Local Sustainable Food Systems: Ensuring food for today and our future

By: Joan Brady, Farm and Food Consultant

Introduction

A sustainable food system approach to food provision and food security examines food production, distribution, consumption and waste to facilitate the efficient use and conservation of our food supply. Building a common vision and ensuring each stage of the food system can be offered in a practical geographic area increases its sustainability as it becomes easier to manage. A local context also creates closer links between producers and consumers, restoring and supporting the health of people, place, planet and profit.

This resource is a follow-up to HC Link’s three-part webinar series on the same topic. Webinar recordings, slides and other materials are available on www.hclinkontario.ca (see this document’s Resources listing for links).

Download this resource at www.hclinkontario.ca/images/sustainable_food.pdf

Ce document est également disponible en français
Defining Food Security, Food Systems & Sustainability

Community food security has been an evolving discussion in the past 10-20 years and involves the notion of having access to sufficient quantities of safe, nutritious food. Hamm and Bellows (2003) incorporated the idea of sustainability in this concept when they defined food security as: “a situation in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance and social justice”. This definition describes not only what the food should be (safe, nutritionally adequate and culturally acceptable) but also how and where it is produced – sustainably, holistically, justly and with consideration to the community.

A food system is cyclical. It includes production/collection, processing, distribution, access, consumption and waste disposal. A food systems approach looks at the entire cycle that our food travels from the site of production to where it is consumed and finally discarded, giving particular attention to the links between stages. This perspective allows us to examine and affect change in order to meet the goal of producing local, healthy, sustainable food systems.

As the citizens of the world continue to use resources and grow in numbers, sustainability has become a focus for many. Increasing sustainability means acknowledging which current actions or expectations are unsustainable and introducing change. Sustainability generally includes a balance between economic, social/cultural and environmental demands, also taking into consideration:

- The planet’s limits;
- Needs of future generations;
- Equitable distribution of opportunities and resources; and
- Resilience for recovering from/adapting to future crises.

When one component receives too much or too little emphasis, there may be negative effects. For instance, a focus on maximizing economic output may cause environmental (loss of habitat, pollution, etc.) or social (health threats, low income) costs. Balance is key to sustainability.
Benefits of Developing Local Sustainable Food Systems

**Economic:** Focusing on local production and substituting local for imported foods can increase local employment, incomes and investments.

**Environment:** A balanced approach protects the viability of land, water and other resources for future generations.

**Health:** Local food means less processing and faster access to food and this allows more vitamins and other nutrients to be available to the body. Gardening, hunting, gathering and other personal food production provides physical activity and improves mental health.

**Social:** Food literacy rises with increased opportunities for learning and dialogue in the community. Food becomes a community connector and everyone becomes more aware of what it takes to feed a community.

**Community resilience:** Resilient systems are adaptable, self-reliant, collaborative, as well as economically, environmentally and demographically diverse to allow for varied responses to gaps and challenges. Consideration of all perspectives, their linkages and the realization of the necessity for constant adaptation will improve a community’s resilience.
Production/Collection

The food system begins with the production and collection of food, including hunting, fishing and wild crafting. The agricultural sector includes farmers as well as the businesses that supply the necessary resources to grow the food (seeds, fertilizers, farm equipment, animal feed and farm buildings). The agricultural and commercial fishery sectors are dealing with a number of issues that affect sustainability and the food system:

- **Access to resources** including land, skills, seeds and animal stocks, appropriate technologies, water, labour, credit to finance business operations and more;
- **Climate change**, which is altering growing conditions and causing more volatile weather;
- **Energy costs** are increasing to operate farm machinery and manufacture crop inputs such as fertilizers; and
- **Farm/fishery incomes are very low**, resulting in fewer young farmers/fishers, more off-farm/fishery employment and an above average age of farmers/fishers.

In many areas of the country, members of the non-farm community also produce food through gardening, keeping livestock, fishing and hunting. Urban agriculture has increased as green areas of cities become potential growing sites and people supplement their diets with fresh eggs, milk and meat from backyard livestock. In community gardens, groups of people nurture, develop and sustain a growing space in their community, sharing the labour and the resulting produce. This smaller-scale production shares some of the challenges of the agricultural sector - access to resources and climate change in particular.
Processing

In a climate where fresh food is only available for a portion of the year, we must still be able to store and access food year-round. Generally, food in Canada is produced in rural areas, far away from the consuming public. Raw food is often altered to allow efficient and economical transportation and distribution. Freezing, canning, dehydrating and other processing allows access to food beyond the growing season and growing region. Processing capacity is often the key to new markets, new products, new revenue streams and increased activity throughout the food system.

Canadians can buy fresh and processed food from around the world. As many food-exporting countries have lower environmental and employment standards or influence markets to their advantage, their foods are often cheaper than Canadian-produced foods. In this competitive international marketplace it can be expensive to choose to support a local, sustainable food system. As a result, Canada has lost processing capacity, jobs, and quite possibly the ability to feed ourselves.

Distribution

Distribution happens at each stage of the food system. Food producers distribute and transport inputs and workers. In some specialized processing such as meat production, food is transported for harvest. Harvested food needs to be transported for processing and marketing. Food that is ready to sell is transported to farmers’ markets, retail stores, restaurants, food hubs, homes and businesses. People consider transportation, time and convenience when they decide how and where to buy their food. Waste is often transported and handled to maximize usage of any surplus or by-product.

Distribution can limit or enable food access. For example, supermarkets may demand that a neighbouring farm transport food to a regional warehouse many miles away rather than facilitating a direct delivery. Available and affordable fossil fuels have enabled food distribution around the world, but as the cost of fuel increases so will our reliance on food grown closer to home.

A CASE FOR COMMUNITY ABATTOIRS

Many small, community-oriented abattoirs and butcher shops have recently closed. These businesses have been unwilling or unable to afford the high cost of meeting regulatory food safety standards. Many producers are now unable to meet the demand for local meats due to a lack of processing infrastructure and because butchering is becoming a lost skill. We need to design a food safety regime that recognizes alternative safety measures and the importance of small abattoirs to the rural economy and sustainable food systems.
Access

Food access reflects where and how people provide their own food. Do we purchase our food at farmers’ markets, supermarkets or at our local restaurant? Are we able to grow or gather any of our own food and then preserve and store it for future use? Do we have a job or the money to purchase what we need?

Income directly affects a person’s access to healthy food. People living in poverty often must spend most of their income on housing and other living expenses, leaving little for buying food. Perversely, processed foods are often cheaper than fresh fruits and vegetables; the healthy choice is not often the most economical. Thus, food access is determined by the means to afford food as well as the affordability of food.

Physical proximity to food stores is another aspect of food access. In many urban centres, there are food deserts where it is difficult to purchase fresh foods because grocery stores are far away. Creative solutions to bring food into these areas include cooperative stores, pop-up markets and community gardens. As well, many communities have supported the development of farmers’ markets to make it easier to access fresh local foods. In rural areas car dependence and a lack of public transportation can make it difficult to buy food at distant grocery stores. Transportation requirements must always be considered when estimating the cost of food.

Consumption

What we eat is directly related to access as it influences where we get our food, whether we need to prepare it and in some cases where we eat it. Many factors influence our consumption patterns: busy lifestyles; the devaluation of food preparation; low food preparation skills; lack of traditional foods; sensitivity to allergens; lack of nutritional knowledge; and food safety concerns all influence our diet choices and our abilities to feed ourselves well.

Redeveloping food literacy and a more sustainable diet may involve increasing food education, preserving traditional skills and increasing focus on fresh and minimally-processed food. Closer association with production and faster access to food may reduce the need for additional food processing. Consumers are key to changing to healthier consumption patterns and more sustainable diets and many efforts attempt to influence their choices for the better.

FOOD BANKS: A TEMPORARY SOLUTION?

Canada’s first food bank opened its doors in 1981 in Edmonton. While food banks were intended to be a temporary measure, the need for them continued — and grew. Today, there are more than 800 food banks and 3,000 food programs in Canada. Thirty-seven percent of food banks offer programs in budgeting, food preparation, job and life skills training, and more.

In Ontario, Bill 36 The Local Food Act (2013) awards tax credits to farmers (about 25% of fair market value) for food donated to their area food banks, potentially increasing food bank access to local fresh foods. See Original Source.
Waste

There is an element of waste in each food system component as food is further developed and handled. Most food is graded and substandard products are disposed of as waste or sent for further processing. Other foods generate peelings, pits or other waste during processing. Food that is not handled or stored properly can spoil. Food that cannot find markets or adequate profits might be left unharvested in the fields or not transported in order to minimize production costs and losses.

A United Nations Food and Agricultural Organization study estimated that one third of all food produced for human consumption is lost or wasted. Matching supply with demand and minimizing or repurposing waste or underused food products can help feed a growing world population. Composting organic waste re-incorporates nutrients in the production cycle. On the other hand, non-compostable synthetic products have replaced some leather, wool and other secondary products of food production, creating preventable organic and inorganic waste. The sale of these secondary organic products help meet the cost of food production.

Using surplus to feed a hungry world

At Ontario Christian Gleaners, volunteers take donations of vegetables and vegetable processing waste and trim, chop and dehydrate them. The resulting mix is added to grains and legumes to form a soup mix that is distributed to those in need around the world.
As with many collective actions, a desire to enact change results as a response to a perceived problem or opportunity. Ontario communities may act to change food systems for many reasons: improving access to healthy food, providing viable farm incomes, improving stewardship of land and resources and increasing economic activity. Plans for change can address both policy and more practical considerations, such as:

- Developing a food distribution hub to aggregate and distribute local food;
- Establishing a regional research network to investigate production issues that consider regional climatic, geographic and demographic conditions;
- Developing public procurement policies;
- Initiating a municipal composting program; or
- Including food considerations in an Official Plan.

Healthy sustainable food systems can be organized nationally, provincially and municipally, as well by food/watersheds and geographically distinct regions. The geographic area of focus needs to be clear. Most often this involves looking at jurisdictional boundaries and food system policies. Our decision-making power within the system -- and the influence of other, perhaps more powerful, stakeholders -- affects our ability to create change. For this reason, communities often focus on local food systems because they can directly affect outcomes and make decisions, both individually and as a community, that result in change.

Organizing and Networking: Food Policy & Action Groups

Food policy and action groups are becoming more prevalent. They often begin organically as stakeholders share common goals and activities. A more formalized policy or action group develops to facilitate the sharing and combining of resources, to create an identity for the action, to be a connection point for a wider base of stakeholders and to create a working space for policy or food system change.

Effective food policy and action groups include representation from each of the food system components as well as community and government representatives. These groups offer their members opportunities to network, develop additional complementary relationships and collaborate on projects to develop the local food system. Each stakeholder brings expertise and the perspective necessary to move collective actions forward.
Successful groups develop governance and decision-making structures that guide their work. They define their goals and develop strategies to achieve them. Often the group’s mandate expands with success and experience and as other priorities emerge.

**Identifying Opportunities: Community Food System Assessments**

To change, we need to know where we are currently and where we need to be. Community food system assessment is a participatory and collaborative process that measures the assets, resources and gaps of the food system components and a broad range of related issues. Based on pre-determined goals and objectives, it can involve varying degrees of community engagement and can help create a collective vision of a healthy and viable community food system. It offers a baseline from which to measure change. An initial food system assessment can lead to continuous measurement and analysis if appropriate systems are put into place to collect data.

**Planning for Action: Food Charters and Strategies**

A food charter is a collaborative vision for the food system as it could or should be, as defined by the area's residents. It provides a set of values and principles to guide planning, policy, program development and implementation efforts in food security and community development. Food charters are typically created by people from a broad spectrum of community interests and organizations meeting to discuss their concerns and desires around food and agriculture policy. When a food charter is adopted by the local government and others in the community it becomes a public document to guide decision-making.

A food strategy is a plan to implement a food charter or other action. It outlines goals and objectives and maps the actions needed for change to happen. It can acknowledge challenges and issues that may influence a food-secure future and suggest measures to mitigate any negative effects. A food strategy can coordinate efforts around food system development, crossing sectors to ensure positive community, health, economic and environmental outcomes. The most effective food strategies are fluid documents, re-visited regularly and adapted to meet local changes.

**HURON FOOD ACTION NETWORK** Established 2013

**Vision:** Cultivating a sustainable local food system to nourish all people of Huron County and beyond.

**Working Groups include:** Food Policy, Distribution, Community Gardens, Food Education.

**Stakeholders include:** County staff, Public Health, Economic Development, Food producers, processors, retailers and the General public.

**Lessons:** It must be community driven; Municipal support and collaboration are key; There are multiple paths; It takes time, funds and community champions.

huronfoodactionnetwork@gmail.com

**SAMPLE CHARTERS & STRATEGIES**

- Durham Region Food Charter
- Your Guelph Wellington Food Charter Toolkit
- Taking Root: York Region Food Charter Consultations
- What Feeds Us: The Vancouver Food Strategy
Engaging communities in sustainable local food systems is an important process which will do much to improve community food security, health, economic stability and the natural environment. There are many opportunities for action when people understand and take into consideration food system components and the basic principles of sustainable food system development.

Many communities in Ontario, Canada, North America and beyond have begun to intervene in their local food systems and are willing to share their resources, enthusiasm and support. (Follow the links throughout this document or contact HC Link to get in touch with them.) Communities empowered to set priorities and make decisions to develop and manage their local food systems will build resilience in the face of future challenges and help ensure a prosperous and secure food future.

CONCLUSION
References


Resources

**HC Link’s Sustainable Food Systems Webinar Series**
- Part 1: Introduction to Sustainable Food Systems
- Part 2: Sustainable Food Systems in a Healthy Communities Lens
- Part 3: Organizing to Affect your Food System: Food Policy & Action Groups

**Reports, Research & Toolkits**
- *Beyond Business as Usual: Towards a Sustainable Food System* Food Ethics Council (UK)
- *Doing Food Policy Councils Right: A guide to development and action* Mark Winne Associates
- *From the Ground Up: A Primer for Community Action on Kingston and Countryside’s Food System* National Farmers Union
- *Local Food Systems & Public Policy: A Review of the Literature* Équiterre & The Centre for Trade Policy and Law (Carleton University)
- *Mapping Local Food Webs Toolkit* Campaign to Protect Rural England
- *Municipal Food Policy Entrepreneurs: A preliminary analysis of how Canadian cities and regional food districts are involved in food systems change* Toronto Food Policy Council
- *Scaling Up: Meeting the Demand for Local Food* University of Wisconsin-Madison

**Networks**
- *Food Secure Canada Sustainable Food Systems Network*
- *FoodNet Ontario: Working together to achieve a food-secure Ontario*
- *Nourishing Communities: Sustainable Local Food Systems Research Group*
- *Sustain Ontario: The alliance for healthy food & farming*

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To learn more about us or request a service, contact us at:
www.HCLinkOntario.ca  |  info@hclinkontario.ca
416-847-1575  |  1-855-847-1575

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