This article was downloaded by: [Rocky Mountain Research Station]
On: 10 June 2013, At: 05:31
Publisher: Routledge
Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK

Local Environment: The International Journal of Justice and Sustainability
Publication details, including instructions for authors and subscription information:
http://www.tandfonline.com/loi/cloe20

Local Food Plus: the connective tissue in local/sustainable supply chain development

Alissa Mae Campbell [a] & Rod MacRae [a]
[a] Faculty of Environmental Studies , York University , Toronto , Ontario , Canada
Published online: 03 Jun 2013.

To cite this article: Alissa Mae Campbell & Rod MacRae (2013): Local Food Plus: the connective tissue in local/sustainable supply chain development, Local Environment: The International Journal of Justice and Sustainability, 18:5, 557-566

To link to this article: http://dx.doi.org/10.1080/13549839.2013.788488

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: http://www.tandfonline.com/page/terms-and-conditions

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae, and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand, or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

Local Environment, 2013
Vol. 18, No. 5, 557–566, http://dx.doi.org/10.1080/13549839.2013.788488

Routledge
Taylor & Francis Group

Local Food Plus: the connective tissue in local/sustainable supply chain development

Alissa Mae Campbell and Rod MacRae*

Faculty of Environmental Studies, York University, Toronto, Ontario, Canada

Local Food Plus (LFP) is a non-governmental organisation that blurs the lines between traditional community and private sector functions by creating space for buyers and sellers to meet; building trust among diverse food-system actors; and creating new markets for goods. This article uses a participatory action research method to explore these functions in detail. The first section examines how LFP has both emerged from a community of food practice and in turn become a pivot in creating new communities of practice within values-based food chains. The second section identifies and analyses the diversity of tools that have proven essential to LFP's model. The third section examines how LFP has contributed to alternative norm construction by balancing various conventions. Finally, the fourth section explains LFP's engagement with the state and other "strange bedfellows" to advance change, to ultimately comment on LFP's role in fostering food hub development.

Keywords: food hubs; community of practice; values-based supply chains; conventions theory; local food

Downloaded by [Rocky Mountain Research Station] at 05:31 10 June 2013

Introduction

Local Food Plus (2013a) is a charitable non-profit organisation, based in Toronto, Ontario. Local Food Plus (LFP) arose in 2006, in direct response to the challenges facing producers attempting to supply local markets and related problems in Canada's food system – environmental degradation (OECD 2008, Eilers *et al*. 2010), economic difficulties for many farmers (Wiebe 2012), and loss of farmland to urban development (Hofman *et al*. 2005). In the words of its executive director, L. Stahlbrand (personal communication, 9 Nov 2011), LFP's work rests on a strong belief in the urgent need to return to a local sustainable food system, preserve local farmland, and increase our capacity to feed ourselves. LFP's tools, in this regard, are its production and processing standards (Local Food Plus 2013b), independent inspection, local/sustainable branding, institutional and retail market development, and public education and outreach. In this sense, LFP reflects what a recent review of private certification has concluded − although certification does have positive impacts in many cases on production process, the ability to move conventional supply chains towards local/sustainable approaches requires multiple mechanisms (Steering Committee of the State-of-Knowledge Assessment of Standards and Certification 2012).

In 2006, LFP developed a set of standards to certify local sustainable producers and processors, and began forming partnerships with retailers, restaurants, and institutions committed to procuring certified products. LFP's standards (described in more detail below) cover five areas: locality, production/processing, biodiversity, labour and energy,

*Corresponding author. Email: rmacrae@yorku.ca

© 2013 Taylor & Francis

and packaging. They explicitly engage both local provenance and sustainable production practices, recognising that local food production and distribution on its own does not necessarily lead to sustainable food systems (Born and Purcell 2006, Louden and MacRae 2010). Although local is not precisely defined and definitions are disputed, LFP is using provincial boundaries to identify locality, an approach that attempts to balance jurisdictional and supply chain realities and consumer perceptions (see Louden and MacRae 2010 for a discussion). To date, LFP has certified over 200 farmers and processors and has partnered with almost 100 retailers, restaurants, caterers, distributors, and institutions. Its first significant institutional partnership in 2006 was with the University of Toronto, which became the biggest local sustainable food contract in North America. Since its incorporation in 2005, the organisation firmly established itself in Ontario, and launched nationally in November 2010. LFP is now working across Canada with particular focus in Ontario, British Columbia, Manitoba, and Quebec.

LFP provides multiple services linking local/sustainable food suppliers and buyers and blurs the lines between traditional community and private-sector functions. Overall, LFP views its role as a "builder of relationships and supply chains aimed at growing the local sustainable food system" (L. Stahlbrand, personal communication, 9 Nov 2011). It is not a food hub per se (Morley *et al*. 2008, Horst *et al*. 2011, Barham *et al*. 2012), but provides some of the functions of a food hub in a virtual sense. By using norms and conventions to create rules of interaction between market actors, LFP creates a space for buyers and sellers to meet; builds trust among food-system actors who do not typically collaborate; and creates new markets for goods.

Downloaded by [Rocky Mountain Research Station] at 05:31 10 June 2013

Method

Our understanding of LFP has emerged from a participatory action research process (see Introduction this volume). Both authors have worked for LFP: Campbell as an Institutional Relations Intern; and MacRae as a consultant drafting standards and policy. Campbell conducted lengthy semi-structured interviews with LFP's senior staff over the period of September 2011 to April 2012. In addition, a weekly log was kept recording observations and relevant activities, interactions, and conversations conducted in the context of the internship.

In this paper we explore LFP's functions in some detail, using analytical frameworks drawn from Friedmann (2007)'s conception of community of food practice to explore webs of interaction and how LFP bridges the activist, state, and market worlds; Bloom and Hinrichs' (2011) conceptualisation of formal and informal mechanisms of supply chain coordination to define the tools LFP uses to this end; Morgan *et al*.'s (2007) use of Storper's Interpersonal World of Food combined with convention theory to help make sense of LFP's contributions to alternative norm construction; and Koc *et al*.'s (2008) discussion of regulatory pluralism to explain LFP's engagement with the state and other "strange bedfellows" to advance change.

Communities of practice: the creation of LFP

Friedmann (2007) chronicles the emergence of LFP from what she describes as Toronto's *community of food practice*. Developed in the field of social theories of learning, the concept of communities of practice relates to "Groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (Wenger *et al*. 2002, pp. 4–5). Central to the

concept is the collective exchange and interaction between members of the group and the social learning that is ultimately produced as a result.

In applying the concept to LFP's emergence, Friedmann (2007) builds on this conceptualisation by broadening the Toronto community of food practice to include not only networks of individuals, but also of private businesses, governmental bodies, and non-governmental organisations. Waddell (2005) contends that the transformative potential of social learning and change processes is, in fact, *contingent* upon such bridging between businesses, government, and community-based organisations. Waddell (2005) further notes that the opportunities created through the linking of diverse actors provide fertile ground for the emergence of new solutions to broad-based complex problems. Indeed, the bridging between diverse organisations and individuals must be viewed as fundamental to the process of learning that ultimately formed the social creativity of LFP's model: Friedmann (2007) describes in particular how the Toronto Food Policy Council, a municipal government body, and Food Share, a non-governmental food security organisation, provided the strategic resources and cross-organisational learning opportunities for the emergence of LFP.

It requires a particular set of organisational skills to bridge the differences between all these actors. Notably important was the hiring of experienced supply chain actors. Employees at LFP come from a wide breadth of backgrounds in the food system, including farmers, organic certifiers, municipal councillors, farmers' market managers, chefs, food policy researchers, and journalists (L. Stahlbrand, personal communication, 9 Nov 2011). During start-up, this engendered a comfort with the process of creating bridges and negotiating partnerships among actors that might not normally collaborate. It also enabled a comfort with complexity and uncertainty. Given the difficulties of both protecting innovations and innovators from the pressures of conventional supply chains (e.g. corporate concentration, penetration of genetically modified seed into seed and feed distribution chains, distribution challenges associated with small volumes, retailer vendor protocols), many situations were completely new and the experience of the staff permitted a robust discussion about how to move forward and a willingness to take chances.

Not only did LFP emerge from a vibrant and diverse community of food practice in Toronto, but Friedmann (2007, p. 395) notes that LFP's creative model itself, in turn, "draws upon and facilitates 'food citizenship' across not-for-profit (including municipal government) *and* market spaces", creating the conditions, for new communities of practice to emerge. Friedmann (2007, p. 395) describes LFP's contract with the University of Toronto as an "experimental configuration centred on a non-profit organisation which works towards enabling a constructive market linkage between local small farmers and large transnational organisations". This innovative approach permeates LFP's work and defines the model it has developed. When describing the supply chains in which LFP works, L. Stahlbrand (personal communication, 9 Nov 2011) refers not to chains, but to *networks*: "Integral to LFP's work, is the creation of networks of farmers, retail and restaurant partners, along with municipal councillors and university directors. All these connections facilitate the sharing of information relevant to common goals." LFP has now created dozens of networks between buyers, sellers, and non-traditional supply chain actors that would not likely exist in its absence. Thus, just as Friedmann (2007, p. 396) identifies the Toronto Food Policy Council and Food Share as "pivot[s] of the community of practice" in which LFP emerged, in a number of ways, LFP can now be identified as a pivot in enabling new communities of practice to form through the supply chain partnerships it fosters.

Downloaded by [Rocky Mountain Research Station] at 05:31 10 June 2013

Downloaded by [Rocky Mountain Research Station] at 05:31 10 June 2013

While supply chains are conventionally viewed as linear processes involving distinct actors, LFP alters our understanding of the supply chain by redefining the relationships between its members and broadening its scope to include non-traditional actors, such as non-profits, as critical players. E. Shapero (personal communication, 17 Jan 2012), then LFP's Director of Institutional Relations, identified connections to individuals and other organisations as among LFP's strongest assets: LFP's broad network is both national and international and spans organisations involved in the food movement and social justice, those dedicated to fostering sustainable farming practices, environmental organisations engaged in issues such as biodiversity and climate change, and public institutions including hospitals, municipalities, and universities. These relationships are mapped in Figure 1 (see also Mount and Andrée, 2013).

The supply chains LFP coordinates may be likened to the supply chain networks recently coined "values-based chains" or "value-chains" (Stevenson and Pirog 2008); in contrast to conventional supply chains, the values-based chains in which LFP works tend to be characterised by high levels of trust and transparency among actors in the chain (Stevenson and Pirog 2008). These actors are in turn viewed as strategic partners, who are explicitly committed to social, economic, and environmental goals and whose shared aim is the welfare of all value-chain participants, rather than adversarial relationships that tend to characterise conventional chains; on their website, LFP describes the relationships between producers and consumers exchanging LFP-certified goods as "a network

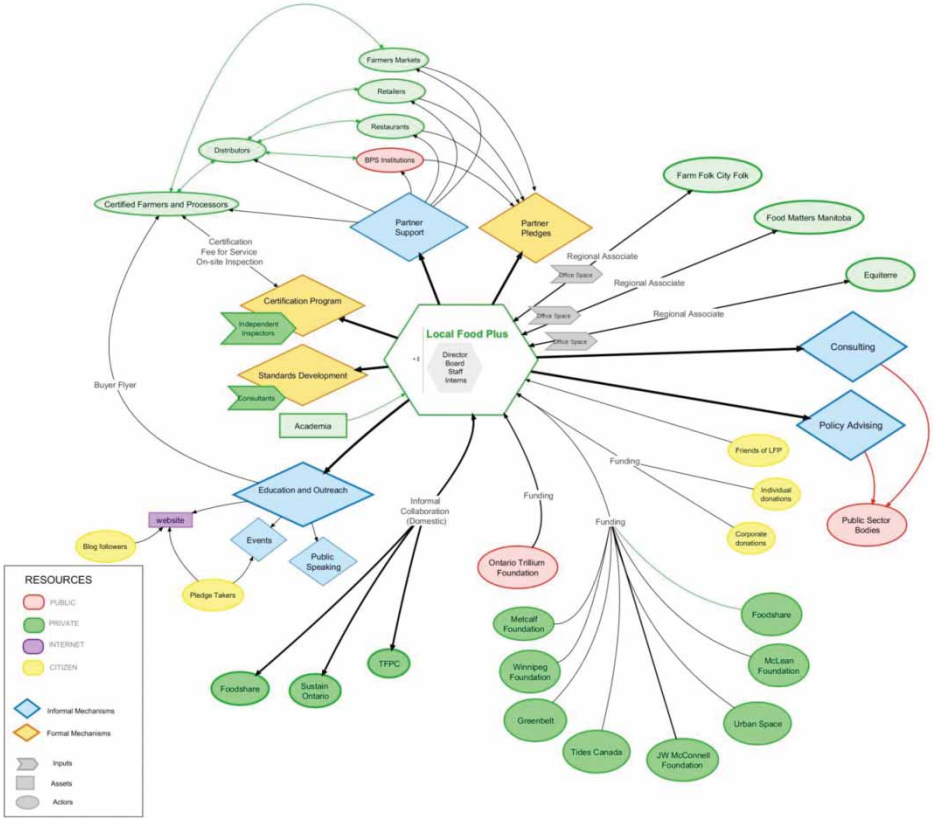

Figure 1. LFP's relationships.

bound by common values, not just monetary gain". Furthermore, L. Stahlbrand (personal communication, 3 July 2012) believes that relationships LFP has attempted to build primarily around opportunities for monetary gain have failed. The desire to "do the right thing" and be financially viable is essential to reconfiguration of supply chain relationships.

LFP's model can ultimately be understood as a creative response to private and public procurement (Morgan and Morley 2002) which reconfigures supply chain relationships in order to, in turn, create new communities of practice or to broaden existing ones. When viewed as members of a community of practice, "practitioners in a supply chain [...] actively and deliberately 'participate' together over time in exploring their relationships and in learning together to collaboratively build their competence, their commitment and their accountability to their supply chain 'community of practice'" (Sense and Clements 2006). Indeed, members of the community are in reality *practitioners*: they not only share common interests and a common endeavour, but they actively engage in regular and joint activity towards common goals. As such, through time, members of a community of practice develop a body of common knowledge, shared practices, perspectives, and approaches along with established ways of interacting (Wenger *et al*. 2002).

Downloaded by [Rocky Mountain Research Station] at 05:31 10 June 2013

LFP's contribution to alternative norm construction

Conventions, or "ways of doing things", have been theoretically framed as "practices, routines, agreements, and their associated informal and institutional forms which bind acts together through mutual expectations" (Salais and Storper 1992, p. 174). While they may take a number of forms, conventions have generally been organised within a typology based on the qualities of dominant evaluative criteria to which actions respond. Boltanski and Thevenot (2012) differentiate between the following: *commercial conventions* which prioritise the economic value of goods and services; *domestic conventions* in which actions are determined on the basis of trust and local embeddedness; *industrial conventions* in which reliability, efficiency, and long-term planning dominate actions; *public conventions* which rely on general recognition or opinion; and *civic conventions* which tend to prioritise goods on the basis of their societal benefits (cf. Murdoch and Miele 1999). Storper (1997) in turn proposed that combinations of conventions will likely cluster within certain economic structures or "worlds of production" (of which he identifies four). Within the specific context of the agri-food sector, Morgan *et al*. (2007, p. 23) add to Storper's typology by suggesting that conventions may cluster not only according to an economic logic, but similarly on the basis of cultural, ecological, and political/institutional logics, noting in particular that: "the embedding of food in new productive worlds is taking place because of ecological problems in the Industrial World and the emergence of new cultures of consumption oriented to foods of local provenance".

Conventions theory allows for differentiation within market relations of forms and degrees of embeddedness – associated with civic, domestic, or ecological criteria – and disembeddedness – associated with industrial or commercial criteria. In particular, it allows us to identify how LFP's model recognises and internalises Murdoch *et al*.'s (2000) warning that in order to present a meaningful alternative to the global food system, players must refrain from underwriting commercial and industrial criteria even as they seek a high degree of embeddedness. LFP aligns a variety of conventions, balancing commercial and ecological considerations to create supply chains that can and do act at a scale consistent with conventional supply chains. For one, LFP's values-based chains serve institutional and retail markets that are beyond the capacity of direct-marketing relations in both the volume and consistency of product in circulation. As such, LFP

provides a model that allows "agriculture of the middle" to participate in sustainable food supply chains (Stevenson and Pirog 2008).

Second, LFP's model has negotiated commercial and industrial conventions to allow it to successfully expand both its geographical reach as well as the number of farmers, processors, and partners with whom it works. Essentially, LFP uses standards and conventions to bridge the worlds of the market and ecological and cultural values by inserting them in the programme design and execution. Importantly, it has done so in a manner that has preserved the local embeddedness of the products circulating within its supply chains, through the use of specific standards to safeguard the integrity of its brand.

Within LFP's model, we have observed a number of distinct mechanisms through which LFP mediates the tensions between various criteria or forms of evaluation (Murdoch *et al*. 2000), particularly those of local embeddedness within domestic and civic qualifications, and those of industrial and commercial qualities. We borrow Bloom and Hinrichs' (2011) typology which distinguishes between informal and formal mechanisms of supply chain coordination, to discuss the various ways in which LFP negotiates these tensions and conventions present in food value chains. The combined use of formal and informal mechanisms is, in our view, critical to the success of LFP's model. Both informal and formal mechanisms have been designated in Figure 1.

Downloaded by [Rocky Mountain Research Station] at 05:31 10 June 2013

Informal mechanisms

As Bloom and Hinrichs (2011) observe, without the inter-organisational trust provided by informal mechanisms, formal mechanisms, such as labels, are often not able to deliver their full potential benefits, particularly in terms of shifting power towards producers. LFP, thus, uses a number of informal mechanisms, including maintaining strong communication with its partners and offering ongoing support, as well as engaging in outreach and education to the broader public, to foster greater public awareness of food-system issues while directly supporting the values-based chains it coordinates around formal mechanisms.

Despite not participating directly in the transfer of certified LFP goods through various supply chains, LFP participates actively in supporting the maintenance and well-functioning of these chains by providing ongoing support and trouble-shooting services to its partners. According to LFP's website, "partners are one call away from having someone who can give informed answers."

By working within a wide network of actors, LFP has developed an expertise that enables it to transmit the knowledge it has built through its experience with a diverse range of supply chains to its partners. As such, LFP acts as a bank of strategies and lessons that would otherwise take significant time to emerge between inexperienced value-chain partners. This type of support infrastructure beyond just certification is especially valuable when working with actors accustomed to conventional supply chain dynamics (Stahlbrand, interview 3 July 2012). By maintaining open and communicative relationships with all of its partners LFP also facilitates the flow of information throughout its value chains. Finally, further contributing to effective information flows are the point-of-sale materials LFP provides to its retail, restaurant, and institutional partners that allow the seller to communicate the value of LFP's certifications standards to potential consumers.

Public outreach is an important component of LFP's work towards system change. Social media (including a blog), other web-based outlets, along with outreach at relevant community events, public speaking, and consumer awareness campaigns (e.g. shift 10% of your purchases to local/sustainable), also act as promotional and support services for LFP's partners, in effect strengthening its relationships with these supply chain actors.

Downloaded by [Rocky Mountain Research Station] at 05:31 10 June 2013

Formal mechanisms

Formal mechanisms, including labels and contracts, are particularly important in shifting power within the chain towards producers, who are typically at a disadvantage in conventional supply chains (Bloom and Hinrichs 2011). One of the primary goals of LFP's model is to provide markets for local sustainable food products within a framework that resists the tendency of conventional supply chains to put the producer at a marketing disadvantage; by maintaining a brand through to the consumer, formal mechanisms of supply chain coordination, such as LFP's standards, certification system, and labels, are aimed at redistributing power within the supply chain to this effect. Moreover, through the creation of standards and a corresponding certification system, LFP creates the conditions for inter-organisational trust to develop between actors in the supply chain. LFP's standards typically impose new requirements on farmers and processors, in a flexible way that allows each operation to make improvements that fit their scale. Recognising the need to bring more conventional operations into the transition to sustainable practices (something many certification schemes have not addressed according to the Steering Committee of the State-of-Knowledge Assessment of Standards and Certification 2012), minimum requirements are set at stage 2 integrated pest management (IPM) for crop production (Benbrook *et al*. 1996) and "natural" for animal production (Louden and MacRae 2010). The biodiversity protocol is designed to enhance habitat and food sources for wildlife in and around productive fields and reduce on- and off-site pollution. Similarly, energy and packing elements require improvements to energy efficiency and use of renewable energy sources. Finally, the labour standard ensures that producers comply with or exceed provincial labour codes (Local Food Plus 2013b). Comparable requirements are imposed on processors. The standards become a new base norm to which all participants must agree, while the inspection process provides greater assurance that the improvements are real. Audit trail reporting helps to minimise the possibilities of co-mingling LFP and conventional goods, a situation often found in emerging supply chains.

LFP also requires formal "pledges" from its partners; these documents create a framework for an explicit commitment to non-economic goals among supply chain partners. Institutional, retail, and restaurant partners agree to local/sustainable purchasing targets, monitoring of conditions of their staff, and public education requirements. Moreover, at the institutional level, the pledges stipulate annual increases in the percentage of local/sustainable food procured, creating the conditions for longer-term partnerships to cement – an important factor in value-chain success (Stevenson and Pirog 2008). Admittedly, enforcement of pledge commitments is time consuming and difficult; so instead of extensive enforcement mechanisms, LFP is careful to engage with firms demonstrating values similar to their own. On the producer side, formal agreements ensure that farmers meet the standards and agree to conditions associated with marketing materials and branding. LFP does not take ownership over goods and does not participate in price negotiations with buyers and sellers, limiting its role to creating the conditions under which buy and sell contracts can be signed.

LFP's standards, corresponding certification system and use of contractual agreements, also create the conditions for inter-organisational trust to develop between actors in the supply chain. This "process-based" trust is fundamental to the success of the value chain as it ensures that all participants are confident in the "fairness, stability, and predictability of the procedures and agreements among strategic partners; and that policies are consistent and stable over time, and do not change with new management or personnel" (Stevenson and Pirog 2008, p. 125). While this type of trust typically takes a long time to develop,

by acting as an intermediary support partner, LFP is able to foster the conditions for inter-organisational trust to develop more quickly; it does so by offering ongoing support to its partners, certification standards as quality assurance, and contracts that ensure stability and commitment between value-chain actors.

Admittedly, many formal mechanisms, including private standards, are imperfect. Standards only partly account for state failures (cf. Busch 2007) and the resources to maintain them are considerable and difficult to finance without imposing excessive costs on producers and processors. There remain significant gaps in our understanding of their ability to shift markets (Steering Committee of the State-of-Knowledge Assessment of Standards and Certification 2012). Traditional funders of NGO activity do not necessarily understand the process of bridging the commercial and non-commercial worlds, as LFP attempts. However, combined with informal mechanisms of supply chain coordination, standards such as LFP's do compensate for certain market information asymmetries, particularly the difficulty or expense associated with finding suppliers that meet LFP's local and sustainable requirements. For aggregators, LFP's standards can partly or fully replace their own protocols for building partnerships. Informal mechanisms, such as public outreach and education strategies, contribute to logo recognition in the consuming public of the local/sustainable label that partly compensates for the failures of both the market and state to provide more complete information on foods beyond price, safety, and nutritional characteristics (Louden and MacRae 2010). Hence, all these mechanisms contribute to building new connections and relationships, ultimately broadening and strengthening the community of practice in which LFP works.

Downloaded by [Rocky Mountain Research Station] at 05:31 10 June 2013

Engaging the state

In some ways LFP exists because of government inaction, because the state has not properly set the stage for a robust transition to local sustainable systems. In fact, it is frequently argued that the Canadian federal government is largely in the way of such a transition, focusing excessively on Canada's export infrastructure and devoting too few resources to environmental improvements in the food system (MacRae 1999, 2011).

This kind of government inaction accounts, in part, for the development of emerging and still messy approaches to regulatory pluralism in the Canadian food system (Koc *et al*. 2008, MacRae and Abergel 2012), where formal and informal networks of state and non-state actors define and implement change. LFP's "private standards" are part of this, and their successes to date have opened doors for LFP participation in larger government policy and programme design discussions, including local food procurement, farm financial viability, regional economic development, and consumer information systems (cf. Louden and MacRae 2010). Essentially, the state is recognising that NGOs like LFP are able to advances changes in arenas for which they have limited capacity or where their interventions might be contested. Consequently, LFP is "allowed" to have access and policy influence. There are indications that two recent Ontario government initiatives, the Broader Public Service Investment Fund and Foodland Organic, a branch of Foodland Ontario, are partial responses to LFP's work (L. Stahlbrand, personal communication, 3 July 2012). However, according to Stahlbrand, they are both positive and undercutting of LFP's efforts because they both fail to fully embrace a local sustainable programme and are not designed to assertively reconfigure conventional supply chains. The failure to work closely with LFP on the design of such initiatives represents a messy regulatory configuration, a common reality as policy actors learn how to collaborate effectively (MacRae and Abergel 2012).

Implications for food hub development

In reviewing the vast and increasingly diverse use of the concept of "food hubs", Horst *et al*. (2011, p. 224) propose the following expansive definition:

> A food hub serves as a coordinating intermediary between regional producers and suppliers and customers, including institutions, food service firms, retail outlets, and end consumers. [. . .] Services provided by a food hub may include and are not limited to aggregation, warehousing, shared processing, coordinated distribution, wholesale and retail sales, and food waste management.

Actors in the LFP system use existing spaces to create opportunities and, equally important, articulate the infrastructure gaps for regionalisation. The absence of small-to-medium enterprise processing and distribution, why and how buyers and sellers often have difficulty connecting. LFP does, to some degree, operate as a virtual market place, by helping buyers and sellers meet, either through direct communication or through its various public outreach strategies, including social media. LFP staff discovered early on that the traditional market mechanisms could not necessarily redress deficiencies in local sustainable markets and that organisational resources would have to be devoted to lubricating market functions.

However, it appears such lubrication can only go so far and physical hubs can create additional opportunities. LFP farmers and processors still move products through multiple marketing channels and physical hubs may create better places for such channelling. As well, the logistics of distribution to buyers is frequently a challenge for LFP suppliers, especially when aggregation is required to create scale efficiencies. A physical hub may facilitate that aggregation.

Ultimately, however, it would appear that LFP does help build the kinds of relationships and networks that could make a physical hub more effective. The standards, contracts, and formal marketing mechanisms provide some assurances among economic actors that one might not normally associate with conventional supply chains. In addition, these formal mechanisms provide legitimacy to state actors and potential funders of food-system change and they create the possibility of reduced state programme, monitoring, and compliance costs should they eventually decide to support the transition to local sustainable food systems in a substantial way. We can imagine the possibility of organisations such as LFP, and their mix of formal and informal mechanisms, at the centre of certain types of regulatory reconfiguration that builds positively on the strengths of participating sectors.

Downloaded by [Rocky Mountain Research Station] at 05:31 10 June 2013

References

Barham, J., *et al.*, 2012. *Regional food hub resource guide*. Washington, DC: U.S. Department of Agriculture, Agricultural Marketing Service.

Benbrook, C.M., *et al.*, 1996. *Pest management at the crossroads*. New York: Consumers Union.

Bloom, J.D. and Hinrichs, C.C., 2011. Informal and formal mechanisms of coordination in hybrid food value chains. *Journal of Agriculture, Food Systems, and Community Development*, 1 (4), 143–156.

Boltanski, L. and Thevenot, L., 2012. *On justification: economies of worth*. C. Porter, trans. Princeton, NJ: Princeton University Press (Original work published 1991).

Born, B. and Purcell, M., 2006. Avoiding the local trap: scale and food systems in planning research. *Journal of Planning, Education and Research*, 26 (2), 195–207.

Busch, L., 2007. Performing the economy, performing science: from neoclassical to supply chain models in the agrifood sector. *Economy and Society*, 36 (3), 437–466.

Eilers, W., *et al.*, eds., 2010. *Environmental sustainability of Canadian agriculture: agri-environmental indicator report series – report #3*. Ottawa: Agriculture and Agri-Food Canada.

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.

Hofman, N., Filoso, G., and Schofield, M., 2005. *The loss of dependable agricultural land in Canada*. Ottawa: Statistics Canada.

Horst, M., *et al.*, 2011. Toward a more expansive understanding of food hubs. *Journal of Agriculture, Food Systems, and Community Development*, 2 (1), 209–225.

Koc, M., *et al.*, 2008. Getting civil about food: the interactions between civil society and the state to advance sustainable food systems in Canada. *Journal of Hunger and Environmental Nutrition*, 3 (2–3), 122–144.

Local Food Plus, 2013a. *Local Food Plus home page* [online]. Available from: www.localfoodplus.ca [Accessed 31 March, 2013].

Local Food Plus, 2013b. *Certify/what's the process?* [online]. Available from: http://www.localfoodplus.ca/certification/whats-the-process [Accessed 31 March, 2013].

Louden, F.N. and MacRae, R.J., 2010. Federal regulation of local and sustainable food claims in Canada: a case study of Local Food Plus. *Agriculture and Human Values*, 27 (2), 177–188.

MacRae, R.J., 1999. This thing called food: policy failure in the Canadian food and agriculture system. *In*: M. Koc, *et al.*, eds. *For hunger-proof cities: sustainable urban food systems*. Ottawa: International Development Research Centre and the Ryerson Centre for Studies in Food Security, 182–194.

MacRae, R.J., 2011. A joined up food policy for Canada. *Journal of Hunger and Environmental Nutrition*, 6, 424–457.

MacRae, R.J. and Abergel, E., eds., 2012. *Health and sustainability in the Canadian food system: advocacy and opportunity for civil society.* Vancouver: UBC Press.

Morgan, K. and Morley, A., 2002. *Relocalising the food chain: the role of creative public procurement*. Cardiff: The Regeneration Institute, Cardiff University.

Morgan, K., Marsden, T., and Murdoch, J., 2007. *Worlds of food: place, power, and provenance in the food chain*. Oxford: Oxford University Press.

Morley, A., Morgan, S., and Morgan, K., 2008. *Food hubs: the "missing middle" of the local food infrastructure?* Cardiff: BRASS Centre, Cardiff University.

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

Murdoch, J. and Miele, M., 1999. "Back to nature": changing "worlds of production" in the food sector. *Sociologia Ruralis*, 39 (4), 465–483.

Murdoch, J., Mardsen, T., and Banks, J., 2000. Quality, nature, and embeddedness: some theoretical considerations in the context of the food sector. *Economic Geography*, 76 (2), 107–125.

OECD, 2008. *Agrienvironmental performance in OECD countries since 2008: Canada country report*. Paris: OECD.

Salais, R. and Storper, M., 1992. The four worlds of contemporary industry. *Cambridge Journal of Economics*, 16 (2), 169–193.

Sense, A.J. and Clements, D.J., 2006. Ever consider a supply chain as a "community of practice"? Embracing a learning perspective to build supply chain integration. *Development and Learning in Organisations*, 20 (5), 6–8.

Steering Committee of the State-of-Knowledge Assessment of Standards and Certification, 2012. *Toward sustainability: the roles and limitations of certification*. Washington, DC: RESOLVE.

Stevenson, G.W. and Pirog, R., 2008. Values-based supply chains: strategies for agrifood enterprises of the middle. *In*: T.A. Lyson, G.W. Stevenson and R. Welsh, eds. *Food and the mid-level farm*. Boston: Massachusetts Institute of Technology, 119–145.

Storper, M., 1997. *The regional world*. London: Guilford Press.

Waddell, S., 2005. *Societal learning and change: how governments, business and civil society are creating solutions to complex multi-stakeholder problems*. Sheffield, UK: Greenleaf Publishing.

Wenger, E., McDermott, R., and Snyder, W.M., 2002. *Cultivating communities of practice: a guide to managing knowledge*. Boston, MA: Harvard Business School Press.

Wiebe, N., 2012. Crisis in the food system: the farm crisis. *In*: M. Koc, J. Sumner and A. Winson, eds. *Critical perspectives in food studies*. Don Mills, Canada: Oxford University Press, 155–170.

Downloaded by [Rocky Mountain Research Station] at 05:31 10 June 2013