wakefield 2013; Levkoe 2014).

In this chapter I explore the ways that collaboration among AFIs can open new possibilities for building viable alternatives within the dominant food system as tools for transformation. I draw on scholarship around communities of practice, which originates from studies into workplace relationships to explain situated practice in processes of learning and knowledge generation (Wenger 1998; Lave and Wenger 1991). Building on this literature, I use the concept "communities of food practice" (CFP) to refer to broad-based networks of individuals, organizations, and institutions that build sustained mutual relationships to share knowledge and experiences and engage in collaborative action related to food systems (see also Friedmann 2007; Waddell 2005). Interacting through networks across diverse sectors, scales and places, CFPs offer an opportunity to draw on and develop strategic resources, as well as to engage in collaborative experiments, learn from others and develop transformative orientations. I explore these CFPs through the case studies of four provincial[1] food networks in Canada: British Columbia, Manitoba, Ontario and Nova Scotia. The research was conducted between 2010 and 2013 and is based on the analysis of over 40 in-depth interviews with key network leaders, a provincial network survey, site visits, and interactive workshops held in each province with network actors.

I begin by drawing on critical scholarship that identifies proposed processes and strategies for changing the dominant food system in order to critically analyze the kinds of collaborative work happening within the networks. I build on the framework of a transformative food politics (Levkoe 2011) to elucidate three interrelated elements: (1) a transition from individualized market mechanisms to collective subjectivities; (2) the consideration of the multifaceted, interrelated web of elements, activities and relationships that constitute a food system; and, (3) a politics of reflexive localization that involves place-based organizing and solidarities across

[1]In Canada, the provincial level is significant for organizing around food issues. Each province is a co-sovereign jurisdiction with legislative control over a number of areas relevant to food systems including health care, agriculture, education, municipal institutions, property and civil rights.

localities. Following an overview of the framework, I apply these three elements to collaborative efforts taking place within the four provincial food networks. Drawing on a range of examples, I highlight where transformative work is happening and identify opportunities for improvement. Through this analysis, I demonstrate that CFPs offer a strategic opportunity for AFIs to mobilize and develop transformative orientations, but that these efforts have some significant limitations that must be addressed.

Framework for a Transformative Food Politics

While AFIs have had some significant successes, a number of recent studies have questioned their approaches and practices. These critical perspectives have suggested that the work of AFIs may actually be counterproductive and complicit in the neoliberalization of food systems. To understand these critiques, I turn to the concept of a transformative food politics that refers to a suite of strategies and activities that attempt to move beyond making slight changes to the current food system towards a reconceptualization of both the root of current dilemmas and of the solutions that will address them (Levkoe 2011). Instead of simply lamenting the effects of the existing system or pointing to an end goal of the kind of system we desire, a transformative food politics is a dialectic between what is and what ought to be with a focus on the processes of transformation. This is a kind of "real utopian" experiment (Wright 2010) that helps to reflect and act on the possibilities for transformation while being aware of unintended consequences of our actions and the normative trade offs. To elucidate a framework for understanding these transformative processes, I build on the critical literature about AFIs to describe three interrelated elements: collective subjectivity, a comprehensive food systems approach, and a politics of reflexive localization. In this section, I summarize these elements in turn (these elements are adapted from Levkoe 2011).

A transition to *collective subjectivity*, the first element of a transformative food politics, refers to the shift from individualized market mechanisms as the mode for change to collaborative mobilization around collective needs. This element is a response to literatures that suggest some AFIs have been complicit in propagating neoliberal ideals and facilitating the retrenchment of the state (Allen and Guthman 2006; Guthman 2008; Sharzer 2012). For example, critics suggest that while some AFIs may provide "healthy", "ethical" or "green" food options for some people, they maintain and reproduce social inequality by encouraging individual responsibility and consumer choice for the socially and economically privileged (Guthman 2003; Johnston and Baumann 2009; Lockie 2009).

Collective subjectivity is rooted in the idea of "reclaiming the commons" articulated in social movement discourse as "reorienting economies away from an exclusive focus on commodification and profit maximization, and towards a more equitable and sustainable provisioning of [collective] human [and non-human] needs" (Johnston 2008: 243; also see Sumner 2011). For example, as part of the

commons people would collectively control and be guaranteed access to "life goods" such as food, clean air and potable water (Wuyts 1992; McMurtry 1999). Unlike capitalist tendencies of homogenization, which attempt to subsume all relationships into the market, collective subjectivity points to broader and more diverse kinds of relationships (Gibson-Graham 2006; Haarstad 2007). In respect to food organizing, this involves moving beyond individual, market-based solutions (e.g. acting strictly as a consumer or producer) towards ones that embed food within meaningful cultural and community relations while improving production of and access to good, healthy food for all. Thus, a transformative food politics would identify and act upon problems at the core of food systems by refocusing analysis from the individual towards the collective as the primary agent of change. A central aspect of collective subjectivity is that food can act as a tool for building complex memberships in a society with both rights and responsibilities (Welsh and MacRae 1998; Wilkins 2005). From this perspective, individuals are conceived as having capacities beyond consuming or producing goods and services and society is more than a marketplace.

A *comprehensive food system* is the second element of a transformative food politics. It describes the integration of social justice, ecological sustainability, health and democracy throughout all aspects of a food system—from production to processing to distribution to consumption to waste management. This element is a response to the concern that some AFIs have been complicit in the theoretical and practical isolation of food-related issues and the separation of sectors within food systems (Goodman and DuPuis 2002). Over time, critical food theorists and practitioners have increasingly come to recognize that in order to understand and address any one aspect of a food system a comprehensive approach is necessary (Bowler and Ilbery 1987; Atkins 1988; Marsden et al. 1996; Winter 2003; Roberts 2013).

From a comprehensive perspective, food can serve as an entry point to analyze and contest broader social, political and economic relations across the entire food system. Unlike some production-oriented perspectives where the commodity is seen primarily as a veil that conceals exploitative social relations (Cook and Crang 1996), Goodman and DuPuis (2002) assert that food is an area of contestation that can also reveal and challenge concentrations of political power. Building viable solutions also demands establishing alliances with actors that may only be peripherally related to food and agriculture. Allen (2004) writes,

> Interactions among the larger environmental, social and economic systems in which agriculture is situated directly influence agricultural production and distribution. This means that solutions need to be found both on and beyond the farm, and that solutions will be not only technical but also social and political as well (16).

Thus, a comprehensive food systems approach would provide AFIs with a more integrated understanding of the multiple issues and sectors that constitute food systems.

Reflexive localization is the third element of a transformative food politics described as transcending a static interpretation of the meaning of "local" while preserving and maintaining unique characteristics and diversities developed in place. In other words, a transformative food politics begins with AFIs working on projects in place but would move beyond day-to-day activities to create a wider politicized culture of action. This element responds to the concern that some AFIs fetishize ideas of "local," by assuming that foods produced in short geographic proximity have an innate association with positive attributes (Allen et al. 2003; DuPuis and Goodman 2005; Winter 2003; Sharzer 2012). For a transformative food politics, reflexive localization would entail AFIs moving beyond ideas of the local scale as exhibiting desirable qualities in and of itself (DuPuis and Goodman 2005). It also means acknowledging that ideas like social justice and ecological sustainability have different meanings depending on the particular contexts in which they originate and thus cannot be carried forward unexamined (Allen et al. 2003).

Analysts have pointed to the need for AFIs to adopt a reflexive perspective of "local" that recognizes and encourages difference both within and beyond local spaces (DuPuis and Goodman 2005; Born and Purcell 2006). In contrast to ideas of fixed scales, critical geographers argue that scale is a spatial relation that is socially constructed through struggle (Marston 2000; Brenner 2001). From this perspective, the local and global are understood as mutually constitutive levels of social organization—local is not seen as an alternative to globalization, but as an intrinsic part of it. For example, studies have described the way scale can be used strategically such as "jumping scales", where groups pursue an agenda at different scales in order to shift the balance of power (Smith 1992; Swyngedouw 1997), and "boomerang strategies" where organizations bypass the state and find international allies to raise pressure (Keck and Sikkink 1998). Thus, a transformative food politics involves making localism an open, ongoing and process-based vision as opposed to a fixed set of standards or an end in and of itself. For AFIs, reflexive localization underscores the idea that while localizing food systems has many potential benefits, locally produced or distributed foods are not inherently just. Instead, ideas of local must be contextualized by the historical and social elements of a particular place.

These three elements of a transformative food politics are not meant to provide a definitive solution or step-by-step evaluative tool. Instead, my intention here is use them as a framework to examine the transformative potential of AFIs as part of CFPs. Scholars have argued that building alliances among disparate AFIs present a strategic opportunity to develop new collaborative projects that can have significant impact on structural challenges within food systems (Stevenson et al. 2008; Holt Gimenez and Shattuck 2011; Goodman et al. 2012; Levkoe and Wakefield 2013). To explore this claim, I focus on the ways that AFIs in British Columbia, Manitoba, Ontario and Nova Scotia have used CFPs as strategic tools to transform the dominant food system.

Investigating Communities of Food Practice

In this section I apply the three elements of a transformative food politics to investigate the kinds of collaborative initiatives being mobilized within the provincial networks. I address each of the elements in turn by presenting the strengths and limitations for AFIs actively involved in CFPs to further their objectives and goals.

Collective Subjectivity

For CFPs, food can be used as a tool to engage in collective action among a wide diversity of AFIs. Describing the value of collaboration, an AFI representative in Manitoba suggested: "[working with other individuals and organizations] foregrounds the politics of food in an interesting way. It takes the issue beyond the individual and makes food appear to be a political subject worthy of advocating to governments." Describing the reason for being involved in a CFP in British Columbia, an AFI representative commented: "you may think you are food secure, but if your neighbour isn't, then you don't have food security in your neighbourhood. We are getting away from that 'me' stuff back to an 'us' stuff." Another representative agreed, "It isn't just about feeding people; it's about working *with* our communities to feed each other." While these comments express a general sentiment towards collective subjectivities, the examples of collaborative activities in this subsection demonstrate how these ideals are being implemented.

Representatives from AFIs described how the provincial networks were used to develop collaborative activities ranging from community festivals celebrating cultural cuisines and local harvests to resisting corporate led industrial practices (e.g. free trade agreements, genetically modified organisms, factory farming, inadequate labour laws) and pushing forward particular policy recommendations. In many of these conversations, individuals spoke about food as a way to engage a broad range of people and to address an even broader range of issues. To highlight how the CFPs are strategically used to facilitate collective subjectivity, examples have been organized into three general categories: experimenting with cooperative governance, promoting public engagement, and establishing collaborations that politicize individuals and empower them to act collectively.

First, cooperative refers to projects that involve groups of people and AFIs that democratically share ownership, management and decision-making. For example, Farm Folk City Folk (FFCF) in British Columbia has established a network of community farms where land is held in trust, as opposed to private ownership, and produces food for local eaters using agroecological practices. Using the provincial food networks, FFCF brings together individuals, non-profit organizations and

small businesses to support community farms across British Columbia for the conservation of farmland. Another example of cooperative governance is the multitude of cooperatively owned and operated non-profits and small businesses across the provinces with an explicit mandate to contribute to ecological and just food systems. In general, cooperatives are democratically controlled by their users and encourage collectives of individuals to pool their resources and share both the benefits and the risks to achieve common goals. A recent study found that there are about 200 cooperatives of various sizes involved in food production, marketing, retail, processing and distribution in Canada (CCA 2009). Engagement in food related co-operatives varies from single membership to multi-stakeholder models (e.g. farmers, eaters, workers, community organizations). Interviewees identified cooperatives as a valuable way to bring individuals and AFIs together to experiment with more desirable models for food systems governance.

Public engagement in food systems, the second category within collective subjectivities, involves the growing number of food policy councils and roundtables. These collaborative initiatives engage citizens and stakeholders from diverse backgrounds, rather than as representatives of special interest groups and endeavour to transform the everyday functioning of governance (Roberts 2010). A 2012 census revealed that there were 59 food policy councils and roundtables known to be in existence throughout Canada (Winne 2013). Many of the AFIs interviewed noted that they were connected to a food policy council or roundtable in some way. To highlight one example, the Waterloo Regional Food Systems Roundtable (WRFSRT) in Ontario was established in 2007 with the mission "to champion a vibrant and healthy local food system" through increasing awareness and communicating with a common voice to promote action. The WRFSRT brings together diverse AFIs and individuals from the public, private and non-profit sectors to develop collaborative solutions to challenges in the food system. Describing its work, one of the members of the WRFSRT explained: "Not only do we need public awareness, but we also need to address the inequalities that are behind our system… Making people angry through awareness is important, but unless you change the policies and laws you can't do anything." Like most food policy councils and roundtables, the WRFSRT is not bound by the interests of a particular sector and its politics emerge from an ability to tackle food systems problems collaboratively and democratically.

The third set of examples of collective subjectivity is categorized as collaborations that have politicized and empowered individuals to act collectively. For example, the participatory food costing project in Nova Scotia builds on the National Nutritious Food Basket[2] to monitor the cost and affordability of eating a healthy diet. As opposed to working strictly with professional researchers, the project trains participants in research skills and provides education about issues of

[2]Introduced in 1974, the NNFB collects data on about sixty foods from grocery stores and determines the overall cost of a nutritious diet for different age and gender groups. The results are used to promote and support the development of policies to increase access to nutritious food.

food insecurity and provincial level policy. An organizer of the project explained that it has succeeded in connecting individual experiences of food insecurity to a broader political agenda around issues of poverty, agriculture and ecological sustainability. Further, the data emerging from the food costing studies has become the basis for provincial efforts towards policy change and movement building. In this way, food costing represents a series of politicizing moments that have contributed to advocacy and the development of a broader CFP in Nova Scotia.

Despite these examples of ways that food is being used as an entry point into understanding and addressing a broader range of issues in a collective and politicized way, there were also examples of initiatives that were not reflective of collective subjectivity. For example, a number of initiatives ignored the systemic problems such as poverty and inequality and focused primarily on education with the goal of influencing personal behaviour. This approach might reproduce neoliberal ideals promoting personal responsibility and self-improvement. Comments like this one from an AFI representative in Ontario were common: "Education translates into people buying more local food and being influenced to do something… but education must also translate into policy." Notably, this comment also highlights the way that education and awareness can be used as a point of entry into broader political action. For example, a staff member from an AFI in Manitoba outlined a strategy of "getting people to switch $10 a week" to buying local and sustainable food as part of "educating and engaging action around food justice". In a similar initiative, the WRFSRT explained their integrated priorities for action that include improving skills for growing and preparing food but also education as part of a broader process to reclaim democratic control over all aspect of food systems. In sum, focusing strictly on education with an aim to influence personal behaviour may not result in significant structural change. However, AFIs actively collaborating with others through CFPs have used education as part of a broader strategy towards more transformative orientations.

Another limitation to collective subjectivity was the inability of some AFIs to engage in an explicit critique of the corporate led industrial food system for fears of jeopardizing strategic partnerships with governments and corporations. For example, one AFI representative reacted strongly to the use of language like "resisting the corporate led industrial food system." While this AFI had an acute awareness of the imbalance of power in the food system (i.e. skewed towards corporate and state actors), they were concerned that this kind of language might negatively affect relationships with some partners. They indicated that another researcher that had used "controversial" language in a report had caused tensions with a particular Minister's office.

The above discussion about collective subjectivity highlights some of the opportunities and limitations of collaborative activities for food systems transformation. In the examples of cooperative governance, public engagement and collaborations that politicize and empower individuals to act collectively, there is evidence that the CFPs are being used strategically to facilitate collaborative

activities that challenge the dominant food system. However, a number of AFI were also focused on personal responsibility, and some felt that their ability to critique was constrained by partnerships with more powerful actors.

A Comprehensive Food System Approach

CFPs offer strategic opportunities to address food from a comprehensive perspective because they are predicated on the involvement of a wide diversity of actors from different sectors, each with different objectives and approaches. In a discussion with representatives from the British Columbia Food Systems Network (BCFSN), the conversation focused on ways that different food-related issues had typically been the responsibility of separate funding bodies or governmental departments with contradictory missions. For example, one of the BCFSN board members noted that Ministries of Agriculture, Industry, and Trade are mandated to support the profit-making agendas of the big food companies while Health, Environment and Social Services are left to "mop up the damage." Using a more comprehensive approach, the board member explained, "The BCFSN addresses food systematically so that different parts of our movement can take on different components. The network is about linking, which makes it an unwieldy blob at times. But that's also its strength." A representative from Sustain Ontario: The Alliance for Healthy Food and Farming (Sustain Ontario) reflected on the advantages of Ontario's diverse and decentralized network structure. She suggested that centralized networks are more conducive to groups that focus on one particular issue, while a decentralized structure presents distinct advantages and challenges for developing a comprehensive food systems approach:

> A huge advantage is that we are required to be in constant dialogue about the whole food system and each of the players begins to change through that dialogue. We progressively understand more about how the food system works and develop more holistic approaches to change it. … It takes a lot of time to have these conversations and it requires patience with process. But I think the advantages far outweigh the challenges. In my experience, the players see that and find value in understanding a system rather than just bringing their piece to the table.

Premised on the belief that the current food system does not work for most people, Sustain Ontario has worked to broaden the conversation in order to create a stronger CFP. According to one staff member, this is accomplished through "bringing in groups we are not completely comfortable with to have those hard conversations. If we want to affect policy and move the yardstick, we need more than the usual suspects."

Within the various CFPs, there were many examples where bridges were being built between different issues to understand and transform the food system in a more comprehensive way. Through collaborative efforts, a number of activities demonstrated that addressing food systems issues as interconnected produces a transformative potential. To illustrate these efforts, I point to some key examples of

a comprehensive food systems approach organized into two main categories: developing community food hubs and creating common projects among unlikely allies.

The first set of examples of a comprehensive food systems approach can be categorized as community food hubs. Typically, the concept of a "food hub" has been used to describe the infrastructure that supports connections between producers of locally grown food and nearby consumers. I use the term "community food hub" more broadly, to describe the way that networked AFIs have developed social and physical infrastructure that integrates different kinds of food-related initiatives in order to create synergies (see also Blay-Palmer et al. 2013). Speaking to the value of community food hubs for food systems work, an AFI representative in British Columbia commented,

> There are links being made between the food bank, the garden, and the community centre so they can do much more together, having a multiplier effect on the impact… because then they can create synergies and build on each other's expertise.

Examples of community food hubs highlighted the way that CFPs have integrated food systems thinking into their work. The most common kinds of examples were food banks and community housing projects that had begun to work with AFIs involved in community gardening or community kitchens in attempts to move beyond a charity model. Perhaps the best example is the experience of The Stop Community Food Centre, an organization in Toronto, Ontario that evolved from a food bank offering emergency relief into a thriving neighborhood hub. At The Stop, people come together to grow, cook, and share food, and to advocate for measures to establish more just, sustainable and healthy food systems for all (Levkoe and Wakefield 2011). While The Stop has been a pioneer in developing this approach, there are similar community food hubs emerging across the case study provinces.

The Harvest Moon Society (HMS) in Manitoba is another example of a community food hub that promotes the importance of rural communities, rural environments, and sustainable agriculture through education, research, and outreach activities. Using participatory practices to engage rural farmers and urban eaters, HMS established a community learning centre that hosts a wide variety of educational programs, including university credit courses, agro-environmental events, and community celebrations. HMS's initiatives are focused on improving economic livelihoods for existing and new farmers, ensuring all people have access to healthy food, and creating food systems where producers and eaters can take a more active decision-making role. Just Food Ottawa in Ontario, another example of a community food hub, runs a wide range of projects that take a comprehensive food systems approach. Just Food began as the Ottawa Food Policy Council and expanded to include a community gardening network, new farmer training, the promotion of local food production and consumption, and advocacy campaigns promoting sustainable and just food systems. One of Just Food's most recent and largest projects is a community food and sustainable agriculture hub established in 2012. This project compliments Just Food's existing work by providing 75 acres of land for agroecological farming and community programming. Like the other

examples of community food hubs, Just Food's clustering of initiatives and collaborations with other AFIs has produced multiple benefits that take a comprehensive food systems approach.

The second set of examples of a comprehensive food systems approach is categorized as common projects among unlikely allies. Since many of the AFIs come together with different perspectives and objectives, attempts to collaborate can result in tensions. For example, AFIs involved in anti-poverty work often discussed coming into conflict with farmers, despite the fact that both groups were addressing issues of poverty and limited food access as a result of broader structural factors. These kinds of tensions can limit the ability of AFIs to work with others and address food systems issues comprehensively. In attempts to circumvent tensions and find ways to collaborate, some AFIs within the networks have engaged in mutually beneficial projects despite disagreements on certain issues. Speaking to the way that CFPs can encourage interaction among diverse AFIs, three AFI representatives had the following interaction:

> Representative 1: For me it is not about having only one single message since we do have to communicate with one another. It might be that the food policy council is saying that farmers need more money. The food costing people may be saying that people don't have enough money. It is all part of the same issue and we need to listen to each other so that we can work together.
>
> Representative 2: It is a challenge when you have groups giving different messages. But it is not about everyone using the same message, rather we should build that shared understanding to hear everybody so we can come together around these issues and see the commonality… [understanding our] diversity is the only way that we are going to come to a place where we can bring it to a larger systems level and make sense of it and not get caught up in the conflicting messages.
>
> Representative 3: We also have to make sure that we don't leave anyone out of that diversity. The ultimate solution can't create more social problems than we have or risk working in isolation.

These comments reflect the sentiment embodied by a comprehensive food systems approach and demonstrate the way that the networks are actively being used to collaborate with unlikely allies.

An example of unlikely allies coming together to address common concerns was the *Is Nova Scotia Eating Local?* project. The project culminated in a report published in 2012 and served as a platform for the alignment of different food systems stakeholders. Led by the urban-based Food Action Committee (FAC), the project's intention was to examine the costs and benefits of the dominant food system along with the estimated effects of increased spending on local food. Recognizing that research focusing on local food needed input from farmers, the FAC developed a partnership with the Nova Scotia Federation of Agriculture (NSFA), an association of farmers that supports conventional farming businesses in the province. The project was part of a research, education and policy initiative that explored Nova Scotia's food systems and provided an opportunity for two very different organizations to collaborate on a common project. One of the authors explained, "The final report is really about a lot more than just greenhouse gas

emissions and how far our food is traveling. We also looked at where our food comes from and how it is being produced and we continue to advocate for broader ecological food production." Speaking about learning from the collaboration, a representative from the NSFA noted, "We realized that we all agreed with the fundamentals of supporting local farmers and sustainable food… but we diverged on some of the other issues." During interviews, authors from both the FAC and NSFA explained that the process of writing the report helped to elucidate different perspectives within food systems and find common ground to move forward.

Another example of networks being used to facilitate collaboration between unlikely allies were the many food policy councils and roundtables discussed above. One of the main objectives of food policy councils and roundtables is to bring together actors from across food systems and to find ways to work together. For example, the WRFSRT's membership is comprised of eighteen representatives from different sectors of the regional food system. While there is no expectation of consensus on every issue, members must endorse the group's mission in order to participate. A representative explained that while some interactions could be uncomfortable and difficult at times, creating an inclusive and supportive environment for dialogue increased members' understanding of food systems and their ability to work together.

Despite these examples of positive collaborative efforts, there were also a number of food systems issues that had not been adequately addressed. There was an expression among some AFIs that they were too insular and more work was required to include specific sectors and/or geographic issues. For example, in Manitoba and Ontario, some respondents commented that more efforts needed to focus beyond urban areas, primarily in the rural and remote communities and in the north. Suggestions were also made in all provinces to increase the scope of collaborations by encouraging a broader representation of actors from across the food systems. For example, a number of respondents in Manitoba, Ontario and Nova Scotia mentioned that more producers needed to be included in the network. In British Columbia, some called for more inclusion of provincial and federal government representatives. In Ontario, some mentioned that francophone, immigrant, and Indigenous communities had not been sufficiently engaged. In Manitoba, some AFIs spoke about the lack of radicalized voices and noted that many AFIs were overly concerned with engaging the mainstream and partnering with the state. In Nova Scotia, some AFIs felt that many of the network members were too closely tied to public health and academic interests, which skewed the focus of collective efforts.

Reflexive Localization

In the case study provinces, many AFIs were able to move beyond their own experiences (rooted in place) by strategically using networks to make connections across localities and to negotiate the principles of a broader food politics. Despite

the differences among AFIs, working within CFPs was identified as a way to share differences, learn from others, and better understand the barriers to developing just and ecologically sustainable food systems. For example, a staff member of Sustain Ontario described their primary role as supporting CFPs to translate neighborhood and municipal level experiences into policy proposals and move them forward to the provincial and national level. Similarly, an AFI representative in British Columbia used the analogy of a nutcracker to explain the need to be working at multiple scales simultaneously:

> To crack the nut you've got to have pressure from underneath and pressure from the top. We need the grassroots engagement, people voting with their feet and making changes themselves. But we also need the lever from above [i.e. changing government policy]… you've got to have both. You can't crack the nut if only coming from one direction.

These ideals point directly to the way that networks can be part of developing CFPs capable of reaching across localities. In other words, the networks are a product of the relationships between autonomous AFI where participants bring with them a wealth of experience and knowledge that become the foundation for collaboration. The following examples of reflexive localization from AFIs working within CFPs are organized into two categories: scaling-up and scaling-out placed-based initiatives, and building multi-scale collaborations.

First, FarmStart is an example of a non-profit organization from Guelph, Ontario that has been active in CFPs, using them to bring its programming to other places as well as to engage provincial and federal level policy issues. FarmStart's primary work focuses on facilitating, supporting and encouraging a new generation of farmers by providing access to land, resources and training. The program became so successful that FarmStart was receiving regular requests from farmers across North America interested in becoming involved. While the needs of individual farmers can be very different, staff explained that they were witnessing similar problems including the high cost of land, uneven access to markets and a lack of knowledge and skills: "We realized there were issues bigger than our individual situations that we were *all* facing and that it was important to articulate them and work together." In addition, FarmStart staff realized that unless they began to address structural policy issues, they would be working "in a vacuum".

Recognizing the need for broader engagement in food systems, FarmStart took the lead in building a series of sub-networks within existing provincial and national networks to scale-out its programs and services and scale-up farmers' experience to address broader challenges. First, FarmStart established the FarmON Alliance through a series of partnerships to support a new generation of viable, ecological and locally-oriented farmers across the province of Ontario. Second, to address structural barriers to small-scale ecological farming, FarmStart realized that there needed to be substantial policy-related organizing beyond the provincial level. Working with CFPs to bring groups together across Canada, FarmStart began a national conversation about how best to impact provincial and federal policy. A staff member explained, "We didn't want to create a single voice, or a new organization, but we created a way to start to link up around a policy framework…

And as a group we can move that forward more than just one organization." FarmStart staff was clear that efforts to scale-up and scale-out their programs would not have been possible without the existing CFP.

Another example of strategically using CFPs to scale-up and scale-out the experiences of place-based AFIs is the People's Food Policy (PFP). The PFP officially began in 2008 to develop Canada's first (and only) citizen-led comprehensive food policy. The process of creating the PFP engaged hundreds of AFIs by coordinating a series of "kitchen table talks" in local communities across Canada that collected experiences and ideas around changing the food system. Participants were asked to speak from their own experiences to share stories of struggle and hope about different kinds of food systems. These stories were recorded and used to support federal-level policy proposals around a series of emergent themes. Writing teams synthesized the different recommendations to create a series of discussion papers that presented a guide for transformative action at the national level. As described by reflexive localization, the PFP catalyzed a national-level CFP that built solidarity through sharing local knowledge and experiences across the country. By producing a federal-level policy document, the ideas generated in local places became part of a broader collaborative process to produce a critique of the dominant food system along with collaborative solutions.

The second category of reflexive localization involves examples of efforts to build multi-scale collaborations that bring together place-based AFIs to share knowledge and develop broader political action. An example was efforts by the BCFSN to organize its members according to bioregions. In part, this decision reflects a desire to move beyond fixed scales of organizing to encourage trans-local solidarities. Besides increasing communication between initiatives, a bioregional approach demonstrates that political levels (e.g. ward, municipality, town, etc.) don't always make sense for CFPs. For example, a leader from an Indigenous AFI in British Columbia spoke about the way that "arbitrary" borders had historically divided her community, separating families and creating regulations that limited access to traditional foods. The idea to strategically organize CFPs in this way was to enable autonomous AFIs to work together in self-defined regions. One AFI leader commented, "You can't isolate our food system. We need to be working all over the place to have an impact. For example, working in British Columbia to change our food system is connected to China, Boston, California, Mexico and all other places." Since the shift to bioregional organizing, a BCFSN board member explained that there had been a proliferation of CFPs that engage a range of AFIs as well as new organizations from different places.

In Nova Scotia, the Activating Change Together for Community Food Security (ACT for CFS) project provides another example of creating multi-scale CFPs. In a discussion about the project, AFI representatives pointed to the capacity of ACT for CFS to connect local projects through participatory processes. "The project," explained one AFI representative "is about changing the food system through changing ways of working and building relationships. It is about adopting a critical lens to look at the current Nova Scotia food system and finding ways through conversation, relationships and analysis to have an impact." The project began by

conducting participatory assessments focusing on people's experiences of how food was being produced and accessed in Nova Scotia. A central part of this work was to identify the barriers and opportunities for change within government and other institutions. Using the assessment as a catalyst, over 50 project partners participated in reflective dialogue to share knowledge and skills and to plan collaborative strategic actions. An AFI representative who also served as a member of the ACT for CFS project management commented, "I see the 'ah ha' moments that happen when people realize that a specific policy, which may seem irrelevant to food, actually impacts their community's food security. That is when the connection is made." These kinds of initiatives that engage place-based knowledge and experiences and work across sectors, scales and places exemplify the way that CFPs are being used strategically for collaboration between localities and for connecting local efforts to broader social and political processes.

While there are many examples of AFIs engaging in practices of reflexive localization, there were also some significant limitations among the CFPs. For example, the most common barrier to collaboration among all the case study provinces was the limited amount of time and resources. Some identified limited finances to attend meetings or technology to engage in the virtual communications. For others, lack of time to participate in activities beyond their workday was a major limitation. Further, some commented that their organization's leadership and/or funders did not see collaboration as a priority. An examination of the rosters from regional and national food movement meetings indicated that participation was generally limited to larger AFIs who could pay for staff or volunteers to attend.

For some AFIs, a perceived loss of autonomy was also a barrier that constrained participation in the CFPs. This concern was expressed through comments that collaborating with others who did not understand their particular context might threaten local control by imposing specific ideas. For example, one AFI representative expressed apprehension about participating in the CFP due to concerns they might "lose control of the outcome". These kinds of comments were most prevalent among more established AFIs such as those that were more entrenched in a particular community, had longer histories, or those with larger budgets and more extensive programming.

Finally, while there were many examples of place-based AFIs coming together to work across localities, there was limited involvement with national and global level networks. While there have been a number of pan-Canadian efforts to establish collaboration at broader levels, discussions with AFIs revealed limited collaborations beyond the regional and provincial scale.

Conclusion

The purpose of this chapter has been to explore whether CFPs can facilitate a transformative food politics by exploring examples of AFIs that are strategically using networks to further their objectives and goals. Using the three elements of a

transformative food politics—collective subjectivity, a comprehensive food systems approach, and reflexive localization—I have highlighted key areas where collaboration is happening within the networks along with some further opportunities and areas for improvement. These categories are not intended to be comprehensive, but to represent the most prominent themes that arose from within the CFPs.

Overall, the findings demonstrate that transformative work is indeed happening within CFPs. Using regional food networks, AFIs are engaging in collaborative initiatives around collective needs, adopting an inclusive and comprehensive approach that considers the interrelated aspects of food systems, and building connections across localities to negotiate the principles of a broader food politics. The examples highlighted here are only selections, drawn from numerous other collaborative activities where AFIs are using CFPs to further their goals and objectives. In this way, regional networks are tools that provide AFIs with a strategic opportunity to establish CFPs and develop transformative orientations, but these efforts have some significant limitations that must be addressed if there is to be sustained impact.

References

Albritton, R. 2009. *Let them eat junk: How capitalism creates hunger and obesity*. London: Pluto Press.

Allen, P. 2004. *Together at the table*. Pennsylvania: Pennsylvania University Press.

Allen, P., M. FitzSimmons, M. Goodman, and K. Warner. 2003. Shifting plates in the agrifood landscape: The tectonics of alternative agrifood initiatives in California. *Journal of Rural Studies* 19 (1): 61–75.

Allen, P., and J. Guthman. 2006. From "old school" to "farm-to-school": Neoliberalization from the ground up. *Agriculture and Human Values* 23 (4): 401–415.

Atkins, P. 1988. Redefining agricultural geography as the geography of food. *Area* 20 (3): 281–283.

Blay-Palmer, A., K. Landman, and I. Knezevic. 2013. Constructing resilient, transformative communities through sustainable "food hubs". *Local Environment: The International Journal of Justice and Sustainability* 18 (5): 521–528.

Born, B., and M. Purcell. 2006. Avoiding the local trap: Scale and food systems in planning research. *Journal of Planning Education and Research* 26 (2): 195–207.

Bowler, I.R., and B.W. Ilbery. 1987. Redefining agricultural geography. *Area* 19 (4): 327–332.

Brenner, N. 2001. The limits to scale? Methodological reflections on scalar structurization. *Progress in Human Geography* 25 (4): 591–614.

[CCA] Canadian Co-operative Association. 2009. The lay of the land: Local food initiatives in Canada. http://www.coopscanada.coop.

Cook, I., and P. Crang. 1996. The world on a plate: Culinary culture, displacement and geographical knowledges. *Journal of Material Culture* 1: 131–153.

DuPuis, E.M., and D. Goodman. 2005. Should we go "home" to eat? Toward a reflexive politics of localism. *Journal of Rural Studies* 21 (3): 359–371.

Friedmann, H. 2007. Scaling up: Bringing public institutions and food service corporations into the project for a local, sustainable food system in Ontario. *Agriculture and Human Values* 24 (3): 389–398.

Gibson-Graham, J.K. 2006. *Postcapitalist politics*. Minneapolis: University of Minnesota Press.

Goodman, D., and M. DuPuis. 2002. Knowing food and growing food: Beyond the production consumption debate in the sociology of agriculture. *Sociologia Ruralis* 42 (1): 5–22.
Goodman, D., E.M. DuPuis, and M. Goodman. 2012. *Alternative food networks: Knowledge practice and politics*. New York: Routledge.
Guthman, J. 2008. Neoliberalism and the making of food politics in California. *Geoforum* 39 (3): 1171–1183.
Guthman, J. 2003. Fast food/organic food: Reflexive tastes and the making of "yuppie chow". *Social and Cultural Geography* 4 (1): 45–58.
Haarstad, H. 2007. Collective political subjectivity and the problem of scale. *Contemporary politics* 13 (1): 57–74.
Holt-Giménez, E. (ed.). 2011. *Food movements unite! Strategies to transform our food systems*. California: Food First Books.
Holt-Giménez, E., and A. Shattuck. 2011. Food crisis, food regimes and food movements: Rumblings of reform or tides of transformation? *Journal of Peasant Studies* 38 (1): 109–144.
Johnston, J. 2008. The citizen-consumer hybrid: Ideological tensions and the case of whole foods market. *Theory and Society* 37 (3): 229–270.
Johnston, J., and S. Baumann. 2009. *Foodies: Democracy and distinction in the gourmet foodscape*. New York: Routledge.
Keck, M., and S. Sikkink. 1998. *Activists beyond borders: Advocacy networks in international politics*. New York: Cornell University Press.
Lave, J., and E. Wenger. 1991. *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.
Levkoe, C.Z. 2011. Towards a transformative food politics. *Local Environment* 16 (7): 687–705.
Levkoe, C.Z. 2014. The food movement in Canada: A social movement network perspective. *The Journal of Peasant Studies* 41 (3): 385–403.
Levkoe, C.Z., and Wakefield, S. 2013. Understanding contemporary networks of environmental and social change: Complex assemblages within Canada's "food movement." *Environmental Politics.*
Levkoe, C.Z., and S. Wakefield. 2011. The community food centre: Creating space for a just, sustainable and healthy food system. *Journal of Agriculture, Food Systems and Community Development* 1 (2): 249–268.
Lockie, S. 2009. Responsibility and agency within alternative food networks: Assembling the "citizen consumer". *Agriculture and Human Values* 26 (3): 193–201.
Marsden, T., R. Munton, N. Ward, and S. Whatmore. 1996. Agricultural geography and the political economy approach: A review. *Economic Geography* 72 (4): 361–375.
Marston, S. 2000. The social construction of scale. *Progress in Human Geography* 24 (2): 219–242.
McMurtry, J. 1999. The lifeground, the civil commons and global development. Paper presented at the annual meeting of the Canadian Association for Studies in International Development, Congress of the Social Sciences and Humanities. Sherbrook, Quebec, 7, June.
Patel, R. 2007. *Stuffed and starved: Markets, power and the hidden battle for the world's food system*. Toronto: Harper Collins.
Roberts, W. 2013. *The no-nonsense guide to world food*, 2nd ed. Toronto: New Internationalist.
Roberts, W. 2010. Food policy encounters of a third kind: How the Toronto Food Policy Council socializes for sustain-ability. In *Imagining sustainable food systems*, ed. A. Blay-Palmer. Aldershot: Ashgate Publishing.
Sharzer, G. 2012. *No local: Why small-scale alternatives won't change the world*. Hants: John Hunt Publishing (Zer0 books).
Smith, N. 1992. Geography, difference, and the politics of scale. In *Postmodernism and the social sciences*, ed. J. Doherty, E. Graham, and E.M. Malek, 57–79. London: Macmillan.
Stevenson, G.W., K. Ruhf, S. Lezberg, and K. Clancy. 2008. Warrior, builder, and weaver work. In *Remaking the American food system: Strategies for sustainability*, ed. C. Hinrichs, and T. Lyson, 33–62. Lincoln: University of Nebraska Press.

Sumner, J. 2011. Serving social justice: The role of the commons in sustainable food systems. *Studies in Social Justice* 5 (1): 63–75.

Swyngedouw, E. 1997. Neither global nor local: "glocalization" and the politics of scale. In *Spaces of globalization: Reasserting the power of the local*, ed. K.R. Cox, 137–166. New York: The Guildford Press.

Waddell, S. 2005. *Societal learning and change. Sheffield*. London: Greenleaf Publishing.

Welsh, J., and R. MacRae. 1998. Food citizenship and community food security: Lessons from Toronto, Canada. *Canadian Journal of Development Studies/Revue canadienne d'études du développement* 19 (4): 237–255.

Wenger, E. 1998. *Communities of practice: Learning, meaning, and identity*. Cambridge: Cambridge University Press.

Winne, M. 2013. Ontario: The case for a provincial food policy council. In: Policies from the field: Promising food policies from other places. A discussion paper series published by Sustain Ontario. http://www.sustainontario.com.

Wilkins, J. 2005. Eating right here: Moving from consumer to food citizen. *Agriculture and Human Values* 22 (3): 269–273.

Winter, M. 2003. Embeddedness, the new food economy and defensive localism. *Journal of Rural Studies* 19 (1): 23–32.

Wittman, H., A. Desmarais, and N. Wiebe (eds.). 2011. *Food sovereignty in Canada: Creating just and sustainable food systems*. Halifax: Fernwood.

Wright, E.O. 2010. *Envisioning real utopias*. New York: Verso.

Wuyts, M. 1992. Deprivation and public need. In *Development policy and public action*, ed. M. Wuyts, M. Mackintosh, T. Hewitt, 13–38. Toronto: Oxford.

Chapter 12
Postscript

Alison Blay-Palmer, Irena Knezevic, Charles Z. Levkoe, Phil Mount and Erin Nelson

Nourishing Communities describes and analyzes the challenges and pathways toward sustainable food systems. We would like to close this collection by pointing to three key themes that are particularly important for food studies theory and practice in the coming years to evaluate the capacity for community-academic partnerships to act as catalysts for change: integration, scale and governance.

First, the chapters point to the need for integrative food systems models to facilitate increased attention to the various dimensions of sustainable food systems. This includes particular consideration of how marginalized populations and regions —such as remote settlements, Aboriginal communities, urban youth, and new immigrant populations in Canada, the US, and the EU—navigate the food system and contribute to community resilience through cultivation of traditional knowledge, urban agriculture, social enterprise, and innovative financing models. The authors in this volume suggest that adopting a regional perspective may help to better understand how food systems function, and that this enhanced appreciation can allow us to dismantle disciplinary, theoretical and sectoral barriers that continue to divide our work. By adopting a regional focus, we can identify interstices where regional practices offer viable alternatives to existing structures. This can be particularly

A. Blay-Palmer
Wilfrid Laurier University, Waterloo, ON, Canada

I. Knezevic (✉)
125 Colonel By Drive, Ottawa, ON K1S 5B6, Canada
e-mail: irena.knezevic@carleton.ca

C.Z. Levkoe
Department of Health Sciences, Lakehead University, Thunder Bay, ON, Canada

P. Mount
Just Food, Ottawa, ON, Canada

E. Nelson
International Development Studies, University of Guelph, Guelph, ON, Canada

I. Knezevic et al. (eds.), *Nourishing Communities*,
DOI 10.1007/978-3-319-57000-6_12

effective when we apply a regional food lens to examine rural and city-region spaces as the basis for comparative research that considers both the global north and south, highlighting their shared challenges in the face of globalization pressures. With over half of the world's population located in cities, it is critical to explore ways to feed urban centers so that regional resources are used optimally as well as equitably (Boys and Hughes 2013; Brinkley et al. 2013). By situating cities within their surrounding bioregions, we can look at food in a more holistic, place-based context and understand more about material and knowledge flows (Van der Ploeg et al. 2012). Attending to the well-being of rural communities fosters community revitalization and can alleviate rural-urban migration and its attendant challenges (Blay-Palmer et al. 2015).

Second, scale is a pivot point that prompts fundamental questions about whether and how sustainable regional systems can integrate and weave together place-based solutions to challenge and change food insecurity, diet-related disease, social injustice, and ecological degradation (Mount and Andrée 2013). Researchers are increasingly investigating whether we can scale up without losing fundamental values and goals of social justice and ecological revitalization (Westley and Antadze 2010) or falling prey to market forces and conventionalization (Mount 2012). Lack of regional infrastructure often stands in the way of greater local food volumes, accessibility and impact. Critically, this includes both physical and social infrastructure—the facilitators, paths and mechanisms that encourage networking, collaboration and relationship-building (Mount and Smithers forthcoming). Regional food systems and infrastructure are built both as alternative to and yet also within existing policy, regulatory and legislative structures. These structures, from municipal to global—and the discourse that supports them—shape both the barriers to and opportunities for transition. Bridging the isolation of regional systems, and fostering collaboration, efficiency and shared learning through networks of localized initiatives, will be critical to solving issues of scale (Clancy 2012). While there is compelling evidence that sustainable food systems need place-based solutions (Marsden 2012), these solutions must address known and emerging challenges of fostering or expanding regional food systems, including 'defensive' localism and agglomeration (Goodman et al. 2011; Levkoe 2011), network approaches (Sonnino and Griggs-Trevarthen 2013), social capital (Nelson et al. 2013) and innovation (Tisenkopfs et al. 2008).

Third, governance brings together scale and questions of power, class, and social justice, as we consider normative discourse in the context of grounded reality. The role of the state—in particular, the neo-liberal state—as enabler of or barrier to community food initiatives, as well as related questions of private versus state need to be examined in situ. Devolution is the double-edged sword of neoliberalism. Localized governance structures are often presented as more collaborative, engaged, inclusive and informal forms of decision-making and control. However, existing disparities in wealth and privilege and the resultant conflicting priorities play an equally important role in shaping the extent to which local food systems are 'fair', socially equitable, and democratic (DuPuis and Goodman 2005). Social movement networks—with the power to foster and sustain collaboration—are an

important part of this process (Levkoe 2014). Here, research with historically marginalized communities—including peasants, Indigenous peoples, migrants, racialized groups, women, and youth—is essential (Alkon and Agyeman 2011). As our work evolves, we continue to analyze diverse networks and how they can be organized into transformational assemblages. Critically understanding different practices is crucial as our work further expands into partnerships with broader communities of food practice.

From Fractured Food Systems to Transformative Pathways' provides a snapshot of selected challenges and transformative solutions through the lens of community-driven sustainable food systems. We have described a range of networked food initiatives, projects, practices and policies that expose the fissures in the industrial food system and offer alternative pathways for their communities. These examples—and the many similar international efforts that they reflect—are not isolated drops of water. Through these pages we bear witness to the potential of a diversity of initiatives networked into a food movement, a more robust and transformative food system, collecting drops of water into a rushing stream with the power to change the very structure of the earth itself. Our writings are a humble contribution to that stream, but a contribution, we hope, that demonstrates that a sustainable future is indeed possible.

References

Alkon, A.H., and J. Agyeman (eds.). 2011. *Cultivating food justice*. Cambridge, Massachusetts: MIT Press.

Blay-Palmer, A., R. Sonnino, and J. Custot. 2015. A food 'Politics of the Possible'? Growing sustainable food places through collective action. *Agriculture and Human Values*.

Boys, K.A., and D.W. Hughes. 2013. A regional economics-based research agenda for local food systems. *Journal of Agriculture, Food Systems and Community Development* 3 (4): 145–150.

Brinkley, C., E. Birch, and A. Ketaing. 2013. Feeding cities: Charting a research and practice agenda toward food security. *Journal of Agriculture, Food Systems and Community Development* 3 (4): 81–87.

Clancy, K. 2012. Digging deeper: Bringing a systems approach to food systems: High-priority research approaches for transforming U.S. food systems. *Journal of Agriculture, Food Systems and Community Development* 3 (4): 5–7.

DuPuis, M., and D. Goodman. 2005. Should we go home to eat? Toward a reflexive politics of localism. *Journal of Rural Studies* 21 (3): 359–371.

Goodman, D., M.E. DuPuis, and K.M. Goodman. 2011. *Alternative food networks: Knowledge, practice and politics*. New York: Routledge.

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

Levkoe, C.Z. 2011. Towards a transformative food politics. *Local Environment: The International Journal of Justice and Sustainability* 16 (7): 687–705.

Marsden, T. 2012. Food systems under pressure: Regulatory instabilities and the challenge of sustainable development. In *Food practices in transition: Changing food consumption, retail and production in the age of reflexive modernity,* ed. G. Spaargaren, P. Oosterveer and A. Loeber. London, UK: Routledge.

Mount, P. 2012. Growing local food: Scale and local food systems governance. *Agriculture and Human Values* 29 (1): 107–121.

Mount, P., and P. Andrée. 2013. Visualizing community-based food projects in Ontario. *Local Environment: The International Journal of Justice and Sustainability* 18 (5): 578–591.

Mount, P., and J. Smithers. forthcoming. The divergent trajectories of local food: Alternative and conventionalized pathways. *Progress in Human Geography*.

Nelson, E., I. Knezevic, and K. Landman. 2013. The uneven geography of local food projects in Southwestern Ontario. *Local Environment: The International Journal of Justice and Sustainability* 18 (5): 567–577.

Sonnino, R., and C. Griggs-Trevarthen. 2013. A resilient social economy? Insights from the community food sector in the UK. *Entrepreneurship and Regional Development* 25 (3–4): 272–292.

Tisenkopfs, T., I. Lace, and I. Mierina. 2008. Social capital. In *Unfolding webs: The dynamics of regional rural development*, ed. J. van der Ploeg, and T. Marsden, 87–110. Assen: Van Gorcum.

Van der Ploeg, J.D., Y. Jingzhong, and S. Schneider. 2012. Rural development through the construction of new, nested, markets: Comparative perspectives from China, Brazil and the European Union. *Journal of Peasant Studies* 39 (1): 133–173.

Westley, F., and N. Antadze. 2010. Making a difference: Strategies for scaling social innovation for greater impact. *The Innovation Journal: The Public Sector Innovation Journal* 15 (2): 3–20.

Erratum to: Strengthening the Backbone: Local Food, Foreign Labour and Social Justice

Janet McLaughlin

Erratum to:
Chapter 2 in: I. Knezevic et al. (eds.), *Nourishing Communities*, DOI 10.1007/978-3-319-57000-6_2

In the original version of the book, the belated correction has to be incorporated in Chapter 2. The erratum chapter and the book have been updated with the change.

The updated online version for this chapter can be found at http://dx.doi.org/10.1007/978-3-319-57000-6_2

I. Knezevic et al. (eds.), *Nourishing Communities*,
DOI 10.1007/978-3-319-57000-6_13

Index

I. Knezevic et al. (eds.), *Nourishing Communities*,
DOI 10.1007/978-3-319-57000-6