A SCAN ON BEST PRACTISES FOR SCALING UP COMMUNITY FOOD PROJECTS: THE ROLE OF PROJECT MANAGERS, CITY PLANNERS AND MUNICIPAL GOVERNMENT

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ABSTRACT

Community food projects (CFPs) form an integral part of the growing local food movement within North American cities. These grassroots initiatives incorporate activities related to urban agriculture and local food distribution, while promoting community engagement, food-based education, and training opportunities for urban residents. CFPs also play vital role in building local food economies, community capacity, and improving food security and community health. Given these benefits, there is a need to foster the expansion of the community food sector in cities. As such, this paper explores the best practices for expanding small-scale community food projects through a scan on North American CFPs and municipal food policy strategies. Practices at both the project-level and city-level are examined, including strategies for CFPs to attain operational sustainability and municipal policy that nurtures the growth of urban agriculture and local food activities. The role of project managers, urban planners, and local government are highlighted.

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My father taught me that the fate of a seed can be predicted by the health of the soil where it takes root. This is true of summer crops. It can be true, in another sense, of people. We all need a healthy environment and a community that lets us fulfill our potential.

- Will Allen, The Good Food Revolution (p.63)

As an integral part of the emerging local food movement in cities, small-scale community food projects are becoming an increasingly prominent feature across North American urban landscapes. Although lacking any formal definition in the scholarly literature, community food projects (CFPs) are commonly regarded as grassroots, pilot initiatives, predominately situated in urban areas. While they incorporate any number of agricultural and local food-related activities within its operation, most often they involve growing, production and distribution of fresh produce and other craft food products. Typical examples of CFPs are community gardens, urban farms and farmers' markets (Mount et al., 2013).

Problems associated with the dominant food system have incited numerous political debates about issues such as climate change, food miles, food safety, and food scares. In response to this growing public concern, CFPs are lauded as an approach that can alleviate the associated social, economic and environmental stresses (Eriksen, 2013). The community food sector, comprising numerous CFPs, as well as larger scale food-based non-profits or social enterprises, also known as community food enterprises (CFEs), is intensely local and community-based. At the core of all community food initiatives lies the practicing of principles of social justice and community engagement. These projects are focused on tackling social issues related to food security, food safety and quality, and health inequalities. As such, they are often based within low-income and underserved communities as a means to support individuals and families who derive the greatest benefit from these services (Meenar & Hoover, 2012).

In light of the noted benefits of CFPs in promoting community health and thriving local food economies, there is a need to facilitate the expansion of the community food sector within cities. As CFPs tend to be experimental and informal in nature, and tailored to unique community contexts, their viability is often uncertain due to insufficient financial and social

support. There are, however, opportunities for individual CFPs to scale-up and to attain greater operational sustainability, by modifying their management practices. Additionally, there are external practices at the municipal level, including city policies, plans, and programs, which can foster growth in urban agriculture (UA) and the community food sector. Many CFPs in North American cities have found success in expanding their activities and achieving a degree of sustainability. It is from these flourishing projects that lessons of best practice can be learned; essential instructions for other CFPs starting up.

Through a web-based scan, this paper explores the question: What are the best practices for expanding small-scale community food projects, at both the level of project management and city-level policy? Both scales are considered in this scan because the success of CFP operations depends on practical project management strategies, as well as the support and validation from a municipal environment that is attentive to community food issues. In this scan, numerous CFPs of various sizes across North American cities are examined, from gardening projects situated in vacant lots to established CFEs that maintain space for greenhouses and training programs. This scan also explores various municipal policies that cities employ to support the expansion of UA and CFPs. Some of the highlighted cities include Toronto, Vancouver, San Francisco, Portland, New York, Chicago and Philadelphia. In response to the proposed research question, seven criteria of best practices have been established, five of which are at the project-level, two at the city-level. The criteria include: funding, volunteers, income-generation, community engagement, education, access to land, and UA-friendly municipal policy. These are presented in a format that emphasize barriers and opportunities for scaling up. Examples of successful project practices are highlighted throughout each section.

In order to facilitate a better understanding of the issues, this document is organized accordingly: first, a literature review to further explain concepts introduced above, such as local food, urban agriculture, community food projects and community food enterprises. This section also introduces the role of the planning profession in planning community food systems. The scan on best practices is then presented, followed by a summary table of the seven criteria and seven recommendations for small-scale CFPs pursing project expansion. Finally, limitations of this paper and directions for future research are discussed. Two appendices are included:

Appendix A presents three case studies of CFP examples that are assessed using the criteria; Appendix B contains the list of all the projects and social enterprises that were considered in this scan.

LITERATURE REVIEW

Local Food and Local Food Initiatives

The local food system is conceived as an alternative practice to the conventional, dominant food system: a globalized, industrialized market controlled by multinational corporations that are driven by profit maximization and efficiency, and are reliant on food imports and exports transported over enormous distances (Campbell, 2004). There has been growing public concern in North America over economic, environmental and health problems associated with the conventional system. This has led some consumers to critically analyse the source and content of their food, its nutritional quality and taste, as well as the environmental and social impacts of mass production (Eriksen, 2013; Mount, 2012). Some prominent issues include:

- Damage to local economies due to a loss of local control of supply and delivery structures and local decision-making power (Abate, 2008; Anderson & Cook, 2000).
- Loss of farmland and greenspace for agricultural production (Abate, 2008; APA, 2007).
- Energy waste and pollution produced by industrialized agricultural practices and transport (APA, 2007).
- An absence of healthful food destinations within neighbourhoods (known as 'food deserts') (Raja, Born, & Russell, 2008).
- An abundance of processed, high-calorie foods that exacerbate diet-related problems such as heart disease, obesity, and diabetes (Pothukuchi, 2009).

Interest in local food for both the public and in scholarly discussion has grown intensely in recent years, as local food has been regarded as a potential solution to the negative externalities associated with the global food system. Consumer demand for food grown and produced locally has been increasing, especially for urban residents. Interest in the development of local food economies within urban areas has also risen, evident by the growth in the number of local urban food initiatives, such as farmers' markets and community gardening (Abate, 2008).

There is no unanimously accepted definition of local food, as academic debate persists over the usage of the term 'local' as an ambiguous term. For example, local food can also be understood from three different domains of proximity: geographical (spatial locality), relational (direct relations between food system actors), and values of proximity that individuals ascribe to local food (e.g., traceability, authentic, freshness, quality). Food systems actors, from producers, retailers and consumers, will have different perspectives on how local food applies to them. This lack of clarity, and the subsequent practical consequences of such ambiguity may have impeding effects on further development of the local food system, including the reconnection of producers to consumers, a direct exchange relationship, and shared goals and values that underlie the system, most often related to sustainability and social justice (Mount, 2012).

Despite academic uncertainties, local food initiatives are flourishing as a sector of activity in cities. Diverse 'alternative' food projects, food-based non-profit, for-profit, and social enterprises have emerged, many of them centred on smaller scale, local growers and producers that generate support from, and engagement with, local residents. This sector, embodying the local food movement, is dedicated to the expansion of the alternative food system by addressing concerns of mainstream food practices, promoting regional and local economies, and community economic development. Additionally, this sector is committed to focusing on issues such as sustainable growing practices, maintaining local food traditions, food safety, health, nutrition, food security and access to food, as well as the creation of green and leisure spaces (Abate, 2008; Meenar & Hoover, 2012; Mount et al., 2013).

Urban Agriculture

Urban agriculture (UA) is considered an integral part of the local food movement. The bulk of local food initiatives cropping up around cities are in some way connected to UA; many local food projects engage in their own food growing, distributing or selling, or forming partnerships with other local food projects involved in UA. Thus, some discussion of UA is pertinent to the understanding of the local food movement.

UA refers not only to the growing of food in urban areas, such as backyard gardening, community gardening and urban farming, but also includes other agricultural activities: animal husbandry (e.g., keeping of backyard chickens), beekeeping, aquaculture, arboriculture, horticulture, edible landscapes, rooftop gardening, vertical growing, and composting (Mendes et al., 2008). UA can comprise of any small or mid-sized agricultural operation in a city or on the urban fringe that includes the production, distribution and marketing of food. However, it can also include projects that are pursued for home consumption or for educational purposes (Hagey, Rice, & Flournoy, 2012). As such, UA is not solely an economic activity, as it also responds to a variety of recreational, social, environmental and health needs (Thibert, 2012).

There are numerous reasons for promoting UA in cities. At an individual level, participation in UA projects has the potential to improve physical and mental health and wellbeing, as well as introduce cost savings to households (Bellows, Brown, & Smit, 2004). However, even more significant, are the more broad positive contributions to families, surrounding neighbourhoods, and local economies, by UA projects that are created to address the needs of the local community. These contributions to community health include better access to healthy, affordable food, improved food security, community engagement and inclusiveness, education and skill-building, improved ecology, and the revitalization of communities through community economic development and improved economic health (Hagey et al., 2012; Urban Agriculture Working Group, 2013).

Typically, UA and local food initiatives are considered to be part of a grassroots movement; a bottom-up approach to decision-making whose participants advocate for relocalization of the food system to address concerns about local food security and access to healthy food. This grassroots movement, notably, gives power to women, minorities, and other disadvantaged populations (Meenar & Hoover, 2012), and supports a food system that is "decentralized, environmentally-sound...supportive of collective rather than individual needs, [and] effective in assuring equitable food access" (Anderson & Cook, 1999).

Community Food Projects and Community Food Security

There is a clear connection between the values and goals of the local food movement and UA grassroots initiatives; fundamentally, grassroots UA and local food are embraced by community food projects (CFPs). Some CFPs are stand-alone small-scale initiatives, others are part of larger projects or ventures. They are often based on privately owned land or public property, and usually, especially with small-scale initiatives, have precarious security of land tenure. Examples, beyond community gardening, include: small urban farms or large market gardens, community markets, community supported agriculture, food box programs, community kitchens, and school gardens (Crabtree, Morgan, & Sonnino, 2012). What is predominant about CFPs is that they are carried out within a given community, managed by community residents, and are for the benefit of the local community. Significantly, one of the most important attributes attached to CFPs, are that they work within, or are created by, lowincome communities (McGlone et al., 1999).

There is potential for CFPs to create greater access to healthy, fresh foods, or in other words, improve food security; this is especially important in low-income areas where residents have been traditionally underserved by limited access to nutritious food options (Meenar & Hoover, 2012). Where once the focus of food security in academic literature examined individuals and households and their ability to reliably access affordable and healthy foods, there has been a shift in focus toward an idea known as 'community food security' (CFS). This is a relatively new concept, with no universally accepted definition as of yet, but the emerging CFS movement and related literature have captured some common elements: it is generally agreed that CFS is "a situation in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community selfreliance and social justice" (Hamm & Bellows, 2003). In the past, food security initiatives focused on alleviating hunger as a short-term response to low-income population needs, with projects such as charitable food programs, food banks, and soup kitchens (Campbell, 2004). In contrast, the CFS approach, and what community food projects now embody, is an integrated approach to tackle food security issues that do not just reflect immediate need, but are a product of wider social issues and policies, such as income inequality. Community food

initiatives are intended to build capacity at the local level, create a democratic, communityresponsive food system with fair wages and job security, promote educational and training opportunities, as well as encourage participation from diverse groups of people within the community (Hamm & Bellows, 2003).

CFPs, thus, are about more than just improving community food security. Participants and practitioners of CFPs become involved for a variety of reasons, from leisure and recreation, social or cultural exchange, to gaining skills and workforce training, or simply to engage in neighbourhood improvement and urban greening activities (Smith, Greene & Silbernagel, 2013). CFPs can also be viewed as "an outlet for transforming the city—through the reclaiming and reshaping of abandoned or underused urban spaces" (Thibert, 2012). Perhaps most importantly, they provide opportunity for education about food and the food system, and the opportunity for participants to take ownership of the projects they become involved in (Meenar & Hoover, 2012; Thibert, 2012). CFPs are, therefore, about community capacity, community development, and local engagement.

Scaling Up: Community Food Enterprises

Despite the growth of, and increasing attention to, CFPs, the alternative, local food sector, remains small-scale in comparison to the conventional food system. Given the wide range of social and environmental objectives delivered by the community food sector, as well as the principles of social justice it upholds, there is a need to see this sector scale-up in order to have a greater transformational impact within cities (Meenar & Hoover, 2012).

Unfortunately, CFPs have to contend with numerous barriers to scaling up their operations, as they are working within a system of infrastructure that is in place to support larger, well-established, and industrialized food enterprises. One of the most critical concerns for CFPs is economic viability (Mount et al., 2013). As CFPs are generally supported through public or private funding, it can be difficult to find the capital to expand their programs or activities. Due to this limitation, CFPs are becoming increasingly interested in taking an enterprising approach to generating more of their own income in order to achieve greater financial sustainability.

Many CFPs are turning to a non-profit or social enterprise model of organization, known in the community food sector as a 'community food enterprise' (CFE). Like all community food initiatives, CFEs are run by the community and for the community benefit. They are usually, though not necessarily, medium-sized operations, that expanded and became a non-profit organization after several years of growth. As such, examples of CFEs also include aspects of smaller scale CFPs, such as growing and distributing food, but they also tend to be involved in a variety of activities, such as processing, marketing, distribution, wholesaling, retailing, and food service. Examples include organic and urban farms, farmers' markets, community orchards, local flour mills, community bakeries, wholefood distributers, local food hubs, other community-owned shops, and food co-operatives (Crabtree et al., 2012).

A profit is pursued in the CFE model, but for the objective of reinvesting its generated revenue into the operation of the enterprise, or towards other practices that serve a social or environmental benefit for the community (Sustain, 2013). There are several fundamental principles practiced by CFEs that highlight the importance of such enterprises both within the local food movement and as a valuable model for scaling up community food practice. These principles, outlined by Crabtree et al. (2012), include an emphasis on:

- Market creation or innovation, to serve customer bases that are unattractive to the private sector; typically low-income or marginalized populations.
- Localism, by operating within a local community for that community.
- Community engagement, strengthening community capacity, and creating local opportunities and livelihoods by involving marginalized groups and partnering with likeorganisations.
- Generating multiple outcomes to achieve benefits that are not just economic, but social and environmental (a triple bottom-line).

Overall, scaling up a CFP's operations involves establishing more income-generating activities that also provide a valuable service to the local community; from food distribution, to food-based education and training, to social and cultural events based around food knowledge and skills. This is a social enterprise model that some CFPs are already performing successfully, while others are only just setting out. Although large-scale expansion will not be possible for all projects, it is a fundamental goal to strive for, as this will contribute to the success and growth of the community food sector.

Planning a Community Food System: The Role of the Planning Profession

The planning profession is involved in the shaping of the physical and social environments of urban and rural human settlements. Historically, planners have been occupied with the traditional areas of planning: land use, growth management, urban design, housing, transportation systems, economic development, the environment, and historical preservation (Pothukuchi & Kaufman, 2000). Planners are also concerned with the equitable delivery of basic needs of communities to help achieve community goals, through designing social and community services, helping to create economic capacity in local communities, forging connections between diverse city systems and sectors (Canadian Institute of Planners (CIP), 2014; Pothukuchi & Kaufman, 1999). In modern rhetoric, planners have become centrally concerned with "securing the physical, economic and social efficiency, health and well-being of urban and rural communities" (CIP, 2014), or, in other words, creating healthy, safe, and sustainable places to live.

However, what has been markedly absent as a focus of the planning profession is food; food systems issues have been "virtually ignored by planners" (Pothukuchi & Kaufman, 1999; APA, 2007). Yet persistent neglect of the food system would be imprudent as "food issues are embedded in the lives of community residents and the health of the community" (Pothukuchi & Kaufman, 2000). Food is a basic need, one of the many complex factors that influence individual health, and is connected to a range of community sectors and goals, such as economic development, public health, and community food security (Pothukuchi, 2009). As such the food system needs to be incorporated into a planner's area of concern in order for planners to continue to efficiently shape healthy, safe environments.

Planners have a role to play in developing sustainable, community food environments because the food system is inherently affected by planning actions. Clearly, the traditional areas of planning significantly affect people's ability to access food. For example:

- Land use planning: growth management strategies for farmland preservation retains land dedicated to food production; zoning codes regulate location of food retail within a community (APA, 2007; Raja et al., 2008).
- Transportation planning: planners design transit routes that influence access to food retail outlets, farmers' markets, and other affordable healthy food destinations (especially important for residents who do not own vehicles) (Pothukuchi & Kaufman, 2000).
- Environmental planning: the creation of parks and greenspaces facilitate UA activities, such as community gardens; planners may provide guidance to farmers to avoid adverse impacts of fertilizers and pesticides on bodies of water (APA, 2007; Raja et al., 2008).
- Economic development: planners may support the revitalization of main streets with small, independent grocery stores, or devise strategies to attract food processing plants to industrial zones (APA, 2007). Also, local food enterprises, such CSAs, merit the attention of planners because these strengthen local food economies and bring healthy food to urban consumers (Raja et al., 2008).
- Housing: when affordable housing is in short supply, economically disadvantaged households may become at greater risk for food insecurity, and become more dependent on emergency sources of food (Pothukuchi & Kaufman, 2000).

Evidently, food issues are the purview of numerous disciplines and municipal sectors, and are affected by many city systems. A planner's professional expertise, and community-oriented and interdisciplinary approach to tackling community issues means that their skills can be applied to strengthen community food systems (Pothukuchi & Kaufman, 2000).

Since the late 1990s, there has been an emerging planning interest in community and local food systems. This growing attention has been augmented by, and in turn has supported, the broader social movements of local food and community food security (Pothukuchi & Kaufman, 2000).¹ There has also been an increased institutional support for local food planning

¹ For example, there has also been a concurrent growing interest in food issues in the field of public health; both planning and public health have been increasingly studying the relationship between the built environment and high obesity rates in North American cities, especially in impoverished communities (Mikkelsen, Chehimi, & Cohen, 2007; Pothukuchi, 2009).

as efforts are made into resolving issues related to climate change, transportation, and smart growth – planners are making the connections between these issues and the food system (Pothukuchi, 2009).²

By recognizing the prominent role of the food system within their domain, there are numerous ways that planners can be involved in influencing and shaping community food systems, largely through their work in public policy, program and plan development. There are standard tools of planning practice that can be applied to food systems issues, some nontraditional tools, as well as the application of a particular skill set.

For example, planners are skilled coordinators, negotiators and facilitators in the land development process. Given the multi-disciplinary and cross-sector nature of food issues, planners can extend this skill to coordinate food-based projects between relevant agencies and departments (such as, public health, public works, and engineering), as well as between the numerous stakeholders of the food system (producers, processors, consumers, etc.). In this role, for example, planners can facilitate the creation of a food policy council, an emerging strategy across North American cities to bring food policy to the attention of government and the public (Campbell, 2004; Raja et al., 2008).³

A traditional tool of planning practice that can be applied to food planning is zoning reform, or other regulatory policy reform. This strategy can be used to remove barriers that deter the development of the local food system and CFP expansion; for example, revising zoning or regulations that may prohibit the establishment of produce stands, community gardens or entrepreneurial urban agriculture. Or, in contrast, planners can discourage

² In 2005, the APA National Planning Conference in San Francisco held special sessions on food planning topics for the first time in APA's history, and a white paper on food planning was prepared and presented at the 2006 conference (APA, 2007). This motivated the creation of the APA *Policy Guide on Community and Regional Food Planning* (2007), and the subsequent advisory report by Raja et al. (2008); both call attention to the how the food system impacts the economic, environmental, and physical health of communities.

³ A food policy council is a food system stakeholder group that holds an advisory capacity to local government on matters related to food policy. Although they typically do not have the authority to pass laws, they are effective advocates and perform a variety of tasks, such as: generating information on a community's food system, raising awareness of food issues to local government and the public, advising on municipal comprehensive plans, developing food-related programs and guidelines, and organising regional or national conferences (Raja et al., 2008).

unhealthy practices by creating restrictive policies, such as limiting the density of fast food restaurants in certain areas (Campbell, 2004; Pothukuchi & Kaufman, 2000; Raja et al., 2008).

In terms of non-traditional planning approaches, planners can be involved in the creation of standalone regional food plans that focus on community food security,⁴ or in supporting the integration of food system elements into regional economic development plans or comprehensive land use plans (APA, 2007; Pothukuchi & Kaufman, 2000; Raja et al., 2008). Planners can also facilitate the development of UA projects on school, park, community centre sites or other public land; prepare neighbourhood plans that recognize community gardens, farmer's markets, and other UA activities as valuable land uses; support transit programs or develop area plans that improve connections between neighbourhoods and healthy food destinations; and assist in the creation of programs that enhance food-related economic opportunities for low-income residents (APA, 2007; Raja et al., 2008).

Several of these aforementioned planning approaches are highlighted in the following section, specifically, as best practices at the city-level; many are municipal policy tools that cities employ to promote UA and community food, typically in consultation with urban planners.

⁴ For example, see A Healthy Community Food System Plan for Waterloo Region (2007), http://chd.region.waterloo.on.ca/en/researchResourcesPublications/resources/FoodSystem_Plan.pdf

SCAN ON BEST PRACTICES FOR SCALING UP COMMUNITY FOOD PROJECTS

Method

Within the academic literature on CFPs, research has generally focused on the importance of and benefits gained from local food projects, as well as their effectiveness at bringing positive social outcomes to communities.¹ Research specifically on scaling up CFPs has explored practices at the municipal level, such as zoning policies. What is lacking are studies examining the operation of activities and approaches to programming that are practiced by CFPs during project establishment and expansion. As such the scan on best practices for CFPs across North America was largely conducted as a review of secondary literature. While academic attention to this topic is limited, when relevant, it informed the development of the framework.

The cities included in this scan were: Montreal, Toronto, Calgary, Vancouver, Seattle, San Francisco, Los Angeles, Portland, Boston, New York, Philadelphia, Washington D.C., Detroit, and Chicago.² These cities were selected because they are major urban centers with large populations and progressive policies related to healthy urban development and civic engagement. All projects had to be connected to serving a community benefit in some way; projects were excluded if they focused more on private enterprise. Some projects' information was also supplemented with material from blogs or other media-based articles. At the end of this process, data from 27 CFPs were included, some from cities not originally searched for, but discovered because of their direct relevance. The information gathered on these CFPs' operations were used to inform the development of the criteria for best practices.

Results and Discussion

This sections presents a detailed discussion of the seven criteria of best practices for scaling up CFPs; the first five practices are managed at the project-level, while the final two

¹ For example, see Allen et al., 2008; Kirkpatrick & Tarasuk, 2009; Loopstra & Tarasuk, 2013; Macias, 2008; McCormack, 2010; Smit, Nasr, & Ratta, 2001; Thibert, 2012; Wakefield et al., 2007

² Various search terms were employed based on variations of "community" and "food project". Examples of some interchangeable terms used were: "grassroots" or "community-based" and "urban agriculture", "local food" or "food growing project". "Small-scale" was an additional term included following the initial search, as was "food-based social enterprise".

categories are controlled at the city-level. The criteria are presented in the following order: 1) Funding; 2) Volunteers; 3) Income-generation: (a) Methods of Food Distribution; (b) Valueadded Production; 4) Community Engagement; 5) Education; 6) Access to Land; 7) Urban Agriculture-friendly Municipal Policy.

(1) Funding

There are a number of costs associated with starting, maintaining and expanding a CFP. An important concern for project practitioners is thinking about how these expenses will be paid for. Accessing funds through grants, raising money through donations, or forming partnerships with other organizations for cost-sharing purposes are some of the key ways community food projects are able to get started and/or scale-up their activities.

Start-up costs for a growing project can include land use fees, application fees, soil testing, water and utilities set-up, construction of garden beds, seeds and transplants, tools and machinery, materials for infrastructure and labour fees for construction, etc. There are also operating costs which will include utility use fees, soil conditioners, infrastructure maintenance, insurance, and various administration costs. There could also be expenses for communication and marketing and possibly staff salaries (Goodall, 2010; Burkholder et al., 2007). Expenses will vary across projects according to their site and size, scale of activities, volunteer time, and the amount and type of free resources and assistance available (e.g. free construction labour, donated goods, reusable materials, etc.). An estimation for starting a new growing project, such as a community garden, can cost on average \$7,000 to \$10,000 (Goodall, 2010). The expansion of an existing project will likely include many of these base costs, but other expenses would have to be considered. For instance, the price of purchasing or leasing new land and the corresponding maintenance fees, or the renting of a new space, such as a kitchen, or the construction of new infrastructure, like a greenhouse.

As with all grassroots organizations and social enterprises, the need for external funding is ubiquitous for community food projects (Sustain, 2013). There are three common approaches to securing funds and the resources needed for beginning or expanding a community food project:

Applying to Government Grant Programs or Funding Agencies

- Intervale Green Rooftop Farm is a community growing project in the Bronx neighbourhood of New York; located on the rooftop of an affordable housing development, it has relied on grant funding to expand its growing operation. The project began with 550, 4 inch deep containers that held poor quality soil and produced little yield. In 2010, it received funding from its community partner WHEDco, who helped them secure a \$40,000 grant from the United Way. With this money, larger 8 inch containers and higher quality soil were purchased, helping the site to become more productive. The project now offers plots to tenants in the building and grows over 1,000 lbs of harvest for residents and the local community (Intervale Green, 2014; loby.org, 2012).
- An example of a project that has been quite successful in applying for and receiving numerous grants from the government and funding agencies, is SOLEfood Street Farms in Vancouver, B.C. External funding has undoubtedly allowed it to flourish and become what is now a well-established, community food enterprise. SOLEfood works at converting vacant urban land into productive farms, using raised beds and moveable planters to grow artisanal varieties of fruits and vegetables. It has large expenses to cover, maintaining now five different urban farm sites. The infrastructure on these sites, including rows upon rows of planter boxes filled with tonnes of soil, is tremendously expensive, costing \$80,000 to \$90,000 to set up a half-acre lot before even planting. Its products are not the cheapest on the market, but even through food sales not all of the expenses of the farms can be recovered (Smith, 2012). As such, SOLEfood seeks numerous grants to help fund its operations and has "managed to gather an impressive amount of start-up cash in a funding climate friendly to local food initiatives" (Kimmett, 2012). In 2009, Vancouver City Council approved a \$100,000 grant to SOLEfood, \$50,000 of that coming from a Greenest Neighbourhood Grants allocation. In 2010, it received \$10,000 from Vancity, and was awarded \$15,000 from Nature's Path Organic Foods. It has received other grants from Vancity in 2011, including a community investment grant and an enviroFund grant. Since 2009, it has received about \$700,000 in direct grants, and more in in-kind contributions. It is

also owned by a charity, Cultivate Canada, which raises finances through private donations (Smith, 2012).

A downside of applying for grants is that the process of grant writing can require considerable time and effort, especially for small-scale projects with little staff or volunteer capacity. Also, the competition for grants has intensified due to government financial cutbacks and an increasing number of organizations seeking funding (Sustain, 2013). Other methods of raising funds are thus needed.

Seeking Charitable Donations

Many of the reviewed projects seek donations in conjunction with grant applications. Some projects have obtained corporate sponsorship or larger donations from the private sector, while almost all ask for individual contributions from members of the community. This is achieved through a donation box at the project site, setting up an online donation application on the project website, by organizing fundraising campaigns, or writing to local businesses or charities to ask for financial support. This traditional fundraising effort may supplement more formal funding but can be time-consuming and contributes relatively little towards raising the necessary funds (McGlone et al., 1999).

Forming Community Partnerships

To acquire financial assistance, CFPs and enterprises also look to create partnerships with other community organizations, local councils, government agencies or businesses. Networking with similar projects, and building links with different organizations, is also beneficial for a project's sustainability, not just for financial help. They can receive other in-kind support from partners, such as encouragement, learning informally from one another, advice on operating procedures, and skills training. They may also partner on projects to exploit funding opportunities (McGlone et al., 1999). Since many grants are only applicable to non-profits or registered charities and have specific guidelines for what projects or groups they will fund, it may be beneficial for a small-scale community project to consider partnering with a non-profit or charity group.

These three approaches to funding have assisted the reviewed CFPs to mobilize the necessary funds for various activities and improvements; from purchasing new tools or

containers, installing a watering system or building a greenhouse, to hiring a full-time coordinator, or developing a new plot of land. Projects need to employ a mix of methods for raising funds in order to develop a sustainable way of paying for ongoing costs. Project sustainability depends on accessing a source of secure funds in order to maintain consistent cash flow; a significant obstacle for the majority of CFPs (Sustain, 2005). Grants are available only through a competitive application process and "are generally provided as one-off, timelimited funding tied to the delivery of specific activities and outcomes." (Goodall, 2010). They can help with start-up costs, but finding an ongoing source of funding is much more difficult. In order to qualify for set-up funding for a second time, projects are often compelled to change their direction or reinvent themselves (McGlone et al., 1999). Also, many funding sources available to CFPs are restrictive with requirements that necessitate time-consuming, labourintensive activities to meet the funder's objectives (Sustain, 2013). Consequently, "much precious project time and effort is concentrated on the activities of acquiring funding, monitoring funding and showing how funding has been spent." (Sustain, 2005). Not only is this a distraction for the project managers from pursuing their own long-term needs, grant funding may also delay efforts to build a viable business model.

Given these limitations, all projects, once they have the capacity, should consider raising funds through self-finance; or in other words, earning an income through project activities to reinvest into operations. Criteria (3) presents details on income earning practices as an important opportunity for small-scale projects to scale-up and strive for project sustainability.

(2) Volunteers

The majority of people involved in CFPs are volunteers. Even in projects where jobs have been created, volunteers remain as a vital part of the workforce (Local Action on Food, 2012). It is from the efforts of committed volunteers that new projects just starting out are able to break ground, and existing projects are able to expand. Project managers themselves, in the beginning stages of the project, undertake a lot of the work in their free time. Volunteers are necessary for small-scale projects. They are needed as extra hands to help with the project duties, given the limited number of paid staff members. Start-up funding or new grant money is often dedicated to the construction of new infrastructure or the purchase of new space.

Increasing the payroll (if there are any paid employees) is therefore a low priority after accessing new funds. Typically, since funding is one-off and time-sensitive, it is not appropriate to allocate temporary funds to an ongoing cost like an employee's salary, especially for smallscale projects. Some CFPs do receive grant money to pay for a new administrative role, but they often find it difficult to maintain a paid position once the funding has ceased (Local Action on Food, 2012).

As such, most of the reviewed CFPs and social enterprises communicated clearly their heavy reliance on volunteers for day-to-day operations. Volunteers take on a number of different roles. Many are involved in the food growing activities, including planting, harvesting, and maintaining the growing sites. Volunteers also help with food sales, construction and maintenance, and various administrative duties. Volunteers are most often members of the local community, those who are directly benefiting from the food project and its services, and thus have a stake in the success of the project. Since most CFPs have such a large number of volunteers, they must create a volunteer coordinator position, either from a staff member or from another volunteer themselves.

 Cadillac Urban Gardens, a small CFP in Detroit, opened in 2012 and was set up entirely through the efforts of volunteers. In a partnership with several businesses, including General Motors, company workers, families, and residents of the area worked together to arrange 250 metal shipping crates repurposed into raised garden beds on a vacant lot. More than 1,400 plants are now maintained by volunteers, in which youth groups contributed almost 6,000 hours to the garden in 2013 (Horton, 2012; South Detroit Environmental Vision, 2013).

Well-established larger scale CFEs also still depend on volunteers for everyday operations:

 Earthwise Society in Delta, B.C., a non-profit that began as a compost demonstration garden in the 1990s, acknowledges the integral role of their volunteers in planting, maintaining, and operating their community and demonstration gardens and teaching farm skills. They have a Garden Crew and Farm Hands team to maintain the growing sites, a Fix-Its Team who perform maintenance duties, and they rely solely on volunteers to operate the on-site farm store. They also have to recruit extra help during their annual spring plant sale, and are

in need of ongoing volunteers to be garden guides, workshop presenters, event planners, fundraisers, and assist with outreach and office support (Earthwise Society, 2014c).

Reliance on volunteer time can be a barrier to the expansion and sustainability of CFPs as a project will always be having to entice new volunteers, who are committed and reliable, while not over-exerting existing ones. Being able to recruit more volunteers, giving them meaningful roles where they are able to learn something from their experience, is an opportunity that CFPS should capitalize on. Showing an appreciation of their efforts is also important, to compensate them for their hard work. For example, a common practice is to provide volunteers, in exchange for their time, a share of fresh produce. This is sometimes done informally, or formalized through a work-share program.

The food projects and enterprises included in the scan began recruiting volunteers through a number of means. Word-of-mouth, community flyers or announcements on the project website were some of the basic ways to raise awareness of the project and solicit help from the community. Another popular and effective practice is to hold a 'Volunteer Day', often on a weekend, where the entire community, with a focus on families, is invited to come to the site, help out and get their hands dirty. Food is often provided, as are free workshops. Many of the projects also seemed to elicit extra help by presenting opportunities explicitly to youth to gain skills and experience.

For scaling up and reaching a greater level of project sustainability, CFPs should aspire to be able to create paid jobs for the people involved (Local Action on Food, 2012). Unfortunately, many of these projects do not regularly have the capacity to hire new employees. However, many do run formal training programs for long-term volunteers, or other interested community members, in apprenticeship-style programs. These programs afford volunteers an opportunity to formally learn skills that could be used to seek paid employment elsewhere. The capacity of CFPs to hire employees, and rely less on volunteers, will depend on the ability to become more financially self-sustaining, particularly by diversifying income-generating activities. But even large CFEs still, and likely always will, benefit from the efforts of volunteers.

(3) Income-generation

Activities that facilitate income-generation for CFPs have been categorized into two subcriteria: a) food distribution and b) value-added production. Both of these practices incorporate a number of supplementary revenue-earning project activities. For example, farmer's markets and community supported agriculture are contained within the sub-criterion of food distribution practices, while community kitchens and enterprise incubation services are described as value-added production activities.

a) Food Distribution

Making fresh food available to the local community is a fundamental component of CFPs. Distributing and/or selling grown or produced food to local residents, especially in underserviced neighbourhoods, promotes access to and availability of fresh, healthy produce and other food products. Food distribution and sales has become a central component of grassroots food projects because this activity strengthens community food security, fosters greater community support, while simultaneously supports the project in generating own-source income to maintain its operations.

Newly established, small-scale projects many only initially grow enough food to supply the project's coordinators and volunteers with food for themselves and their families. Though with practice, and by involving individuals with gardening experience, the project can achieve higher yields, even over one growing season. Growing and harvesting extra food introduces a primary opportunity for small-scale projects to scale-up, as they are able to engage in food distribution and selling activities, and thus, work towards greater financial sustainability. All of the reviewed projects have engaged in food distribution and sales of some kind.

A challenge for small-scale projects is in deciding which methods of distribution should be established in order to make food accessible to the wider community, while balancing the project's budget as much as possible. Choosing a food distribution method will depend on the project's site or available space for production of the food to be distributed, the staff and volunteer capacity of the project, as well as city policies and zoning by-laws regarding the sale of food in certain land use districts (discussed in the city-level best practices section). There is also the challenge of deciding on the appropriate pricing. Although donating free food has its

place and can greatly benefit those who receive this service, selling food is a key way for projects to be able to self-finance their operations and rely less on external funding. A balance must be struck between donating to those in need and selling at affordable rates. Keeping the cost down has proven to be difficult for some CFPs, but by diversifying food selling activities there is the potential to earn income from a greater variety of sources and reach a wider public. Achieving some degree of financial sustainability means that established CFEs are able to focus less on their budget, and more on other societal benefits they can cultivate through provision of healthy foods.

Deciding on the appropriate method is a minor barrier. Ultimately, food distribution is an important practice that all food growing projects should transition into. The major food distribution methods employed by the reviewed CFPs and enterprises are: Donations, Farmer's Markets/Market Stands, Community Supported Agriculture, and Wholesale.

Donations

Allocating a portion of a CFP's food toward free distribution to low-income residents and families, or to social service organizations, is an exercise that allows projects and social enterprises to uphold their social mandates related to CFS and community health. Many of the reviewed food projects and non-profit enterprises engaged in charitable donations of some kind, whether delivering vegetables to residents in low-income housing, or supplying social agencies and food banks with free produce.

 A strong example of charitable food distribution comes from Earthworks Urban Farm in Detroit, a food growing program of the Capuchin Soup Kitchen. Fruits and vegetables grown at the large garden site, as well as honey and jams, are sold at their community market located on site. But primarily the produce from the farm, and recently from a small greenhouse, are used to prepare fresh, healthy meals for individuals who rely on the soup kitchen's free services. The income generated from food sales are what helps sustain the soup kitchen and operations of the urban farm (Capuchin Soup Kitchen, 2011).

Free distribution must also coincide with the selling of food in order to operate sustainably, while keeping prices at a level appropriate for the local community the project serves.

Unfortunately, growing food at a small-scale, in competition with conventional, large-scale farming, means that maintaining low cost products can be a challenge. Several of the reviewed projects have managed to devise affordable pricing schemes:

- SOLEfood in Vancouver, B.C., donates about 10% of the produce grown on their five urban farm sites to several agencies in the downtown eastside, mainly to service kitchens and neighbourhood houses. Recently, in 2012, they also launched a voucher program, in which monetary donations from the public are divided into \$10 vouchers and then distributed at the Downtown Eastside Neighbourhood House drop-in service. These vouchers can be used at any of the farmers' markets they vend at (Kimmett, 2012).
- City Slicker Farms incorporate an innovative pricing scheme at their weekly community market stand, located in a disadvantaged neighbourhood in West Oakland, California. The produce sold at the stand is priced on a donation-basis only; customers can decide how much they pay for the produce based on how much they can afford (City Slicker Farms, 2014b).
- Greensgrow Farms in Philadelphia has a robust CSA program that has been designed to accommodate low-income customers; they have discounted CSA shares that can be bought with food stamps, and members can bring their shares to participate in nutrition classes held at the Greensgrow Community Kitchen (Pennsylvania Women's Agricultural Network, 2014).

Vending at Farmers' Markets and Market Stands

Selling freshly grown food and other food products to the public at a vendor stand is a typical practice for CFPs interested in expanding their enterprise. Establishing a market stand is a retail opportunity that involves little capital costs (some transportation, handling, or refrigeration) while providing a financial benefit of greater profits through selling directly to customers (Government of Alberta, 2012). The two most typical ways growers sell at a vending stall are by joining an existing local farmers' or community market, or by setting up a small market stand at the project site itself; some of the reviewed projects did both. The ability to sell off- or on-site largely depends on the context of each individual project.

Farmers' Markets

The majority of the reviewed initiatives are involved in selling at local markets. Some of the community markets they join are already established, while others become one of the initial vendors at a new, smaller market, often at sites like community centres. These pop-up markets tend to more feasible for small-scale growers. Operating a table at a local farmers' or community market is advantageous for increasing community awareness of local food projects. By joining an established market it is possible to access a regular customer base and it offers the opportunity to network with other community organizations and food-based businesses. Becoming a vendor at a farmer's market requires some time and effort devoted to the application process. There is sometimes a fee for becoming a vendor and there are other rules and regulations to be followed related to business licencing, vender permits, insurance and health inspections.

Selling food at a community market can be a profitable avenue; the profits made can contribute to the expansion of small-scale projects:

Food Works Farm in Portland, Oregon, was able to expand by focusing on youth entrepreneurship and food sales. Food Works was initially known as the St. John's Woods Garden Project, which began in 2001 as a 2,500 sq. ft. garden, tended by residents of St. John's Woods housing project and youth participating in a community organization, Janus Youth Programs. Initially, the harvested vegetables were donated and delivered to elderly residents in the neighbourhood, but in 2005, the youth carried the project further by beginning to grow additional produce to sell at the Portland Farmers' Market (Acott, 2006). After receiving funding from a USDA grant, as well as access to a one acre plot of city-owned land, the youth crew members were able to increase their yield. From 2006 to the end of the 2012 season, the Food Works youth had harvested over 23,000 lbs of produce and earned nearly \$34,000 from food sales, in which they reinvested into the program. By 2013, they were selling at 6 different farmers' markets, and made over \$27,000 in sales in the 2013 season alone (Village Gardens, 2014). They are now able to pay the youth crew salaries for the summer season. The leftover funds have been used to purchase school

supplies for neighbourhood kids, and half of their harvested produce is distributed for free to the low-income residents and families of St. John's Woods (Acott, 2008).

Market Stands

In addition to vending at farmers' markets, another common practice involves setting up a small stall located at the project site. This is also a very low cost approach – no transportation required, no vendor fee, and volunteers can be used to operate the stand during set hours. The objective of having an on-site market stall is to make the purchase of fresh foods as accessible to the local community as possible; nearby residents should be made aware of the stand and its hours of operation through advertising. An on-site vending stall is not possible for all food growing projects. It will depend on the space available to set up a stand as a temporary or permanent structure. But mainly, it will depend on municipal by-laws regulating the sale of food within certain zones of the city, specifically, commercially zoned areas.

Market stalls range in size, some merely a few tables set up for weekends or during community events, while others are more permanent structures, including craft stalls or even small store fronts.

- Loutet Park Farm in North Vancouver, a small-scale urban farming project, is able to run 'farm gate sales' twice a week for three hours from June through October; this involves a simple set-up of a few tables to sell their harvest to the public (Edible Garden Project, 2013).
- An example of a larger-sized and successful market stand comes from City Slicker Farms in West Oakland, California. City Slicker Farms began in 2001 by a group of community residents who wanted to help bring more healthy foods into a low-income neighbourhood with a lot of vacant land. So they began a garden on a donated plot of unused property to grow food. Of the food the volunteers did not take home themselves, they left out for anyone to take for free. However, upon learning that local residents were more interested in buying the produce, rather than taking it at no cost, the group began a weekly farm stand at the site, growing culturally-appropriate food and marketing specifically to local residents. City Slicker Farms has since grown to five community market farms; the food harvested from these five sites, as well as other products such as eggs and honey, are sold at the

Saturday community market stand. Donation-based pricing is used to ensure that no one is turned away for lack of funds, and everyone is able to afford the healthy products (City Slicker Farms, 2014b).

At an even larger scale, some well-established CFEs have grown to include an on-site store front as a permanent retail location: The Farm Store at Earthwise Society in Delta, B.C., is situated in a small barn on their now two-acre site, which is open six hours a week and sells organic produce from their teaching gardens (Earthwise Society, 2014a). This scale of retail will not be possible, of course, for all project sites.

Other unique ideas for market vending include examples from Earthwise Society in B.C. and Greensgrow Farms in Philadelphia. These two programs contribute to the social value of improved community food security, rather than profit generation:

- Earthwise Society has a program called Pocket Markets, which is a mini farmers' market set up in seniors' residences and targeted for elderly individuals with mobility issues that prevent them from attending community farmer's markets in the area. The Pocket Markets are held every month, and offer freshly harvested organic produce from the Earthwise farm, healthy snacks, cooking demonstrations, craft tables, and information displays (Earthwise Society, 2014b).
- In 2011, Greensgrow launched its Mobile Markets; a service which involves a customized delivery truck travelling every week to underserved neighbourhoods in Philadelphia to sell fruits, vegetables, eggs, pantry goods and other staples at very affordable prices, or by accepting food stamps and farmers' market vouchers. As well as food distribution, the Mobile Market invites residents to participate in workshops, cooking demonstrations, and fitness activities (Greensgrow Farms, 2014d).

Community Supported Agriculture (CSA)

CSA programs, or food box programs, are growing in popularity for rural and urban farms, but are also being utilized by many smaller scale CFPs and food-based enterprises. A CSA or food box program is a membership program, similar to a buying club, in which participants buy a share in a growing project's harvest at the beginning of the season and in exchange they receive weekly packages of fresh produce and/or other food products at discounted prices for

the duration of the growing season (East New York Farms, 2010a). Similar to a CSA is the Good Food Box program in Canada. This program involves weekly shares of fresh produce distributed to participants, however, the food is purchased in bulk from local growers and producers rather than grown by the non-profit organization handling the distribution. The significance of this program is that it generally targets lower income families who reside in neighbourhoods with poor access to fresh foods and strives to provide high quality produce that is especially affordable by keeping costs lower than retail prices (FoodShare, 2014; Miewald, Holben, & Hall, 2012).

A CSA or food box program benefits both the grower and the consumer because of the nature of the direct relationship they are able to form with each other. Growers are paid for their produce fairly and at wholesale prices, and are able to anticipate a certain amount of profit from selling shares. The upfront membership fee is also a source of income at the beginning of the season to allocate to operations of the program. CSAs allow growers to start small, with a consistent set of clients, and also allow them to avoid some expensive infrastructure investments such as refrigeration. Meanwhile, the participants benefit from a regular source of locally grown and produced foods that are fresh, nutritious, in-season, and affordable (Patel & MacRae, 2012). These boxes are sometimes delivered right to participants' doors, but are usually available for pick-up at a centralized location. Although the package contents are standardized, minimizing a participant's choice of delivered foods, the convenience and affordability of the program generally overcome any limitations, and especially benefit those who would otherwise not have access to healthful produce (FoodShare, 2014).

The majority of the reviewed projects, large and small, have initiated a CSA or food box program. While established enterprises, such as Growing Power in Chicago and Greensgrow Farms in Philadelphia, have up to several hundred members, smaller projects have also been able to manage by beginning with fewer members:

• An urban farm in Brooklyn, New York, called 'Tenth Acre Farms', though now defunct, grew nearly seven tons of food each year on a literal tenth of an acre. They sold some of their harvest at a market stand on their site, but even with such a small growing space they were

able to begin a CSA that was set-up for residents of the immediate neighbourhood (Dailey, 2011).

A small-scale CFP called Walnut Hill Community Farm, a large raised bed garden situated in a vacant lot in West Philadelphia, operates an on-site community farm stand, as well as a stall at a local farmer's market, run by youth volunteers. Although operating its own CSA was beyond the volunteers' capacity, the project was able to join with two other urban farms to create the West Philly Foods CSA. Its 2013 season had 110 CSA members, ran 6 pickup locations, distributed 18,000 lbs of produce, and included 7 options of other food products, including baked goods, beer, bread, flowers, jam, pestos, and pies (West Philly Foods, 2014). This example demonstrates that even for projects with limitations in capacity there is the option to partner with other growing sites and organizations to run a CSA together.

For other projects that do not grow enough food to meet demand, or even food-based enterprises that grow no food at all, they can still manage a CSA distribution program by sourcing food from local growers:

- A unique example of this comes from New Orleans, an urban farm and community garden space called Hollygrove Market and Farm. Although it has a demonstration farm for educational and training activities on-site and garden plots for community members, it operates a 'weekly produce market' by buying produce from backyard growers, community gardens, local urban micro-farms and nearby rural farms and then puts together produce boxes for sale. Interestingly, their version of this CSA-style cooperative does not require members to sign-up for shares, but rather makes the pre-designed boxes available for individual purchase in their retail space for all walk-in customers. Included in the box is useful nutritional information, storage suggestions, as well as a link to their website where they present weekly 'box recipes' to inspire use of the array of produce found within that week's box (Hollygrove Market, 2014; Peterson, 2009).
- From the larger scale enterprises, an example of a successful CSA program, achieved through many years of hard work and project expansion, is the Farm-to-City Market Basket Program managed by Growing Power in Chicago. This program is operated on a weekly-

basis and year-round, owing to the convenience of growing in their greenhouses. The produce in the baskets come from several of Growing Power's urban and rural farm sites, as well as sourced from a network of local, small family farms. Given the scale of the Growing Power enterprise, participants can make their orders on a weekly basis, and do not have to commit to a season-long share. The program runs three different types of baskets, designed to accommodate different family sizes, and has several pick up locations in Milwaukee, Madison and Chicago, although large orders are delivered to customer's homes or workplaces (Growing Power, 2010b).

The Toronto non-profit community food organization, FoodShare, offers a successful Canadian model of a food box program.¹ The produce in the weekly boxes are mainly sourced from Ontario producers through the Ontario Food Terminal. Box contents vary each week according to what is in season, locally available and reasonably-priced. The boxes are packed by FoodShare volunteers then delivered to almost 200 different neighbourhood drop-off locations, which are managed by volunteer coordinators. FoodShare offers several types of boxes to accommodate a range of needs: a large and small Good Food Box; a large and small Organic Box; a Fruit Box, containing a selection of fresh fruit; and a Wellness Box, containing already cut-up produce, targeted for seniors and busy households. Each box contains a newsletter with nutritional facts, information about the supplying farmers, food preparation tips, and articles about FoodShare's other programs and events. Each month, over 4,000 boxes are delivered to Toronto neighbourhoods, supplying food to an estimated 8,000 to 10,000 people, and generating approximately \$700,000 in annual sales (FoodShare, 2014; Johnston & Baker, 2005).

Although CSA's seem better suited to larger growing initiatives, it is possible for smallscale community growing projects to run a CSA, and is an important step to take for scaling up

¹ FoodShare's Good Food Box program is one of the longest-standing in North America; established in 1994 as a program to specifically address community food security, targeting marginalized, low-income and ethno-cultural communities. FoodShare now operates a broad range of community food security activities, including gardening, cooking, nutrition, community economic development and training programs.

and diversifying the project's activities. New projects may encounter a few barriers to first initiating a food box program. There are some upfront costs involved, such as purchasing containers for distribution, administrative materials, as well as implementing any marketing strategies. It can be labour intensive in terms of harvesting, sorting and packing all of the shares, making deliveries or managing the pick-up points, as well carrying out membership administration and communication tasks (FoodShare, 2014; Patel & MacRae, 2012). This requires a lot of staff and volunteer time and energy; the more customers the more help will be needed. Another potential barrier is that there has to be some space on-site, or in the vicinity, for storage and a workstation for organizing and filling the boxes; if not, renting space might be necessary but will add to the costs of operating the program. CSA managers should also consider adding a newsletter in the box that contains nutritional information and educational material on food preparation for the week's produce; another administrative task to add to the many. Other challenges include dealing with high member turnover rates and the demands of producing consistent amounts of produce week after week (Patel & MacRae, 2012). The first couple seasons of running a CSA program can be chaotic at times and will require flexibility. A core group of volunteers and members will be needed to keep the CSA running smoothly. CSA members should be encouraged to visit the growing site and participate in gardening activities as a way to recruit extra help. From the review of community growing projects that have been running a CSA for several years, it can be surmised that managing a CSA becomes easier with experience, and more profitable over time.

Wholesale to Local Businesses

Another possible avenue for income generation is growing produce specifically for sale to local restaurants or local independent food retailers. Current trends suggest that this alternative, farm-to-retail market, is gaining popularity, for both growers, retailers, and consumers (Sharma et al., 2012). There is a high demand from restaurants for very local and unusual varieties of fruits and vegetables, and increasing numbers of CFPs are approaching interested restaurants to directly negotiate sales (Local Action on Food, 2012). In recognition of a growing consumer interest in locally produced food, restaurants and community food retailers, like food co-ops, are becoming more involved in local food sourcing; obtaining their

ingredients from local farms and other urban growers (The Mustard Seed, 2014; Sharma et al., 2012).

In other words, selling freshly harvested produce to local establishments is a viable option for CFPs, and these services are in demand. Some advantages of directly selling to retailers include: the option to sell small quantities at high prices, arranging orders in advance so that there is a guaranteed market for the produce being grown, having one delivery point, and not having to prepare or wash the produce, as this will be done in restaurant kitchens or by retailers (Local Action on Food, 2012). It is also an opportunity to advertise the growing project within the community and make some initial business connections.

There is no formal guide for small-scale projects to follow on how to form a supplier relationship with local restaurants or independent food retailers. From the review of community growing projects, it seems these connections were made on an individual basis; restaurants or other businesses were simply approached, and inquired about their food sourcing and the potential relationship they could form. The informality of this practice may be viewed as a barrier for some small-scale projects who are looking for more conventional ways to expand. Logistical issues would need to be worked out with each establishment. The majority of projects that supply restaurants are responsible for delivering the produce right to the restaurant – so having a means of transportation will be necessary. Also, the form of payment is more often than not dealt in cash, again, highlighting the informal nature of the relationship. Another challenge to consider is the ability to grow a consistent amount of high-quality produce that retailers, especially restaurants, are looking for in order to ensure a long-term successful relationship. Traceability and safety of the produce is also a particular concern when selling to restaurants (Local Action on Food, 2012).

Supplying food to local restaurants and small food stores remains a common practice among the reviewed projects. Naturally, larger social enterprises are able to manage the delivery and sales to businesses quite efficiently; having more resources like staff and a means of transportation, as well as the ability to harvest greater yields to sell at wholesale prices.

- Growing Power sells produce, meats, and specialty greens to numerous catering businesses, food suppliers, and well over thirty restaurants in the Chicago and Milwaukee area (Growing Power, 2010c).
- SOLEfood in Vancouver sells at various farmers' markets, but is also known for supplying high-quality produce to 37 of Vancouver's best restaurants (Smith, 2012).
- Garden State Urban Farm, in New Jersey, grows vegetables and herbs in containers set up on a previously abandoned lot, as well as greens in a hydroponic greenhouse. Their hydroponic greens are specially grown for two prominent restaurants in New York City and New Jersey, and also take requests for vegetable or herb varieties from the restaurants' chefs. They are now looking to arrange more restaurant partners after the success of these relationships (Valley Arts, n.d.).
- Although Greensgrow Farms has flourished to become a significant community food hub in Philadelphia, it began exclusively as a hydroponic lettuce farm in 1998, situated on small, brownfield lot. Lettuce and mustard greens were grown for sale solely to supply local restaurants (Breaking Through Concrete, 2010). As a small-scale niche growing project, they were able to sell directly to restaurants, optimize their prices, and minimize the cost to distribute the products. The income earned from this venture allowed them to expand to container growing, as well as diversifying to fruit and vegetable bumper crops, and begin a CSA program (Simon, 2003).

Wholesale distribution to local establishments is best suited for projects that are able to focus their efforts on this activity. It may not work for all small-scale growers looking for profitable routes into the local food market, but is worth considering as another source of income. The capacity to pursue this activity will depend on the context of the project, finding local businesses that are interested in forming a relationship with a grower, and negotiating an agreement that will benefit both parties.

b) Value-added Production

The final method of income generation as a best practice for CFPs, is the processing and sale of value-added products using freshly grown produce, or other harvested goods, such as herbs, flowers or beeswax. From the reviewed CFPs and enterprises, the most commonly

produced value-added products included edible goods such preserves or pickled vegetables, jams and jellies, salsas, spreads, honey, spice mixes, and edible flowers, as well as cosmetic products such as lotions, soaps, and perfumes. Many of the larger scale projects also offered garden starts through the sale of plants for home gardens. The benefits of creating valueadded, special item goods include being able to reach new and different customers, to sell in various locations, not just fresh food markets, and ultimately earn greater profits to devote to project operations or creating new job opportunities on the product line.

Value-added Product Development

Growing Power in Chicago, Earthworks Urban Farm in Detroit, and the Homeless Garden Project in Santa Cruz, California, provide examples of success with value-added product development:

- Both Growing Power and Earthworks have apiaries for beekeeping to harvest honey and beeswax. Growing Power specifically focuses on training and employing at-risk youth in its Chicago Youth Corps program; the youth group are involved in developing a line of valueadded beauty products, including lip balms, soaps, scrubs, as well as candles. They have also found a unique market for selling their hand-crafted products on an online E-market, Etsy.com (Growing Power, 2010a). Earthworks has a 30-hive apiary, and their honey is for sale year-round at a local gift shop and at their on-site market stand. They also create hand balms using beeswax and propolis, as well as other value-added products, typically jams, from the berries they grow, and canned tomatoes and pickled beets. All of the income generated from the sale of their value-added products goes into covering production costs, which supports the farm to self-finance their operations (Earthworks Urban Farm, 2008).
- The Homeless Garden Project's value-added product development, as a different example, involves the creation of flower arrangements, managed by the project's Women's Organic Flower Enterprise (WOFE). Trainees in this program, now including both men and women, learn to grow and dry a variety of herbs and flowers at the farm, and then design arrangements as gift products, which are sold at their on-site retail store. WOFE trainees can also apprentice in wreath making and candle making, in which their candles, wreaths, and other hand-crafted gift items, such as aprons, scarves and jewelry, are also for sale at

the store. All of the revenue earned returns to the program. WOFE provides trainees yearround transitional employment, and training in job skills (Homeless Garden Project, 2010c).

These three examples come from larger scale social enterprises, which have had years of experience to grow and acquire more securing funding and revenue streams to develop these particular value-added products. For smaller scale projects, there are some barriers to beginning and sustaining this practice. First of all, a project has to have the growing capacity, and space, to grow and produce the necessary ingredients for the value-added goods to be created. A value-added product line will require capital to get started, until steady income can be earned, and it requires plenty of time and commitment. Without the support of volunteers dedicated specifically to this task, the amount of work might be overwhelming.

Community Kitchens

There is an opportunity to economically produce value-added products for smaller scale growing projects, while also offering education, skills training, and community engagement activities to community members and volunteers, through establishing a community kitchen. The idea of incorporating kitchen space within a project site and adding various cooking and community kitchen programming to the range of offered activities, has become an increasingly popular practice. Many of the reviewed projects have benefitted from community kitchens as a program that can support project expansion and income-generation.

A community kitchen (CK) can be defined as "a shared-use processing facility that offers specialty food processors, farmers, and caterers a low-cost way to make processed food products that they can sell to the public" (Muldoon et al., 2013). In other words, they are useful as business incubators, especially for low-income participants, who are not able to afford capital costs associated with setting up and running a commercial-grade kitchen. Some CKs are standalone social enterprises that are unconnected to growing projects, others are specially established as food business incubators, while some growing projects invest in their own kitchen space on-site, or rent nearby facilities.

CKs present a valuable opportunity for scaling up local food projects because of the many social, educational, and entrepreneurial benefits they can provide. Having access to kitchen space means that projects are able to offer free or inexpensive cooking demonstrations and

other workshops, on a weekly or monthly basis, as well as during special community events. They offer a space for community gathering, are an effective tool for community engagement, as well as for recruiting volunteers as kitchen helpers. For example, Greensgrow Farms CK offers a variety of Saturday afternoon culinary classes in the spring and fall from local chefs and instructors, featuring take-home items and recipes. Participants learn canning, fermenting, bread making and yogurt making, among other culinary skills (Greensgrow Farms, 2014a).

CKs also afford space to prepare meals for participants to take home, as well as valueadded goods sales to the public:

- The Kitchen Table in New York, a CK created in partnership with a CFP project called Project Harmony, runs a membership-based collaborative dinner program. Through a small membership fee, which approximates to about \$5 per meal, members share the cost of purchasing local, whole foods, then share the work of creating meals made from scratch, to take home or for staying and eating together (The Kitchen Table, 2011).
- Salt, Fire, and Time is a community-supported kitchen in Portland, which began as a shared kitchen space for its three founding members, then expanded, mainly through fundraising efforts, into a small business that sells prepared take-out foods. The kitchen now offers weekly classes, holds community dinners, and has a volunteer program. They have also begun a CSA model of weekly boxes of prepared foods for members. Other services they offer are menu planning, nutrition coaching, catering and support services for new mothers (Coughlin, 2009; Salt, Fire & Time, 2013).
- The West End Food Co-op in Toronto is a not-for-profit co-operative organization that runs various food security initiatives for residents of the west end of the city, including the year-round Sorauren Park Farmer's Market. Its new storefront, opened in 2012, contains a community kitchen space. Prepared meals, soups, salads and snacks created in the CK are sold in the retail space, along with fresh produce and non-perishables sourced from local growers and producers. CK programming includes various workshops and food demonstrations for participants. The Community Cannery program teaches hands-on fresh food preservation skills using produce grown by co-op members and local farmers. A unique program offered through the Community Cannery is the Community Supported Orchard

program: similar to a CSA, participants purchase shares of fruit at the beginning of the summer season, but are personally involved in learning to preserve their own shares at the CK space. Members then get to take home their canned goods, approximately five to ten pounds of fruit per season (West End Food Coop, 2014a, 2014b, 2014c).

Enterprise Incubation Services

A CK can also function as a food business incubator. Users are able to rent kitchen space and are charged only for the time they use the facilities for cooking and preparing their valueadded products. They also often benefit from the technical knowledge of others using the kitchen, while many CKs also provide production, marketing, and business assistance (Muldoon et al., 2013).

- La Cocina in San Francisco, founded in 2005, is a shared-use commercial kitchen and non-profit CFE that provides kitchen space, equipment, mentoring and access to capital through its Incubator Program. The program is targeted toward low-income food entrepreneurs, particularly women and newcomers, to help them grow their businesses by providing them with technical assistance and access to market opportunities. La Cocina also engages the community through educational workshops and cooking classes, as well as community events, such as an annual gala and conference. They also have a volunteer program, recruiting technical assistance providers and mentors, as well as general volunteers for events, vending at their local farmer's market, and fundraising and administrative duties (La Cocina, 2014).
- The East Scarborough Storefront is a vibrant community centre and hub model of service delivery that provides and coordinates numerous supportive services, outreach programs and community development initiatives to a diverse population located in East Scarborough, Toronto. One of its many programs includes the Eco-Food Hub – a commercial-grade kitchen space created to allow residents and social service agencies to interact and share knowledge and expertise on healthy cooking and eating. Besides offering classes and workshops, the Eco-Food Hub provides entrepreneurship opportunities and support. At a very affordable rate, budding food entrepreneurs are able to use the facilities to test their ideas and ingredients. The Storefront also helps entrepreneurs to form business

plans, enhance their resumes, and connect them to resources and networks. The Storefront also has imminent plans to deliver a food handler's course for participants to earn the required certification to operate their food businesses (East Scarborough Storefront, 2014a, 2014b).

Greensgrow Farms Community Kitchen also offers enterprise incubation services, demonstrating a unique example of a CFE scaling up its operations to include food entrepreneurship activities for the community. Rather than trying to find the space on-site to set up kitchen facilities, which can be a barrier to CK establishment, they decided to rent the kitchen space at a local church. With this partnership, they were able to upgrade and renovate the kitchen for commercial certification. Licensing is one major cost barrier to launching a CK, which can be expensive to establish and maintain. Often outside funding or grants are needed for the capital investment, but Greensgrow managed to overcome this challenge through its church partnership. Start-up food businesses now rent the kitchen space; Greensgrow hosts all kinds of food businesses, including caterers, bakers, food trucks and other small craft businesses that cook and package wholesale or retail products (Greensgrow Farms, 2014b). By charging a renting fee, some CKs are able to generate enough income to cover expenses, which is important for remaining economically sustainable; this is Greensgrow Farms' model. For other CKs, ongoing subsidies are sometimes needed, especially when serving low-income entrepreneurs. Some CKs develop technical assistance services, self-owned labels and template marketing materials for their users in order to supplement rental fee income (Muldoon et al., 2013). Greensgrow CK produces a line of prepared foods under its 'Greensgrow Made' label, which are sold at their on-site farm stand and through their CSA. The income generated helps supplement the rental fee and fund the CK program (Greensgrow Farms, 2014c).

As another practice for project expansion through income-generating activities, community kitchens are a worthwhile venture to consider. From the review of projects that use CKs, they appear to be well-received and well-used by the local community. Income can be earned through workshops and events at the kitchen, and through selling hand-crafted food items, prepared meals, baked treats, and other value-added goods cooked and prepared in the

kitchen. And beyond this, CKs can also support the local food economy, by potentially operating as food business incubators for local entrepreneurs.

(4) Community Engagement

The success of a CFP is dependent upon its ability to engage the local community. A small food project can grow more quickly and will be more sustainable in the long-term when it garners strong support from the community, but will struggle to survive if it fails to build local interest (McGlone et al., 1999). One method of encouraging community involvement has been discussed previously; the practice of recruiting volunteers from the local community. This is recommended because local community members have a stake in the project's outcomes and are helpful in defining their needs and the goals that are needed to be achieved.

Another practice essential for promoting community engagement is hosting a variety of events that are open to the wider public. This practice is common to all of the reviewed food initiatives, from the smallest scale garden projects to the larger social enterprises. Community engagement events largely involve education, advocacy, and other activities that are of value to the community, but there is also the role for special events to help celebrate successes and promote the project (Muldoon et al., 2013). Community events can be an effective communitybuilding activity. They provide social opportunities for those who attend to meet new people, spend time with family and friends, and just get to know the neighbourhood better. This is especially important for communities with large newcomer populations. Accordingly, the celebration of food is often the central part of these events.

There is a wide range of community events that have been beneficial to the success and growth of the reviewed food projects. The 'Volunteer Day' is a popular event for many of the CFPs, where individuals and families are invited to spend time at the site on the event day to help with food growing activities, but also to participate in other workshops or activities. These are often held on a monthly basis, but some projects have a weekly Volunteer Day. Similar to this event are seasonal festivals or galas held at the project site. These full-day events typically involve activities such as games for kids, face painting, raffles, live music, vendors, food and plant sales, site tours, food growing, processing or cooking demonstrations, and usually includes the serving of a meal.

- The Homeless Garden Project, a non-profit organization in Santa Cruz, California that has a large garden site, holds several events throughout the year, including a monthly 'First Friday Celebration', an annual 'Fall Farm Supper', monthly mixers, cooking demonstrations, and even book events (Homeless Garden Project, 2010a).
- The St. John's Woods Garden Project in Portland, now known as Food Works Farm, holds an annual harvest party, but on a weekly basis has a 'Food Pass Out' day, where low-income residents and families in the St. John's Woods neighbourhood are provided with free produce from the gardens (Acott, 2008). This is an example of a project that has been able to respond to the needs of the community it serves and effectively engage with local residents by sharing with them the project's harvested food and inviting them to communal celebrations. As such, the Food Works Farm is well-supported by the community.

Smaller scale projects may experience some capacity barriers to hosting public events. Volunteers will need to be at hand to help plan and manage the activities and will require hours of volunteer time and energy. Finding the necessary space might be an issue, while using project funds will likely be required, whether for renting space or facilities or hiring event services. These challenges can be overcome by recruiting new volunteers for the event or incentivising regular volunteers (e.g. with free food), partnering with organizations, or by seeking donations or in-kind contributions from local businesses.

CFPs should focus on holding community events because they represent an opportunity for small-scale projects to grow. They can foster a broader awareness of the project, help the project gain new volunteers, and they offer a great opportunity for fundraising through a variety of methods, such as charging attendance fees, collecting donations, selling products during the event, as well as showcasing to potential funders (Goodall, 2010). The majority of the reviewed projects have held events specifically for the fundraising opportunity, the money raised either directed toward general operations, or set for a specific purpose.

 Intervale Green Rooftop Farm, a small growing project in the Bronx neighbourhood of New York, held a Summer Harvest Festival, with the help of their sponsor, the Women's Housing and Economic Development Corporation. This event was part of their 'Greenhouse Campaign' to raise money to build a greenhouse, including the cost of lights, heaters and

growing equipment. The Deutsche Bank Americas Foundation also sponsored the event by offering to match donations dollar-for-dollar. Building the greenhouse allowed the project to scale-up, as afterwards they would be able to grow more food year-round for the residents in the affordable housing development and the surrounding community (loby.org, 2012).

In the study by McGlone et al. (1999) on how local food projects work, it was determined that in order for a project to be sustainable, the level and type of engagement with the community has to reach beyond "local people as recipients." Instead, the local community members need to be active members of the project, in which "their views and concerns are all part of the agenda" so that the project is better able to respond and adapt to the needs of an area (McGlone et al., 1999). Operating a project by this model will mean involving the local community as volunteers, or potentially employees, who have a voice in defining the community's needs and the project's goals. It also means inviting local residents to the project site, just to see and experience the site, and respond to any questions they may have. Gaining community input and involvement through public events and activities that are welcoming for all ages is vital to a project's success. The community should know what the project has achieved and what it plans on achieving. As such, events are valuable for showcasing success, celebrating achievements, and gaining wider support.

(5) Education

Another practice that CFPs and CFEs often include in their repertoire of project activities are education and training programs. Providing access to educational opportunities and skills training is a key way for community-based initiatives to respond to local needs and concerns. For example, in a neighbourhood where unhealthy eating habits are a concern for youth, a CFP could introduce a nutrition education program as a potential solution. After interest develops, and the program gains more participants, this could lead to the running of cooking classes, which could then expand to gardening classes (Muldoon et al., 2013).

Educational activities provided by community food initiatives also include a range of employment training programs. These have been created by some of the reviewed projects in response to an indicated community need, often in low-income neighbourhoods with high

unemployment rates. For example, food service job training or farmer training courses offered by initiatives can benefit community members by eventually leading to employment as skilled workers. Robust CFP educational programs go beyond basic agricultural and food service skills as well, to include life skills, business skills, interview skills, and more (Muldoon et al., 2013). In this review of CFPs, participants of various educational activities have noted benefits such as job skills, food growing and cooking skills, nutritional knowledge, an increased interest in their health, self-confidence, employability, as well many social benefits.

Workshops and Classes

As with community events, small-scale projects may not have the capacity to manage substantial educational programs, but providing educational opportunities does not have to be expensive, especially by utilizing volunteers who have an area of expertise and are willing to teach or lead. At the smallest scale, an educational activity includes basic workshops or classes, demonstrations, hands-on training, and one-on-one consultations. Some projects also host school groups, even smaller scale ones:

- Loutet Park Farm in North Vancouver, B.C., is a pilot growing project located on a small plot of parkland within a residential area. They are able to offer basic food growing classes for all ages, and provide hands-on workshops for school-aged children (The Edible Garden Project, 2013).
- A larger initiative, the Spiral Gardens Community Food Security Project in Berkeley, California, now a social enterprise that has expanded to two blocks of city-owned land, provides various free workshops on how to grow food in an urban setting, how to cook produce, as well as beekeeping. It now also boasts an outdoor community classroom, a space to host regular free classes for the public, as well as host hands-on training for school groups, youth and other community organizations (Spiral Gardens Community Food Security Project, 2014).

All of the reviewed projects provided some basic educational opportunities like growing and cooking workshops, held on a weekly or monthly basis, or at community events. The benefit of these simple workshops or hands-on training sessions is that participants will learn

while simultaneously helping the project with its duties, such as watering plants, weeding, or harvesting.

Training Programs and Internships

At a larger scale, generally for more established initiatives and social enterprises, but not unattainable for smaller expanding projects, educational activities include training programs, internships or apprenticeships, and summer student programs. These types of programs, depending on the organization's finances, can be provided for free or may include a participation fee in order to support the costs of running the program. These programs are also often youth-focused, or targeted towards low-income or marginalized individuals.

- An example of a youth-centric community food project is the East New York Farms Project, which began in 1998 as a community garden. In a disadvantaged neighbourhood in Brooklyn, community members had voiced their concerns regarding the need for more green space, fresh food, and opportunities for youth; so the project focused on engaging youth gardeners in organic food production. The project now has two farm sites, one being the UCC Youth Farm, where an annual 9-month Internship Program is held every year for over 30 youth participants. The participants are engaged in hands-on learning on the farm, as well as learning about community development, social justice, leadership, and entrepreneurship (East New York Farms.org, 2010b).
- An example of an initiative that supports disadvantaged individuals through skills training is
 the ReVision Urban Farm in Boston. It began as a small garden project in 1990 located
 alongside a shelter for homeless mothers, but is now a half-acre farm and social enterprise.
 The organization provides a job training internship program for youth and homeless
 residents of ReVision Family Home. In the program they learn about and gain experience in
 small-scale organic farming, greenhouse management, seedling production, marketing, and
 community outreach (ReVision Urban Farm, 2012). These two examples demonstrate how
 community-based initiatives created education and training programs as a way to engage
 with the local community and respond to a community need.

There are plenty of examples of other unique educational programs that demonstrate the innovation behind CFPs:

- Common Good City Farm in Washington D.C., runs an Herbal Apprenticeship Program that offers participants practical experience planting, maintaining, and harvesting culinary and medicinal herbs (Common Good City Farm, 2014).
- The Homeless Garden Project in Santa Cruz has a certificate program called 'Cultivating Community', involving weekly lectures and workshops on sustainable agriculture techniques, environmental issues, and interview techniques. Once a participating volunteer logs 100 hours of garden and job training in the program, they receive a certificate of reference that can be useful for job searching (Homeless Garden Project, 2010b).
- City Slicker Farms in West Oakland, California, runs a free Backyard Garden Program for low-income households interested in growing their own food. City Slicker staff and volunteers help set-up a garden in the resident's backyard and provides them with gardening tools and supplies. The resident then learns how to maintain their own garden with the help of a mentor. After a year of participation, experienced backyard gardeners are recruited to provide mentorship for newer gardeners (City Slicker Farms, 2014a).

A focus on education and training is an important practice that CFPs should employ when expanding and scaling up their activities. For one, a greater diversity of activities means a greater potential for more sources of income to support the project. Although providing free educational activities is ideal, small fees are not uncommon in order to finance the project's operations with less reliance on outside funding. Also, education contributes to a food project's sustainability because these activities provide more ways for the local community to get involved, benefit from the project, learn and grow as individuals, and then utilize their new skills to benefit the wider community. Potentially, with their gained knowledge and skills, individuals can carry on the project as leaders, or use their new know-how to begin their own food-based initiative. This cyclical process of learning food-based skills, then employing them in the community and teaching others, is initiated through community engagement and education.

City-level Best Practices

The following two, and final, criteria are based on practices found at the municipal level. Both refer to different policies and planning tools that various North American municipalities have used to facilitate the growth of urban agriculture and CFPs in their cities. Both of these criteria address important sub-topics, including: innovative spaces and land security, official plans, zoning by-laws and food-specific city plans.

Although these city practices are beyond the immediate control of CFP practitioners, they are still important to consider in this review. Project and enterprise managers should be aware of the various municipal policies and programs that can help or hinder their initiative's growth and sustainability. This knowledge can help them decide which policies they should advocate for in their own cities.

(6) Access to Land

To establish or expand a CFP, acquiring the appropriate amount of space for the project's activities is one of the necessary first steps. Besides securing land for food growing, a project might require space for workstations, storage, holding community gathering events, or even kitchen facilities. Unfortunately, one of the biggest challenges for CFPs is accessing land. This includes not only difficulties in locating potentially available spaces, but cost barriers of using or sustaining the project in that space. Especially in urban areas, the high value of land and its high demand for different uses makes purchasing land, or even paying full rent, generally not possible for CFPs with small budgets (Local Action on Food, 2012). The other key barrier faced by many community food initiatives, in regards to access to space, are issues of land security.

Accessing Innovative Space

With the high cost and competition for urban land, some CFPs have had to be quite creative in finding a place to grow their food and/or operate their enterprise. Land has been utilized at public parks, social housing or private apartment building property, backyards, and private businesses:

• Walnut Hill Community Farm is located in a pocket park in West Philadelphia, a parcel of land that is leased from Philadelphia's public transportation authority (Philly Rooted, 2012).

Loutet Park Farm is a small urban farm established on city-owned land in partnership with the City of North Vancouver (City of North Vancouver, 2010). Green City Acres in Kelowna B.C. operates as a multi-locational urban farm by utilizing space in privately-owned front and backyards, rented from numerous homeowners around the city. In exchange for using their property, the landowners receive a weekly basket of produce; the rest of the grown vegetables are sold and distributed locally (Green City Acres, 2014).

By partnering with public institutions, land can also be utilized on school grounds, churches, fire halls, or other city-owned land:

Fresh Roots, in Vancouver, B.C., was able to establish itself as a social enterprise after partnering with a local elementary school. Originally gardening only in backyards as a small-scale CFP, they had a vision of transforming underutilized spaces into thriving gathering places through urban agriculture. Noticing a local school ground falling into disrepair, they offered to help transform the grounds into an edible schoolyard, which was accomplished with the help of students and staff. In 2013, Fresh Roots formed an agreement with Vancouver School Board to establish their first Schoolyard Market Garden, an educational and commercial growing space on the school grounds. The food grown, now at two schools, supplies the school cafeterias, local neighbourhood houses, two Good Food Markets, and a weekly box program for East Vancouver families. Fresh Roots now helps other institutions across Vancouver establish gardens (Fresh Roots, 2014).

An increasing trend in recent years is the establishment of growing sites on vacant parking lots or other underused property, like brownfields, or private land that is awaiting development:

 Both SOLEfood Farms and City Slicker Farms have missions to transform vacant urban land into productive food growing sites. City Slicker has now developed 5 vacant lots in Oakland, CA, into market farms and have also helped set up over 180 backyard gardens for residents (City Slicker Farms, 2014b). SOLEFood utilizes a portable container growing methods in order to grow on paved lots and avoid soil contamination, as well as have the ability to move sites easily to avoid land tenancy issues. They now have 5 sites in the downtown eastside of Vancouver (SOLEFood Street Farms, 2014).

Other innovative spaces are rooftops and right-of-ways (Hagey et al., 2012). Rooftop gardening, as a novel growing strategy, is still in need of further assessment as a space for food production and community gardening potential. Already they have been recognized for providing several benefits, such as stormwater management, air and water quality improvement, noise reduction, and wildlife habitat (Balmer et al., 2005). Right-of-ways have been used for agriculture most extensively in developing countries, especially along utility line corridors, although other cities are recognizing the potential of these spaces. The City of Seattle recently assessed 5 different sites along their public transmission lines for potential community growing space, while three community gardens already exist on a multi-use path right-of-way (Horst, 2008). Spiral Gardens in Berkeley, California established their community farm, first on one lot of city-owned land at the end of a former railroad right-of-way, and then on a second lot. They now rent the entire block in order to expand to create a nursery and outdoor community classroom (Spiral Gardens, 2014).

Land Inventories

Locating potential spaces to establish or expand CFPs should not depend solely on the effort and creativity of food project or enterprise managers; local governments have a role to play in helping CFPs overcome the challenge of accessing land. One increasingly common practice among North American municipalities is to conduct a land inventory. This is a planning tool that can be used to help identify, assess, and categorize land with potential for UA, and gather data about the city's urban growing capacity (Markgraf & Kay, 2011). The types of lands usually included in the inventory are block ends, right-of-ways, traffic circles, institutional or industrial lands, rooftops on public buildings, and government-owned property (Hagey et al., 2012). Inventories are used for identifying specific sites, but can also provide an estimate of production potential, as well as define the type of urban agriculture (category of use) for each site, such as community gardening, small-scale growing, larger scale market gardening sites, or other UA practices (Horst, 2008). Other benefits associated with conducting land inventories are: they increase awareness and political support for UA in communities, create a benchmark and generate data to assist in land use decision-making regarding UA, and subsequently, can support the development of UA-friendly policies and by-laws (Markgraf & Kay, 2011). A

number of cities in the last ten years have carried out the process of inventorying vacant public and private lands, most notably, Portland, Vancouver, Seattle, Oakland, and Cleveland. Some land inventories are only intended to guide internal decision-making, but they are most useful when municipalities engage the public to participate in the design and implementation, and then present findings in an accessible report. A clear and readable final product that uses texts, charts and maps is what will benefit CFPs in their search for appropriate space.

Land Security

Another challenge many CFPs face after locating a potential site for their operation is securing long-term use of the land or acquiring permanent ownership. This is considered another barrier to access. Typically, projects are established on vacant or abandoned land, or on land that is awaiting development, and either lease or have permission to use the property, but do not own it outright. This means that projects have minimal protection for longer-term tenancy and are vulnerable to losing their space and years of work because of permitting or zoning issues, or by eviction if a developer wants to purchase the land. Without land security, project managers may be hesitant to invest in infrastructure, such as water line access, on-site structures and storage facilities, or cooking and processing facilities that would otherwise benefit their project's operations and growth (Hagey et al., 2012).

Municipalities can support CFPs in attaining greater land security through use of planning tools and policies that accommodate UA. For example, a city can dedicate underutilized land to UA through authorizing leasing agreements with private land owners, or authorizing use of cityowned land through easements or more informal agreements. Another method is through publicly funding organizations that operate as land trusts for UA—an organization authorized to purchase property and hold ownership of it, then specifically permit the use of their land for community gardening or other UA projects (Hagey et al., 2012). The City of Chicago provides a model of this practice:

 Chicago City Council helped form and fund a non-profit land trust entity called NeighborSpace in 1996, which is authorized to purchase properties to protect as open spaces; many of their sites are dedicated to community gardening. NeighborSpace benefits community food growers by helping to secure land against potential development, by

providing basic liability insurance for its land users, and supporting community control of, and engagement in, local green open spaces (NeighborSpace, 2014). Other cities that have begun using land trusts to acquire and preserve space for UA are New York, Boston, and Philadelphia.

(7) Urban Agriculture-friendly Municipal Policy

UA-friendly municipal policy refers to various planning and policy tools that are used by cities to create a supportive environment for urban agriculture, community food growing, and local food entrepreneurship. Cities that practice a range of these UA-friendly policies generally foster greater opportunities for CFPs to scale-up, and a better chance at their success and sustainability. A few key policy tools are highlighted in this section: municipal land use plans and zoning by-laws, and food-specific city plans and programs.

Official Plans/General Plans

A city's comprehensive land use planning document for growth and development, known as Official Plans in Canada and General Plans in the United States, should incorporate UAsupportive policies to demonstrate a long-term commitment to local food growing and other urban agricultural activities. This is important because broad UA-friendly policies set the stage for developing zoning by-laws that can protect and encourage UA land uses. This practice involves adopting supportive language to the UA and local food movement within the Official/General Plan, and recognizing UA as a key element of the city's sustainable growth (Urban Agriculture Working Group, 2013).

For the most part, leading cities in North America support UA in their municipal land use plans through recognition of community gardening in parks and open space:

 Some cities have created specific community gardening policies in their General Plans, such as Berkeley, Oakland, and San Francisco CA, as well as Seattle, WA, which encourage community gardens as a high priority of use in open space zones, particularly in higher density residential areas (City of Berkeley, 2002; City of Oakland, 2011). Seattle, specifies its policy further by including a benchmark of one community garden per 2,500 households (Public Health Law Policy, 2008).

 Philadelphia, alternatively, has focused on more general urban agriculture policies, found within their sustainability plan, called "Greenworks Philadelphia". Urban agriculture is highlighted as an equity goal to create more equitable access to healthy food in the city, including a target to bring local food within ten minutes of 75% of residents through an initiative that will create 59 food producing gardens, 12 farms, and 15 farmers' markets within the city (City of Philadelphia, 2009).

While community gardening has been the current emphasis in North American cities' land use plans, yet to be seen are municipalities that stress a wider range of UA activities as important for sustainable long-term growth.

Zoning By-laws

Following broad recognition of UA in land use plans, the most influential and practical way municipalities can support CFPs is through UA inclusion in zoning by-laws. UA-friendly zoning codes are important for establishing and sustaining CFPs because by, "defining and regulating urban agriculture land uses in zoning by-laws, municipalities legitimize the activities of current and prospective urban agriculture practitioners (Urban Agriculture Working Group, 2013). Sanctifying UA activities helps CFP managers overcome challenges of land security by protecting project spaces from redevelopment. It also indirectly encourages project managers to invest in infrastructure at their site, a necessary step for expanding their operations (Hagey et al., 2012).

Zoning by-laws also influence CFPs by permitting or prohibiting certain uses on the property or within the district where the project is situated. For food projects interested in diversifying their practices to greater income-generating activities, an especially relevant zoning code is one that sanctions where in the city food can be grown, where food can be sold, or the legality of other common CFP activities, such as aquaculture, animal husbandry, or beekeeping. Some projects may experience barriers if they are restricted from selling their freshly harvested produce on-site. Municipalities that create zoning by-laws to facilitate urban food growing and food sales for small-scale growers, create an environment that encourages greater local food entrepreneurship and community economic development.

There are numerous examples of North American cities that are now proactively amending their zoning by-laws to include UA in response to the growing local food movement. There are two strategies for zoning for UA:

UA as a permitted land use in existing zoning categories

- The City of Seattle permits community gardening in all zones, prohibiting sales in residential zones, while urban farms, defined as, "where plants are grown for the sale of the plants or their products," sold on the lot or off-site, are permitted as a principal use in Commercial and Industrial zones, and an accessory use in Residential areas (Urban Agriculture Working Group, 2013).
- San Francisco has created a use category called "Neighbourhood Agriculture", permitting community gardens, CSA, market gardens, and small-scale commercial farms (less than one acre) to grow and sell within all zoning districts (San Francisco Urban Agriculture Alliance, 2011).
- Chicago, Philadelphia, New York, Portland, Vancouver and Toronto have similar UA zoning ordinances, permitting or prohibiting various UA land uses and food sales within zones across the city. They also include rules for on-site structures, fencing, landscaping, property standards, signs, compost, pesticides, and use of heavy machinery (Urban Agriculture Working Group, 2013).

UA as a zoning category or overlay district

This strategy refers to the establishment of separate UA districts, which are more limited than a rural agriculture designation but generally allow for animal husbandry, commercial production, and sales. Creating a designated UA district addresses land tenure issues to a greater degree by protecting gardens, farms and other UA projects as a good use for the property, thus securing the land against redevelopment (Mukherji & Morales, 2010).

 The City of Cleveland created an Urban Garden District within its zoning code. The permitted main uses within this district include community gardens and market gardens, where on-site sales are allowed, while permitted secondary uses include greenhouses, hoophouses, and other structures, such as compost bins, seasonal farm stands, chicken coops, and beehives (City of Minneapolis, 2010; Mukherji & Morales, 2010).

- Boston established a Community Garden sub-district, a designation within its Open Space zoning districts, which permits use and tenure for the cultivation, growing and harvesting of herbs, fruits, flowers or vegetables, or any horticultural commodity (Boston Redevelopment Authority, 2014a). Another unique development in Boston is the adoption of the Olmsted Green Smart Growth Overlay District in 2008, which contains a use category for "food production uses including a farm, garden, food production center and/or incubator and food oriented retail" (Boston Redevelopment Authority, 2014b).
- Chicago and Milwaukee are also in the process of creating overlay districts with permissive language regarding urban agriculture (Mukherji & Morales, 2010).

Food-Specific Plans and Programs

City-level plans and programs with a focus on local food development contribute to a UAfriendly city culture; one that values the role of community UA projects in sustainable city growth. Plan examples include:

- Food Charter: a political document developed by community members that presents "a statement of values, principles, and priorities for a just and sustainable food system," and intended to be endorsed by the local government (Jaquith, 2012).
 - E.g., Toronto's Food Charter (City of Toronto, 2000)
- Food Strategy or Food Action Plan: a high-level municipal plan that "expresses the commitment to improving all elements of the urban food system, including urban agriculture," and used to guide decision making and recommend courses of action (Urban Agriculture Working Group, 2013).
 - E.g., Vancouver Food Strategy (City of Vancouver, 2013); City of Seattle Food Action
 Plan (City of Seattle, 2012)
- Food System Assessment: an evaluative tool used to assess the cycle of the local food system, from production, distribution, and processing, to consumption and waste management. It is a method of measuring the assets and needs of communities across the city or region, with a specific focus on food security, community capacity, and economic

development (Pothukuchi, 2004). It is an effective tool for integrating food into urban planning and its results are generally presented in a report format.

 E.g., A Food Systems Assessment for Oakland, CA (Unger & Wooten, 2006); San Francisco Collaborative Food System Assessment (San Francisco Food Alliance, 2005)

Program examples include:

- The City of Boston's Grassroots Program promotes access to open space for community gardens through the conveyance of city-owned land to non-profit organizations, and the provision of capital funds for site design and construction. Community gardens may include other features beyond garden plots, such as children's play equipment, social gathering spaces, wildlife habitats, benches, and paths (City of Boston, 2010).
- New York City's GreenThumb Program is the largest urban gardening program in the United States, helping to support over 600 community gardens across the city. The program provides tools, materials, seasonal workshops, and small grants to create gardens or green spaces on previously vacant lots (GreenThumbNYC, 2014).

The two criteria of best practices at the city-level demonstrate a number of different municipal policy approaches that can encourage CFP growth though facilitating access to secure land and permitting UA activities integral to CFP operations. These practices vary in purpose and scope. Some cities begin small by focussing on one area of UA, for example, a community gardening policy, while others take on larger initiatives that cover a wider range, such as UAfriendly zoning. Often times, more than one approach is taken simultaneously. Advocates of local food, and managers of CFPs of all scales, should be aware of policies and initiatives that have been put in place successfully in other cities, so that they may incite their local government to act in similar positive and supportive ways.

SCALING UP COMMUNITY FOOD PROJECTS: CRITERIA OF BEST PRACTICES SUMMARY

This section presents a summation of the seven categories of best practices for scaling up CFPs, presented in table format below. Within the table, the left-hand column outlines the key practices; the right-hand column provides some relevant questions to consider for each category.

This table is intended to be completed by CFP mangers and practitioners, in any city, to assist them in applying the criteria to their own projects, whether already-established or just starting out. By providing basic responses to the questions in the right-hand column (along with any other relevant information), this table can help assess what their project is doing right (practices they are strong in), and what they could be doing more of (activities they lack). For an example of how this table may be completed, see Appendix A.

Project Title:	"Community Food Project" (City) Brief Description
Funding	
Government Grants & Funding Agencies	 What grants has the CFP applied to? How much in grant money has the CFP received? (e.g., most recent season, in total) Are there other grants available that have not yet been applied to?
Donations	 From whom does the CFP seek donations? (e.g., individuals, businesses) What strategies are used?
Partnerships	 How many community partners does the CFP have? (e.g., with other CFPs, social service agencies, government agencies, etc.) Are there particular activities the CFP and its partners have organized together? (e.g., cost sharing, in-kind support, etc.)
Volunteers	
Recruitment	 How many volunteers are involved? How are volunteers recruited? Which strategies are most effective?
Training	 Which duties are volunteers involved in? Does the CFP offer any extra training opportunities for volunteers?
Food Distribution	(What food distribution services does the CFP practice?)
Donations	 Donating free food? To whom? (e.g., social service agencies, neighbourhood houses, etc.) Approximately, how much? (lbs or % of crops)

Farmers' Market &	Operating a vending stall on-site or off-site?
Market Stands	 If off-site, at which markets?
	 Is the stall or market geared toward the community? (e.g.,
	pricing, culturally appropriate foods)
	 Does the income earned cover program costs?
	Operating a CSA or food box program?
Community Supported	 How many customers are signed up?
Agriculture	 Is the program tailored at all for the local community?
	 Does it include supplemental material? (e.g., recipes,
	pamphlets, nutritional information)
	 Does the income earned cover program costs?
	• Selling whole foods or food products to local food businesses? (e.g.,
Wholesale	restaurants, independent grocers, food co-ops)
	 How was this relationship formed?
	 How does the exchange work?
	 Does the income earned cover program costs?
	• Creating processed or prepared food products or other crafted goods?
Value-Added Products	(e.g., canned or preserved foods, jam, honey, etc.)
	 Where does production take place?
	 How are the products stored or where are they sold?
	 Does the income earned cover program costs?
	Operating a community kitchen?
	 Where is the kitchen located?
Community Kitchen	 What kind of classes or workshops are offered?
	 Typically, how many participants are involved? Is the
	programming tailored to local community needs?
	 Does the income earned cover program costs?
	• Does the CK include a business enterprise program?
	 How many clients? What types of food businesses?
	 Does the CK help clients in any other way? (e.g., technical
	assistance, marketing and business skills, etc.)
Community Engagement	
	• Does the CFP hold any on-site events open to the public?
	 How often? For a specific goal? (e.g., fundraising, community
Community Events	dinner, cultural festival, etc.)
	 How are local residents made aware of the event? Is there
	good attendance?
	 What activities are offered during the event?
	 Is income generated during the event? Enough to cover
- · ·	program costs?
Education	(What educational activities does the CFP offer?)
	Workshops or classes open to the public?
Workshops & Classes	• How often?
	 What sort of topics are covered?
	• Are these free or include a fee?
	 Are topics tailored to local need?

Training & Internships	 Skills training or internship programs? (i.e. programs delivered over several weeks or months) Who is this program offered to? How many trainees/apprentices are involved What types of skills are taught? Do participants receive any other benefits? Does the income earned cover program costs?
Municipal Context:	
Access to Land	 Where is the CFP located? (e.g., in a public park, vacant lot, on city-owned land, rooftop, etc.) What type of land use is the property zoned for? Do the zoning by-laws present any restrictions to the CFP's operations? How did the CFP gain use of the land? (e.g., through ownership, donation, leasing agreement, land trust, etc.) Were partners involved in accessing this space? Does the CFP use any other space? (e.g., rented kitchen facilities, area for community gathering) Does the CFP require more space for expansion? Has the local government facilitated the process of accessing land in any way?
Municipal Policy	 How does the local government promote UA in the city? What city plans, policies, or other municipal policy tools (established, or are currently being established) enable the CFP's development, or the community food sector's growth in general? Are there any municipal policies that have hindered the CFP's operations? Have any policy tools directly benefited the CFP? Has the local government encouraged local food, UA or CFPs in any other way?

Recommendations

The scan of best practices presented in this paper offers insight into how various CFPs have successfully expanded and, for some, achieved a secure level of project sustainability. In conjunction with the above table which summarized and elaborated on these best practices, provided below are a few basic recommendations to be considered by CFP managers and/or other CFP stakeholders involved in the implementation, management or operations of CFP activities.

1. Pursue a wide variety of funding sources.

- Research grant opportunities from a variety of sources at all levels of government, from funding agencies, and private organizations.
- Seek partnerships with local government and community organizations or local businesses that share a similar cause or interest in local food; partners can provide in-kind support, as well as support in joint funding projects.
- Ask for charitable donations from businesses and the public—even small contributions can help.
- Prioritize grant writing: set aside time for research and writing; enlist the help of those with writing experience (e.g., community partners, students, career service agencies).
- Begin to plan for financial self-sufficiency as soon as possible:
 - Consider which income-generating activities are best suited for the project and the context of the community.
 - Create a business plan to demonstrate how the CFP will balance its budget and address long-term sustainability (justifying the project in economic terms is often required in grant writing).

2. Provide volunteer opportunities as often as possible.

- Recruit volunteers through advertising at project site, at community gathering spaces or at community events; approach people, create flyers, arrange an ad in a local paper, hold a 'Volunteer Day' at the project site.
- Offer a variety of duties to volunteers to cater to a range of interests, such as gardening/farming tasks, administrative or coordination activities, community outreach, social networking, teaching, etc.
- Focus on youth involvement, skills training and hands-on experience.
- Arrange work-share programs: volunteers work a set number of hours for a free share of produce.
- Invite volunteers to be part of decision-making processes, seek their input on project activities, and allow them to decide what they want out of the experience.

3. Establish income-generating activities as soon as possible.

(Financial self-sufficiency is the key to project expansion and sustainability)

- Plan to begin growing more food for greater yields in order to prepare for food distribution activities.
 - Consider how more growing can be accommodated, by either seeking additional space, new growing methods, or forming partnerships with other growers.
 - Research the costs of expanding the growing operation decide on the most efficient approach with respect to the project's budget.
- Research the potential options for food distribution activities suitable for the local community, and in consideration of municipal food policy and existing community food initiatives. For example:
 - Search for a local farmer's market to join, or consider beginning a new community market with partners.
 - Setting up a market stand on-site may be another viable option; ask for input from local residents and review municipal regulations.
 - Determine the demand for a CSA in the local area: hold a meeting with local residents; consider ways the CSA program can be tailored to interested residents' needs.
 - Contact local food establishments to enquire about a potential food sourcing partnership.
 - Determine local interest in a community kitchen program; begin seeking facilities to rent, or seek grant funding or partnership to establish new facilities.

4. Organize a community event to engage the local community.

- Hold a 'Volunteer Day', a community dinner, a food festival or gala.
- Be sure to advertise well in advance through signs, flyers, social media, print media, etc.
- Invite local residents, other community organizations, funders and local politicians.
- Organize kids' activities, music, speakers, and provide plenty of food.
- Keep attendance fees minimal.
- Showcase the project.

- Seek input and feedback from local residents and event attendees to determine project successes and areas for improvement.
- Begin planning for future events.
- 5. Focus on education and training in all aspects of the project.
- As a component of all project activities that involve volunteers and community members, provide participants the opportunity to learn new skills.
- Emphasize food education, including growing techniques, composting, healthy eating and cooking; provide opportunity to learn skills relevant to employment and entrepreneurship.
- Hold a workshop: seek input from local community on which topics people are most interested in learning about.
- Recruit local residents to lead or co-lead a workshop, or share their expertise on a topic.
- Focus on youth education and training: invite a local youth group to help with food growing duties; invite high school students to complete community service hours at the project site.
- Look to partnerships as a way to jointly run a program, or join an organization in an existing one.
- 6. Be informed about government food policy and plans.
- Review the City's General/Official Plan for policies regarding urban agriculture and/or local food, as well as the relevant zoning by-laws (typically available online).
 - Consider how these policies impact the project's activities, or plans for expansion; for example, in which zones food can be grown and sold, whether animal husbandry is permitted, composting regulations, etc.
 - Visit the City Planning department if assistance is required in interpreting any information
- Research whether the City has conducted a land inventory or community food assessment; review these reports if they are publicly accessible.
- Understand the political climate regarding food policy and local food initiatives: visit social media websites, read government and agency reports on food issues, communicate with other community food organizations.

- Collaborate with partners, non-profits, and food-based social enterprises to address
 restrictive government food policies as a unified voice, and to advocate for positive change.
- 7. Develop a web presence for the project.
- Build a homepage or create a page on an established social network site (e.g., Facebook)
 - An online presence is invaluable for promoting the project to the public, providing information about project activities, recruiting volunteers, advertising community events, seeking donations, and staying connected with partners.
- Begin a blog or newsfeed and update regularly: this will allow community members to stay informed on project operations and/or changes to events or volunteer schedules.
 - Recruit a volunteer to be responsible for social media updates to ensure the website remains current.
- Include plenty of pictures.

RESEARCH LIMITATIONS

There are a few disadvantages associated with conducting a web-based scan to establish the criteria for best practices. Firstly, many of the CFP websites were not up-to-date; some descriptions of programs and initiatives were written up to four or five years ago. Consequently, information about more recent expansion was not always accessible. Secondly, there was limited online presence for small-scale CFPs. Although this scan was intended to consider expansion practices for small-scale projects, newer, small CFPs may have limited capacity (e.g., cost, time, staff with technical skills) to create and maintain an active website. As such, a greater number of larger scale CFEs were included in this review—mostly urban farms and operations with several garden sites and a number of hired staff. The assessment of current small-scale CFPs is therefore limited. Although, data on larger scale CFEs are still worthwhile because these projects have had success in scaling up.

Another limitation to note refers to the established criteria. Given the disadvantages of the web-based scan, some important practices involved in launching and expanding small-scale CFPs might be excluded. These could be practices that involve more of the 'hidden' aspects of managing CFPs, such as management styles, team dynamics, or the tenacity of certain project managers. For example, McGlone et al. (1999) conducted a study on how food projects operate and what makes them successful. From interviews, it was found that some important practices which contribute to project sustainability include: professional support, shared ownership, project credibility, dynamic workers, and responsiveness to the community. These factors, though described by local food project managers, are not necessarily evident from an outsider's perspective. As such, there are other best practices that could be considered for inclusion that were overlooked; the seven criteria established in this paper are not an exhaustive list.

DIRECTIONS FOR FUTURE RESEARCH

From this review, it is apparent that community partnerships play a vital role in contributing to CFPs' success and growth. Partnerships with charitable organizations and government agencies are often integral for funding and cost-sharing, as is working with other community organizations to provide new programs for local residents. Given that most, or all, CFPs may only effectively expand through the support of partnerships, this practice needs to be

further explored. In a review of over 120 CFPs in Ontario, collaboration was cited as one of the most significant barriers to scaling up CFP operations. It was noted in this research that in order for the local food system to achieve a greater positive impact on the existing food system, what must be facilitated is a "convergence of these organisations into a more institutionally mature and large-scale food movement" (Mount et al., 2013). Future research should thus examine collaboration strategies for forming working partnerships for CFPs and the community food sector in general.

This scan also clarified economic viability as a primary concern of CFPs. It is recognized in the literature that the majority of CFPs that do not operate as a social enterprise, rely almost entirely on external funding and donations to survive (Sustain, 2013). Indeed, the study on CFPs in Ontario found that the most significant barrier to CFP growth was the reliance on long-term stable funding (McGlone et al., 1999). While pursuing a social enterprise model is a step toward greater financial self-sufficiency, this may not be possible for all CFPs; in particular, those CFPs that operate in low-income areas and exist to support disadvantaged individuals and families. Delivering services for free or at the lowest cost possible, rather than generate revenue, is much more vital for these CFPs in order to be responsive to local need. As such, they will no doubt rely almost entirely on funding to maintain their operations. To assist CFPs to achieve their important community role, further research is needed on innovative grant programs or private sector financing that can better accommodate the unique needs of CFPs, especially for those based in low-income neighbourhoods. This need is even greater for CFPs in Canada, since the United States already has a few established grant programs targeted toward CFPs and other agricultural and food-based initiatives. For example, the United States Department of Agriculture administers a Community Food Project Competitive Grants Program (USDA, 2014), yet there is no national equivalent to this in Canada. The best Canadian example comes from British Columbia's Interior Health Community Food Action Initiative, which is a funding body for community projects that focus on increasing community food security (Interior Health, 2014). Future research should explore different innovative funding strategies to incentivize CFPs to deliver programs that foster self-sufficiency, community capacity building, and community economic development.

The Future Role for Planners

The planning profession has a greater role to play in facilitating the growth of the community food sector. It is apparent that the food system can no longer be a "stranger to the planning field", as it has been in the recent past (Pothukuchi & Kaufman, 2000). As planners are centrally concerned with improving the quality of life of residents, and creating healthy, liveable, environmentally sustainable, and economically vital communities, then food issues also have to be considered as a fundamental area of planning attention (Campbell, 2004; Pothukuchi & Kaufman, 1999). This is because food is a significant community issue; it influences individual physical health, community social health, and is integrally connected to the environment, the economy, and housing and transportation issues. In other words, the food system intersects with many other major city systems that planners help to shape. As such, planners need to better address and incorporate food issues into regular planning functions and everyday activities (Pothukuchi, 2009; Pothukuchi & Kaufman, 1999, 2000).

There are distinct opportunities for planners to become more involved in promoting the expansion of the community food sector, as planners are significantly involved in the design and implementation of land use and resource policies in cities. Many of these approaches were highlighted in the city-level best practices section of this paper; specifically, the range of municipal policies, plans and programs adopted by local governments.

Greater political and institutional support for, and recognition of, the interconnected nature of food system issues to wider urban policies will strengthen the emerging involvement of planners in food policy and community food planning. This recognition consequently calls for a more holistic approach to addressing local food system issues. Planners are at an advantage in this regard, as their work is oriented toward a comprehensive perspective of city dynamics (Pothukuchi & Kaufmann, 1999). The traditionally single-sector and disciplinary approach to city planning and management – the silo approach – needs to be overhauled by creating more interdisciplinary partnerships; a necessity in order to tackle a multifaceted issue such as food. Applying their coordination skills as collaborators and negotiators, planners can effect interdepartmental and multi-stakeholder groups with a focus on food, ultimately influencing municipalities' pursuit to foster a supportive environment that achieves community food goals.

This is not without its challenges. Advocacy from stakeholders, food policy scholars and practitioners, including planners, will be needed to argue the importance of local food planning to decision makers, to generate the political will and sustained commitment of political attention from all levels of government, as well as the resources and funding to match (Pothukuchi, 2009).

Finally, there is also the need for greater attention to food systems issues in planning education (Campbell, 2004; Pothukuchi & Kaufman, 1999). Graduate-level food systems courses are offered at several accredited North American universities (e.g., University of California, Los Angeles, Wayne State University, Simon Fraser University, among others), but, arguably should be available at all planning schools, as a key topic made accessible to all potential planners, or current planners seeking academic upgrades. The food system can either be integrated into existing course offerings, as a topic area in economic or community development, land use policy, transportation, or regional planning, or as a standalone community food systems course. Either way, it is critical for students to be exposed to, and understand, the intrinsic connections between the food system and the other traditional sectors of planning (Campbell, 2004; Pothukuchi & Kaufman, 1999).

There is no single solution to confront or resolve the social externalities associated with the current dominant food system, just as one CFP cannot solve all of the problems of food insecurity, or health and economic inequalities in a neighbourhood. The practices highlighted throughout this paper do demonstrate, however, the benefits of an integrated approach for improving community health; an approach that necessitates support and participation from all stakeholders at all levels of the food system. Through a collaborative effort from CFP managers, volunteers, community members, community organizations, businesses, local food advocates, urban planners and decision makers in government, it is expected that CFPs and the community food sector will be able to thrive. With the provision of strategic public funding, municipal support of_well-designed local food planning, and cooperation between like-minded organizations, important issues can be tackled together. CFPs depend upon the efforts of tireless individuals in supporting communities with healthy foods; they must create inviting, shared spaces while being responsive to and engaging with local residents; they involve

individuals who should take ownership of these projects too, while learning, creating and teaching others. In short, a community food project is more than about growing food—it is more about nourishing a community.

APPENDIX A: CASE STUDIES

To demonstrate how the seven established best practices are a useful way of assessing CFP operations, three examples of CFPs mentioned throughout this paper are examined using the selected criteria and table format below (Case Study 1 - 3). By considering CFPs from the application of these criteria, it is possible to gain insight into existing projects and enterprises, to make comparisons and assess their different strengths and weaknesses toward achieving varying degrees of success and sustainability.

Case Study #1

, 	
An urban farm and nurse Social Change. Incorpora healthy sustainable comm productive use of urban	Gardens Community Food Security Project (Berkeley, CA) ery. Founded in 1993 as project of the Agape Foundation for Nonviolent ted as an independent non-profit in 2004. Mission statement: "Creating munities by promoting a strong local food system and encouraging the soil." Website: http://www.spiralgardens.org/
Funding Operational costs approx	x. \$4000/month. Pursues a model of financial self-sufficiency.
Government Grants & Funding Agencies	 Received \$150,000 start-up grant from the USDA Out towards costs associated with setting up on chosen site
Donations	 Encourages donations from public at site and on website/blog Has held raffles to raise money for particular projects (e.g. to sustain the weekly on-site produce stand)
	Accepts donations of garden equipment to replace aging tools
Partnerships	Numerous community partnerships over the years to deliver programs
Volunteers	1
Recruitment	 An all-volunteer organization Encourages walk-in volunteers from local neighbourhood
Training	 Community volunteers help in community farm and at produce stand No training programs
Food Distribution	
Donations	• All produce grown in community farm is shared among volunteers and local senior residents in adjacent apartment buildings
Farmers' Market & Market Stands	 Operates a Tuesday produce stand Produce sold is sourced from local organic growers, bought at wholesale prices and re-sold at cost Earns approx. \$1,400/week Participate in Saturday Berkeley Farmers' Market
CSA	n/a
Wholesale	n/a
Value-Added Products	Operates a retail organic nursery at Urban Garden Center

	 Sells Bay Area appropriate plants, including annual and perennial food plants, culinary and medicinal herbs, plants for fiber, dye and cleaning products; also sells red worms and soil Focuses on keeping costs low Sales generated at the nursery cover most of the their operating expenses
Community Kitchen	n/a
Community Engagement	F
Community Events	n/a
Education	
Workshops & Classes	 Free workshops: how to grow food in an urban setting, cooking produce, beekeeping An education resource for schools, youth organizations (field trips); hosts students from UC Berkeley, Merritt College, and San Francisco State, and local elementary and high school kids Hands-on learning in demonstration gardens Established an outdoor community classroom; space for regular free classes for public
Training & Internships	n/a
Municipal Context:	
Access to Land	 Innovative space on public right-of-way: first site on one block of city- owned land at end of a vacant railway corridor; attained use of adjacent second lot to establish Urban Garden Center and outdoor community classroom (petitioned in local neighbourhood) Future expansion plans: developing produce stand into a storefront as bulk food distribution outlet
Municipal Policy	 Examples: City of Berkeley General Plan: Community Gardens are encouraged as high priority of use in Open Space designations. Actions include: land purchases, long-term leases and other agreements for gardens Urban Agriculture Incentive Zones Act (California): allows cities to designate 'incentive zones' in urban areas where landowners receive property tax breaks in exchange for dedicating underutilized land to agricultural use (potential for use in Berkeley)

Case Study #2

Project Title:Greensgrow Farms (Philadelphia, PA)An urban farm initiative founded in 1997. Became registered non-profit 'Greensgrow PhiladelphiaProject' in 1999. Now a nationally recognized leader in urban organic farming and thriving food hub.Mission: "revitalizing communities through the practice of sustainable entrepreneurial urbanagriculture." Website: http://www.greensgrow.org/

Funding

Operates a model of financial self-sufficiency; relies minimally on external funding

Government Grants & Funding Agencies	 Community food grant to help switch from wholesale operations to retail at site when first establishing Has received numerous grants over the years, totaling to approx. \$81,000* (now revenue from farm, nursery and CK cover all operational costs, plus new programs)
Donations	Accepts donations onlineAll of the farm equipment is recycled and repurposed
Partnerships	 Corporate sponsorship with Subaru Community partners: Green Mountain Energy, St. Michael's Lutheran Church (site of CK), Philadelphia Brewing Company, other environmental groups Numerous restaurant partners
Volunteers	
Recruitment	 Able to employ 6 full-time staff, ~20 seasonal workers Recruits volunteers through website; individual or volunteer groups Volunteer events: spring clean-up day, Whole Hog fundraiser, Subaru Fall Festival
Training	 Volunteers involved in variety of duties: farm, nursery, kitchen, farmstand, CSA, construction projects No training programs
Food Distribution	
In 2012, sold over \$1,000),000 in product.
Donations	 Donates seasonal produce to local soup kitchens and food pantries Run food drives donated to local residents
Farmers' Market & Market Stands	 Operates an on-site farmstand Thursdays and Saturdays; hosts weekly guest vendors Sells "Greensgrow grown" produce, dairy products, eggs, value-added goods; also sources from local farmers In 2010, generated over \$100,000 in revenue* Operates 'mobile markets' in undeserved neighbourhoods (received \$100,000 in federal funding to launch in 2011)
Community Supported Agriculture	 Operates summer and winter CSAs; members sign up online, by mail, or in person Various pick-up locations, different payment options, includes weekly newsletter; CSA party held at beginning of season Generated over \$450,000 (2010)* Operates a SNAP Box program: a low-cost CSA available to customers who receive SNAP benefits (food stamp program)
Wholesale	 Sells wholesale produce and other products to restaurant partners Generated over \$75,000 (2010)*
Value-Added Products	 Operates two retail nurseries; one is off-site at new garden center Sells numerous plants and seedlings Offers gardening services, gardening classes Generated over \$300,000 (2010)* CK staff create line of "Greensgrow Made" food products, sold at farmstand

	Operates off-site community CK	
Community Kitchen	 Generated over \$17,000 (2010)* 	
	 Demonstration kitchen: culinary workshops and classes for 	
	community members	
	 Enterprise incubation services: kitchen rental for food 	
	entrepreneurs – has helped to launch several food truck	
	businesses and catering companies	
Community Engagement		
Community Events	• Several large community events, including annual fundraising dinner,	
	seasonal festivals, volunteer days	
Education		
	Numerous classes and workshops open to public. Examples include:	
Workshops & Classes	gardening skills, composting, beekeeping, kitchen demonstrations and	
,	culinary skills	
	• Urban farming course for teens: 1-day intensive course for high school	
	students to learn about the local food system and urban farming	
Training & Internships	n/a	
Municipal Context:	17 0	
Widnicipal Context.	 Founded on a former industrial site leased from a community. 	
	Founded on a former industrial site, leased from a community	
Access to Land	development corporation; began hydroponic lettuce growing to avoid	
	soil contamination issues, moved onto raised beds and container	
	gardening	
	Was able to build a greenhouse on-site with revenue from lettuce	
	sales; operated first seasonal nursery	
	• Expansion plans for future: opening a second food hub in the low-	
	income city of Camden, New Jersey	
	Examples:	
	"Greenworks Philadelphia" Sustainability Plan: vision to become	
Municipal Policy	'greenest city in America'.UA is placed in equity category, target to	
	bring healthy food closer to families through creating gardens, farms	
	and farmers' markets	
	 Philadelphia Zoning Code: Market or Community-supported farms are 	
	permitted in most commercial, most industrial, and all residential	
	zones.	
	201103.	

*Richman, N. (2010). Urban Farm Benefits Low-Income Consumers: Greensgrow in *Financing Healthy Food Options: Implementation Handbook Case Study*. Retrieved from http://www.cdfifund.gov/what_we_do/resources/ Web%206_Case%20Study-GREENSGROW.pdf. Case Study #3

Founded in 1990 as a sma and their children. It is no	<u>ReVision Urban Farm (Boston, MA)</u> all garden alongside ReVision Family Home, a shelter for homeless parents ow a 1 acre urban farm and social enterprise. Mission includes 3 main goals: relopment, community food security, and job training and education. .org/revision/
Funding Pursues a model of finance	cial self-sufficiency.
Government Grants & Funding Agencies	 Received several grants over the years, most recent include: \$100,000 from City of Boston Grassroots Program Funding in 2010 for infrastructure improvements \$25,000 in 2012 Walmart Foundation's State Giving Program to offset operational costs
Donations	• Accepts donations online and through Cornerstone Partner Program (recurring donation program), Planned Giving program, Matching Gifts program (e.g., companies match donations made by employees)
Partnerships	• Farm was formed in partnership with non-profit organization, Victory Programs; Boston Living Centre another key partner
Volunteers	
Recruitment	 Relies on support of volunteers from the community and residents of the Home; recruited online and on-site Welcome individual and group volunteers Engaged ~1000 volunteers (in some capacity) in 2010
Training	 Hands-on volunteer opportunities on farm, greenhouse, farm stand, CSA; other duties include tutoring, nutritional counseling, carpentry Job Training program for volunteer residents from Home
Food Distribution In 2007, generated more	than \$32,000 through food sales to reinvest in project; ~\$120,000 in 2010.
Donations	 Donates ~25% of grown produce to shelter and local residents
Farmers' Market & Market Stands	 Operates weekly farm stand on-site during summer Keeps prices as low as possible Accepts SNAP dollars, WIC coupons (assists low-income residents with access to food) Operates a booth at Dorchester House Farmer's Market
CSA	 Operates through a partnership with local suburban farms; supports local growers by increasing their access to the urban market Summer season only; multiple pick-up locations Generated ~\$95,000 (2010)
Wholesale	Sells to local restaurants
Value-Added Products	 Sells seedlings on-site; ~\$5,000 generated in 2010
Community Kitchen	n/a
Community Engagement	-
Community Events	n/a

Education	
Workshops & Classes	Currently none available to general public; focus is on homeless residents
Training & Internships	 Job Training Program: Several shelter residents work as interns on the farm; teaches basic job skills, provides experience in small-scale organic farming, greenhouse management, seedling production, marketing and community outreach Intended to foster job-readiness and vocational skills to help residents transition from homelessness to independence Plans on developing multiple track formal training program (growing, food retail, culinary arts) Summer Youth Internship: hires 4-8 to eight high school students to work as agriculture interns for 6 weeks
Municipal Context:	
Access to Land	 Began small garden on shelter's property; with assistance of funding partners purchased 3 abandoned lots (1/2 acre) across the street to establish urban farm space Future expansion plans: launching New Urban Farm at Olmsted Green (has received a cash donation of \$300,000 from anonymous foundation, and more in-kind donations)
Municipal Policy	 Examples: Boston Grassroots program: promotes access to open space for community gardens through conveying city-owned land to non-profit organizations. Boston Zoning Code: Community Garden Open Space Sub-district within Open Space zones: designates use for the cultivation of herbs, fruits, flowers or vegetables, including agricultural and horticultural commodities. Explicitly refers to the use of vacant public land. Article 89, introduced in 2013, supports farming and other UA activities with new allowances within city zones (e.g. beekeeping and backyard chickens)

*Rootcause.org. (2008). *ReVision Urban Farm/New Urban Farm Prospectus*. Retrieved from http://www.rootcause.org/docs/Social-Innovators/Revision-Urban-Farm-Prospectus.pdf

Three large and well-established community food enterprises were highlighted in the above case studies. As examples of successful CFEs, they have all already capitalized on opportunities to expand their activities and scope, and have progressed considerably toward financial self-sufficiency. The case studies are useful in demonstrating that even successful, long-standing CFPs are not able to, or choose not to, diversify to all of the recommended practices for project expansion (this is evident by the incomplete sections of the above criteria tables).

The scan of best practices, thus, was utilized to determine a range of activities used by a wide variety of CFPs—highlighting partial examples from many projects, rather than focusing on the entire operation of a few. Using this approach, it was possible to establish the criteria of practices that are utilized by the majority of projects, and yet also discover examples of unique project activities undertaken by innovative CFPs. Although there are many common practices that should be regarded as fundamental strategies for all budding CFPs (i.e., recruitment of volunteers, food sales, community engagement, and education), these have all been approached differently and developed uniquely. This is because basic CFP activities cannot be perfectly replicated in, nor are appropriate for, every community—modifications and tailored approaches have to fit the local and city context. However, since established CFEs have experienced notable success, as in the above case studies, it would benefit small-scale projects to emulate components of successful practices.

APPENDIX B

Provided below is a list of the 27 CFPs that were included in the scan of best practices:

British Columbia

Earthwise Society (Delta) http://www.earthwisesociety.bc.ca/

Fresh Roots (Vancouver) http://freshroots.ca/

Green City Acres (Kelowna) http://www.greencityacres.com/

Loutet Park Farm (Vancouver) http://www.cnv.org/Your-Government/Living-City/Urban-Agriculture/Loutet-Park-Farm

SOLEfood Street Farms (Vancouver) http://solefoodfarms.com/

Toronto, Ontario

East Scarborough Storefront http://www.thestorefront.org/

FoodShare http://www.foodshare.net/

West End Food Co-op http://westendfood.coop/

California

City Slicker Farms (Oakland) http://www.cityslickerfarms.org/

Homeless Garden Project (Santa Cruz) http://www.homelessgardenproject.org/

La Cocina (San Francisco) http://www.lacocinasf.org/

Spiral Gardens Community Food Security Project (Berkeley) http://www.spiralgardens.org/

Three Stone Hearth (Berkeley) http://www.threestonehearth.com/

Detroit

Cadillac Urban Gardens https://www.facebook.com/CadillacUrbanGardensOnMerritt

Earthworks Urban Farm http://www.cskdetroit.org/EWG/

New York

East New York Farms Project (Brooklyn) http://www.eastnewyorkfarms.org/

Intervale Green Rooftop Farm (Bronx) http://bronxrooftopfarm.wordpress.com/

The Kitchen Table (Harlem) http://thekitchentablenyc.wordpress.com/

Portland, Oregon

Food Works Farm http://villagegardens.org/food-works/

Salt, Fire and Time http://www.saltfireandtime.com/

Other U.S. Cities

Common Good City Farm (Washington D.C.) http://www.commongoodcityfarm.org/

Garden State Urban Farm (New Jersey) http://www.gardenstateurbanfarms.com/

Greensgrow Farms (Philadelphia) http://www.greensgrow.org/

Growing Power (Chicago) http://www.growingpower.org/

Hollygrove Market and Farm (New Orleans) http://www.hollygrovemarket.com/

ReVision Urban Farm (Boston) http://www.vpi.org/revision/

Walnut Hill Community Farm (Philadelphia) http://phillyrooted.org/walnut-hill-community-farm/

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