

Sustainable Local Food Systems in Policy and Practice

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Food hubs: Growing community based solutions for sustainable, local food systems

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Increasingly, food systems are explicitly linked to social, economic and environmental challenges and opportunities. The growing interest in farmers' markets, foodprints, and the "diabesity" crisis reflects this trend. It is also more widely understood that multiple dividends can accrue from sustainable food. These benefits include, more money staying in local economies as dollars and (re)circulating from eater to farmer; better human health as people eat more produce and get exercise while growing food in community gardens; tastier food grown closer to home and planted for taste purposes, not ease of shipment; and more resilient human and biological communities (NEF 2002, Hinrichs and Lyson 2008, Blay-Palmer et al. 2010).

In an attempt to unravel some of these connections, this paper will report the findings from three research initiatives that assess local, sustainable food systems through different lenses. First, indicators from the Canadian *Food Counts* Sustainable Food Systems report card project are used to draw attention to strengths and weaknesses associated with food system dimensions at different scales. Second, by reflecting on these findings through the EU policy lens, solutions emerge to support the creation of more robust communities of food. Next, best practices of successful, sustainable local food communities identified through an Ontario-wide survey are identified. One of these opportunities — the community food hub — will be elaborated.

Food Counts: Understanding the gaps and opportunities

Work done to develop *Food Counts* — a sustainable food system report card for Canadian Communities — helps us understand the scale of the problem in the food system and where opportunities for change may exist (Blay-Palmer et al. forthcoming). Data demonstrate both the scope of influences that feed into a sustainable food system as well as the related interconnections (Table 1). While this set of indicators is being assembled into a report card, taken in tabular format, the numbers provide interesting insights.

From an economic perspective, food makes a significant contribution to the Canadian economy — one in eight people are employed in the food industry and it accounts for 8.1% of GDP (AAFC 2010). There is also a huge amount of redundant trade with \$6.39 billion in food imported into Canada that could have been produced and/or processed locally. As well, there is huge market potential through public procurement. Hospitals and long-term care facilities in Ontario alone serve over 115 million meals every year (Padanyi and Varangu 2010). With that said, the emphasis is on cheap food. Funding for meals in Ontario long-term care facilities is set by the government at \$7.33 per person, per day. From a food access perspective, too many Canadians rely on food banks to meet their basic food needs every month — over 790,000 in March of 2009 (Food Banks Canada 2010) The percentage of Canadians living on low income in 2007 was 9.4%. For recent immigrants this number was 16.4% and for lone parent families the number jumps to 21.3%. The figures are similar for food insecurity. The percentage of people who report being either moderately or severely food insecure is too high (7.7%), while single people living alone and lone parent families are disproportionately represented (10.5% and 23% respectively) (Canadian Community Health Survey 2010).

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8.1%	Food sector as % of Canadian GDP, 2009
1 in 8	Number of food related jobs in Canada
58,460 (food manufacturing) ; 45,830 (auto manufacturing)	Number of people employed in Ontario in food and auto manufacturing
\$6.39Billion	Value of food imported into Canada that could have been produced locally
115,000,000	Number of meals served annually in Ontario hospitals and long-term care facilities
\$7.33	Ontario long-term care facility resident/day food allowance
794,738	Canada, number of people using food bank in March 2009
9.4%; 16.4%; 21.3%	Percentage of people living on low income 2007: general Canadian population; recent immigrants; lone parent family
7.7%; 10.5%; 23%	Percentage of Canadians who are moderately or severely food insecure: general population; unattached living alone; lone parent family
2010 \$12.2bn 2020 \$16.9bn	Cost of diabetes, Canada
45.6%	Proportion of Canadians eating 5 or more servings of fruit and vegetable/ day (2009)
1st generation (age 15+): 3.34 million (34%)	Diversity in Ontario
62 MT CO2 emissions	Canada, agricultural production GHG emissions
\$27 billion (51%)	Lost value due to food wasted in Canada every year (% of this value that is lost in Canadian households)
Table 1: Food system information (Blay-Palmer et al. forthcoming, Statistics Canada 2001, 2006; Statistics Canada Labour Force Survey 2008; Food Banks Canada 2010; Padanyi et al. 2010; Wylie-Toal 2011; Canadian Community Health Survey 2010; Gooch et al. 2010)	

And while the cost of diabetes grows — costs for 2010 were at \$12.2billion and for 2020 are forecast to be \$16.9billion (Diabetes Association of Canada 2009) —, only 45.6% of Canadians were eating more than five servings of fruits and vegetables a day in 2009. While this is an increase of over 10% from 41.4% in 2003, it remains inadequate. From a community perspective, the cultural diversity that increasingly defines Canada — for example, in Ontario, 34% of people 15 years and older are first generation Canadians — offers substantial opportunities for food celebrations and niche market opportunities (Statistics Canada 2006). On the environmental front, there is room for improvement. Agriculture production alone creates 62 megatons of carbon dioxide emissions. The annual value attributable to food waste is \$27 billion dollars with 51% of this value lost in Canadian households

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(Gooch et al. 2010). Among the trends that can be identified from this data, some underscore a lack of attention to environmental and community health dimensions as well as the relative economic importance of food in Canada. Given this information, it becomes clearer that we, both need and have the opportunity to create healthier people, communities and ecologies.

Where do we go from here?

Thoughtful, long-lasting solutions are needed to begin addressing the challenges and opportunities outlined. As part of the thinking to take us in this direction, it is useful to look at policies and programs from multiple scales. If we step back to consider the macro-policy environment, there are lessons to learn by examining the EU approach to sustainability. One notable difference between EU and Canadian policy and regulation is the nature of the commitment to sustainability. The principle of sustainability, strongly defined, was entrenched in EU law since its founding principles were established in 1992. In the Canadian context, a comparable example is the Quebec Sustainable Development Act of 2007. This act entrenches a robust policy commitment backed up by funding and a meaningful review process. Unfortunately, efforts at the federal level — for example, the 2008 Federal Sustainable Development Act and references within the Oceans Act (Government of Canada 1996), the Canadian Environmental Protection Act (Government of Canada 1999) and the Endangered Species Act (Government of Canada 1998) to the precautionary principle — lack substance and do not provide the solid foundation needed to develop robust sustainability policy and programs. Rather, they strongly privilege free market principles over concerns for the environmental and community well-being. Second, the EU has evolved structures founded on the ideas of subsidiarity and leveraging multiple dividends. This enables the recognition of the stacked value-added capacity within a food system (Friedmann 2005). While Marsden, Sonnino and others rightly point to the gaps and inadequacies of EU policy (see Marsden and Sonnino 2008, Marsden et al. 2010), it does provide reference points for conceiving and creating more sustainable food systems and offers a framework from which to enact sustainability at appropriate scales (Blay-Palmer 2011). There are also more focused lessons to learn from the implementation of labelling and incorporation of provenance concepts manifest through the Protected Designation of Origin legislation and other such laws.

On the ground, there are encouraging signs that change is taking place in Canada thanks to the work of food champions and multiple vibrant, grassroots ‘communities of food’ (Waddell 2005, Friedmann 2007, Baker et al. 2010). A recent survey of Ontario local food experts (Landman et al. 2009) identified best practices for existing local food projects. When asked to identify goals for local food systems, experts included the need to build community and ecological sustainability in tandem with robust local economies.

Plans to achieve these goals emphasized: public education and empowerment; improved food access; and increasing the availability of tasty, healthy, and safe food that is produced sustainably in the local foodshed. When asked about how to achieve these aims, experts spoke about the need to: continue to improve regional labelling and branding; amend regulations to facilitate local food linkages; support procurement of local, sustainable food; and support small and medium-sized enterprises (SME) in food processing and distribution. Given these priorities, it makes sense to consider food systems that have the potential to build more locally and sustainably focused food systems. Food hubs have been identified as an important element needed to move towards more resilient food systems.

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Community food projects: Moving forward using hubs, centres and clusters

Food hubs are defined as:

“...[ranging] from narrow market-efficiency functions to those related to visions of building a diversified food culture that may support small scale producers and deliver environmental, economic and social sustainability to the producing sector together with health and cultural objectives among consumers” (Morley et al. 2008: 3).

Essentially, food hubs fill what Morley and others describe as ‘the missing middle’ in the food system. This gap exists between consumers, producers and regulators (Figure 1), and has resulted from a hollowing out of local capacity through the expansion of global food systems (Baker et al. 2010).

While little has been written to date about food hubs, a survey of the existing literature reveals a range of their characteristics (Table 2). While these are presented as extreme and oppositional, in reality food hubs are usually a *mélange* of, or middle ground between these characteristics. According to Sustain (UK), key features of successful food hubs include: a single (or group) of champion(s); diversified activities to spread opportunities and risk and to achieve financial stability; some kind of social economy focus; initiatives centred on personal relationships first, and physical infrastructure second; some connection to distribution, although this could operate through a third party; focus on high value-added products; and a reliance on grants or in-kind contributions to get started (Sustain n.d.). While this conceptualization includes more social economy and individual relationship dimensions for food hubs, Morley et al. (2008) acknowledge a broader range of organizations leading food hub creation including entrepreneurial and cooperative producers, retailers, wholesalers and food service providers

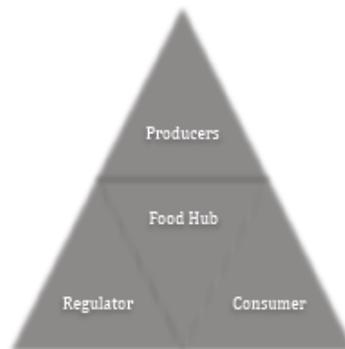


Figure 1: The role of food hubs

as well as the public sector. Structurally, food hubs can be purely commercial or can contain a social enterprise set of goals. In considering function, a food hub can operate at single or multiple points in the food chain — from production to consumption — and engage in the distribution of information, education or product and process development and quality assurance, marketing and management support (Morley et al 2008).

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Structure	Profit	Non-profit
Economic orientation	Free market	Social economy
Scale (number of products, volume of sales, geographic range, technology)	Large	Small
Organizational model	Centralized	Co-operative
Client focus	Institutional, large retailer	Individuals, small retailers
Value-added focus	Standard farm products	Artisanal

Table 2: Food hub characteristics (extracted from Baker et al. 2010, Landman et al. 2009, Morley et al. 2008, Sustain n.d.)

Food hubs benefit communities through synergies realized from co-location, shared resources and diminished duplication. They can provide stable demand for producers while economic development can be targeted to specific, low income, communities. A food hub can also provide a platform to differentiate products based on provenance (Morley et al 2008). The tensions of creating successful food hubs include: scaling up, in particular, the need to balance supply and demand; ensuring long-term financial viability; and developing scale appropriate physical, institutional and regulatory infrastructure (Morley et al. 2008, Friedmann 2007). Within this challenging environment, there is a need to engage in product differentiation to add value as opposed to engaging in a race to the bottom through a focus on product price alone.

In addition to these benefits, food hubs and related initiatives also provide a model for a broader solution to food challenges. As amply demonstrated in a series of seminal reports sponsored by the Metcalf Foundation, Baker, Levkoe, and Campsie (2010) as well as others identify food centres and food clusters as providing the basis for targeted community development and education. Food centres are founded firmly on principles of social justice. While they can improve food access for low-income communities, they also offer spaces for education, engagement and empowerment to 'bridge the gap' between producers and community members unable to access healthy food (Baker et al. 2010: 31). For example, through the Green Barn project community food experts teach community members about urban agriculture and food preparation. In this model, hubs are leverage points to activate change within communities as they provide scale appropriate spaces where all community members can help remake the food system. The Stop is now piloting their model in three other Ontario communities (Scharf et al. 2010, Baker et al. 2010). Food clusters are proposed as ways to fill the processing (includes canning, freezing and abattoir facilities) and distribution gap between consumers and producers. There is a widespread call for scale appropriate technologies and facilities (Baker et al. 2010, Carter-Whitney and Miller 2010, Landman et al. 2009).

So whether we call them hubs, centres or clusters, the remaking of the middle provides a practical, community-based solution to many pressing problems. In considering the way forward, it is useful to be wary of the challenges and plan accordingly. First, we need to acknowledge the resource question. To make the case for community food projects, we need to understand both internalized *and* externalized costs associated with respect to a dysfunctional food system, and attribute addressing those challenges as funding for new food projects. So if a food hub is helping to reduce "diabetes" and related health care costs, those savings need to be attributed to the long-term funding for community food projects. While we want to avoid bean counting, we do need to have research that assesses the multiple

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dividends of food projects in a more holistic way and assigns these costs and benefits appropriately. Research on life cycle analysis for greenhouse gas emissions could provide a starting point. We need to be able to 'value' the range of approaches presented in Table 2. That said, we also need to be mindful of human resources and provide support for the people doing the heavy-lifting. Too often, community groups fall as they are forced to rely too heavily on volunteers. Second, policy and regulations need to be in place to support scale appropriate, place-based community resources (Scharf et al. 2010, Landman et al. 2009) as well as provide meta-policy as a reference point for on-the-ground work (Blay-Palmer 2010, 2011). Third, we need to broaden the idea of community food projects to include opportunities from field to garbage heap. So for example, providing ecological credits to farmers can be as much a part of these discussions as improving food access for underserved urban communities. As well, community food projects need to be community-specific and the gaps that need bridging must be identified on a community-by-community basis. In this way we create grounds for education, inclusion and the creation of relevant, empowered and connected food communities.

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