



Local Environment

The International Journal of Justice and Sustainability

ISSN: 1354-9839 (Print) 1469-6711 (Online) Journal homepage: <http://www.tandfonline.com/loi/cloe20>

Local food networks as catalysts for food policy change to improve health and build the economy

Richard C. Sadler, Godwin Arku & Jason A. Gilliland

To cite this article: Richard C. Sadler, Godwin Arku & Jason A. Gilliland (2015) Local food networks as catalysts for food policy change to improve health and build the economy, *Local Environment*, 20:9, 1103-1121, DOI: [10.1080/13549839.2014.894965](https://doi.org/10.1080/13549839.2014.894965)

To link to this article: <https://doi.org/10.1080/13549839.2014.894965>



Published online: 27 Mar 2014.



Submit your article to this journal [↗](#)



Article views: 941



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 4 View citing articles [↗](#)

Local food networks as catalysts for food policy change to improve health and build the economy

Richard C. Sadler*, Godwin Arku and Jason A. Gilliland

Department of Geography, Social Science Centre, University of Western Ontario, London, Ontario, Canada

(Received 19 June 2013; accepted 6 February 2014)

Local food networks (LFNs) are growing in popularity, in part as a response to broader criticisms of conventional food production. Municipal policy-makers have the opportunity to work with stakeholders to build LFNs to increase access to healthy foods in cities and ultimately improve population health and well-being. Building opportunities for healthy eating is particularly important in our study area. Flint, Michigan, is a post-industrial shrinking city suffering from the economic and health effects of deindustrialisation. Various stakeholders in Flint have responded to a significant issue with access to food by strengthening collaborations through a food policy council (FPC). Growth in the local food system has been supported by administrators and community advocates alike, through supporting community gardens, farmers' markets, and urban agriculture in a manner similar to nearby Detroit. Participant observation was conducted with stakeholders involved in the development of the LFN and the FPC in Flint. Stakeholders were exposed to existing research on the food system to help inform their policy direction. The group expressed several core concerns and prospects for future work, including a strong emphasis on consensus-based decision-making. Based on the synthesis of stakeholder opinions, policy recommendations are made to aid in continued planning of the LFN. Planning for food is an important first step in improving public health and strengthening local economic development in post-industrial cities. This research highlights the issue by making explicit the challenges and opportunities for policy advocacy in LFNs.

Keywords: local food network; food policy; food systems; consensus-based decision-making; local economic development

Background

Local and alternative food networks are growing in popularity due to an increasingly criticised conventional food system and an active discourse aimed at increasing accessibility to affordable, nutritious foods. The study area for this research – Flint, Michigan – may see substantial benefits from growth in these networks because of poor public health indices and a lack of nutritious foods.

Some stakeholders, however, may lack a thorough understanding of the implementation and nature of local food policy (LFP) as a potential solution, especially in contrast to

*Corresponding author. Email: rsadler6@uwo.ca

national food policy (NFP). Understanding characteristics and differences of national and LFP – while remaining aware of issues of the ‘local trap’ (Born and Purcell 2006) – is essential to build a case for LFP advocacy. A well-functioning network of LFP actors can both ameliorate negative effects of fragmented NFP approaches and add pressure to effect change in NFP by uniting actors from various sectors (Barling *et al.* 2002, Harper *et al.* 2009). Given the increasing importance of multi-level governance, it is particularly useful to promote this policy integration among various local actors as well as between local and regional/national actors (Barling *et al.* 2002).

But even well-versed LFP actors are often constrained in their opportunities for progress by a series of challenges including: external (e.g. disconnect from local government), logistical (e.g. lack of professional staffing and resources), and procedural issues (e.g. member selection, cooperation among diverse members, and decision-making style) (Harper *et al.* 2009).

The research questions are, therefore, twofold. First, how are challenges and opportunities for policy advocacy among local food activists manifest in Flint, Michigan? This is important for understanding decision-making processes and their potential impact on LFP in a community heavily affected by poverty and the economic changes brought about by neoliberalism and deindustrialisation. This research question is achieved through a grounded theory approach to participant observation, whereby themes are uncovered from rich qualitative data. Second, how does the local food network (LFN) make use of research on the food system to inform policy agenda? This is of importance because a misunderstanding of existing knowledge can lead activist groups to advocate for ineffective policy change, and policy knowledge is increasingly important in a society where public programmes are increasingly scrutinised for economic efficiency. This research question is achieved by sharing geographically relevant research findings about the current state of the local food system with the network. Generally, this study will track the policy advocacy efforts of an LFN; connect ideas of social justice, empowerment, and local food production; and offer an insight into the challenges and opportunities faced by local food stakeholders based on their knowledge of available research on the food system.

The nature of food policy

The relative disparity between farmer and consumer subsidies is a central concern of NFP in the USA. During the 1980s and 1990s, conservative political administrations cut funding to food assistance programmes for low-income consumers (Allen 1999). Meanwhile, lobbyists continued to push for farm subsidies facilitating cheap commodity production (Caraher and Cowburn 2005), which contribute substantially to the high-sugar, high-fat diets characteristic of many Americans today (Story *et al.* 2008, Lustig *et al.* 2012). While intended to help those at risk of food insecurity, an increase in food stamp funding from the 2007 Farm Bill (Chite 2007) may have a perverse effect by contributing to increasing rates of “hunger and obesity by pushing unhealthy food onto the poorest” (Brinkley 2013, p. 245). As well, local economies seldom benefit from these consumer-oriented aid programmes, since the vast majority of food stamps are spent at non-local, chain grocery stores (Cook 2011, Okrent and Alston 2012).

Commodity subsidies favouring large food companies continue to grow, even while diet-related public health issues grow more serious: obesity rates among Americans rose from 13% to 32% between 1962 and 2004 (Okrent and Alston 2012). Some policy responses around informational or geographic access to food (Wrigley 2002, Downs

et al. 2009), meanwhile, persist despite mounting evidence that uni-dimensional structural programmes do not always influence consumption (Cummins *et al.* 2005, Giskes *et al.* 2009). Further complicating this matter is that food policy-making in the neoliberal context tends to favour large-scale agricultural interests over social programmes to support personal nutrition (Sodano 2012), and some national-level healthy eating programmes provide contradictory or erroneous claims about healthy eating (Blay-Palmer 2013). Neoliberal reforms have also meant the devolution of responsibility for food planning from the state to (often fiscally insolvent) local municipalities (Morgan 2013) or under-resourced citizen groups (Mansfield and Mendes 2013). At best, this conflict between food companies and social justice groups creates a “policy cacophony” whereby implementing policies is an arduous process (Gortmaker *et al.* 2011, p. 839); at worst, these interventions can backfire and create unintended negative health consequences (Johnson *et al.* 2012).

Where local policy-makers have the luxury of funding for food planning efforts, the ‘local trap’ can further hinder meaningful policy change. Several researchers have cautioned against fetishising or valorising local-scale as a superior medium in policy formulation, indicating negative economic externalities from a narrow approach (Hinrichs 2003, Morgan *et al.* 2006, Feagan 2007). These local governing bodies are equally susceptible to corruption, bias, social inequality, and environmental degradation (Born and Purcell 2006, Niles and Roff 2008). As well, because food policy has historically been the purview of national-level governance, “the institutional and imaginative foundations needed for effective governance that promote healthy food systems in urban contexts” have been diminished (Mendes 2008, p. 946).

Beyond the potential for corruption and bias and the lack of funding available to local authorities, local food policy-makers are also subject to policy cacophony which at times has resulted in ineffective policy programmes (Gortmaker *et al.* 2011, Johnson *et al.* 2012). Specifically, stakeholders remain entangled in a debate over the relative influence of structural factors in the built environment versus consumer-based decision-making (CBDM). Lang and Caraher (1998) indicated that “public policy has over-emphasised behavioural explanations and encouraged health education to favour behavioural intervention rather than . . . structural factors” (p. 207). The idea of food deserts, considered to be a structural determinant of diet, is described as:

... a metaphor which caught the imagination of those involved in policy development, not least because it encouraged a shift in focus in health promotion activity and food policy. (Wrigley 2002, p. 2032)

Arguments favouring structural interventions propose investment in programmes to provide fresh foods to low-income consumers, including funding for farmers’ markets, mobile food units, and community supported agriculture (Maxwell and Slater 2003).

This focus on structural factors is not always appropriate, however, because policy decisions are often made without sufficient empirical evidence to demonstrate the importance of food deserts or the efficacy of food-based interventions (Cummins and Macintyre 2002). As well, social and cultural factors diminish the importance of pure geography on consumption (Cummins *et al.* 2007). Wrigley (2002) continues by saying:

“... ‘food deserts’ were simply assumed to exist despite a lack of systematic research documenting their prevalence and distribution” . . . nascent research on the topic “provided somewhat ambiguous results and the opportunity for policy divergence”. (p. 2032)

In support of this theory, additional recent research critiques the value of overly simplistic research designs and prescriptions from structural interventions (Coveney and O'Dwyer 2009, Bedore 2013, Donald 2013). Thus for others, the emphasis of health promotion practice remains on altering behaviour (Downs *et al.* 2009). When combined with other health initiatives, for instance, taxes may encourage consumption of healthy foods and simultaneously discourage consumption of unhealthy foods by economic means (Caraher and Cowburn 2005). Because large food companies may oppose food taxes, however, policy recommendations may also *encourage* the development of nutritious foods through shifting subsidies to fruits and vegetables (Caraher and Cowburn 2005). Similarly, some behavioural economists advocate libertarian paternalism as a means of improving decision-making. This approach incentivises healthy choices without actually taking away less healthy options, a policy approach which might be attractive to existing neoliberal political systems such as the system found in the USA (Camerer *et al.* 2003, Sodano 2012).

The presence and popularity of various and potentially conflicting interventions to combating diet-related illness is central to this research, since policy-makers must be careful to avoid Gortmaker's policy cacophony. The increase in research among social and health scientists reflects a broader shift in food policy stakeholders to include many practitioners, researchers, and citizens situated outside of traditional agri-business, farming, and governmental interests (Morgan 2009). With this shift comes the potential for intra- and interdisciplinary disagreement about the most effective policy interventions for healthy eating. Increasing communication and identifying similar motivating factors through a process of mediation can help to unite disparate interests around common, achievable goals (Blay-Palmer 2009, Wegener *et al.* 2012).

Food policy councils and policy agendas

As a forum to bridge these institutional and disciplinary chasms, and to increase LFP advocacy and citizen activism, food system and urban planning researchers and practitioners have supported the creation of LFNs and food policy councils (FPCs) (Campbell 2004, Clancy 2004, Kaufman 2004, Pothukuchi 2004). LFNs reflect a common concern by community citizens to take back control of the growing, processing, distribution and sale of foods, often with an emphasis on nutritious and/or organic products. FPCs often contain similar memberships, but function as local food system advocacy groups to local municipalities (Campbell 2004). Both LFNs and FPCs play critical roles in bringing the focus of food policy back to a community scale, serving as forums for discussing food issues, and fostering coordination among sectors of government, industry, and the public (Harper *et al.* 2009).

LFNs/FPCs also have the potential to affect national and state-level policy debates and bring LFP into mainstream politics (Harper *et al.* 2009). Given issues of resource allocation, human capital, and a lack of diversity in these groups, however, their advocacy is often narrow in scope. Members sometimes focus on only one issue, such as hunger, the implementation of a food charter, or a general county-level food systems plan (Dahlberg 1994, Harper *et al.* 2009). In addition, because municipalities can be vulnerable to corruption (Schneider *et al.* 2008) or ambivalent to building relationships with FPCs (Schiff 2008), the implementation of municipal-level food policy changes can be significantly hampered.

The elements selected for consideration by FPCs are also contingent on the interests and political motivations of stakeholders, the group decision-making model, and the city-specific context (Dahlberg 1994, Thibert 2012). Thus, it is imperative to understand how

these FPCs ultimately decide on the priorities for LFP advocacy, because a major challenge for any FPC is to pursue an “agenda which seeks to protect and enhance the long-term public interest” (Dahlberg 1994, p. 10). Nurturing a dialogue between FPCs and the public is important to finding success because public participation is a key element of their decision-making process (Feenstra 2002).

Still, those empowered with setting policy agendas within these organisations should have basic knowledge of research about the food system, especially at the local level. Four reasons have been cited in research which allude to the importance of a well-informed decision-making body: (1) the formulation of policy is socially contingent (Pal 1992); (2) it relies on non-scientific values (Brownson *et al.* 2010); (3) the definition of policy priorities is in the eye of the beholder (Dunn 1994); and (4) policy priorities are frequently defined by those who “are inadequately informed by and untrained in science” (Teret 2001, p. 374). All of these indicate the susceptibility of policy formulation to human error, and the need to link policy-makers with relevant available research.

The intention of this research is to evaluate the policy agenda pursued by an LFN in Flint, Michigan, in light of their decision-making style and their incorporation of existing research on the local food system. Considering how public discourse and power dynamics can influence agenda setting and policy priorities, it is important to know *how* the group decided on topics for policy advocacy (Pal 1992, Pelletier *et al.* 2003, Yeatman 2003). Their policy advocacy can be framed within a large body of research on nutrition and health in the Flint metropolitan region, including professional and academic reports on diet, health, accessibility to nutritious foods, and participation in community gardens (Alaimo *et al.* 2008, Genesee County Health Department 2008, Ober Allen *et al.* 2008, Alaimo *et al.* 2010, Michigan Department of Community Health 2011, Sadler *et al.* 2013a, 2013b). It is from this research and other relevant literature on food systems that stakeholders advanced their local knowledge.

Previous research has surveyed the opinions and priorities of FPCs in North America. Schiff (2008) considered the views of only the principal contacts for multiple FPCs, while Thibert (2012) was primarily concerned with food policy from a broad, top-down perspective. But it is also important to evaluate the opinions and priorities of many stakeholders within a single FPC. Additionally, the comparison of stakeholder opinion with existing research on the food system has not been explored in previous studies. The results of this research will therefore be useful for the LFN itself and for other prospective FPCs in determining evidence-based best practices for policy-making.

Study context

Issues relevant to LFNs – building economic development, improving health – have recently received much attention in the study area: Flint, Michigan. Hobor (2012) classifies Flint as an *ideal* poster-child of deindustrialisation: a once dominant yet vulnerable manufacturing sector has been decimated by economic change, and rapid and persistent population decline have exacerbated urban poverty. Despite this shortcoming, Flint has shown how a shrinking city can adapt itself to embrace local and alternative food networks. The growing local food movement has received national attention by those seeking to better understand the potential of abundant vacant land for rebuilding a local economy through community gardening and farmers’ market programmes (Barry 2009, Tumber 2012). The tone of this recent journalism mirrors that of local officials, who see opportunity where many outsiders see only devastation.

Despite a change in attitude, economic development in many areas of Flint remains sparse. Past plans primarily focused on tourism or single-industry schemes; none focused especially on the full-scale development of a local economy. Even a recent attempt to open a grocery store near downtown failed after 17 months (Sadler *et al.* 2013b). Thus the economic climate in Flint has continued to worsen, considering Flint's inability to solidify a new economic niche – as other Rust Belt cities have done – and as job prospects continue to move elsewhere (Hobor 2012).

Flint also suffers from a multitude of health and social problems: unemployment has long been above 11%, obesity rates are above 30%, rates of diabetes and heart disease are among the highest of any region in Michigan, and many residents do not have ready access to nutritious food (Genesee County Health Department 2008, Michigan Department of Community Health 2011, Sadler *et al.* 2013a). Additionally, many years of municipally sponsored racial segregation and race-based urban renewal, followed by white (and later, middle class) flight from the city have strained relations between the black and white communities, and between advantaged and disadvantaged populations (Highsmith 2009). Nevertheless, research from Flint and elsewhere suggests that local food activities such as community gardening may help alleviate some of these problems by building community social capital and increasing consumption of healthy foods (Holland 2004, Alaimo *et al.* 2008, Ober Allen *et al.* 2008, Alaimo *et al.* 2010).

In 2008, community members in Flint started a dialogue on the importance of food for building health and the economy. Dialogue participants represented community groups, gardens, farms, farmers' markets, the health coalition, the state university extension, and city planning offices, and came to advance their personal belief that a strong local food system can help to rebuild the community. The outcome of this dialogue was that in 2009, an LFN was formed to advocate for food as a determinant of health and the economy. The primary aims of the LFN are to connect food growers to resources and advocate for changes to food policy to make it easier to access healthy food. In seeking to bring healthy food to everyone in a community affected so deeply by poverty and unemployment, the LFN closely aligns with the notion that:

... community organizations that provide various forms of assistance, training, networking, and outreach can help to mediate the effects of intense poverty and isolation. (Schneider *et al.* 2008, p. 48)

In 2011, formal efforts were undertaken to create an FPC which would have additional authority by which to influence local and state government policies. The prospective creation of this participatory body creates an opportunity for knowledge translation from established research to community members as they build this organisation, and reflexively back to a growing body of research on the food system in Flint. Results from this study are directly applicable to LFN participants and future FPC members, who can use findings reported here in future planning efforts. More broadly, Flint is of particular interest to the discussion around FPCs because of extreme issues with public health, employment loss, and vacant land. Thus, the ideas forged from this group represent the outcomes from one of the most extreme outposts of poverty and abandonment in the developed world.

Methodology

Qualitative data were collected by the primary researcher through participatory, community-based research while volunteering with food system advocates in Flint (as in

Hayhurst *et al.* 2013). In past participatory research, Travers (1997) used participant observation as the initial primary data collection method while working at a charitable food distribution facility. Wakefield *et al.* (2007) likewise used participant observation in South-East Toronto gardens over the course of a growing season, working with gardeners and attending meetings, social events, and educational workshops. After each event, detailed field notes were transcribed. Similarly, this study makes use of the primary researcher's involvement in the LFN in Flint as an avenue for participant observation.

Many of the research participants have been instrumental in work to form an FPC, but all are already active in an LFN. Participants come from a diverse range of community organisations, are mostly volunteers, and include retailers, city planners, municipal government workers, health coalition employees, food producers and growers, and other stakeholders, a range of local expertise similar in scope to initial (and now successful) food policy efforts in Vancouver and Toronto (Mendes 2008, Blay-Palmer 2009). Although past research has lamented “race-inflected, even missionary aspects of alternative food politics despite the pretense of color-blindness” (Guthman 2008, p. 433), participants and leaders of this LFN come from both black and white as well as advantaged and disadvantaged communities. Thus as will become clearer throughout the paper, food policy advocacy tends to converge more on issues of social justice than missionary aspects of alternative food because participants originate from within the community rather than outside it.

Data collection and analysis

Data were collected from 30 stakeholders via participant observation and informal one-on-one discussions between August 2011 and July 2012, during which time various efforts were made to formalise an FPC in the community. The primary researcher attended 35 community and organisation meetings aimed at increasing advocacy of the LFN, engaging citizens in the work of LFNs, and aiding in the construction of an FPC. Meeting transcripts from numerous informal discussions were evaluated to help clarify opinions and priorities of stakeholders. The exploration of these ideas about the food system in a qualitative setting allows for the development of broad themes independent of statistical testing. Collecting information informally ensured that the primary researcher was seen as a local insider during meetings.

Meeting notes were coded by specific ideas and categorised into themes using concepts of grounded theory, which has been used in food policy research in the past (Alkon and Mares 2012). This technique encourages the genesis of insights directly from available data (Charmaz 2006). Coding allowed the researcher to re-visit common themes to develop a coherent understanding of the main issues among the many stakeholders. In general, the qualitative data were evaluated by guidelines (e.g. those in Baxter and Eyles 1997) rather than a strict set of quantitative rules in an attempt to stay true to the qualitative nature of the data (Risteen-Hasselkus 1991). Because of the informal nature of data collection, direct quotes were rarely transcribed verbatim. For that reason, only broad themes are presented throughout this paper.

The research is considered *inductive* and *dialectical*, since ideas are gathered from key stakeholders to build a cohesive narrative, and both subjective and objective points of view are considered valuable for data gathering (Kemmis and McTaggart 2000). Dialectical reasoning is common among stakeholders; some discuss the importance of *stepping back* from their work and being open to new ideas but also of staying true to personal values. The group also employs a CBDM model, which facilitates the reflexivity of stakeholders

in subjective *and* objective positions since they are not bound to reach decisions by a simple majority vote. This is perhaps a more honest approach to research and policy-making than purely quantitative approaches, which often seek to remove any inclination of bias from their publications (Aronson 1994).

Because the stakeholders represented many different interests, it is useful to know whether there exists any dissonance in opinions, and how these differences are resolved and brought into a coherent organisational framework. Throughout the research period, various groups examined research on the food system (particularly existing studies on Flint) to help guide their decision-making. Uncovering differences of opinion, sharing research on food systems, and building an ongoing dialogue with stakeholders will contribute to the creation of a research document for use by the stakeholders as they continue in their efforts to build an FPC.

Participants were encouraged to discuss and corroborate or dispute the findings of past research during data gathering-oriented LFN meetings. This technique may clarify a potential ambiguity in quantitative research by evaluating the criticisms and acceptance of quantitative work among stakeholders (Guba and Lincoln 1994). Although quantitative food system research can uncritically rely on statistical analysis (Moss 1995), including it alongside a qualitative analysis of stakeholders can help bring a voice to public opinions on the issue (Rank 1992). Thus this research views qualitative and quantitative methods as complementary and useful, and rejects dualisms that suggest they are antithetical (Sprague and Zimmerman 1993).

Findings

Results are divided into four sections which categorically match the research aims: (1) the decision-making style of the group and how this affects policy priorities; (2) the main concerns/barriers to effective policy advocacy; (3) prospects for policy change; and (4) how existing research informs proposals for policy change. Overall, the results suggest an awareness of the limitations of the conventional food system and fervour for the development of a local or alternative food system to support food sovereignty.

Decision-making style

As discussed, many stakeholders within the LFN emphasised a CBDM framework. In contrast to democratic decision-making by majority or plurality voting, CBDM emphasises the development of interpersonal relationships and working through differences rather than pacifying dissent. In Flint's case, this helped citizens and representatives from marginalised communities to ensure the power structure remained decentralised. This is seen as important in a city where for years the black minority population experienced direct and indirect negative consequences of a majority rules government system, because all voices must be considered in CBDM. Additionally, participants recognised the tendency of LFNs to become a "bastion of what we might call the educated, professional class" (Hinrichs and Kremer 2002, p. 85), and saw CBDM as a means of alleviating this tendency. Furthermore, many meetings were run by locally respected facilitators, who ensured that all voices (including newcomers and community residents) had the opportunity to contribute their ideas to the CBDM process.

Even so, this commitment translated into a sometimes arduous meeting process, as all concerns were considered to reach amenable group decisions. Despite the challenge participants remained committed to this approach, citing a desire to remain a grassroots

organisation focused on equity, education, empowerment, and inclusion (which many felt could only be attained through this style of decision-making). As shown below, little dissonance existed between the decision-making style of the group and the priorities expressed.

One negative outcome of the deliberate but slow decision-making process, however, was the eventual attrition of some local health-care and anti-hunger institutional representatives from the group (many of whom may have constituted the same educated, professional class warned of by Hinrichs and Kremer). The process had the effect of bringing the most committed citizens to weekly or bi-weekly meetings to move the policy agenda forward. Given the decision-making style and participant make-up of the group, it was anticipated that most themes would adhere to a general idea of social justice – the idea that inequalities are created by our modern economic and political system, and that respect for human rights is paramount. The novelty of the group created opportunities, in that as-yet untested ideas for urban agriculture and local food systems would receive more support. But the novelty also created uncertainties, including how the group would be run in the future and whether the original members would continue to have a voice in the matter.

Concerns for effective operation

Research participants expressed a central group of concerns related to the formation of an FPC, including uncertainties about governmental support for and institutional takeover of the FPC. Initially, participants indicated that the Detroit (Michigan) FPC's Policy on Food Security would be used as a framework for building an equivalent document for Flint. Many stakeholders expressed a deep concern, however, that as the group became formalised, the decision-making of the eventual FPC could be turned over to institutional heads, as was the case in Detroit. Not only could a directorship-style FPC limit the voices of residents, but it could also alter the popular CBDM framework.

This concern is further manifested by a wariness of institutions such as hospital research teams or other health-care service providers, who some stakeholders considered to be outsiders with institutional goals which may conflict with goals of community development (as noted in Hayhurst *et al.* 2013). The abundance of research studies on public health and the food system in Flint further complicates this relationship because many feel the subject has been over-studied, and action is more important than research. Thus for the group, local control of the prospective FPC was seen as vital to maintain this direction.

Specifically, some expressed concern that the concept of *equity* may be defined differently among various stakeholders. An FPC board of institutional heads would likely be challenged on the grounds that residents from certain neighbourhoods were not included, which could result in alternative (possibly inferior) courses of action not reflective of community input. Although most active participants agreed with this assessment, some did lament the absence of institutional involvement. But the slow yet deliberate decision-making process which caused attrition of institutional representatives may have unwittingly alleviated the concern of institutional takeover. To date, there remains an absence of official involvement of institutional heads perceived as *outsiders* – any active participants of the prospective FPC who do belong to a formal institution are considered to be *locals* or *insiders*. But the group also opposed aligning itself with the closely related LFN – which recently incorporated as a 501(c)(3) non-profit organisation – citing the lack of advocacy effectiveness of non-profit organisations.

A second primary concern expressed by many was that the local government was either ineffectual at or unwilling to support opportunities for growth in the LFN. Some of these concerns were directed at current policies which unwittingly inhibit the growth of food entrepreneurs, for example: laws limiting local food processing; removal of local food vendors from street corners to meet food safety laws; and local land use laws prohibiting the sale of produce/other goods from farm to consumer within city limits. Other concerns about backyard chickens and goats grazing on city parkland were voiced by some members of the group. Many of these concerns could be alleviated at little or no cost to the city through a revision to local ordinances. But there is concern that because the city is currently controlled by a state-appointed emergency financial manager, government involvement will be minimal and the city will have limited ability to pursue changes to policies or ordinances which could facilitate the growth of an LFN.

Prospects for policy change

The main prospects for policy change are similar to those for other post-industrial cities and contrast somewhat with FPCs in high-growth cities such as Toronto, Canada (Thibert 2012). The food system is seen as a vital tool not just for local economic development (by creating jobs in food production), but also for self-sufficiency (and improved food security). In this way, the group implicitly accepts (though it does by no means explicitly endorse) the dominant neoliberal framework by which central government social support is increasingly scaled back and the local food movement becomes seen less as a middle class social movement and more as a community food security strategy (Morgan 2013).

As Brown and Jameton (2000) indicate: “successful urban entrepreneur gardens could be said to benefit indirectly the nutritional health of a community by providing income and employment opportunities for low-income households, and thereby contributing to their ability to purchase a healthy diet” (p. 26). The policy advocacy of the LFN focuses, therefore, on facilitating change in laws and ordinances which will support the strengthening of the local food system.

The concern over institutional takeover was reflected in the prospects proposed by the stakeholders. Most favoured policies which harnessed local resources over the use of university researchers or heads of other FPCs, who were considered to be *outsiders*. This self-sufficiency was evident in the attention given to local economic development through small-scale farms and the development of food hubs/food processing plants. Yet involvement in government functions is important for the group, as they recognise the potential for expansion by gaining support of the local government and the role of NGOs to lobby in the neoliberal governance framework.

The prospective FPC remains committed to advocacy efforts to effect change in government to build support for LFNs. There is some evidence of this at work, as the state government pledged funding for regional food hubs in Michigan (Flint Journal 2012), and the city farmers’ market recently announced plans to open such a facility in their new building (opening in 2014). In addition, the city contracted with an externally funded food systems consultant (one of the LFN stakeholders) whose task is to encourage the enrichment of the LFN as an economic development tool. Unlike the opposition to institutions running the group, the work of this insider at the city is considered a way to remedy the lack of official government and institutional involvement. Ideally, the city government, lacking funding for oversight or for running an FPC, will be convinced to revise laws and ordinances currently prohibiting certain types of food production and distribution in the city.

Another aspect of the aforementioned consultant's work is to influence the city's new master planning process – the first since 1960 (Ladislas Segoe and Associates 1960) – to include provisions for urban agriculture and more support for LFNs. Stakeholders have been involved in a dialogue with this consultant to open a direct line between local government and the efforts of the LFN/prospective FPC, an alliance being successfully pioneered in cities around the world (Morgan 2009) and one which exemplifies the increasing role of private organisations in local governance as seen in neoliberal frameworks. This increase in communication to local government may be a considerable boon for the stakeholders, since the approval of ordinances amenable to urban agriculture may provide an avenue for increased economic development.

But stakeholders understand that economic development in itself will not solve the public health problem in Flint; thus, they also made good use of existing research and programmes from other cities to propose additional action items. Shunning often narrow understandings of food deserts, the participants were aware of many innovative approaches to improving health beyond retail-based interventions. These proposals included integrating cooking classes with existing faith-based programmes, holistic educational programmes with physical supports for planting new gardens, shared community kitchens at existing emergency food facilities, community-led educational programmes, working with areas gardens to sell produce to local corner stores, and addressing crime around existing food retail outlets to encourage residents to visit these proximate stores.

In some FPCs and LFNs, the amelioration of hunger through market-based strategies can become a dominant issue (Dahlberg 1994, Borron 2003). Under the dominant food desert discourse, much time is spent lamenting the abandonment of grocery stores in core areas while other pathways to improve community vitality and health are ignored. The stakeholders in Flint, however, considered a range of options for interventions. Although they recognised the absence of grocery stores and other nutritious food retailers, most agreed that improving educational programmes and incentivising healthy behaviours would be more effective. This attitude is perhaps attributable to the recognition among participants that the issue of retail investment was market-based, and that grassroots programmes were more likely to gain support and have a positive effect on diet-related issues, especially given the short-lived existence of a grocery store that opened in 2011 and closed in 2012 (Sadler *et al.* 2013b).

Existing research and proposed policies

This research also evaluated the degree to which stakeholders' opinions of the state of the food system were based on existing research, and in a related vein, how their opinions were shaped by discourse. While the stakeholders were somewhat wary of academic research when it meant an intrusion into the lives of local citizens, they did effectively use evidence drawn from existing academic and public policy research to inform their advocacy. Their recognition of the importance of existing research is evident: an entire workgroup within the prospective FPC focused for several months on compiling all relevant studies from Flint on food system or public health programmes and outcomes. The group made it a stated goal to use available data and previous findings as inspiration for future policy advocacy. Although the intention was to primarily inform direction based on Flint-specific research, relevant research from outside the region was also examined to further inform advocacy.

From this research, stakeholders proposed a few options for policy change. The group strongly supported the expansion of community gardening as a strategy to improve dietary

habits, as endorsed by Alaimo *et al.* (2008). This includes advocacy to the city to revise zoning codes, as well as to the health department to enable direct-to-consumer sale of foods. Echoing some of the work of Ober Allen *et al.* (2008), youth are seen as change agents in re-shaping the local food system, and the LFN supports engagement with young people. This commitment was reflected in an internal policy to include youth in LFN projects and external advocacy to community organisations to include youth-oriented policies.

Regarding land-use policy, stakeholders used their local knowledge to identify targeted neighbourhoods for policy response – regardless of whether they fit the classical definition of ‘food deserts’ – recognising that spatially defined disparities explain only part of the problem (Sadler *et al.* 2013a). Thus, they did not explicitly support policies to support retail-driven programmes (foreshadowing later work by Sadler *et al.* 2013b). For instance, reflecting the cautionary words of Wrigley (2002), stakeholders advocated for a more comprehensive evaluation of healthy food availability across the city prior to defining any strong policy direction. This advocacy was quickly translated into action by recent community-engaged research by Mayfield *et al.* (2013), who worked with area residents to evaluate the availability of healthy foods in every store in the city and surrounding environs. Resultant data and subsequent mapping were thereafter better able to help stakeholders in identification of problem areas.

Discussion and conclusions

Flint’s political and economic climate is compromised by ineffectual government and a dwindling tax base, creating basic governance issues. The present portfolio of research on Flint’s food system is, however, well documented. It was thus anticipated that any policy formulation would need to consider the relative lack of: public funds for educational programmes; public investment directed towards re-development in many neighbourhoods; and efficacy of past structural programmes.

Recognising the lack of efficacy of structural programmes, stakeholders unanimously echoed a general sentiment that some responsibility falls on the individual and the community to help empower consumers to make informed choices about their diets. Their policy advocacy reflected this by emphasising grassroots efforts to expand community gardening and local food systems, and their scepticism of governmental involvement or support.

Constraints

But simply advocating for effective policies will not guarantee success by the LFN/prospective FPC, as both internal and external constraints may inhibit progress. Internally, the group is careful to indicate that there is no formal FPC to lead policy advocacy; it remains a loosely bound LFN with stakeholders from the public and private sectors. Formal budget support, consultants/advisers, and integration into city government are some of the many characteristics of successful FPCs which need to be developed to facilitate success for this group (Dahlberg 1994). The financial and advisory elements may be supported through the current incorporation of the LFN into a formal non-profit organisation. And while integration with municipal government may be realised through a continued dialogue between food policy advocates and the city through the food systems consultant, Borron (2003) cautions that FPCs are often the subject of budget cuts by municipal governments. The tension between the group and other institutions may complicate efforts towards achieving successful policy advocacy. Success will be seen if the

stakeholders are able to capitalise on the connections that do exist to build a successful framework.

An external constraint on the work of this LFN relates to the city-specific context identified above. Presently, Flint continues to decline in population, and vacant land for urban agriculture is abundant. But mixed-use redevelopment in the core and a concomitant resistance towards expanding urban agriculture has created some scepticism among residents and LFN participants alike. The concern is that opposition to urban agricultural land uses may be part of a broader plan among developers, and that re-investment in key areas will draw city resources (e.g. infrastructure, policing, federal grant money for demolition and stabilisation of neighbourhoods) away from areas in need. Given the strength of growth coalitions in other Rust Belt cities, this concern may be well founded (Wilson and Wouters 2003).

Subjects of discourse

One interesting aspect of this LFN is that hunger and food insecurity issues did not explicitly come to dominate discourse throughout the meetings and interviews. Instead, many proposed solutions focused on empowering individuals to make healthy choices, and on hunger alleviation as an element of this economic and personal development. This is promising, because the social issues present in Flint pervade far deeper than just hunger. The attitude towards self-empowerment may reflect the knowledge that even in distressed neighbourhoods, economic opportunities in food systems exist which could ameliorate health deficiencies and economic distress among the most at-risk.

Many stakeholders held the view that improving the economy would have as strong an impact on diet as simply providing new options for healthy eating. These opportunities included the expansion of small-scale agriculture and the establishment of a food processing facility. This integration of nutrition and economic development may be a more effective means of drawing attention to the issue of food insecurity (Pelletier *et al.* 2003). It is important to recognise that some inequalities continue to be perpetuated by the dominant food system, and transforming the food system in Flint will be an arduous process. Still, supporting these programmes is a step forward for improving employment and employability, especially among young people.

In general, the group accepted existing evidence when developing advocacy plans for the future. But as discussed, they were wary of large institutions *running* the FPC. The stakeholders were not wary of the research itself, but rather the data collection methods whereby researchers remained outsiders, detached from community involvement. The presence of the primary researcher as an internal member of the group contributed to the ease with which information was collected for this study. Similarly, if institutional heads became well entrenched in the LFN/prospective FPC from a local *insider* standpoint, their presence may be welcome in the ongoing process.

Future directions

Reflecting on a basic premise of this research, there is an observable difference between LFP advocacy in Flint and the outcomes of some NFP. The local stakeholders in this research were open to the contribution of empirical evidence on the food system to help inform their decisions. This in part reflects a desire to pursue policies which are likely to be effective, and which are likely to be funded by external granting organisations.

In contrast, much national-level food policy is obfuscated by the work of lobbyists pursuing a particular political agenda even when it conflicts with evidence. One example would be the continuing subsidy of sugar despite the serious public health problem it poses (Ward *et al.* 2008). At the local level, these stakeholders are more concerned with improving their community than advancing a political or business-related agenda, effectively downplaying the importance of politics in policy-making and advocacy.

LFP advocates are committed to strengthening the local food system. Likewise with research by Desjardins *et al.* (2011), the LFN in Flint has made it a priority to influence the master planning process to accommodate urban agriculture, in part by nurturing a relationship with the city's new chief planning officer. In contrast to Desjardins *et al.* (2011), the primary goals of this LFN include more to emphasise economic development and jobs creation. Furthermore, much of their focus was on urban agriculture and gardening rather than farmland preservation. These elements are likely a relic of differing economic conditions between Flint (a post-industrial city) and that of Desjardins *et al.*'s (2011) Waterloo, Ontario (a high-growth technology-based area).

The work of this LFN/prospective FPC is also encouraging because these recommended policies reflect a deep understanding of the social and health challenges of post-industrial, neoliberal urbanism. Affected by high poverty, low education, high obesity rates, and an eroding public sector, many in Flint may benefit from programmes aimed at increasing the knowledge of and capacity for independent food production (Jones 2008), in contrast to market-based regeneration schemes promoted elsewhere but which are inhibited by the constraints of neoliberalism (Wrigley *et al.* 2002, Cummins *et al.* 2005, Alkon and Mares 2012). Additionally, food may provide a critical alternative for economic development in cities which are unable to capture the knowledge economy. The adaptive re-use of vacant land as a resource for urban agriculture represents an asset towards self-sufficiency and local economic development. Thus, the presence of these stakeholders – and their policy advocacy towards self-sufficiency – reflects a positive attribute which may contribute to success. Furthermore, the consensus-based nature of the LFN offers a voice to common citizens and encourages empowerment through direct action. That is, rather than a council of public health executives, the groups are intended to be citizen-driven.

Future directions of the group offer opportunity for the local food system, and reflect a commitment to social justice. First, the LFN has a committed goal of continued advocacy for local food to increase the number of farmers' markets, urban agriculture, and community gardens in and around the city. A tangible result is the city farmers' market's decision to open satellite markets for the first time in many years (Sadler *et al.* 2013c). These satellite markets operate in neighbourhoods without ready access to healthy foods, which may contribute to improvements in dietary quality or encourage residents to learn more about gardening and urban agriculture.

Second, the group continues to seek changes in LFP which will make community gardens and small farms easier to begin and operate. The work of the food systems consultant with the city's master planning process is an encouraging indication that changes in LFP may be forthcoming. Currently, many gardeners and small farmers also lack facilities to process or sell their goods. The commitment among the group to advocate for changes to LFP includes grant-writing to fund facilities such as food hubs. Furthermore, the city's master planning process has now approved zones in the city for community gardening and more intensive urban agriculture.

Third, the stakeholders remain committed to working with food retailers in the city to increase the offer of healthy food. This reflects an understanding of the dominance of the conventional food system, and the need to approach healthy eating campaigns from all

angles, including conventional grocery stores and convenience stores. The LFN is currently building capacity to create partnerships between convenience stores and local farmers to encourage store owners to carry local healthy foods.

Yet throughout this work, the group must remain focused on the difficulties and importance of long-term policy change given that neoliberal constraints can limit the effectiveness of food policy organisations (Alkon and Mares 2012). As Sabatier (1987) has argued, policies are best understood when evaluated over the course of a decade or more, in part because many short-term understandings are subject to manipulation at the hands of the dominant political paradigm – in this case, neoliberal values (Marsden and Franklin 2013). Maintaining a close understanding of the stable parameters in the study area (including fundamental cultural values such as building social capital and community development) will help these stakeholders in the future. Given the maintenance of core belief systems among policy actors, and the current momentum of the stakeholders to work towards post-neoliberal food governance (Marsden and Franklin 2013), policy change can be expected if the stakeholders continue to advance their belief systems on government entities capable of revising LFP (Sabatier 1987).

This research contributes to a deeper understanding behind the motivations for policy advocacy of an LFN/prospective FPC. Although the LFN did not formally incorporate into an FPC during the research period, the actions taken and priorities established reflected an understanding of past research and the area-specific context. The LFN's method for policy advocacy and the evaluation contained in this manuscript will be useful for other prospective FPCs. While challenges remain for the continual enrichment of local food systems, the research process of engaging stakeholders with existing research on their local food system and charting the priorities of an LFN will provide additional evidence to strengthen economic sustainability in post-industrial cities like Flint.

Acknowledgements

The authors are deeply thankful to members of Flint's LFN, both for their participation during this process and more importantly for their continued efforts to strengthen the health and economy of the Flint region. The authors are also thankful to the anonymous reviewers whose comments helped to strengthen this manuscript.

References

- Alaimo, K., *et al.*, 2008. Fruit and vegetable intake among urban community gardens. *Journal of Nutrition Education and Behavior*, 40 (2), 94–101.
- Alaimo, K., Reischl, T.M., and Ober Allen, J., 2010. Community gardening, neighborhood meetings, and social capital. *Journal of Community Psychology*, 38 (4), 497–514.
- Alkon, A.H. and Mares, T.M., 2012. Food sovereignty in US food movements: radical visions and neoliberal constraints. *Agriculture and Human Values*, 29 (3), 347–359.
- Allen, P., 1999. Contemporary food and farm policy in the United States. *In*: M. Koc, *et al.*, eds. *For hunger-proof cities*. Ottawa: International Development Research Centre, 177–181.
- Aronson, N., 1994. Science as a claims-making activity: implications for social problems research. *In*: J. Schneider and J.I. Kitsuse, eds. *Studies in the sociology of social problems*. Norwood, NJ: Ablex, 1–30.
- Barling, D., Lang, T., and Caraher, M., 2002. Joined-up food policy? The trials of governance, public policy and the food system. *Social Policy & Administration*, 36 (6), 556–574.
- Barry, D., 2009. Amid ruin of flint, seeing hope in a garden. *New York Times*, 18 October. Available from: <http://www.nytimes.com/2009/10/19/us/19land.html?pagewanted=all> [Accessed 4 April 2012].

- Baxter, J., and Eyles, J. 1997. Evaluating qualitative research in social geography: establishing 'rigour' in interview analysis. *Transactions of the Institute of British Geographers*, 22 (4), 505–525.
- Bedore, M., 2013. Geographies of capital formation and rescaling: a historical-geographical approach to the food desert problem. *The Canadian Geographer*, 57 (2), 133–153.
- Blay-Palmer, A., 2009. The Canadian pioneer: the genesis of urban food policy in Toronto. *International Planning Studies*, 14 (4), 401–416.
- Blay-Palmer, A., 2013. Constructing resilient, transformative communities through sustainable "food hubs". *Local Environment*, 18 (5), 1–21.
- Born, B. and Purcell, M., 2006. Avoiding the local trap: scale and food systems in planning research. *Journal of Planning Education & Research*, 26 (2), 195–207.
- Borron, S.M., 2003. *Food policy councils: practice and possibility*. Congressional Hunger Center, Hunger-Free Community Report. Eugene, OR: FOOD for Lane County.
- Brinkley, C., 2013. Avenues into food planning: a review of scholarly food system research. *International Planning Studies*, 18 (2), 243–266.
- Brown, K.H. and Jameton, A.L., 2000. Public health implications of urban agriculture. *Journal of Public Health Policy*, 21 (1), 20–39.
- Brownson, R.C., et al., 2010. From epidemiology to policy: toward more effective practice. *Annals of Epidemiology*, 20 (6), 409–411.
- Camerer, C., et al., 2003. Regulation for conservatives: behavioral economics and the case for "asymmetric paternalism". *University of Pennsylvania Law Review*, 151 (3), 1211–1254.
- Campbell, M.C., 2004. Building a common table: the role for planning in community food systems. *Journal of Planning Education and Research*, 23 (4), 341–355.
- Caraher, M. and Cowburn, G., 2005. Taxing food: implications for public health nutrition. *Public Health Nutrition*, 8 (8), 1242–1249.
- Charmaz, K. 2006. *Constructing grounded theory: A practical guide through qualitative analysis*. Thousand Oaks, CA: Pine Forge Press.
- Chite, R.M., 2007. *CRS report for Congress: farm bill budget and costs: 2002 vs. 2007*. Washington, DC: Congressional Research Service – The Library of Congress.
- Clancy, K., 2004. Potential contributions of planning to community food systems. *Journal of Planning Education and Research*, 22 (4), 435–438.
- Cook, M.E., 2011. *Emerging food perceptions, purchasing, preparation and consumption habits in female participants on the Supplemental Nutrition Assistance Program (SNAP)*. Unpublished master's thesis. Muncie, IN: Ball State University.
- Coveney, J. and O'Dwyer, L.A., 2009. Effects of mobility and location on food access. *Health & Place*, 15 (1), 45–55.
- Cummins, S. and Macintyre, S., 2002. "Food deserts" – evidence and assumption in health policy making. *British Medical Journal*, 325 (7361), 436–438.
- Cummins, S., et al., 2005. Large scale food retailing as an intervention for diet and health: quasi-experimental evaluation of a natural experiment. *Journal of Epidemiology and Community Health*, 59 (12), 1035–1040.
- Cummins, S., et al., 2007. Understanding and representing 'place' in health research: a relational approach. *Social Science & Medicine*, 65 (9), 1825–1838.
- Dahlberg, K.A., 1994. Food policy councils: the experience of five cities and one county. Paper at the *Joint Meeting of the Agriculture, Food, and Human Values Society and the Society for the Study of Food and Society*, 11 June, Tucson, AZ.
- Desjardins, E., Lubczynski, J., and Xuereb, M., 2011. Incorporating policies for a healthy food system into land use planning: the case of Waterloo Region, Canada. *Journal of Agriculture, Food Systems, and Community Development*, 2 (1), 127–140.
- Donald, B., 2013. Food retail and access after the crash: rethinking the food desert problem. *Journal of Economic Geography*, 13 (2), 231–237.
- Downs, J.S., Loewenstein, G., and Wisdom, J., 2009. Strategies for promoting healthier food choices. *American Economic Review*, 99 (2), 1–10.
- Dunn, W.N., 1994. *Public policy analysis: an introduction*. Englewood Cliffs, NJ: Prentice Hall.
- Feagan, R., 2007. The place of food: mapping out the 'local' in local food systems. *Progress in Human Geography*, 31 (1), 23–42.
- Feenstra, G.W., 2002. Creating space for sustainable food systems: lessons from the field. *Agriculture and Human Values*, 9 (1), 99–106.

- Flint Journal, 2012. Flint-area regional 'food hub' could expand appetite for locally produced, healthy foods. *Flint Journal*. Available from: http://www.mlive.com/news/flint/index.ssf/2012/03/flint-area_regional_food_hub_c.html [Accessed 11 November 2012].
- Genesee County Health Department, 2008. *The health of Genesee County*. Flint, MI.
- Giskes, K., et al., 2009. Household and food shopping environments: do they play a role in socio-economic inequalities in fruit and vegetable consumption? A multilevel study among Dutch adults. *Journal of Epidemiology and Community Health*, 63 (2), 113–120.
- Gortmaker, S.L., et al., 2011. Changing the future of obesity: science, policy, and action. *Lancet*, 378 (9793), 838–847.
- Guba, E.G. and Lincoln, Y.S., 1994. Competing paradigms in qualitative research: theories and issues. In: S.N. Hesse-Biber and P. Leavy, eds. *Approaches to qualitative research*. New York: Oxford University Press, 17–38.
- Guthman, J., 2008. Bringing good food to others: investigating the subjects of alternative food practice. *Cultural Geographies*, 15 (4), 431–447.
- Harper, A., et al., 2009. *Food policy councils: lessons learned*. Oakland, CA: Institute for Food and Development Policy.
- Hayhurst, R.D., et al., 2013. Community-based research for food system policy development in the City of Guelph, Ontario. *Local Environment*, 18 (5), 606–619.
- Highsmith, A.R., 2009. Demolition means progress: urban renewal, local politics, and state-sanctioned ghetto formation in Flint, Michigan. *Journal of Urban History*, 35 (3), 348–368.
- Hinrichs, C.C., 2003. The practice and politics of food system localization. *Journal of Rural Studies*, 19 (1), 33–45.
- Hinrichs, C.C. and Kremer, K.S., 2002. Social inclusion in a midwest local food system project. *Journal of Poverty*, 6 (1), 65–90.
- Hobor, G., 2012. Surviving the era of deindustrialization: the new economic geography of the urban rust belt. *Journal of Urban Affairs*, 35 (4), 417–434.
- Holland, L., 2004. Diversity and connections in community gardens: a contribution to local sustainability. *Local Environment: The International Journal of Justice and Sustainability*, 9 (3), 285–305.
- Johnson, E.J., et al., 2012. Beyond nudges: tools of a choice architecture. *Marketing Letters*, 23 (2), 487–504.
- Jones, K.I., 2008. *Gardening and nutrition: a systems approach to an intervention and evaluation*. Unpublished master's thesis, Pittsburgh, PA: University of Pittsburgh.
- Kaufman, J., 2004. Planning for the local food system in the United States. In: R.H.G. Jongman, ed. *The new dimensions of the European landscapes*. Dordrecht, The Netherlands: Springer, 39–57.
- Kemmis, S. and McTaggart, R., 2000. Participatory action research. In: N.K. Denzin and Y.S. Lincoln, eds. *Handbook of qualitative research*. 2nd ed. Thousand Oaks, CA: Sage, 567–605.
- Ladislav Segoe and Associates, 1960. *Comprehensive master plan of Flint, Michigan, and environs*. Cincinnati: Ladislav Segoe and Associates.
- Lang, T. and Caraher, M., 1998. Access to healthy foods: part II. Food poverty and shopping deserts: what are the implications for health promotion policy and practice? *Health Education Journal*, 57 (3), 202–211.
- Lustig, R.H., Schmidt, L.A., and Brindis, C.D., 2012. The toxic truth about sugar. *Nature*, 482 (7383), 27–29.
- Mansfield, B. and Mendes, W., 2013. Municipal food strategies and integrated approaches to urban agriculture: exploring three cases from the global north. *International Planning Studies*, 18 (1), 37–60.
- Marsden, T. and Franklin, A., 2013. Replacing neoliberalism: theoretical implications of the rise of local food movements. *Local Environment*, 18 (5), 636–641.
- Maxwell, S. and Slater, R., 2003. Food policy old and new. *Development Policy Review*, 21 (5–6), 531–553.
- Mayfield, K., et al., 2013. Flint food store survey. Poster presentation at the *Joint Annual Meetings of the Agriculture, Food and Human Values Society, Association for the Study of Food and Society, and the Society for Anthropology of Food and Nutrition*, 19–22 June, East Lansing, MI.
- Mendes, W., 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.
- Michigan Department of Community Health, 2011. *Preliminary health indicators and risk estimates by community health assessment regions & local health departments: Michigan Behavioural Risk Factor Survey 2008–2010 Combined*. Lansing, MI.

- Morgan, K., 2009. Feeding the city: the challenge of urban food planning. *International Planning Studies*, 14 (4), 341–348.
- Morgan, K., 2013. The rise of urban food planning. *International Planning Studies*, 18 (1), 1–4.
- Morgan, K., Marsden, T., and Murdoch, J., 2006. *Worlds of food: place, power, and provenance in the food chain*. Oxford: Oxford University Press.
- Moss, P., 1995. Embeddedness in practice, numbers in context: the politics of knowing and doing. *The Professional Geographer*, 47 (4), 442–449.
- Niles, D. and Roff, R.J., 2008. Shifting agrifood systems: the contemporary geography of food and agriculture; an introduction. *GeoJournal*, 73 (1), 1–10.
- Ober Allen, J., et al., 2008. Growing vegetables and values: benefits of neighborhood-based community gardens for youth development and nutrition. *Journal of Hunger & Environmental Nutrition*, 3 (4), 418–439.
- Okrent, A.M. and Alston, J.M., 2012. The effects of farm commodity and retail food policies on obesity and economic welfare in the United States. *American Journal of Agricultural Economics*, 94 (3), 611–646.
- Pal, L.A., 1992. *Public policy analysis: an introduction*. Scarborough: Nelson Canada.
- Pelletier, D., et al., 2003. Participation, power and beliefs shape local food and nutrition policy. *The Journal of Nutrition*, 133 (1), 301S–304S.
- Pothukuchi, K., 2004. Community food assessment: a first step in planning for community food security. *Journal of Planning Education and Research*, 23 (4), 356–377.
- Rank, M.R., 1992. The blending of qualitative and quantitative methods in understanding childbearing among welfare recipients. In: S.N. Hesse-Biber and P. Leavy, eds. *Approaches to qualitative research*. New York: Oxford University Press, 81–96.
- Risteen-Hasselkus, B., 1991. Qualitative research: not another orthodoxy. *The Occupational Therapy Journal of Research*, 11 (1), 3–7.
- Sabatier, P.A., 1987. Knowledge, policy-oriented learning, and policy change. *Knowledge: Creation, Diffusion, Utilization*, 8 (4), 649–692.
- Sadler, R.C., Gilliland, J.A., and Arku, G., 2013a. Community development and the influence of new food retail sources on the price and availability of nutritious food. *Journal of Urban Affairs*, 35 (4), 471–491.
- Sadler, R.C., Gilliland, J.A., and Arku, G., 2013b. A food retail-based intervention on food security and consumption. *International Journal of Environmental Research and Public Health*, 10 (8), 3325–3346.
- Sadler, R.C., Clark, M., and Gilliland, J., 2013c. An economic impact comparative analysis of farmers' markets in Michigan and Ontario. *Journal of Agriculture, Food Systems, and Community Development*, 3 (3), 1–21.
- Schiff, R., 2008. The role of food policy councils in developing sustainable food systems. *Journal of Hunger & Environmental Nutrition*, 3 (2–3), 206–228.
- Schneider, D., van der Meulen Rodgers, Y., and Cheang, J.M., 2008. Local government coordination of community food systems in distressed urban areas. *Journal of Poverty*, 11 (4), 45–69.
- Sodano, V., 2012. Food policy beyond neo-liberalism. In: D. Erasga, ed. *Sociological landscape – theories, realities and trends*. Rijeka, Croatia: InTech, 375–402.
- Sprague, J. and Zimmerman, M., 1993. Overcoming dualisms: a feminist agenda for sociological methodology. In: S.N. Hesse-Biber and P. Leavy, eds. *Approaches to qualitative research*. New York: Oxford University Press, 39–61.
- Story, M., et al., 2008. Creating healthy food and eating environments: policy and environmental approaches. *Annual Review of Public Health*, 29, 253–272.
- Teret, S., 2001. Policy and science: should epidemiologists comment on the policy implications of their research? *Epidemiology*, 12 (4), 374–375.
- Thibert, J., 2012. Making local planning work for urban agriculture in the North American context: a view from the ground. *Journal of Planning Education and Research*, 32 (3), 349–357.
- Travers, K., 1997. Reducing inequities through participatory research and community empowerment. *Health Education & Behavior*, 24 (3), 344–356.
- Tumber, C., 2012. *Small, gritty, and green: the promise of America's smaller industrial cities in a low-carbon world*. Cambridge: The MIT Press.
- Wakefield, S., et al., 2007. Growing urban health: community gardening in South-East Toronto. *Health Promotion International*, 22 (2), 92–101.

- Ward, N., *et al.*, 2008. Productivism, post-productivism and European agricultural reform: the case of sugar. *Sociologia Ruralis*, 48 (2), 118–132.
- Wegener, J., Hanning, R.M., and Raine, K.D., 2012. Generating change: multisectoral perspectives of key facilitators and barriers to food system policy making. *Journal of Hunger & Environmental Nutrition*, 7 (2–3), 137–148.
- Wilson, D. and Wouters, J., 2003. Spatiality and growth discourse: the restructuring of America's rust belt cities. *Journal of Urban Affairs*, 25 (2), 123–138.
- Wrigley, N., 2002. 'Food deserts' in British cities: policy context and research priorities. *Urban Studies*, 39 (11), 2029–2040.
- Wrigley, N., Guy, C., and Lowe, M., 2002. Urban regeneration, social inclusion and large store development: the Seacroft development in context. *Urban Studies*, 39 (11), 2101–2114.
- Yeatman, H.R., 2003. Food and nutrition policy at the local level: key factors that influence the policy development process. *Critical Public Health*, 13 (2), 125–138.