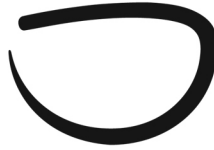


Canadian Food Studies



La Revue canadienne des  
études sur l'alimentation

## Field Report

# **Disruptive innovation and operationalization in local and sustainable food systems: Examining the University of Toronto-Local Food Plus partnership**

Lori Stahlbrand

Toronto Food Policy Council, City of Toronto; Department of Equity Studies, University of Toronto

## Abstract

This paper traces the partnership between the University of Toronto and the non-profit Local Food Plus (LFP) to bring local sustainable food to its St. George campus. At its launch, the partnership represented the largest purchase of local sustainable food at a Canadian university, as well as LFP's first foray into supporting institutional procurement of local sustainable food. LFP was founded in 2005 with a vision to foster sustainable local food economies. To this end, LFP developed a certification system and a marketing program that matched certified farmers and processors to buyers. LFP emphasized large-scale purchases by public institutions. Using information from in-depth semi-structured key informant interviews, this paper argues that the LFP project was a disruptive innovation that posed a challenge to many dimensions of the established food system. The LFP case study reveals structural obstacles to operationalizing a local and sustainable food system. These include a lack of mid-sized infrastructure serving local farmers, the domination of a rebate system of purchasing controlled by an oligopolistic foodservice sector, and embedded government support of export agriculture. This case study is an example of praxis, as the author was the founder of LFP, as well as an academic researcher and analyst.

**Keywords:** University foodservice; institutional procurement; local food systems; sustainable food, Local Food Plus

\*Corresponding author: [lori.stahlbrand@toronto.ca](mailto:lori.stahlbrand@toronto.ca)

DOI: 10.15353/cfs-rcea.v6i1.269

ISSN: 2292-3071

## Introduction<sup>1</sup>

In September 2006, the University of Toronto (U of T), with more than 85,000 students on three campuses, became the first university in Canada to purchase certified local sustainable food (Local Food Plus, 2006b). The initiative at the U of T's main St. George campus arose from a partnership between the U of T and a newly-minted Canadian civil society organization, Local Food Plus (LFP)<sup>2</sup>. The U of T-LFP partnership marked the first time that three concepts—"public sector procurement", "local food" and "sustainable food"—were brought together in a single phrase and a unified project.

LFP aimed to create a full-service organization designed to drive the transformation of the food system in Canada through large-scale purchasing of local sustainable food. This was reflected in LFP's founding vision: "To foster vibrant local, regional economies by growing environmentally, socially and economically sustainable local food systems" (Local Food Plus, 2006a). To achieve this vision, LFP combined three functions in one organization: the first comprehensive third-party certification system for farm products labelled "Certified Local Sustainable" (featuring sustainable production methods, on-farm labour practices, animal welfare, biodiversity protection, and energy use); a market development program linking farmers with purchasers; and a public education campaign promoting both local and sustainable food.

At its peak, LFP had more than 200 certified farmers and processors in its roster, and about 80 "market partners" purchasing certified food. In 2012, LFP estimated that about 160,000 Certified Local Sustainable meals and snacks were served each week at 277 broader public sector institutions in Ontario, with an annual value of more than \$2 million (Local Food Plus, 2012). The U of T-LFP partnership launched LFP, and marked the first major institutional foodservice contract to specifically include the purchase of certified local sustainable food.

Despite many successes, LFP was unable to raise enough funds to continue active operations beyond 2014. However, in 2016, the University of Toronto moved to take over foodservice operations on the St. George campus for all venues previously run by foodservice contractor Aramark, rather than enter into another contract with a global foodservice corporation.<sup>3</sup> U of T foodservice administrators acknowledge that the U of T-LFP partnership paved the way for this game-changing decision (J. Lokker, personal communication, August 2016; A. Macdonald, personal communication, August 2016). This review of the U of T-LFP partnership permits an examination of major factors affecting local and sustainable food initiatives in Canada. It reveals obstacles inherent in operationalizing a local and sustainable food

---

<sup>1</sup> Throughout this paper I refer to myself in the third person when I am discussing my previous practitioner role as the founder and president of LFP, and I use the first person when I am writing as an academic researcher and analyst.

<sup>2</sup> The original name of the organization was Local Flavour Plus. The name was changed to Local Food Plus in 2007 to avoid a potential legal battle over intellectual property with another organization.

<sup>3</sup> The total number of students living in residences now run by U of T Food Services was 2,112 in 2015-2016. U of T Food Services also sources food for retail outlets on the St. George campus which cater to almost 44,000 students, as well as faculty and staff. In addition, the St. George Catering Company, the catering arm of U of T Food Services, provides catering for meetings, events and conferences across the St. George campus.

system, and explores LFP as a “disruptive innovation” (Christensen, 2003) which posed a challenge to many dimensions of the food system.

## Methodology

As the founder and former president of Local Food Plus, I am both a subject of this case study and an academic researcher and analyst. The primary research for this paper comes from 36 in-depth semi-structured key informant interviews. To manage my positionality in this paper, I have only made use of personal notes, emails, and memories which are confirmed by interviews or public documents. Ethics approval was obtained by the Laurier University REB and interviews were conducted with key figures at the University of Toronto and Local Food Plus, as well as farmers, processors and distributors engaged with LFP. Despite repeated efforts to interview LFP's key contact at Aramark, I was not granted an interview.

## LFP as a Disruptive Innovation

Clayton Christensen developed the most famous articulation of “disruptive innovation” in his influential book, *The Innovator's Dilemma* (Christensen, 2003). There are three key dimensions of disruptive innovations: they disrupt the existing product offerings and operational model; they upset the privileges of powerful groups benefitting from that model; and they come from outside established mainstream structures (Christensen, 2003). LFP fits this understanding of disruptive innovation.

By coupling local and sustainable—maintaining that sustainable food systems have to be primarily local, and that local is most robust when coupled with sustainability—the LFP concept disrupted the operational model of the dominant foodservice industry, which is based on volume purchases of standardized low-cost food without provenance. By deliberately moving beyond advocacy to program implementation, LFP upset the privileges of the dominant food service industry, which benefitted from the existing model. By emerging from the alternative food movement, LFP was clearly outside established mainstream structures. However, perhaps the most disruptive aspect of the LFP program was that it articulated a public purpose to both food production and food procurement. This contested the idea that food is fundamentally a commodity, and thereby confronted and reframed established practices and understandings of business, government, and philanthropy.

Although Christensen's disruptive innovation model was designed to analyze innovations in the business world, it offers a useful way to describe LFP's role relative to four major players in the existing food polity: the provincial government, particularly OMAFRA (the Ontario Ministry of Agriculture, Food and Rural Affairs); the dominant players in the foodservice industry; the organic sector; and philanthropic foundations.

### *LFP and the Ontario Government*

By championing a local and sustainable food system, LFP put itself in opposition to OMAFRA's long-standing focus on food exports, which downplays food for local populations. Foodland Ontario, a government-run branding scheme to promote Ontario food, has been in existence since 1976 (Government of Ontario, 2013), but is strictly about increasing awareness of local foods. The Local Food Act of 2013, which claims to “increase access to local food, and to boost the supply of food produced in Ontario” is aspirational, with no regulatory force (OMAFRA, 2015).

LFP also represented a disruption to the Ontario government's historic stance on sustainability. Although pesticides are federally regulated in Canada, the Ontario Ministry of the Environment and Climate Change regulates their sale and use (OMAFRA, 2016b). LFP standards, which restrict the use of certain approved pesticides, posed a challenge to the Ontario government, which claims that current agricultural standards in the province are already sustainable (OMAFRA, 2016a).

### *LFP and the Dominant Foodservice Industry*

LFP's approach was also disruptive to the business model of the dominant foodservice industry, which is based on globally-sourced cheap, anonymous, and placeless food bought in bulk through centralized supply chains. As well, this business model features rebates that give high-volume vendors special access, and excludes smaller local farmers. LFP's offering of slightly more expensive local and sustainable food, often requiring cooking from scratch, was directly at odds with this business model.

### *LFP and the Organic Sector*

Although most of LFP's leadership came out of the organic movement, LFP's focus on local—as well as broader sustainability issues, such as labour conditions, animal welfare, biodiversity, and energy use—disrupted the organic sector's domination of the alternative food market. While several leading organic farmers saw LFP as highlighting their personal commitment to local food systems, as well as humane animal and labour practices, dominant figures in the organic sector saw LFP as unwelcome competition. LFP co-founder and vice-president Mike Schreiner stated “I think the organic movement saw LFP as a threat because the organic movement had owned the environmental sustainability piece” (M. Schreiner, personal communication, July 2016).

## *LFP and Philanthropic Foundations*

As a full-service organization with an ambitious mandate that worked in both the public and private sectors, LFP also posed a challenge to philanthropic foundations, which typically fund charitable projects featuring education, the arts, and services for the disadvantaged. Despite strong early interest, foundations conceived of LFP as more of a business venture than a non-profit. Foundations believed LFP should become self-financing as soon as possible. LFP's needs also did not fit with the way that philanthropic foundations make grants, based on project-based funding in one- to three-year cycles.

LFP reframed many key issues around scaling local sustainable food up and out, and the ways that government, public sector, business, and philanthropy interact. Equally important, as a full-service organization, LFP went beyond talking about policy issues in the abstract. It also worked to change the rules of the procurement game, in order to implement its sustainability program. In retrospect, the enormity of the task that LFP set for itself is clear. But at the time, it seemed exciting, rather than overly-ambitious (D. Mills, personal communication, August 2016; M. Schreiner, personal communication, July 2016).

## *The LFP Certification Standards*

LFP was more than an organization with an idea; it was an organization that rolled up its sleeves for food system change. To promote foods from particular farms, LFP had to define precisely what the words “local” and “sustainable” meant. This entailed creating specific standards, and a way to measure these standards through a credible certification process. The labour-intensive model adopted—annual third-party inspections based on site visits and examination of detailed records of complex and varied practices and production methods—was influenced by the fact that all of LFP's senior staff came from the organic movement.

LFP's standards and certification methods were developed in collaboration with several key consultants such as Rod MacRae, a soil scientist and food policy expert. MacRae says guidelines for the LFP standards were like three legs of a stool:

“One leg is creating something that differentiates you from the dominant practices, and actually causes positive change on the landscape, whether it is at the farm, processor, or whichever level you're focusing on. Another leg is what consumers can recognize as important. The third leg is to write a standard that enough producers can meet so that you have enough supply to create a new market”. MacRae adds that “a lot of standards that certain groups have written over the years have failed because they haven't got that balance right.” (R. MacRae, personal communication, July 2016).

That balance requires a deep understanding of both supply and demand, and a readiness to collaborate.

In keeping with evolving IPM standards<sup>4</sup>, LFP awarded farmers points based on five sets of practices, which LFP defined as follows: employ sustainable production systems that reduce or eliminate synthetic pesticides and fertilizers and conserve soil and water; provide healthy and humane care for livestock; provide safe and fair working conditions for on-farm labour; protect and enhance wildlife habitat and on-farm biodiversity; and reduce on-farm energy consumption. Detailed production standards were developed for virtually every crop grown in Canada. A standard was also developed for processors and packers who would be handling and processing certified local sustainable food, in order to maintain the integrity of the products throughout the supply chain. The standards were based on MacRae’s comprehensive research into best practices for sustainability, as well as input from farmers and OMAFRA crop experts.

LFP launched the first eco-label in Canada to couple local and sustainable food. LFP defined “local food” as food produced, processed, and distributed within one province, or up to 200 kilometres within a neighbouring province. This way of defining local is unique to Canada, where distances are great, supply chains are long, and most agricultural programs fall under provincial jurisdiction.

LFP standards were flexible enough to apply to all categories of food—produce, dairy, meat, grains, or processed foods—sold to all food establishments, including restaurants, retailers, and institutions. But the initial focus was on public-sector institutions because the founders of LFP saw institutional procurement as the way to leverage public power to foster a local and sustainable food system. Schreiner explained that “we wanted to achieve something that was meaningful in terms of change in farm practices, but yet was still affordable and accessible to the institutional purchaser. For me that was always the most challenging and difficult tension” (M. Schreiner, personal communication, July 2016).

## The U of T-LFP Partnership

In Canada, university procurement plays a pivotal role in fostering local and sustainable food systems because Canada lacks a school meal program at the elementary and secondary levels. In countries that have school meal programs, initiatives to promote local and sustainable purchasing happen at all levels of the educational system. In Canada, however, university procurement practices have played a more prominent role. The amount spent on food on campuses across Canada each year is estimated to be more than \$500 million CA (Roberts, Archibald, & Colson, 2014). Campus foodservice operations provide many opportunities to use the buying power of

---

<sup>4</sup> IPM or Integrated Pest Management is “an ecosystem approach to crop production and protection that combines different management strategies and practices to grow healthy crops and minimize the use of pesticides” (FAO, 2018). LFP’s standards define practices that are a meaningful shift away from conventional approaches to pesticide use, while including labour, animal husbandry, and energy components.

universities to promote “creative public procurement” (Morgan, 2014; Morgan & Morley, 2014; Morgan & Sonnino, 2007, 2008). There is also a national student organization, Meal Exchange, with a mandate to empower students “to take an active role in creating a just and sustainable food system” and a focus on university food procurement (Meal Exchange, n.d.).

The U of T-LFP partnership arose from a casual conversation in early 2005 between the author and David Clandfield, then principal of New College, a residential college housing 800 students at the U of T. Clandfield proved to be an effective champion in initiating the U of T-LFP partnership. He fits the definition of a champion as one who “voluntarily takes extraordinary interest in the adoption, implementation, and success of a cause, policy, program, project, or product” (Business Dictionary, 2018). Clandfield had learned how to act strategically to move an issue throughout his varied career as an administrator, an academic, a Board of Education trustee, and a provincial government policy advisor. Under Clandfield, New College pioneered an academic program in Equity Studies. The author was co-teaching the first course offering in food and equity while she was developing Local Food Plus. Clandfield saw a connection:

“When we said we were going to pursue an equity emphasis based on all forms of equity, we decided that this should apply not only to the curriculum, but to everything we did in the College. We were looking for opportunities to embed in the College life, not just in the classroom, things that demonstrated this commitment to social justice and equity.” (D. Clandfield, personal communication, May 2015).

The author's students conducted a survey of New College residents indicating that they were willing to pay a small premium for food if they knew that it came with social and environmental values. By pure coincidence, the foodservice contract at New College was up for renewal. Clandfield acted strategically, seeing his job as “find[ing] the right people to put together so an exciting idea could emerge” (D. Clandfield, personal communication, May 2015)). He called a small meeting in his office in order to present the idea of a partnership between New College and LFP.

One of the people who attended that initial meeting was Anne MacDonald, Director of Ancillary Services at the University of Toronto and responsible for campus housing, parking and foodservice. For Macdonald, another champion, the meeting coincided with efforts to improve communication about foodservice on campus. She was impressed by the author's commitment to incremental change and continuous improvement. “I felt that there was a kind of business case for it,” she said. “It was sufficiently compelling, and it wasn't asking us to buy completely into a huge costly program” (A. Macdonald, personal communication, May 2015). She also appreciated the sustainability option. She says there was a lot of interest in sustainability generally at the university, but she knew that buying organic food to meet that interest was not an option because of cost.

Macdonald introduced the concept to someone who would become another key champion—Jaco Lokker, a former hotel chef, who had stayed at 89 Chestnut as Executive Chef

when the hotel was bought by the U of T and refurbished as a residence for 1200 students. Lokker had grown up in the Netherlands, where everyone he knew was involved in food production. “I just understood where food came from and how important it was,” he said. “In Holland, the milk man who came to the door was actually the dairy farmer. The vegetable farmer would come in his truck with a wagon behind it, and you would buy your vegetables off the rack in the wagon. That's how I understood food” (J. Lokker, personal communication, July 2015).

From the start, Lokker felt that partnering with LFP was the right thing to do for the students. “You're coming to school and starting your life as an adult. Now you're going to make decisions as an adult, and I can influence you on buying local and sustainable, or just thinking in a responsible manner around food. Why wouldn't I take that opportunity?” (J. Lokker, personal communication, July 2015). Lokker also appreciated LFP's work to connect the U of T with farmers. But the major piece for him was third-party verification. “One of the biggest values was making sure the farmers were vetted,” he says. “That's where I saw value in LFP because everyone says 'how do you know that farmer is responsible?' Well, now I can tell you how I know” (Ibid.). The competence and energy of such champions ensured that launching a partnership for local and sustainable food went off without a hitch.

The timing for the author's meeting with senior U of T managers was fortuitous, because the university was about to prepare a Request for Proposals (RFP) for a large foodservice contract. RFPs of this size are usually issued once every ten years. Macdonald brought LFP senior staff into the process. The author and Schreiner made suggestions for the RFP language requiring the purchase of local sustainable food. Wording was developed that specifically referenced the key principles of LFP certification. For New College Residence, the RFP required that:

“a minimum of \$80,000 net (excluding non-food charges) of annual food purchases (food cost) must be sourced from local and sustainable growers and suppliers. The annual minimum amount will increase at a compound rate of 5 percent per year. To ensure variety and support for a wide base of farmers and suppliers, a maximum of 35 percent of the total dollar amount can be allocated to any one commodity e.g. milk, meat, fruit, etc.” (University of Toronto, 2006, p. 28).

A similar dollar requirement was included for retail outlets on campus.

Aramark, an American-based global foodservice corporation with annual revenues of about US \$15 billion and a workforce of 270,000, won the contract to provide foodservices for the New College residence, campus catering, and retail outlets across the St. George campus. In addition to the Aramark contract, self-operated foodservice units, including University College and 89 Chestnut Residence, agreed to voluntarily participate in the U of T-LFP partnership.

Macdonald said Aramark resisted the local sustainable program from the start, despite the fact that the company had agreed to the terms of the contract. “I was getting these phone calls from Aramark procurement saying ‘I don't think we can do this whole local thing’,” said



Macdonald (A. Macdonald, personal communication, May 2015). By contrast, Lokker was keen to see what he could do to advance the LFP program and was a hands-on problem-solver. He said he was able to keep his food budget in line because he cooked from scratch with whole foods, rather than relying on processed products. This meant working with higher labour costs, but lower food costs. He launched an educational campaign to minimize food waste, especially food that students previously left on their plates. The savings from waste reduction helped offset any extra cost of LFP-certified food.

Lokker and Aramark both bought products from a range of LFP-certified producers including produce, dairy, meat, and canned tomatoes. Over the years, Lokker grew the LFP program to about 17 percent of his total buy, with local getting up to 65 percent (J. Lokker, personal communication, July 2015). Comparable estimates from Aramark are not available.

Lokker said the LFP-certified products that worked best for him were: apples from the Norfolk Fruit Growers Association (NFGA) in Norfolk County, a major farming and food processing region on the shore of Lake Erie, about two hours from Toronto; carrots and onions from Carron Farms, grown in the rich soil of the Holland Marsh directly north of Toronto; and milk from Harmony Organic Dairy, about two hours due west of Toronto. In these cases, Lokker stopped buying conventional versions, and switched completely to LFP products. He proactively thought about how he could support LFP's work and foster change. "If you have two carrot farmers and one is connected and one is not, you buy from the one who is connected. That's the only way you will ever get them to stay in the program" (J. Lokker, personal communication, July 2015). For these producers, sales through the U of T-LFP partnership represented a small percentage of their sales, but one they all regarded as an important entry point into institutional markets.

Lawrence Andres, the President of Harmony Organic Dairy, said the greatest value of LFP certification was LFP's ability to open the door to institutional procurement. "Although the initial volume wasn't huge", said Andres, "I think it [selling to the U of T] opens up a lot of doors in the future" (L. Andres, personal communication, August 2016). Andres stated introducing university students to their milk is important because it allows his product to reach large groups of people at one time who may become lifelong customers. "They are going to be consumers, and they are going to be informed consumers who are willing to do something for the environment" (L. Andres, personal communication, August 2016). Andres was willing to give Lokker a price below the usual organic premium because "we made up for it with significant volume, and the future looked promising". Andres saw Lokker as a foodservice visionary, but said the program "needed LFP to develop the relationships and turn it into action". This direct relationship between farmer and chef illustrates the disruptive innovation to the supply chain precipitated by LFP.

### *Background Factors Influencing the U of T-LFP Partnership*

Three background factors played an important role in the emergence and evolution of the U of T-LFP partnership. First, there was a dynamic “community of food practice” in Toronto, which created conditions supportive of the LFP project (Friedmann, 2007), but which were situated entirely in the alternative food movement. Second, there was the existence of a small number of deeply entrenched and powerful transnational foodservice corporations, which resisted local and sustainable food systems. Third, there was little mid-sized infrastructure to support a local and sustainable food system.

These three factors operated within the larger context of neoliberalism, which is characterized by downgrading and downloading major public functions, so that the dominant market players are given increased freedom and control (Harvey, 2006; Moore, 2010; Peck & Tickell, 2002). In a highly privatized and commodified sector such as food, LFP's mission, focused on public institutions, public benefit, and food as a public good ran against the neoliberal grain.

#### *Communities of Food Practice*

Friedmann writes about the highly interactive “community of food practice” that existed in Toronto at the time of LFP's development (Friedmann, 2007). This included institutions such as the Toronto Food Policy Council (TFPC—a municipal body with citizen-members who advise the City of Toronto on food issues), the food justice organization FoodShare (which provided early support), and other long-established players in the sustainable food arena. In other words, the author was connected to a broad network that gave LFP a strong start. She was able to draw from this network to create an impressive team for LFP with deep experience in farming, food policy, organic certification, food sales, and marketing. This team included Mike Schreiner, a food entrepreneur who founded a home box delivery service and a company that sold prepared meals made with organic food; former TFPC co-ordinator Rod MacRae; long-time organic certification expert and inspector trainer Garry Lean; and Don Mills, an organic farmer and leader with Canada's National Farmers Union. The dynamism of this group made the LFP initiative possible, but the lack of representation from the dominant food system or government institutions was a handicap.

#### *Foodservice Oligopoly*

The second background factor was a foodservice sector dominated by three transnational corporations (Compass, Sodexo and Aramark). Their business model has been described as “based on centralized supply chains and management structures, with a reliance on prepared and ‘ready to eat’ food, intended to lower procurement and labor costs” (Martin & Andrée, 2012, 162). This foodservice oligopoly had combined revenues of US \$80 billion in 2015. They employ

more than one million people at colleges and universities, schools, hospitals, sports facilities, workplace cafeterias, airlines, railways, remote mining camps, offshore platforms, the military, and prisons (Aramark, n.d.; Compass Group, n.d.; Sodexo, 2018). Oligopolistic domination of foodservice means that new entrants find it difficult to gain a foothold because the three main players drive prices down by using their enormous aggregate purchasing power and by externalizing any social and environmental costs of cheap food (Clapp & Fuchs, 2009; Martin & Andrée, 2012).

Food distribution is equally dominated by a small number of powerful players known as “broadline” distributors—multi-billion dollar global corporations that provide one-stop shopping to foodservice operations. Ontario's two major broadline distributors are Gordon Food Service (GFS) and Sysco. GFS is the smaller of the two, with revenues of more than US \$12 billion in 2015 (Forbes, 2016). Steve Crawford, a Category Manager with GFS in Ontario, said the company lists 17,000 different products. He described broadline distribution this way: “If you picked up a restaurant up-side down and shook it, whatever falls out, we usually sell” (S. Crawford, personal communication, August 2013). Besides both fresh and processed foods, this includes napkin holders, cutlery and staff uniforms. Oligopolistic domination of the marketplace reduces the potential of any innovation from new and independent competitors.

#### *Absence of Mid-Sized Infrastructure*

The third background factor that influenced the U of T-LFP partnership was a lack of infrastructure appropriate for a community-based sustainable food system, which I call “infrastructure of the middle” (Stahlbrand, 2016a, 2016b, 2017). This term is adapted from the concept of “agriculture of the middle”, which describes the mid-size farms and ranches most at risk in a globalized food system. These farms and ranches “operate in the space between the vertically-integrated commodity markets and direct markets” (Kirschenmann, Stevenson, Buttel, Lyson, & Duffy, 2008). The concept of “infrastructure of the middle” was also influenced by food hub conceptualizations (Blay-Palmer, Landman, Knezevic, & Hayhurst, 2013; Morley, Morgan, & Morgan, 2008). I define “infrastructure of the middle” as “the resources, facilities and networks that create a critical mass, enabling alternative food producers to meet the needs of high-volume, high-profile foodservice clients, especially public-service institutions” (Stahlbrand, 2016b). Mid-sized infrastructure includes both “hard” infrastructure such as warehouses and processing plants, and “soft” infrastructure such as communities of practice and structures for creating and maintaining essential relationships.

In Canada, where the climate is daunting, the population is small, and the costs of infrastructure are high, infrastructure has historically been built and maintained almost entirely with public money—as with canals, railways, roads, utilities, radio and television broadcasters, and colleges and universities. Food infrastructure, by contrast, is largely in private hands. A local and sustainable food system requires distributors, processing plants, warehouses, and information technology that can separate local and sustainable products from products without provenance,

and work with smaller companies. However, mid-sized processing plants have been disappearing in Ontario, and few distributors are oriented to meeting the needs of local and sustainable food suppliers (Hall, 2013; Sparling & LeGrow, 2015). For this reason, the simplistic language of “farm to fork” is misleading because there is so much hidden behind that little word “to” (Stahlbrand, 2016b).

While LFP founders recognized that creating new relationships was part of the soft infrastructure needed to foster local and sustainable food systems in Ontario, it was not immediately clear how little mid-sized hard infrastructure exists. Schreiner noted,

“There is no mid-scale infrastructure in the whole system. For the most part, it is either mass scale or small artisans. It was very challenging for the partners we were trying to work with because they couldn't achieve the scalability of mass-scale. Though they didn't necessarily want to become big, there was no alternative, other than artisan production, which is a micro-niche with very high costs of production” (M. Schreiner, personal communication, July 2016).

As a result of the structure of the marketplace and political economy of food, LFP lacked a base within the food sector.

### *Operational challenges in the U of T-LFP Partnership*

LFP's commitment to operationalization is what attracted funders and volunteers, and led to media attention. No-one in Canada had previously tried to systematically transform a university's food procurement strategy by linking with mid-size farmers and processors, who were not only local, but also met standards for environmental and social sustainability. As MacRae has noted, most local and sustainable food programs limit themselves to smaller endeavours, but LFP had nothing less than food system transformation as its mission. MacRae contended that “Everybody is overly optimistic about what the small stuff can deliver. Operationally [LFP] was out front, because hardly anyone before us had ever really struggled with these operational dilemmas, and really figured out how to make the operation side serve the concept.”(R. MacRae, personal communication, July 2016).

Commitment to operationalizing food system reform also turned out to be LFP's Achilles heel. LFP was expensive to establish and run, but was too young to have developed core funding to sustain the grinding work of operationalization. It was striving to achieve progress in the most ambitious program of its kind ever attempted in Canada. As a result of being first, there were unforeseen operational issues every step of the way.

Understanding these challenges is essential to appreciating the magnitude of the barriers blocking sustainability transition in the food system. This section reviews three of many operational challenges. The examples illustrate the centrality of understanding operationalization

in sustainability transition: operational challenges related to defining “local,” operational challenges related to defining “sustainable,” and operational challenges relating to the rebate system in the dominant foodservice industry.<sup>5</sup>

### *Defining “local”*

Scholars have noted that local food “can have multiple and conflicting meanings” (Allen, FitzSimmons, Goodman, & Warner, 2003, p. 63). Defining local food remains a challenge for scholars (Born & Purcell, 2006; DuPuis & Goodman, 2005; Feagan, 2007; Mount, 2011). It is even more challenging for practitioners who must develop meaningful standards that can be operationalized in places such as university cafeterias serving thousands of meals each day with a limited budget, and primarily during off-season for local agricultural production.

All foodservice relies on a wide array of processed products such as canned tomatoes, dairy products and meats. Therefore, LFP had to develop standards that defined what local means for both farmers and processors. LFP originally defined local food as “food that has been produced, processed and distributed within the province in which it is consumed, or up to 200 kilometres within a neighbouring province” (Local Food Plus, 2011a, p. 4). However, this definition quickly became unworkable. Farmers have little or no control over what happens to the food they grow after it leaves the farm. Nor can they control whether processors co-mingle their food with non-local ingredients. Processors with the best intentions may not be able to source all of their ingredients locally. It quickly became apparent that even those with the deepest commitment to local food systems often could not meet LFP's definition of local.

A case in point is Mapleton Organic. Martin de Groot and Ineke Booy established Mapleton Organic Dairy in 2000. The processing facility is on the farm, where they have raised dairy cows since coming to Canada from the Netherlands in 1980. All milk for their premium quality organic ice cream and yogurt comes from their herd. Both De Groot and Booy are deeply committed to local food systems, and were among the first farmers to certify with LFP. Yet they were unable to source Ontario processed strawberries or blueberries for their ice cream and yogurt. “If there were strawberries here, even if I had to pay a little more for them, I would buy them from Ontario. But there's nothing here,” (M. De Groot, personal communication, June 2013). De Groot and Booy's experience, and the experiences of other processors, caused LFP to develop a policy for multi-ingredient products that allowed up to 50 percent non-LFP-certified ingredients by mass or fluid volume (Local Food Plus, 2007).

---

<sup>5</sup> There are many other examples of operational issues that impact the sustainability transition in food. Some of these include how to evaluate changing government pesticide regulations in a cost-effective manner in order to include them in a certification process, how to work with distributors to avoid “shrinkage” (food loss from decay) while the demand for local and sustainable food is still relatively low, and how to identify LFP-certified products on packaging when farmers and processors only print new packaging once every few years.

### *Defining “sustainability”*

The unidentified presence of genetically modified organisms (GMOs) in many processed foods presented another operational challenge related to defining “sustainable”. GMOs are not permitted in the Canadian Organic Standard, and were not permitted by LFP. Unlike most of Europe, however, genetically modified crops such as corn and soy for animal feed are grown widely in Canada, and there are no laws requiring segregation from non-GMO crops (CBAN, 2015). As a result, most corn and soy are co-mingled. Access to non-GMO corn and soy is thereby virtually impossible for non-organic farmers. Beef farmers certified with LFP were forced to purchase organic feed, but could not recoup the organic premium through their LFP sales. “That extra margin [of the organic premium on feed] compounds up through the value chain for a significantly more expensive product in the end analysis” said Don Mills, who ran LFP's certification program (D. Mills, personal communication, August 2016). The beef farmers petitioned LFP to be permitted to use co-mingled feed until a segregated non-organic supply could be established. After a great deal of thought and consultation, LFP wrote a policy to temporarily allow co-mingled feed (Local Food Plus, 2008).

In making this decision, LFP senior staff were attempting to balance four factors: a realizable yet comprehensive definition of sustainability; the need to increase the supply of local sustainable food, the need to provide a full range of products to market partners; and the inability of LFP to influence Canadian regulations around GMOs, which permitted co-mingling. This decision led to a fierce backlash from some in the organic community, which required crisis management. Despite these difficulties, senior staff involved in the decision believe they struck the right balance between an ethical stance on GMOs and the realities of operationalization (R. MacRae, personal communication, July 2016).

Such constraints only become visible in the course of operationalization. Some argued at the time that there should be zero tolerance for GMOs. However, they did not face the reality that the only way to achieve this was to raise prices above what the market for local sustainable meat would bear. This would have meant that LFP would not have meat as part of its product offer, and beef farmers committed to more sustainable practices would be turned away. In the world of operationalization, there are many shades of gray that may appear black and white to non-practitioners.

### *The Rebate System*

The most formidable operational challenge LFP faced was the system of rebates—a defining feature of the dominant food system. Rebates are an entrenched system of price incentives that essentially block small and mid-sized farmers from selling to foodservice contractors, while generating hundreds of millions of dollars for the global foodservice corporations (Fitch & Santo, 2016). Rebates and related vendor agreements are the price of admission for farmers to be listed with distributors, and for distributors to get onto “preferred vendor” lists with foodservice

contractors, similar to slotting fees in the food retail sector, where suppliers pay for shelf space in supermarkets (Hendrickson, Heffernan, Howard, & Heffernan, 2001). Kaya & Özer argue that rebates are pricing mechanisms designed “to share two important operational risks in supply chains: inventory risk and capacity risk” (Kaya & Özer, 2011, p. 2). However, rebates have become a disciplinary tool of the cheap food system, because they force players to bid low and push the cost down through the supply chain onto farmers, and ultimately onto the land itself. LFP ran headlong into the rebate system. It is the business model that enforces the operationalization of cheap food in a food system controlled by oligopolies.

## Conclusion

This article argues that the LFP project was a disruptive innovation that posed a challenge to many dimensions of the established food system. To illustrate this argument, it reviews the partnership between the University of Toronto and Local Food Plus to bring certified local sustainable food to cafeterias and retail outlets on the St. George campus. The research indicates that LFP did pose a challenge and that universities have a pivotal contribution to make to sustainability transition in the food system, but it also exposed many challenges to be overcome in terms of both background factors and operationalization.

This case study concluded with a significant development. After ten years with Aramark, the University of Toronto took back its foodservice and decided to self-operate all venues previously run by Aramark on the St. George campus. The mission statement of the new operation launched in August 2016 was “To ensure that the campus food services provide a wide range of affordable, sustainable and nutritious food options to our community through excellent service, commitment to our environment and celebration of food to reflect our diverse community” (U of T Food and Beverage Services, n.d.).

Under the new arrangement, about thirty locations across the St. George campus, including two residences, as well as catering for meetings and events, have come under the purview of Jaco Lokker, now the Director of Culinary Operations and Executive Chef. As Macdonald stated, “It's not simply that the managers change. It's that there's more cooking, and there's a shift from prepared ingredients and low-skilled labour to less prepared ingredients and higher skilled labour. It's just a completely different way of operating” (A. Macdonald, personal communication, May 2015).

About 250 former Aramark employees are now employed by the U of T. Kitchens at two residences, 89 Chestnut and New College, have become processing kitchens, preparing more dishes from scratch. Lokker said the kitchens will enable foodservice to work directly with more local farmers selling whole foods, making the U of T a de facto hub for local and sustainable food (J. Lokker, personal communication, July 2015).

Macdonald and Lokker said the experience with LFP gave them confidence to make the move towards a fully self-operated foodservice (J Lokker, personal communication, August

2016; A Macdonald, personal communication, August 2016). LFP gave the U of T the experience of controlling more of the foodservice on campus, because of the local sustainable requirements in the contract. Macdonald adds that the LFP partnership made visible some of the problems associated with working with a global foodservice contractor. This contrasted with what Lokker was able to do at 89 Chestnut, a self-operated unit since it opened in 2003, where implementing the LFP program was adopted more smoothly (A Macdonald, personal communication, August 2016).

LFP co-founder and former vice-president, Mike Schreiner, believed LFP played an important role in building public momentum and support for local food. But he says sustainability turned out to be a much more difficult challenge to embed in everyday food discourses and local food systems, “I don't think we succeeded in really having any enduring penetration around local *sustainable*” (M. Schreiner, personal communication, July 2016).

Schreiner acknowledges that the task that LFP set itself was mammoth. “Institutional foodservice is one of the most entrenched systems in the world. How do you change that? That's why people focus on farmers' markets – little pieces that chip at the edge of the system – because trying to actually go into the heart of the beast and change it is really hard”.

The paper points to the need for further research on institutional food procurement, an area which has been referred to as a “sleeping giant” (Clark, 2016). The move to reclaim foodservices at the University of Toronto may provide an example of a countervailing power to the dominant oligopoly in university foodservice. This countervailing power may create space for organizations such as LFP to be treated as welcome, not disruptive, innovations.

**Acknowledgements:** Lori Stahlbrand, Ph.D. is a Health Policy Specialist with the City of Toronto, where she is responsible for the Toronto Food Policy Council. She is also an Adjunct Professor in Equity Studies at New College, University of Toronto. She would like to thank the interviewees who gave so generously of their time and knowledge; her thesis supervisor, Dr. Alison Blay-Palmer, for her ongoing advice and support; the external reviewers and the co-editor of this Special Issue, Dr. Jennifer Sumner, for their insightful comments and suggestions. She would also like to thank the Social Sciences and Humanities Research Council of Canada, Wilfrid Laurier University, and the Laurier Centre for Sustainable Food Systems.

## References

- Allen, P., FitzSimmons, M., Goodman, M., & Warner, K. (2003). Shifting plates in the agrifood landscape: the tectonics of alternative agrifood initiatives in California. *Journal of Rural Studies*, 19(1), 61–75.
- Aramark. (n.d.). Aramark.com. Retrieved from <http://www.aramark.com/>
- Blay-Palmer, A., Landman, K., Knezevic, I., & Hayhurst, R. (2013). Constructing resilient, transformative communities through sustainable “food hubs.” *Local Environment*, 18(5), 521–528.



- Born, B., & Purcell, M. (2006). Avoiding the local trap: Scale and food systems in planning research. *Journal of Planning Education and Research*, 26(2), 195–207.
- Business Dictionary. (2018). What is a champion? definition and meaning. Retrieved from <http://www.businessdictionary.com/definition/champion.html>
- CBAN. (2015). *Where in the world are GM crops and foods? The reality of GM crops in the ground and on our plates*. Ottawa: Canadian Biotech Action Network (CBAN). Retrieved from <http://gmoenquiry.ca/wp-content/uploads/2015/03/where-in-the-world-gm-crops-foods.pdf>
- Christensen, C. M. (2003). *The innovator's dilemma : the revolutionary book that will change the way you do business*. New York: HarperCollins.
- Clapp, J., & Fuchs, D. A. (Eds.). (2009). *Corporate power in global agrifood governance*. Cambridge, Mass.: MIT Press.
- Clark, L. (2016, August 29). Why farm-to-institution sourcing is the sleeping giant of local food. Civil Eats. Retrieved from <http://civileats.com/2016/08/29/forget-farm-to-table-its-farm-to-institution-sourcing-that-could-make-a-real-dent-the-food-system/>
- Compass Group. (n.d.). Foodservice | Compass Group. Retrieved from <http://www.compass-canada.com>
- DuPuis, E. M., & Goodman, D. (2005). Should we go “home” to eat?: toward a reflexive politics of localism. *Journal of Rural Studies*, 21(3), 359–371.
- FAO. (2018). Plant production and protection division: Integrated pest management. Retrieved from <http://www.fao.org/agriculture/crops/thematic-sitemap/theme/pests/ipm/en/>
- Feagan, R. (2007). The place of food: mapping out the “local” in local food systems. *Progress in Human Geography*, 31(1), 23–42.
- Fitch, C., & Santo, R. (2016). *Instituting change: An overview of institutional food procurement and recommendations for improvement*. The Johns Hopkins University Center for a Livable Future. Retrieved from [http://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-a-livable-future/\\_pdf/research/Instituting-change.pdf](http://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-a-livable-future/_pdf/research/Instituting-change.pdf)
- Forbes. (2016). Gordon food service on the Forbes America's largest private companies list. *Forbes*. Retrieved from <http://www.forbes.com/companies/gordon-food-service/>
- 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.
- Government of Ontario. (2013, August 19). Foodland Ontario. Retrieved from <https://www.ontario.ca/foodland/foodland-ontario>
- Hall, D. (2013, December 11). Kellogg, Heinz plant closures part of a trend. *Windsor Star*. Retrieved from <http://blogs.windsorstar.com/business/kellogg-heinz-plant-closures-part-of-a-trend>
- Harvey, D. (2006). Neo-liberalism as creative destruction. *Geografiska Annaler: Series B, Human Geography*, 88(2), 145–158.

- Hendrickson, M., Heffernan, W. D., Howard, P. H., & Heffernan, J. B. (2001). Consolidation in food retailing and dairy. *British Food Journal*, 103(10), 715–728.
- Kaya, M., & Özer, Ö. (2011). Pricing in business-to-business contracts: Sharing risk, profit and information. London: Oxford University Press
- Kirschenmann, F. L., Stevenson, G. W., Buttel, F., Lyson, T. A., & Duffy, M. (2008). Why worry about the agriculture of the middle? In T.A. Lyson, G.W. Stevenson, & R. Welsh (Eds.), *Food and the mid-level farm: renewing an agriculture of the middle* (pp. 3–22). Cambridge: MIT Press.
- Local Food Plus. (2006a, March). Local Food Plus strategic plan - March 2006.
- Local Food Plus. (2006b, September 19). LFP-U of T launch news release
- Local Food Plus. (2007). Identifying LFP-certified ingredients in a multi-ingredient product.
- Local Food Plus. (2008, December 18). LFP GMO Policy.
- Local Food Plus. (2011a). LFP general standards for farmers and ranchers.
- Local Food Plus. (2011b). LFP general standards for processors and packers.
- Local Food Plus. (2012). *Final report from Local Food Plus to the BPS investment fund*. Local Food Plus.
- Martin, S., & Andrée, P. (2012). The “buy-local” challenge to institutional foodservice corporations in historical context. *Journal of Agriculture, Food Systems, and Community Development*, 2(3), 116–175.
- Meal Exchange. (n.d.). Meal Exchange. Retrieved from <http://www.mealexchange.com/>
- Moore, J. W. (2010). The end of the road? Agricultural revolutions in the capitalist world-ecology, 1450–2010. *Journal of Agrarian Change*, 10(3), 389–413.
- Morgan, K. (2014). The politics of the public plate: School food and sustainability. *International Journal of Sociology of Agriculture and Food*, 21(3), 253–260.
- Morgan, K., & Morley, A. (2014). The public plate: Harnessing the power of purchase. In T. Marsden & A. Morely (Eds.), *Sustainable food systems: building a new paradigm* (pp. 84–102). London: Routledge.
- Morgan, K., & Sonnino, R. (2007). Empowering consumers: the creative procurement of school meals in Italy and the UK. *International Journal of Consumer Studies*, 31(1), 19–25.
- Morgan, K., & Sonnino, R. (2008). *The school food revolution: Public food and the challenge of sustainable development*. Sterling: Earthscan.
- Morley, A., Morgan, S., & Morgan, K. (2008). Food hubs: the “missing middle” of local food infrastructure? Cardiff: BRASS Centre, Cardiff University.
- Mount, P. (2011). Growing local food: scale and local food systems governance. *Agriculture and Human Values*, 29(1), 107–121.
- OMAFRA. (2016a). Local food report 2016. *OMFRA*. Retrieved from [http://www.omafra.gov.on.ca/english/about/local\\_food\\_rpt16.htm](http://www.omafra.gov.on.ca/english/about/local_food_rpt16.htm)

- OMAFRA. (2016b). Guide to fruit production 2016-2017: Publication 360. Retrieved from <http://www.omafra.gov.on.ca/english/crops/pub360/pub360.pdf>
- OMAFRA. (2015). Published plan 2015-16. Retrieved from <http://www.omafra.gov.on.ca/english/about/ppar/2015-2016.htm>
- Peck, J., & Tickell, A. (2002). Neoliberalizing space. *Antipode*, 34(3), 380–404.
- Roberts, W., Archibald, S., & Colson, C. (2014). Sharing out the campus food systems project. Toronto: Meal Exchange.
- Sodexo. (2018). Sodexo - quality of life services. Retrieved from <http://www.sodexo.com/home.html>
- Sparling, D., & LeGrow, S. (2015). *The changing face of food manufacturing in Canada: An analysis of plant closings, openings and investment*. Ivey Business School and the Canadian Agri-food Policy Institute. Retrieved from <http://www.ivey.uwo.ca/cmsmedia/861864/sparling-legrow-changing-face-of-food-manufacturing-in-canada.pdf>
- Stahlbrand, L. (2017). Can values-based food chains advance local and sustainable food systems? Evidence from case studies of university procurement in Canada and the UK. *International Journal of Sociology of Agriculture and Food*, 24 (1)77-95. .
- Stahlbrand, L. (2016a). Short food supply chains and “infrastructure of the middle”: The role of university food procurement in sustainability transition. Presented at the Social and technological transformation of farming systems: Diverging and converging pathways, Proceedings of the 12<sup>th</sup> European International Farming Systems Association symposium. Retrieved from <http://www.harper-adams.ac.uk/events/ifsa-conference/papers/5/5.9%20Author.pdf>
- Stahlbrand, L. (2016b). A typology of “infrastructure of the middle” in university food procurement in England and Canada: Elaborating the “to” in “farm to cafeteria.” *Raizes: Revista de Ciências Sociais E Economicas*, 36(2) 32-44.
- U of T Food and Beverage Services. (2018). Food & beverage Services - Our mission. University of Toronto. Retrieved from <http://www.food-beverage.utoronto.ca/>
- University of Toronto. (2006, January). Request for proposal: Management of food services for the St. George campus of the University of Toronto at Toronto, Ontario.

## Interviews

- Andres, L. (2016, August). Interview with Lawrence Andres.
- Clandfield, D. (2015, May). Interview with David Clandfield.
- Crawford, S. (2013, August). Interview with Steve Crawford.
- De Groot, M. (2013, June) Interview with Martin De Groot.

Macdonald, A. (2015, May). Interview with Anne Macdonald.

Macdonald A. (2016, August). Interview with Anne Macdonald.

Mills, D. (2016, August). Interview with Don Mills.

Lokker, J. (2015, July). Interview with Jaco Lokker.

Lokker, J. (2016, August). Interview with Jaco Lokker.

MacRae, R. (2016, July). Interview with Rod MacRae.

Schreiner, M. (2016, July). Interview with Mike Schreiner.