

Local & Regional Food Systems

What is a “food system”?

Food systems comprise all aspects of food production (the way the food is grown or raised; the way the food is harvested or slaughtered; and the way the food is processed, packaged, or otherwise prepared for consumer purchase) and food distribution (where and how the food is sold to consumers and how the food is transported). Food systems can be divided into two major types: the global industrial food system, of which there is only one, and sustainable/local (or regional) food systems, of which there are many. The global industrial food system has a much wider geographic reach than a local or regional food system. ^[1]

What is a “local (or regional) food system”?

The term “local food system” (or “regional food system”) is used to describe a method of food production and distribution that is geographically localized, rather than national and/or international. Food is grown (or raised) and harvested close to consumers' homes, then distributed over much shorter distances than is common in the conventional global industrial food system. In general, local/regional food systems are associated with sustainable agriculture, while the global industrial food system is reliant upon industrial agriculture. ^[2]

What is local? What is regional?

Commonly, “local food” refers to food produced near the consumer (i.e., food grown or raised within X miles of a consumer). ^[2] However, because there is no universally agreed-upon definition for the geographic component of what “local” or “regional” means, consumers are left to decide what local and regional food means to them. A 2008 survey found that half of consumers surveyed described “local” as “made or produced within a hundred miles” (of their homes), while another 37% described “local” as “made or produced in my state.” ^[3] The ability to eat “locally” also varies depending on the production capacity of the region in question: people living in areas that are agriculturally productive year-round may have an easier time sourcing food that is grown or raised 100 miles (or even 50 miles) from their homes than those in arid or colder regions, whose residents may define “local food” in a more regional context.

Is local food the same as sustainable food?

Not necessarily. Many people now equate the terms “local food” and “sustainable food,” using local as a synonym for characteristics such as fresh, healthful, and produced in an environmentally and socially responsible manner. Technically though, “local” means only that a food was produced relatively close to where it’s sold – the term doesn’t provide any indication of food qualities such as freshness, nutritional value, or production practices, and can’t be used as a reliable indicator of sustainability. For instance, while meat from a factory farm could be accurately marketed to a nearby community as “local,” the meat would certainly not be considered sustainable. Furthermore, as noted above, the maximum acceptable distance from a “local” food’s point of production to its point of sale isn’t actually defined or regulated – it’s left up to the interpretation of whoever is using the term.

Unfortunately, in order to capitalize on increased consumer demand for local food, less scrupulous producers have begun to use the term to “greenwash” (or “localwash”) their products. By taking advantage of the ambiguity regarding the term’s definition, these producers can mislead consumers by

using the local label to imply that their foods are grown closer and/or more sustainably than they actually are.

Of course, it's important to note that food marketed as "local" isn't always industrial food in disguise; indeed, plenty of local food is produced according to the highest sustainability standards. Nonetheless, since local is not defined or regulated, consumers should always be prepared to find more information about production practices in order to determine whether a local food is sustainable.

Food Distribution: the Way Local Food Reaches the Consumer

The ways in which food reaches the consumer vary widely between local food systems and the conventional global industrial food system. The development of refrigerated trucking, in combination with subsidized fuel costs and changes to methods of harvesting and transporting food, enable conventional food to be shipped over very long distances at fairly low cost to producers.^[2]^[1] The conventional food system also heavily relies upon centralized processing and packaging facilities that are often located far from the grower and the consumer.^[1] Local food systems value a shorter distribution distance between grower/producer and consumer. In addition, local food systems often cut out the middlemen involved in processing, packaging, transporting, and selling food.

Sustainable/Local Food Distribution

Local food production-distribution networks often start on smaller, sustainable family farms. Farm products are transported over shorter geographic distances, generally processed either on the farm itself, or with smaller processors. Sustainable/local food distribution networks rely on two primary markets: the direct-to-consumer market and the direct-to-retail, foodservice, and institution market.

The Direct-to-Consumer Market

The direct-to-consumer market is currently the most established sector of local food distribution.^[2] Direct-to-consumer means that all middlemen are cut out of the food distribution equation – farmers sell their products directly to consumers, rather than through third parties, such as grocery stores. Common direct-to-consumer operations include:

- **Farmers' Markets**
Farmers' markets are communal spaces in which multiple farmers gather to sell their farm products directly to consumers. Farmers' markets may be municipally or privately managed and may be seasonal or year-round. Farmers may have to pay a vendor's (or other similar) fee to participate, and must usually transport their own farm products to the farmers' market site. The United States Department of Agriculture (USDA) reports that the number of farmers' markets in the US increased from 1,755 in 1994 to 7,175 in 2011.^[4]
- **Community Supported Agriculture**
Community Supported Agriculture (CSAs) are direct-to-consumer programs in which consumers buy a "share" of a local farm's projected harvest. Consumers are often required to pay for their share of the harvest up front; this arrangement distributes the risks and rewards of farming amongst both consumers and the farmer. CSA participants often pick up their CSA shares in a communal location, or the shares may be delivered directly to customers. The USDA estimates that there may be as many as 2,500 CSAs currently operating in the US.^[2]
- **Other Direct to Consumer Programs**
A much smaller proportion of the direct-to-consumer market are options such as pick-your-own

farms, on-site farm stands and stores, and gleaning programs, in which consumers are invited to harvest crops that are left in fields, usually after harvest.

The Direct to Retail, Foodservice, and Institution Market

A growing component of local food systems are programs that provide farm products directly to retail, foodservice, and institutions. These types of programs cut out the (usually corporate) middlemen involved in storing, processing, and/or transporting food destined for grocery (and other retail) stores, restaurants, schools, hospitals, and other institutions. ^[2]

Direct to retail, foodservice, and institution programs may involve farmers delivering farm products directly to these establishments, or may rely upon a “food hub,” which is a centralized location where many farmers drop off their farm products for distribution amongst multiple establishments. (Read more about food hubs below.)

The Global Industrial Food System

The mainstream food production-distribution network starts on large, industrial farms, where monocropping (in the case of fruits and vegetables) and factory farming (in the case of animal products) is often the norm. ^[7] ^[8] Farm products may be transported to a centralized facility for further packaging, processing, and/or inspection, then transported nationally or internationally to finally reach their destination – usually a conventional grocery store or retail establishment. ^[1]

As farms have consolidated over the past 50 years, so has the food processing industry. ^[7] This consolidation means food is transported over vastly greater distances, and the production and processing of our food is in the hands of only a small number of corporations. ^[7] This has implications for food safety, food security, and the loss of small processing establishments (e.g., slaughterhouses and canneries).

- Read more about factory farming and meat processing

Why are local/regional food systems important?

Supporting local/regional food systems helps support local, sustainably run farms, can help protect our health and the health of our communities, and helps stimulate local economies. We outline some of reasons why local/regional food systems are important below:

Sustainability

Local food systems rely upon a network of small, usually sustainably run, family farms (rather than large industrially run farms) as the source of farm products. ^[2] Industrial farming negatively impacts the environment in myriad ways (e.g., by polluting the air, surface water, and groundwater, over-consuming fossil fuel and water resources, degrading soil quality, inducing erosion, and accelerating the loss of biodiversity). ^[10] Industrial agriculture also adversely affects the health of farm workers, degrades the socioeconomic fabric of surrounding communities, and impairs the health and quality of life of community residents. ^[11] In addition, although the concept of “food miles” (i.e., the number of miles a food item travels from farm to consumer) has been criticized as an unreliable indicator of the environmental impact of industrially produced food, ^[12] it should be noted that conventional food is estimated to typically travel between 1,500 and 3,000 miles to reach the consumer and usually requires additional packaging and refrigeration. ^[1] Many small-scale, local farms attempt to ameliorate the environmental damage done via industrial farming by focusing on sustainable practices, such as minimized pesticide use, no-till agriculture and composting, minimized transport to consumers, and

minimal to no packaging for their farm products. ^[13]

- Read more about sustainable farming and industrial crop production

Food Safety, Health, and Nutrition

As production networks in the conventional food system have become increasingly consolidated, and as distribution networks have become increasingly globalized, the risk of food safety problems, such as foodborne illness, has also increased. ^[10] The consolidation of meat and produce production, including animal slaughter and processing, means that there are more possibilities of improper processing, handling, or preparation affecting vast quantities of food (and subsequently consumers). Recent multi-state outbreaks affecting hundreds of people have been traced to individual farms, food processing facilities, and even individual food handlers. ^[14] When a small amount of contamination (e.g., bacteria) enters these consolidated production systems, vast quantities of the food product being processed and distributed nationally (or globally) may be affected due to the sheer volume of food being produced. This risk is heightened by weak food safety standards, inadequate food safety inspection procedures, and in the case of meat production, the trend toward increasingly rapid line speeds at industrial processing facilities. Tracing outbreaks of foodborne illnesses also becomes more difficult because the production and distribution of conventional food products, such as ground beef, often involves multiple farms, food processors, and food distributors. The distribution of these food products over vast geographical areas further complicates the capability to quickly track an outbreak. ^[15]

In addition, higher yielding plant varieties suitable for industrial production and international travel have come at the expense of nutrition. ^[16] The global industrial food system relies on crops that have been bred primarily for higher yield and ease of transport, while farmers involved in local food systems often place a higher value on plant varieties that are more nutritious by virtue of their variety (i.e., not bred for yield alone) or by their method of production. ^[17] ^[18] Local, sustainably produced farm fruits and vegetables are often fresher, as they do not require long distances for transport, and thus can be harvested closer to peak ripeness. Many fruits and vegetables contain more nutrients when allowed to ripen naturally on the parent plant. ^[16] Meat from animals raised sustainably on pasture is also more nutritious – for example, grass-fed beef is higher in “good” cholesterol (and lower in “bad”), higher in vitamins A and E, lower in fat, and contains more antioxidants than factory farmed beef. ^[19] Sustainably produced food also means less (or no) agricultural chemicals (such as pesticides), antibiotics, and hormones, all of which are common in conventional farm products.

- Read more about the health and nutrition of sustainable food, foodborne illness, pesticides, antibiotics, and hormones

Food Security

The Food and Agriculture Organization of the United Nations says that “food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life.” ^[21] Local food systems may help improve food security by making local, fresh food available to populations with limited access to healthful food; this is especially salient as more farmers' markets accept food stamps (or the equivalent). ^[2] ^[1]

- Read more about food security

Support Local Economies and Protect Local Farms and Farmland

Evidence indicates that local food systems support local economies; ^[2] for example, farmers' markets

positively affect the business surrounding them, while also providing significant sources of income for local farmers, thus maintaining the viability of many small, local farms.^[22] Unlike large industrial farms, small family farms are more likely to spend their dollars in the community on farm-related inputs (e.g., machinery, seeds, farm supplies, etc.); in addition, food grown locally, processed locally, and distributed locally (for example, to local restaurants) generates jobs and subsequently helps stimulate local economies.^[1]

In 1959, there were 4,105,000 farms in the United States, while the latest US farm census in 2011 recorded only 2,200,000 farms.^[23]^[24] In the last 50 years, though the number of farms has shrunk, the size of the farms still in existence has grown tremendously, which demonstrates the consolidation and industrialization of US agriculture.^[24] Local food systems help preserve farmland by providing small family farms a viable outlet through which to sell their farm products. In addition, the creation of relationships between farmers and their urban/suburban customers through direct-to-consumer markets can help preserve farmland as protecting family farms becomes a shared goal for both farmers and their local consumers.^[1]

- Read more about local/regional economies and protecting local farms

Barriers to the Creation of Local and Regional Food Systems

Although local and regional food systems are growing, there are a number of barriers to their creation and expansion. As a result of the consolidation of food processing, small, local farms may have difficulty finding a local slaughterhouse for their pastured animals or a local food processor (e.g., canner, bottler, commercial kitchen, etc.) for added-value farm products.^[1] As large corporate entities begin to capitalize on the “local” moniker, small farmers may have difficulty competing with large-scale producers with large-scale marketing apparatuses.^[26] Finally, farmers may have logistical problems finding reliable and convenient transport for their farm products, especially during the growing season. However, there is an emerging network of small-scale, local (and even mobile) slaughterhouses, a growing trend of farms processing their own added-value products (e.g., jams, pickles, etc.), and the creation of food hubs to solve the dual challenges of transportation and marketing for small family farms.

Food Hubs: Expanding Local and Regional Food Systems

As the demand for local, fresh produce and animal products continues to grow, innovative programs to help small farmers bring their farm products to market are also expanding. One increasingly common solution to the logistical, transportation, and marketing challenges faced by small family farmers is the creation of local and regional “food hubs.” The USDA describes a food hub as the “drop off point for multiple farmers and a pick up point for distribution firms and customers that want to buy source-verified local and regional food.”^[27] Some food hubs also provide transportation of farm products directly to consumers and retail, restaurant, and institutional customers. Food hubs take much of the burden of marketing and transportation from local farmers by finding viable consumers, and provide other business-related services, such as logistical coordination.^[27] In addition, they often provide refrigerated storage facilities and auxiliary services such as commercial kitchens and light food processing.^[27] Food hubs can expand the market reach of small, local farmers, help create local jobs, and can expand access to fresh, local food in urban and suburban markets.^[27]

FOOTNOTES

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GRACE Communications Foundation
gracelinks.org | programs@gracelinks.org

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