6

Local Food Provision

This chapter aims to:

- describe the widespread development of alternative, local agri-food networks;
- explore arguments for relocalizing food provision;
- discuss the dangers of romanticizing local food and oversimplifying requirements for sustainability.

Introduction

Even as international trade in food products has increased rapidly, with greater roles for transnational agro-industrial corporations, 'big box' grocery stores and fast-food chains, so too have new local agri-food networks,[1] in a variety of forms and to an extent that lead many to invoke the formation of an alternative agri-food movement.

In these new, alternative agri-food networks, different social actors concerned about contemporary industrialized food provision find each other. *Small- and medium-scale farmers*, struggling to survive competition from large corporate farms, emphasize quality, freshness, local economic benefits and more. *Urban consumers*, interested in fresh, healthy foods, are flocking to farmers' markets, subscribing to box schemes with local farms for regular home delivery (CSAs), and planting home and community gardens. *Local food retailers*, including greengrocers and restaurants, are strengthening relationships with local growers. *Local governments and business associations*, seeking to boost both urban and exurban economies, have got into the act, offering facilities, staff and other support to launch farmers' markets and promote local agricultural 'brands' (appellations or *provenance*). *Food activists*, relating problems of poverty, malnutrition, obesity, diabetes and a host of other ills to poor access to healthy food, have launched urban gardening, 'farm to fork' and 'farm to school' programmes. All of these actors and many others have worked to support local

agricultural production and consumption; create alternative, short food-supply chains; and provide a counterpoint to globalized food provision.

Participants in this alternative agri-food movement aim to address growing consumer concerns about food quality, human health, the environment, social justice and ethical dimensions of industrialized modes of food production and consumption. They argue that the awareness and social bonds necessary to strengthen social, economic and environmental sustainability can be recreated through directly connecting food producers, consumers, retailers, schools and other institutions.

In contrast to globalized food provision, in the case of local agri-food networks, sustainability is understood to include short supply chains, more fresh and seasonal food, and knowledgeable relationships between growers and consumers. Short supply chains demand less energy for transport, processing and packaging, while maximizing freshness and quality. When agricultural production practices are developed in concert with local ecologies and tastes, they arguably also optimize environmental impacts. Short food-supply chains buffer local producers, consumers and economies against the cyclicality of global markets, characterized by resource scarcities, oversupply problems, sectorial crashes and energy intensiveness. Local food-supply chains are diverse, may acquire various organizational forms and have few formal standards and procedures.

Though increasingly popular, alternative agri-food networks have been critiqued for romanticizing the local; not necessarily producing fresher, higher-quality food, with lower environmental impacts; and failing to address, or even exacerbating, local and global inequality. Some observers also comment that these alternative agri-food networks tend to ignore the necessity for continued national and international action to strengthen food sustainability and, overall, do not pose a viable alternative to global agri-food provision.

In this chapter, we first present the multifaceted phenomenon of these emerging alternative agri-food networks and then review their main characteristics. Criticisms are discussed in the final section.

Local Food Resilience

A rapidly growing movement can be observed of small and medium-sized farmers, consumers, restaurant owners, local food retailers and others, creating new, local agri-food networks in counterpoint to the globalization of food provisioning (O'Hara and Stagl, 2001; Halweil, 2002; Green et al, 2003; Hines, 2003). Related initiatives include the development and marketing of local and regional food brands; the expansion and promotion of farmers' markets; direct sales to local restaurants, schools, hospitals and other institutions; new, urban agriculture; and the Slow Food movement. These different initiatives intend to create alternatives to the increased rationalization, industrialization and commercialization of food from 'farm to fork'. Alternative agri-food networks

Box 6.1 Manifesto on the Future of Food

The 'Manifesto on the Future of Food' calls for 'a transition to a more decentralized, democratic and cooperative, non-corporate, small-scale organic farming as practiced by traditional farming communities, agroecologists, and indigenous peoples for millennia' (ICFFA, 2003, p4). It was formulated by the International Commission on the Future of Food and Agriculture (ICFFA), which is comprised of scientists and food activists, mostly from developed countries, but also from India and elsewhere.

Source: www.farmingsolutions.org/pdfdb/manifestoinglese.pdf (accessed 18 March 2011)

'tend to be place-based, drawing on the unique attributes of a particular bioregion and its population to define and support themselves' (Feenstra, 2002, p100) (see Box 6.1). Eating local is considered attractive because, among other reasons, the food is fresher and more flavourful; local growers are supported, strengthening local economies; and local food supplies are less vulnerable because they are protected from widespread food contamination, transportation problems and petrochemical price spikes and shortages.

Local brands, varieties and regions

The second half of the 20th century saw the expansion, standardization and globalization of food and agriculture. These developments are still continuing. Pressed by low prices and high costs, small- and medium-sized producers around the world are letting marginally sustainable farms go to seed, turning where they can to other, often urban, sources of livelihood. New, suburban housing 'sprouts up' where crops have been grown for generations. Agricultural and varietal diversity are diminishing, while knowledge of traditional agro-ecosystems and the comfort and security of knowing where food comes from are disappearing for many consumers.

Against this still-rising urban tide, the early decades of the 21st century have witnessed a rediscovery and expansion of high-quality, healthy and unique local foods and food products. Traditional agricultural families and new pioneers have combined to develop high-quality local agricultural produce, products and regions – with support from local governments eager to identify new sources of revenue. Building on long-standing European traditions of wine (e.g. Champagne, Bordeaux), cheese (e.g. Camembert, Stilton) and other local food appellations, new food and drink regions have been trademarked and promoted by alliances of local producers, investors, governments, business organizations, co-operative extension agencies and others.

These efforts have emphasized developing new regions for high-value agricultural products (e.g. wine, cheese, maple syrup); high-quality, healthy food (freshly picked, organic); hospitality and 'agro-tourism' (wine-tasting, cheese tours, farm stays, crop mazes); and brand recognition and promotion, even in more distant markets. Proximity to major metropolitan areas can evidently be a plus for the success of these efforts. The Napa Valley wine-

growing region, a short drive from the San Francisco Bay area in California, is one classic example. That region's success has been widely emulated in the US, from the Columbia River wine-growing region in Washington and Oregon, to the Finger Lakes wine (and more recently, cheese) region in New York, among many others.

With a focus on quality, taste, uniqueness and reduced environmental impacts, heirloom varieties have become increasingly popular. Against the few, standardized varieties of produce and other agricultural products offered in large quantities in 'big box' food retailers are tender, juicy heirloom tomatoes. Forgotten varieties and tastes of apples and dry-farmed, intensely flavourful produce are again available. And, agricultural products that are well suited to thrive (or at least survive) in particular, local agro-ecosystems are produced. Recast as extraordinary, high-quality products and experiences in a standardized world, local agri-food brands, varieties and regions are finding new legs to stand on.

Coming soon, to a neighbourhood near you

In recent years, urban residents in North America and elsewhere have had to travel longer and longer distances to suburban 'big box' food retailers, increasing 'food miles' not only for food items, but also for themselves. As major food retailers abandon city centres, they leave behind 'food deserts': a dearth of fresh, healthy food in poor, urban neighbourhoods. The few, remaining small convenience stores charge high prices for not-so-fresh (if any) produce, reinforcing vicious cycles of poverty, unhealthy eating, obesity, diabetes and other food-related ills.

In these urban 'food deserts', new hope is inspired through the creation of neighbourhood and central farmers' markets. These vital, popular enterprises are capturing the imagination of local governmental and business officials, the media, producers and consumers in Europe, North America, Japan, Australasia and elsewhere. In the US in the last part of the 20th century, the number of farmers' markets grew more than ten-fold, from nearly 300 in the mid-1970s to more than 3000 by the end of the millennium. These alternative food-provision networks are based on two guiding principles: that the produce for sale is of local origin (in the UK, for example, with a maximum distance ranging between 30 and 75km) and that those selling the food should have been involved in its production.

Farmers' markets are one vehicle for reconnecting local agri-food producers – most of whom are too small and insufficiently connected to participate in large agri-food supply networks – with urban consumers. Working together, neighbourhood associations, schools, churches and others, local governments and food alliances have endeavoured to promote not only large central farmers' markets, but also smaller, neighbourhood farmers' markets, often on different days of the week in various locations. Local livelihoods and urban economies are boosted further through sales of produce grown in urban and community gardens.

Box 6.2 The 100-Mile Diet

One popular manifestation of the relocalization of food provision is the '100-Mile Diet'. Organized by local-food advocates, churches and others, promoters of the '100-Mile Diet' call for consumers to purchase their food and agricultural products from sources located within 100 miles (161km) of their point of consumption. In such a diet, gone for most 'Northern' consumers are contemporary 'staples', such as olive oil, coffee, tea, bananas and chocolate, which are transported long distances across the globe. In their place are locally grown produce, dairy and meat products. As local agriculture in temperate zones is seasonal, the 100-Mile Diet is based also on relearning practices of canning, drying, freezing and other forms of food preservation. The 100-Mile Diet combines promotion of the local food supply with concerns about reducing the 'carbon footprint' of long food-supply chains, through shortening distances that food and food products have to travel between 'farm and fork', thus reducing 'food miles'. Often part of a regional development strategy, the 100-Mile Diet also relates to the Slow Food Movement.

Sources: www.100milediet.org; Smith and MacKinnon (2008) and Kingsolver et al (2008)

Shoppers visit farmers' markets for a variety of reasons. Food quality and price are important. But so, too, are the local and social *embeddedness* of exchange, including direct, face-to-face relationships between consumers and producers (Hinrichs, 2000; Halweil, 2002, 2006; Kirwan, 2004), a close connection with regional origin or *provenance* and sometimes with traditional local cultures. The symbolic meaning of this food is imbued in such values as 'authenticity' and independence from globalized, 'industrialised, chemical-dependent ... mass food production systems' (Seyfang, 2007, p109) (see Box 6.2). Many of these elements tend to be missing from globalized food provision and 'big box' food retailing.

Farms in the city?

Although centuries old, urbanization is an important social process as ever, with, for the first time in the 21st century, a majority of the world's population living in cities. How to feed these rapidly increasing numbers of urban residents is a critical problem around the globe. Each city's growth is particularistic, dependent on various specific geographic, demographic, economic and other factors. In North America, older cities in de-industrialized regions face problems of loss of livelihoods, poverty, decaying infrastructure and population loss. In newly industrializing regions, including in Asia, Africa and Latin America, cities face rapid in-migration, informal housing, economic insecurity and more. In both older and newer industrialized countries, urban agriculture is becoming increasingly important for food security, livelihood and health.

A fascinating film[2] on urban agriculture in the developing world cites a UN Development Programme (UNDP) estimate (Smit et al, 1996) that, 'worldwide 800 million urban residents are engaged in agriculture'. Agriculture in cities takes place in backyards, in school lots, on roof tops and alongside public infrastructure projects, such as roads and waterways. Often, urban edges serve as intensive 'truck' gardens, growing fresh produce for city dwellers. Where employment is

Box 6.3 Organic vegetables from the slums

In informal settlements around Capetown, South Africa, one can find thousands of organic vegetable gardens, both private and community-organized. Supported by Abalimi Bezekhaya ('Farmers of Home'), a local urban agriculture and environmental action association, residents produce their food organically because it is 'easier and less expensive', and since they cannot read, it would be difficult for them to safely follow printed directions for pesticide applications anyway. With fresh, local produce, residents have ready access to inexpensive vegetables; and by selling surplus through organic shops elsewhere in the metropolitan area, they can earn additional cash.

Source: Petit-Perrot (2009); see also www.abalimi.org.za (accessed 18 March 2011)

scarce and low-waged, especially for newly arrived urban residents, backyard and other forms of urban farming provide important economic as well as nutritional supplementation. In another recent study (Zezza and Tasciotti, 2010, summarized in FAO, 2010, p1), the authors find that, 'based on data from 15 developing and transition countries ... up to 70 per cent of urban households participate in agricultural activities'. They suggest that 'urban agriculture seems particularly important in low income countries such as Malawi, Nepal and Vietnam' (see Box 6.3, for an example from South Africa).

Urban agriculture is also expanding in more developed countries.[3] Former manufacturing hubs, such as Detroit, are losing jobs and population while they are beset by suburbanization as well. Older, inner-city residential neighbourhoods fall into disrepair, with dilapidated homes boarded up, subject to drug users, squatters and arson, and ultimately bulldozed away. More and more vacant lots appear in the city, near perennially impoverished residents. For local anti-poverty and food activists, however, this has become an opportunity to rediscover urban agriculture. In a series of reports in the *Guardian* (UK) newspaper, Paul Harris has documented Detroit's urban agricultural renaissance. According to Harris (2010), the city's population fell by half, 'from about 1.8 million at its peak in the 1950s to fewer than 900,000 today'. During his visits, he found 'thousands of people involved in urban farming in Detroit'. These new urban farmers have plenty of land: 'Abandoned houses, vacant lots and empty factories now make up about a third of Detroit, totalling around 40 square miles – the size of San Francisco'. He finds both community groups and commercial interests actively exploring urban agriculture. These initiatives have 'certainly caught the attention of cash-strapped local government'.

Urban agriculture contributes to people's health and well-being and minimizes the ecological impacts of food provision by eliminating long-distance transport from rural areas and by reusing organic waste through composting.[4] Urban agriculture can be used as a building block for a more encompassing urban food strategy as well. In recent years, a growing number of cities have been redesigning food provision with a wider perspective (Sonnino, 2009). An important complement to urban agriculture is how public and private institutions organize food procurement. Schools, child care centres, hospitals, nursing

homes, prisons and other large institutions all regularly procure large volumes of food for their charges. In all of these settings, stakeholders (parents, students, patients, inmates, families, health officials and others) may lobby for local food provisioning.[5]

'Farm to fork' networks

Among the innovators and advocates for relocalizing food provision are local restaurants featuring fresh, seasonal, locally grown, often-organic produce. Famous restaurateurs and chefs, including Alice Waters at *Chez Panisse* in Berkeley, California, have developed direct relationships with local, organic growers, who provide fresh, wholesome produce daily. Others, such as chef-owner Alicyn Hart at *Circa* in Cazenovia, New York, bring farmers' markets into their establishments, offering customers not only hot dishes but also local 'cheeses, cage-free eggs, organic dairy products' and more. Led by Waters and others, local-food advocates have been working closely with primary and middle-schools, developing vegetable and herb school gardens.[6] These activists are re-evaluating school-lunch programmes that over the years have become increasingly centralized and 'industrialized' along fast-food models, with lots of high-fat, processed foods: fried 'chicken tenders', frozen pizzas, mass-produced beef patties, etc. In addition to school gardens, advocates have initiated 'farm to school' programmes, linking schools with local farms. In this way, not only do students learn more about where their food comes from, but the food is fresh, high quality and locally produced, helping sustain local farmers and strengthen local economies.

Along similar lines, in their publications, Morgan and Sonnino (Morgan and Sonnino, 2008; Sonnino, 2010) stress the benefits of promoting local provisioning of school meals. In many places, governmental authorities (at local, regional or national levels) are legally obligated to provide nutritious meals for school children. Many initially regarded this as a strategy to improve school children's health and educational performance, but over time it became just another public service to be privatized against lowest costs. As a result, in the 1990s and 2000s, many school meals were of low quality, based on industrialized and cheap food, contributing to problems of obesity among today's youth. In response, in different regions, local authorities or parent associations undertook actions to improve school meals by developing procurement policies that promoted local and healthy foods. In many instances, these groups were able to substantially improve the quality of the school meals supplied, in combination with strengthening networks between schools and local farmers and food processors. The promotion of locally supplied school meals has also exposed children to a greater diversity of fresh food products.

Subscription farming

For a time, small- and medium-scale farmers were able to carve out economically viable niche markets in high value-added organic produce. After decades

Box 6.4 Growing Power in Milwaukee

On the northern outskirts of Milwaukee, Wisconsin stand 14 greenhouses on almost 1 hectare of land. 'Growing Power' is the name of a farm producing many different food products, a food-distribution hub in an area without full-service grocery stores, and a training centre. Included in the complex are an aquaponics fish-raising facility, an apiary, three poultry houses for laying hens and ducks, an anaerobic digester to produce energy from the farm's food waste and more. Every week, Growing Power delivers up to 350 baskets of food for distribution in the local community. Together with hundreds of customers, the staff of 35 become familiar with growing and eating fresh produce, an opportunity they would not get otherwise.

Source: Bybee (2009); www.growingpower.org

of extraordinary growth in the natural, healthy and organic foods sector, agro-industry and major food retailers alike saw gold, making major investments and converting large-scale farms from conventional to organic agriculture. The niche carved out by small-scale farmers became increasingly competitive, however, as it was threatened by the entry of agro-business. Economies of scale continued to support large-scale rather than smaller, local producers. In response, by the end of the 1990s, local farmers developed new initiatives, emphasizing the importance not only of organic agriculture, but also of sustaining local farms, economies and food security. Among their new set of survival strategies are CSAs, which are subscription or membership schemes, in which mostly urban consumers make subscription purchases in advance of one or more of a farm's outputs. CSAs allow local growers to generate financial capital to run their farms, and in return, when the harvests come, shareholders receive their shares of the produce. Schemes range from 'rent a cow', shares of milk produced by a female bovine, to 'bird of the month', the advance purchase of roasting fowl (priced to include feed, water, shelter and a margin of profit for the farmer) and 'bouquet of the week', fresh cut flowers delivered each week. There are also schemes that guarantee a weekly delivery of free-range eggs, and many other such agreements (see Box 6.4). The US Department of Agriculture identified more than 12,500 farms engaged with more than 270,000 households through CSAs in 2007 (USDA, 2009, p606). By sharing the costs and harvests of agriculture, farming risks and rewards are more equitably balanced.

Alternative labour strategies

The quality, affordability and availability of farm labour remains one of the biggest challenges to small farmers today. There are more and more instances where crops have been planted or fruit trees are ready to harvest, but labour costs are so high that produce is left unharvested in the fields or fruit remains in the trees. Growers have addressed this in a variety of ways. Some in high-wage OECD countries have resorted to using immigrant, even undocumented, farm labour. Sometimes even such sources of labour are unavailable, however. One alternate labour strategy employed by many small-scale farmers is self-pick (or 'u-pick') schemes, whereby growers plant fruits and vegetables and custom-

ers do the harvesting. Consumers thus gain access to food at prices discounted over what they might find – imported from far-away places – in local grocery stores. In another approach in North America and elsewhere, where retired and unemployed people have an 'excess' of labour and a 'deficit' of nutrition, urban-food advocates have organized 21st century 'gleaners brigades' to harvest and distribute produce that otherwise would rot in the fields. One such, religiously oriented group, the Society of St Andrew, based in Virginia but with efforts across the US, claims to have involved 'more than 30-thousand volunteers ... to salvage and distribute ... more than 18-million pounds of produce through our Gleaning Network'.[7]

Slow Food

Starting in Italy, a country known worldwide for its small enterprises and long-standing regional agricultural specialties, a new Slow Food movement has risen. Inspired by its charismatic leader, Carlo Petrini, the Slow Food movement spread rapidly, especially in more affluent parts of the world, as an alternative to fast food, symbolized by golden arches. Slow Food combines food provisioning, food preparation and food consumption as practices that are simultaneously social and biophysical in nature, with an emphasis on unique quality, taste, sociality, identity and tradition, rather than on quantity, quickness and uniformity. The movement has spurred many local initiatives worldwide, but has become especially active in Europe, the US and Japan. The markets for many, sometimes even forgotten, local and regional food products have been strengthened (Morgan et al, 2006). Small, local agricultural producers are elevated as champions of tradition, quality and community. Communities become deeply embedded in slow food products through reputation, provenance, appellation, marketing and practice. The universal, industrialized fast-food model is rejected in favour of particularistic, small-scale, locally and community-based food production and consumption that centres on the human relationships of farmers with their farms and consumers with their food, and also those between producers and consumers. Therefore, the Slow Food movement can be considered primarily a cultural critique of global, fast food.

The Argument for Local Food

As noted above, a loose but widespread alternative agri-food movement is challenging the increased globalization of food and agriculture. Having identified some of the main manifestations of this movement, we now review some of its major claims. Among these arguments, we find that its promoters consider short food-supply chains to be more ecologically sustainable than long ones; that seasonal, locally produced foods are fresher and healthier; and that local food provisioning strengthens social bonds and communities. Other arguments hold that the viability and sustainability of local economies are enhanced through reduced dependence on global agri-food systems, and that the diversity

of plants, animals, producers, products, consumers and tastes is conserved and even enhanced through sustaining local agriculture.

Short supply chains

Globalized food provisioning requires transporting agricultural goods over very long distances, from one part of the globe to many others. Fresh foods grown elsewhere in the world demand refrigeration, climate control and dependable, quick transportation to maintain freshness and quality. Many agricultural products are processed (frozen, freeze-dried, canned, packaged, etc.) prior to shipping. In addition to affecting nutrition, these processes are also energy-intensive and often polluting to local water supplies. Very large-scale, often vertically integrated, globally sourced corporate farms and agro-processing facilities may in some respects be highly efficient, but overall, they arguably require higher energy inputs because of greater transportation, refrigeration, climate control and processing costs. This model of food provision also results in the unwanted, locally intensive disposal of agricultural and food-processing wastes. By contrast, a greater proportion of local provisioning means food that is fresh is brought to local markets more quickly and has a higher nutritional quality with less associated processing energy costs and waste. Further, when local agricultural-production practices match the ecological characteristics of a particular region, especially its seasonal rhythms, they will have optimal overall environmental impacts.

Fresh and seasonal food

The freshness, taste and nutritional value of many foods are greatest at the moment of their harvest or primary processing stage. The longer the supply chain, the more processing, preservatives and refrigeration are required to maintain the food's looks of freshness, not only adding to food costs, but also reducing overall food quality, taste and nutrition. Local provisioning moves food most quickly and nutritiously from 'fields' to 'fork'. Restaurant owners know this well, and thus they contract local growers, wholesalers or greengrocers to deliver fresh produce daily, or even better, grow their own herbs and other foods in kitchen gardens. Food tastes best and is healthiest when fresh. For many food items, fresh and raw items have the highest nutritional content. The 'natural' character of the products and production methods used in local food-supply networks is considered the best guarantee for protecting the health of human beings, farm animals and the ecosystem as a *whole* (Green et al, 2003). Still, the foods that fit such methods of supply represent just one part of the ordinary diet of most present-day consumers, and to profit optimally from the qualities of local food, this diet would also have to change.

Building relationships

Local food-supply chains are very diverse and can acquire very different

organizational forms because there are no overarching formal standards and procedures. Locally organized, often community-based food-supply chains 'tend to be place-based, drawing on the unique attributes of a particular bioregion and its population to define and support themselves' (Feenstra, 2002, p100). Local communities or networks may develop their own procedures and requirements, making this a very flexible arrangement. Nevertheless, although the organizational forms developed within various local food-supply networks may differ considerably, active consumer participation is an essential characteristic of each of them.

Localizing food provision can also be considered a form of social action, an alternative to mainstream food provision. According to such a view, mainstreaming local food would be seen not as a positive goal, but rather as co-optation or 'conventionalization'.[8] According to this perspective, local food has a symbolic meaning that challenges the main, globalized industrialized food system, because the former's values and structures indicate that other options are possible. The presence of alternative, local food-supply chains provides tangible evidence that globalization is not the only option. By participating in locally oriented forms of food consumption, people may join a social movement (Melucci, 1996) that addresses relevant social problems and expresses alternative values and aspirations. Producer and consumer participation in different aspects of local food provision creates space for creativity, where alternative social and economic practices can be introduced. Local food is selected not only because of its inherent characteristics, but also because of its symbolic meaning, which consumers identify as alternative and something that they can use politically (Terragni et al, 2009). Thus a distinction can be made between local food as a *political agenda*, directed at creating an alternative food economy, and as a *development strategy* to incorporate small rural firms and marginal agricultural economies into economic development (Fonte, 2008). Promoting the first goal means reconnecting producers and consumers, and the second goal means primarily creating regional food identities to strengthen their position on the larger market for food.

Active consumer participation is an essential characteristic in many of these modern, localized supply chains. The involvement of consumers makes it possible to establish trust in the quality and safety of food based on personalized, face-to-face contacts, without relying on expert-based systems, as is necessary in abstract global food-supply chains. Becoming involved in local food-supply chains can promote a sense of community awareness and integration, as networks between like-minded people are strengthened (Watts et al, 2005).

Food security

The small scale of local food-supply chains allows small farmers, local communities and consumers some independence from globalized agri-food systems, which are deemed unsustainable over the long haul. Only alternative local food-supply chains are considered capable of responding to contemporary

Box 6.5 Community food security

In their *Guide to Eating Locally and Seasonally*, the Interfaith Network of Portland, Oregon, suggests that:

> *Food has the potential to weave together the land, people and communities into a fabric of relationships that fosters justice and sustainability. Unfortunately, the food we eat often represents unjust relationships and a degraded Earth. Community food security (defined as all persons in a community having access to fresh, local, culturally appropriate food at all times) is a concept and process that creates healthy relationships around food.*

Source: Interfaith Network (2003)

consumer concerns about health, the environment, animal welfare and social impacts of modern practices in food production and consumption. According to Princen (1997), only de-globalization through the creation of small-scale local food networks would enable the checks and balances necessary for *sustainable resource use of local land and other agricultural resources*, as local networks function on the basis of direct interaction between food producers and consumers. By developing alternative networks, local producers guard themselves against being subordinated in spatially extensive food-supply chains and reduce their vulnerability to subordination within these chains, which serve the interests of powerful actors (Watts et al, 2005). Local food is seen as countervailing the ever-expanding market shares and increasing profits that large corporations are continuously making efforts to expropriate (see Box 6.5).

In response, local food-supply systems offer market opportunities for small (organic) producers and, together with consumers, co-produce feelings of enchantment (Thompson and Coskuner-Balli, 2007). These initiatives differentiate themselves by re-territorializing the food market and blurring the traditionally strict difference between producers and consumers as market actors by making them co-producers of the food system. In some respects, the concept of time is also changing because pre-modern images of farming and rural life are merged with the newest technologies, especially in marketing.

'De-globalizing' food production and consumption and creating localized systems of food provisioning may offer attractive opportunities for innovative forms of governance as well. The nation state has no need to interfere with interactions at the community level, as producers and consumers take up these responsibilities themselves. Involvement by the nation state is needed only to protect these initiatives from domination by large corporations and its harmful effects and, in general, to support the principles of a localized agro-ecology to ensure local food security in combination with the vitality of robust rural economies. At the same time, this focus on optimizing local resource use may reproduce inequalities in the availability of such resources between different localities. Promoting local food security may therefore put pressure on food security at the global level.

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Supporting local diversity

Scholars studying the modernization of agriculture in Europe and elsewhere have documented the persistence of a high level of diversity in farming practices, despite the standardization and homogenization expected from globalization and industrialization (Van der Ploeg et al, 2000; Renting et al, 2003). Diversity is not just a relic of the past; it can be seen today in highly specialized local farms as well. Globalization notwithstanding, there remains room for multi-level, multi-actor and multifaceted ways of providing food. Van der Ploeg et al (2000, p399) consider the emergence of new localized food-supply chains as 'maybe the most evident example of the reconfiguration of resources and networks in rural development'. Diversity in contemporary farming practices means not only that local food systems are still heterogeneous, but also that producers and consumers may negotiate understandings of those systems' material and symbolic meanings in different ways. As Selfa and Qazi (2005) argue, in urban areas, producers and consumers identify local food with physical proximity, while this is not necessarily the case in more rural areas. Localizing food provision can evolve along different lines and create various configurations depending on time and place. Local agri-food networks can be a starting point for sustainable development as it may contribute to creating 'more resilient and robust regions' (Wiskerke, 2009, p383).

Critical Perspectives

In a rejoinder to the idealistic and sometimes romantic promotion of (re-)localized food provisioning, critics advance several provocative questions, including: are localized, short food-supply chains sufficient to feed the rapidly growing urban populations around the world? In this era of hyper-globalization, are there any truly 'local' agri-food products? (And if so, are they not threatened by new global challenges, such as climate change, invasive agricultural pests and diseases and more?) By strengthening local food-supply chains in the global North, are not advocates and consumers unfairly closing attractive export markets to agricultural producers in the global South?

A real alternative?

Critics commenting on the promotion of local food supply claim that being physically close does not necessarily result in less market orientation and instrumentalism in the relationships between producers and consumers (Hinrichs, 2000). Consumers may not act differently when buying food at a farmers' market compared to buying it in a supermarket. Furthermore, sustainable food production can be organized in different ways, not only through the physical distance between food producers and consumers (Scoones and Toulmin, 1999; Evans et al, 2002; Keeley and Scoones, 2003). Also, feedback between food producers and consumers regarding the sustainability impact of practices and behaviours

may be considered to be of a social and not a mechanical character. Feedback must be organized by thematizing the sustainability impact and creating social pressure for implementing solutions that are identified, and this is not automatically generated. At the same time, however, global food-supply chains may not be as disengaged from local social and ecological dynamics as proponents of local food provision often suggest. Producing food remains to be realized under natural conditions that can be manipulated only to a certain extent; if ignored too much, ecological and social dynamics may have unexpected impacts on industrialized food production systems (Morgan et al, 2006).

Despite the popularity of locally organized food-supply chains, such a process of de-globalization does not necessarily provide the only response to the challenges facing contemporary food production and consumption practices today (Evans et al, 2002). As a large part of the food consumed by consumers in OECD countries is already of global provenance, it is important to also seek options for increasing the sustainability of these globalized food-supply chains. If globalization is approached as a heterogeneous and complex process, rather than as a uniform and homogeneous one, other innovative governance arrangements of global food provision may also provide useful and effective responses. Through their focus on the ecological consequences of global supply chains, proponents of local food supply risk ignoring other dimensions of sustainability, such as the social and economic consequences for producers in developing countries. If these broader considerations of sustainability were to be integrated in international trade, the global food supply could be considered to have positive impacts.

In contrast, Seyfang (2007) argues that, at present, local food may not yet be a solution for contemporary food provision, not because of its inherent characteristics, but because mainstreaming successful niche experiments requires institutional support, which is currently lacking. Many consumers are interested in experimenting with alternative lifestyles and relying more on local food, but current agricultural and food policies and institutions limit the expansion of alternative systems. Legal requirements, unfair subsidy arrangements and a general lack of support make the future perspective of local food-supply systems difficult. To consolidate innovative practices, participants in local food systems need to feel that they are part of larger communities that share their values. Stronger political support could facilitate the growth of such a movement.

Embeddedness

Local food is held to be different, embedded in local scale and better than larger-scale food provision. Local food is expected to be more sustainable, more socially just and democratic, delivering better nutrition, safety and quality. Local food systems promote 'socially embedded economies of place' (Seyfang, 2006, p386) that promote personalized trust between producers and consumers and strengthen local economic development. Lyson (2005) considers what he calls *civic agriculture* to be embedded in local communities because it contributes to community health and vitality. In relying on site-specific knowledge about

Box 6.6 Local trap?

In his recent book, *Ecological Intelligence*, Daniel Goleman recounts:

> *Life Cycle Assessment raises the question, what exactly do we mean by 'local'? A Montreal-based industrial ecologist tracked the geography of the life cycles of tomatoes grown in greenhouses near Montreal. As she told me, 'Not much local was in the "local" product. While the tomato R&D was conducted in France, the seeds were grown in China and transported back to France, where they were treated and shipped to Ontario, where the seedbeds were sprouted. Finally, these seedbeds are trucked to Quebec, where the final plant is cultivated and the fruit harvested. Even a "local" tomato has a global past'.*

Source: Goleman (2009, p55–56).

farming, local food farmers can produce higher-quality food for consumers, who now have a voice in how and where their food is produced. Local food thus becomes a focal point around which non-market relationships between previously distanced persons, groups and institutions can be built.

Born and Purcell (2006) criticize this view as being *a local trap* (see Box 6.6). They argue that there is nothing inherent about any scale, because the impacts of a food system depend on the actors and agendas empowered by the particular social relations present within a certain food system. Local food systems may therefore have negative as well as positive outcomes for local food provision because these outcomes depend on the particular actors involved, as well as their strategies and practices. In the authors' view, localization should not be privileged as a goal for food strategies in general, but seen rather as a goal of those empowered by a particular scalar strategy. The scale of food provisioning, whether local, global or regional, is socially constructed, without having any inherent ethical (or sustainability) characteristics. From Born and Purcell's perspective, food strategies therefore should be analysed on the basis of who is empowered, rather than of the scale at which they are enacted.

Winter follows a similar line of argument when he states that 'all market relations are socially embedded' (2003, p25). Relations between producers and consumers require mutual trust but also hold meaning (the signification given to particular purchases). Whether local food heralds a more ecologically sound provision system is therefore an empirical question.

In response, some authors suggest that this argument is too general and that the advantages resulting from local food provision are not just founded on general principles but also in empirically confirmed cases. Research has shown that localism and devolution can effectively create 'deeper democratic structures, social and spatial solidarity and sustainable development' (Sonnino, 2009, p15).

Defining 'sustainability'

In another critique, 'local' should not be conflated with 'sustainable', as the positive impacts of consuming local food are overshadowed by the negative

Box 6.7 Exploring environmental consequences of local food production

Almere is a rapidly growing town in the Netherlands, and municipal authorities want to promote sustainability in one of its new neighbourhoods, including by increasing local food production. In a scenario study, experts determined the consequences of producing some 20 per cent of the total food basket. The chosen 20 per cent represents the proportion of current diets that could be produced locally, given weather conditions, etc. The calculated ecological effects of such a change are relatively small and primarily determined by the chosen technology in primary production (i.e. use of renewable energy or not). This choice is independent of the production location, however. A more important impact depends on the distribution system, because if it is well organized, with a large number of distribution centres, the total number of kilometres driven could be reduced by nearly 90 per cent. The study concluded that this shift is possible, but that larger effects would require a reduction of animal proteins in the diet and not just localizing food production.

Source: Sukkel et al (2010)

impacts. The designation 'local food' itself does not indicate what processing methods have been used, in contrast to organic food, for instance. Local food refers only to the physical distance between the locations of production and sale (Watts et al, 2005), but the environmental impact of food depends not only on the distance it has travelled; it is also influenced by the ways in which it has been produced, processed and transported. For instance, local food may use less energy for transport but more water and land, and in general, its production methods may use natural resources less efficiently than other methods. Local foods therefore should not necessarily be conflated with being organic and better tasting, and with saving family farms and strengthening local communities, because this all must be proven in particular instances.

Increasing the scale can improve the energy efficiency of production, processing and logistics activities, and effective use of available natural resources (sunlight, water, seasons, etc.) can reduce the ecological impact of producing food. It is therefore important to rely not only on a common-sense approach to sustainability but to take trade-offs into account in a comprehensive manner (see Box 6.7).

Impacts on the poor

'De-globalizing' food provision in the developed world would not necessarily address agri-food-related problems of poverty and environmental degradation in developing countries. Demanding 'self-reliance' in food provision in the North would deny countries in the South the possibility of exporting agricultural products to rich country markets and only add to the already-existing poverty and inequality between the rich and the poor. Kevin Watkins (2002) from Oxfam suggests that:

> *if trade is to work for the poor, we need to challenge the power relations and vested interests that make markets work for the rich. That means putting land redistribution, workers' rights, environmental sustainability and the curtailment of corporate power at the heart of the agenda.*[9]

Safeguarding opportunities for the poor in developing countries to access markets in richer countries could then be considered a contribution to sustainability and equality instead of a diminution. Marsden (2004, p138), for example, claims that:

> *what marks alternative food chains out from the conventional system is by no means their face-to-face nature necessarily. In some of the more mature quality supply chains we see the development of spatially extended networks, which are selling brands and labels and seriously commodifying their culinary repertoires (e.g. Parmigiano Reggiano Cheese). They are still categorically alternative, however, in that they have done and do re-equate nature, space, socio-technical practices, and quality conventions in ways which make it impossible to replicate these outside that network. These then are the new ecologically deepened supply chains.*[10]

In developed countries, local food-supply approaches are criticized for leading to another unintended consequence for the poor: they may create divides between richer and poorer consumers. The 'local' may transform into just another market segment allowing for higher added value than conventional food. For instance, farmers' markets are mostly located at the more attractive sites from sellers' perspective, i.e. in more affluent neighbourhoods. Overall, local food is often more expensive than the food poor people normally buy, while they may also lack the cultural resources required for its preparation.

Proponents of local food have mostly pointed out the need to promote alternative agri-food networks at different locations to support the poor. Some of the examples presented in this chapter are used to support the possibility of this claim.

Conclusion

Alternative local agri-food networks are rapidly growing in number and developing into recognized alternatives to conventional industrial global food-supply systems. In this chapter, we provided illustrations of this trend and discussed the contributions this alternative may offer for future sustainability in food provision. Local supply chains are attractive because they try to optimize available diversity, reduce energy needs and prevent problems of oversupply or scarcity through direct communication between producers and consumers,

thereby restricting the role of market dynamics in the food supply. We found that local agri-food networks may have diverse impacts on sustainability and that uniform optimism in this respect is not justified. Next, we also observed that in such agri-food networks, local identities are continuously created and recreated, flexible and mouldable, rather than fixed. Local agri-food networks are also heterogeneous social movements, bringing together people concerned about the consequences of the contemporary way of industrialized food provision, including farmers and activists fighting corporate farming and protecting local communities, consumers who look for fresh and healthy foods of high quality with low environmental impact, and concerned citizens trying to reduce malnutrition (including obesity) among poor people without adequate access to healthy food. The identity of local agri-food networks is primarily built around their protest character, whereby the local is seen as a site of resistance to the global, even while the site itself is also created through globalization. It may therefore be more profitable to consider local agri-food networks through their interactions with other, including global, food-provision practices than in isolation. Through interacting with global food networks, the meaning of 'local' becomes blurred, as it is filled with all kinds of different notions and values. There is a serious danger that local agri-food networks may become overburdened with too many heterogeneous expectations that they cannot meet. It therefore may be more helpful to approach local agri-food networks as part of more encompassing food-supply networks and accept heterogeneity and diversity within them than aiming for their purification.

Take-home lessons

- Alternative, local agri-food networks provide new sources of hope, nutrition and livelihoods for producers and consumers.
- Urban agriculture, in a variety of novel forms, is a critical part of food provisioning for millions worldwide.
- Global and local food sourcing may both be necessary to feed the world and provide livelihoods.

Notes

1 Also called 'agro-food' networks.
2 Video on policy implications and examples of urban agriculture by Resource Centres on Urban Agriculture and Food Security (RUAF), www.ruaf.org/ (accessed 18 March 2011). The film explores 'intra-urban' and peri-urban' agriculture in Ecuador, Tanzania, Senegal and Viet Nam.
3 See www.cityfarmer.info (accessed 18 March 2011) for many more experiences from different cities around the world.
4 See the work by the International Development Resource Centre (IDRC), which has a section, called 'Working with urban farmers for food security' on its website (www.idrc.ca/in_focus_cities, accessed 18 March 2011).

5 For a discussion of experiences in one of the most elaborate urban food strategies, Bela Horizonte in Brazil, see Rocha and Lessa (2009).
6 For instance, US First Lady Michelle Obama's engagement in kids growing their own food in gardens at school. See the US National Gardening Association (www.kidsgardening.org/white-house-garden, accessed 18 March 2011).
7 See www.endhunger.org (accessed 18 March 2011).
8 See Chapter 9 on the conventionalization thesis in US organic agriculture.
9 Retrieved from www.maketradefair.co.uk/en/index.php?file=28052002092914.htm (accessed 16 March 2011).
10 See also Goodman (2004).

Further Reading

Morgan, K., Marsden, T. and Murdoch, J. (2006) *Worlds of Food: Place, Power, and Provenance in the Food Chain*, Oxford University Press, Oxford: offers an insightful overview of the relevance of geographical scale in contemporary food provision; contains several case studies, including some on local food.

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