

Food for Thought: Food with the Farmer's Face on It

Emerging Community-Based Food Systems

Fifth in a Series

"Food with the Farmer's Face on it"
Emerging Community-Based Food Systems

Media Briefing Paper

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Any errors remain the responsibility of the author.

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Executive Summary

Emerging like a patchwork of carefully planted orchards, thousands of community-based food initiatives are taking root in diverse locales across the U.S. Their forms are as unique as the soils and communities that nurture them. And, like any living system, they are both fragile and a source of exceptional strength.

With an estimated total sales of more than \$7 million dollars in 2001, these community-based food systems (CBFS) make up a relatively small part of the overall national food budget. Yet their importance is immense, since local food systems are emerging spontaneously in more than 130 locales around the U.S. Despite the predominance of the commercial foods sector, American consumers have developed a strong hunger for food raised by producers they know: "food with the farmer's face on it."

These community based food systems are emerging for a variety of important reasons. Increasing concern about health, and the simultaneous prevalence of both malnourishment and obesity in the U.S., have led consumers at all levels of society to turn to fresh foods to balance their diets. Research shows that consumers place greater trust in foods that are raised by local growers. Low-income people have taken initiative to connect their communities to healthy food sources. Farmers and consumers alike seek ways to break down their social isolation from each other. Local foods initiatives have engaged youth, farmers and low-income people as a way of strengthening local economies. Further action has been launched by leaders who recognize the nonagricultural benefits of farms.

As a mosaic of interdependent, locally based efforts, these food systems address unique local issues and harness unique local resources. It is difficult to generalize about the resources they most need to grow even further. In all cases, however, connecting to a burgeoning consumer demand is a

critical step. New social connections must be built that support local food systems, and new distribution networks will need to be forged.

Measuring the strength of these local food systems is also not an easy task. Due to the movement's decentralized nature, it is exceedingly difficult to compile standard data sets that provide useful data. Many of the most obvious ways of measuring the movement's growth are not quite satisfactory. Media professionals who wish to cover the local foods movement should review some of the more useful indicators, as listed in the final section of text. Food leaders, technical advisers and reporters alike will also find themselves developing new capacities in promoting and measuring *systemic* change.

This guide also includes an Appendix [page 49] listing important resource groups and community-based food movement initiatives across the U.S.

"Food with the Farmer's Face on it"

Emerging Community-Based Food Systems

Emerging like a patchwork of carefully planted orchards, thousands of community-based food initiatives are taking root in diverse locales across the U.S. Their forms are as unique as the soils and communities that nurture them. And, like any living system, they are both fragile and a source of exceptional strength.

The saplings of this orchard are young enough that it is difficult to tell what exactly is growing, or how quickly it may mature. Still, there are compelling signs of their emergence:

- * More than \$7 million of fresh foods were sold in 2001 to consumers through community-based, regional marketing networks that have emerged in both urban and rural areas over the past 10 years.¹
- * More than 7 million pounds of coffee were sold in 2001 by "fair trade" networks that link small producer coops in Central America, Asia, and Africa directly to U.S. consumers. These sales more than tripled in the past two years.²
- * The number of farmers' markets in the U.S. rose 63% from 1994 to 2000, to a total of 2,863 markets.³
- * The nation now has 600 to 1,000 new-style farms that call themselves "Community Supported Agriculture (CSA) farms." In these CSAs, consumers buy "shares" in a local farm's production at the beginning of each season, receiving regular shipments of fresh foods as they are harvested in exchange for this investment.⁴

- * More than 10 million urban dwellers raise vegetables in small gardens across the country.⁵
- * Thirty-eight U.S. cities host community garden projects. One-third of the nation's 6,000 community gardens were formed in the past decade.⁶
- * "Farm to school" partnerships across the country have engaged youth in raising fresh foods and preparing fresh salads for school lunch programs.
- * Residents in more than 130 U.S. locales are organizing local food systems projects.
- * Through the Community Food Security Act, the U.S. Department of Agriculture (USDA) granted \$15 million of support to 101 local food system initiatives in 40 states from 1996 to 2002. However, this covered only a fraction of the demand, since USDA received 753 proposals to fund food security grants, totaling more than \$126 million in value.⁷
- * The national market for organic food products increased at a compound annual growth rate of more than 20% between 1996 and 2001, rising to a level of \$9.3 billion. Some analysts expect the market for organic foods to swell to \$20 billion by 2005. Moreover, since organic foods are more likely to be marketed directly to consumers than conventional foods, this means that new connections are being built between farmers and consumers.⁸

Largely below the radar, community-based food initiatives like those mentioned have begun to take root in every state of the union. The growth of this movement is especially significant since it results from scattered, spontaneous activity in diverse locales. Working largely independently of each other, and responding to the particular needs of their neighbors, these networks are shipping fresh foods to eager consumers and building new bonds of community loyalty in the process.

Capturing the connections this movement hopes to build among producers and consumers, Japanese women who pioneered community-supported farming methods called their style of farming *teikei*—which may be translated as "Food With the Farmer's Face on it."⁹

Putting the farmer's face on fresh foods, however, is not an easy task. For some local foods leaders, the path has involved long years of dogged work. Local foods farmers often endure strenuous physical labor for uncertain financial rewards. Distributors have shouldered tough competition against one of the most productive agricultural systems in the world. Yet, fueled by judicious investment, the movement continues to grow.

The many faces of the movement

Every community-based food system (CBFS) is distinctive. Each addresses issues that are special to its region. Each responds to local realities of climate, food production, transportation, and consumer taste.

Thus, it is difficult to know how to even talk about community-based food systems. There is no simple way of categorizing the various approaches different communities have taken. Some began as farmers committed themselves to live healthy lives while making a decent living in a highly competitive environment. Some began by addressing the nutritional needs of inner-city consumers. Others began as civic leaders struggled to set policy that would assure a secure local food supply.

What these initiatives have in common is that each builds *systems of exchange that strive to bring food producers and food consumers into affinity with each other*, for the purposes of fostering health, promoting nutrition, building stronger community ties, keeping farm families on the land, and building wealth broadly among community members.

Although there are compelling reasons for community-based food systems to focus on local communities in order to reduce energy costs and environmental impacts, community-based food systems may also cover a larger geography (regional, state, national or international) or be framed around non-geographical connections (cultural groups, religious groups, affinity groups, etc.).

A mature community-based food system is likely to involve a mixed cluster of diverse organizations including: individuals, cooperative associations, private businesses, nonprofit organizations, technical experts, and public agencies. Still, few community food systems are yet mature.

Community-based food systems are different from, but may contain, sustainable farms, organic farms, direct marketing channels, or corporate organizations. The more that such separate entities are interlocked by common visions, institutional structures, or economic exchange, the more a *system* of food production and distribution emerges.

A community garden, by itself, does not constitute a food system. Nor does a single farm that raises vegetables for a local market, nor a single consumers' cooperative. When dozens of community gardeners begin to coordinate their efforts toward a common goal of assuring food security, or when hundreds of growers market their produce to local consumers cooperatively, or when a cluster of community organizations instill a policy of protecting agricultural land and permanent farmers markets, then a local food *system* begins to form.

In this brief, CBFS will be considered in six clusters. This is only a rough categorization, because many groups address a complex set of overlapping goals.

1. **Local foods broker.** Most visible is a regional food brokering firm, based in the Boston area, that conveys locally raised foods to consumers, grocery chains, and institutional buyers.
2. **Educational and food access networks.** Nine regional food access networks focus their efforts primarily on education: informing consumers and producers about the wisdom of building local food systems, and training them how best to form the social connections that create a local foods market. Some of these networks have developed regional or sustainable farming labeling to encourage local purchasing. Others have focused on bringing healthy foods into schools.
3. **Fair Trade coffee.** Also prominent are a network of groups marketing "fair trade" coffee direct from farmer cooperatives in Asia, Africa and Central America.
4. **Local foods initiatives.** Working on a smaller scale, thousands of producer coops, brokers, consumer education initiatives, and food processors have also emerged. Although there is no central registry that can identify all these groups,

such activity is ongoing in at least 130 locales, ranging from rural counties, small towns, metropolitan areas, inner-city neighborhoods, to multi-state regions.

5. **Local Food Policy Councils.** Civic leaders in several cities, counties and states started the local foods discussion from a policy perspective, forming local food policy councils to frame policies that assure adequate local supplies of healthy, fresh foods.
6. **Technical assistance providers.** Finally, these food production and distribution efforts are strengthened and interconnected through technical assistance provided by a cluster of service organizations. These connective resources also play a vital role in constructing *systems* of strong food enterprises.

Main attention in this report is devoted to the larger organizations that consciously work to build systems of food enterprises. Contact information for each of these may be found in the Appendix [page 49]:

Local foods broker

- * A non-profit, Massachusetts-based organization whose purpose is to help family farmers in the Northeast survive in a market dominated by global agribusiness, **Red Tomato** sold \$729,000 worth of fresh produce in 2001. This represents growth of 57% over 2000 sales. The firm just moved into a new 7,000-square-foot warehouse in order to better handle expected growth. Projected sales for 2002 top \$1 million. Red Tomato represented 32 growers in 2001, including growers from New England, New York's Hudson Valley, Pennsylvania, and the Federation of Southern Cooperatives/Land Assistance Fund. Red Tomato distributes fresh produce to some 40 supermarkets in greater Boston and in Pennsylvania. It also brokers selected sales to food distributors. Emerging from the Equal Exchange fair trade network in 1998, Red Tomato at first saw its role as serving as communicators and organizers by working with local groups in Burlington, Vermont; Hartford, Connecticut; and Philadelphia to create market-based reform. Quickly they decided they could not fulfill their mission without actually distributing food themselves, coordinating through a central depot in Canton, Mass. They say customers are

drawn to local foods because of freshness and flavor. For the 2002 season they've launched a consumer brand. Their new tagline, "Fresh produce. Fresh thinking," complements a new Red Tomato logo.¹⁰

Education and food access networks

These are listed alphabetically below; but are covered in narrative order in the text that follows. The following were selected as examples of a diverse set of organizations that have emerged in many states. This listing is not intended to select favorites, but rather to exemplify different types of noteworthy food access efforts. Many other groups could also be included here—notably sister organizations in Kentucky, Kansas, Michigan, Nebraska, and the Chesapeake basin. All the groups listed in this section operate in a geographic region that is multi-county or larger, up to national in scope.

Alternative Energy Resources Organization (AERO) — Montana
Community Alliance with Family Farmers (CAFF) — California
Community Involved in Sustaining Agriculture (CISA) — Western Massachusetts
Federation of Southern Cooperatives (FSC) — Southern states
The Food Alliance — Pacific Northwest and national
The Food Trust — Greater Philadelphia
The Midwest Food Alliance (MWFA) — Upper Midwest
Mountain Partners in Agriculture (MPIA) — Western North Carolina.
Pennsylvania Association for Sustainable Agriculture (PASA)

- * The **Federation of Southern Cooperatives (FSC)** draws upon the most highly developed cluster of cooperatives and private food businesses of all the food groups listed above, having worked with farm families and rural communities for 35 years to help small farmers stay on the land. FSC is a cluster of 74 cooperatives in 10 southern states. Only a fraction of these farmer members (480 farms) market their produce through FSC cooperatives or directly to consumers and food stores. These farms generated a documented total of \$1.2 million in commercial sales in 2000. FSC staff add that because they do not ask farmers to report their food sales, actual revenue could easily be double that level. FSC also helped develop a regional food processing center in Thomasville, Georgia, that packs and distributes farmers' produce. Further, FSC collaborated with public food programs to ensure that low-income residents had access to food, facilitating \$200,000 in WIC sales, and \$160,000 of donations to low-income families. FSC also arranged for local schools to purchase \$200,000 of local foods for use in school lunches. The Federation has

often intervened to stem the loss of black farm land, held educational programs that reached 4,000 farmers, and also created a marketing program to assist women's cooperatives in Senegal. FSC is also strengthened by a strong credit base built in community credit unions, where 13,000 members hold \$25 million in assets. These credit unions have made 63,710 loans valued at \$105 million since they were formed. The Federation's director of rural training and research, John Zippert, says the credit unions and the sustainable agriculture initiatives "reinforce each other. For most of our people, the bank is not really interested in lending money to them until they get bigger. Where we do have credit unions, they are lending to small farmers in their service area to help get them on their way."

- * **The Food Alliance** has mounted the largest effort to promote sustainable foods sales. Participating farmers nationally sold \$5 million of fresh and frozen foods in 2000. Much of this was sold in the Northwest through a partnership with a major food wholesaler, Unified Western Grocers (UWG), which conveyed \$3 million of produce from Alliance farmers to the Thriftway supermarket chain. The Alliance's main marketing tool is its "Food Alliance-Approved" label, which assures customers that strict production standards have been met. Farmers working a million acres of farmland in nine states have been certified to sell fruits, vegetables, dairy, livestock, and wheat products with the Food Alliance-Approved label to countless retail partners.

- * In Western Massachusetts, **Community Involved in Sustaining Agriculture (CISA)** works with 80 farm families, assisting them to market fresh produce, meat, and dairy products through their "Be a Local Hero/Buy Locally Grown" campaign. CISA farmers sell direct to 21 supermarkets, 15 small groceries, 12 farmers markets and over 100 farmstands. All told, CISA farms manage more than 13,000 acres in three counties. Although CISA does not ask local growers for financial sales figures, one distribution firm alone reported handling \$100,000 of produce for CISA farmers. CISA is now working to build additional staff capacity so more growers may be brought into the network from their waiting list. Their Farm Products Guide was distributed to 200,000 area residents this year through local newspapers,

Chambers of Commerce, information booths, hotels and other venues. CISA also advises similar networks that are building their own community-based distribution channels, and helps develop supportive food policies.

- * **The Food Trust** is primarily an educational and food access effort that emerged out of the Reading Terminal Market, an historic indoor market that began in recent years to work with low-income communities in the greater Philadelphia area to advance their nutrition. The Trust encourages school systems to offer healthy snacks, and has helped students set up businesses selling fresh foods at their schools. The quantity of fresh foods placed by the Trust in local schools mushroomed over the past five years, from 150 pounds in a single school to 6,000 pounds in 12 schools. The Trust also manages 12 farmers' markets in the region that serve 85,000 food shoppers. With a budget of \$1.6 million, the Trust hopes to double its staff of ten over the next year.

- * **Pennsylvania Association for Sustainable Agriculture (PASA)** is a statewide membership organization with over 1,000 members, half of whom are farmers. PASA works in three main arenas: (a) it performs research to support the growth of local food systems, (b) it markets fresh, sustainably grown farm products through as many as 30 farmers' markets and three producer cooperatives, and (3) it builds a supportive community through an annual "Farming for the Future" conference and several food policy initiatives. The largest of its partner cooperatives sold more than \$100,000 of fresh foods, mostly to local restaurants, in 2001. PASA's *Southwestern Pennsylvania Guide to Farm Fresh Products* catalogue shows consumers how to connect with locally produced foods. Now PASA is forming 4-6 regional marketing offices across the state.¹¹

Midwest Food Alliance (MWFA) runs a "sustainably raised" labeling program in five midwestern states: Iowa, Minnesota, North Dakota, South Dakota, and Wisconsin. A regional affiliate of The Food Alliance in Oregon, MWFA uses the "Food Alliance-Approved" label, adapting it to local growing conditions. "We have a regional identity to put the local face on the food," says project director Jim Ennis,

"and we also get strong support from the national organization." MWFA markets 20 product categories supplied by 61 midwestern growers—including 18 dairy farms or processors, 23 produce growers, and 20 pork or beef producers. So far 38 retail stores carry the midwestern label, including stores in the Kowalski's, Coborn's and Hy-Vee chains and two independent natural food cooperative groceries. To cover its costs, MWFA charges growers a percentage of their self-reported sales volume. In 2002, MWFA expects sales of product using the MWFA seal of approval to top \$1,500,000. Minnesota apples are the leading seller. MWFA is a joint project of the Minnesota-based Land Stewardship Project and Cooperative Development Services of Madison.¹²

- * **Community Alliance with Family Farmers (CAFF)** works in five specific regions in the state of California, assisting local residents to define and then implement their visions for rural development. Local food systems sparked intense interest among farmers and other residents in each region over the last two years, say CAFF staff. The alliance informs consumers about farmers who market their produce directly, but does not broker sales. Their *California Fresh Directory*, also posted on their web site, lists 175 growers and 65 farmers markets. The web site has proven to be a highly useful tool for recruiting new food shoppers. CAFF also fosters farm-to-school programs that encourage schools in each region to buy from local growers. As co-participants in research projects and in local policy development, CAFF also plays an indirect role in strengthening local food systems.¹³

- * **Alternative Energy Resources Organization (AERO)** set a goal of helping to build vibrant rural and urban communities in Montana. Its food priority has been to add value to Montana farm products. Recognizing that 86 percent of the state's agricultural product leaves the state for processing elsewhere, AERO launched plans to capture more of that processing value. Even a 10% increase in value added would mean \$300 million more injected into the state economy, they reasoned. Their effort focuses on crops that are especially suited to Montana's climate: bread flour, pastry flour, cattle, and barley. AERO coordinated a community planning process that led to the creation of the Mission Mountain Market (MMM), a \$1.2 million community

kitchen and food business incubator for Montana products. Smaller growers are also important. AERO also helped the Crow reservation raise fresh foods in 40 community gardens and two greenhouses as a way of combating an epidemic of Type II diabetes that is erupting among tribal children. Adapting the notion of a farmers market, the reservation convenes a Crow Community Fair in which food and crafts are sold. Further, AERO supported 13 community food projects with small grants that eventually leveraged \$2.5 million of additional investment. The community connections built during these initiatives have been of fundamental importance, AERO says. "This is the first time ever that every major player in agriculture participated in a planning process," said program director Jonda Crosby. Having laid this groundwork, AERO now hopes to follow CISA's example by promoting more local sales of fresh foods as well as processed grains, perhaps launching a labeling program similar to that of the Food Alliance.¹⁴

- * **Mountain Partners in Agriculture (MPIA)** helped form an integrated network of local foods initiatives in Western North Carolina. An outgrowth of this work was the Appalachian Sustainable Agriculture Project (ASAP), which launched a "Get Fresh—Buy Local" campaign, and publishes a "Buy Appalachian Guide." ASAP's web site lists 30 farmers and tailgate markets in 17 counties. In addition to helping farmers market their products, MPIA addresses farmland protection issues, provides technical assistance concerning sustainable agriculture practices, and frames new food and rural policy.¹⁵

Fair trade coffee networks

Coffee is only produced commercially in a few places in the U.S., and does not constitute a local crop in most regions. Nevertheless, it is in high demand. Since fair trade networks have educated U.S. consumers about coffee producers, pay growers more than the world price, and have helped inspire fresh food marketing efforts, we include them as examples of CBFS.

At least 74 wholesalers in 25 states are certified as "fair trade" coffee handlers who purchase coffee from farmer cooperatives in Asia, Africa and Central America. These purchasing

networks help build a sense of connection between U.S. consumers and the 550,000 Third World farmers who raise coffee and sell it through 300 fair trade coops. Consumers have, in turn, influenced more coffee growers to farm sustainably. The first group to create a fair trade niche in the \$7.8 billion U.S. coffee market was Boston's Equal Exchange. Fair Exchange in San Francisco and Peace Coffee in the Twin Cities soon followed. Now 30 outlets sell fair trade coffee direct to consumers through the internet. In recent years, as coffee producer prices plummeted to 100-year lows, fair trade networks paid producers well more than the global market price (at this writing about \$1.26 per pound—or \$1.41 for organic coffee—compared to 50 cents a pound on the open market). The fact that fair trade buyers paid higher prices kept thousands of coffee growers solvent during this price collapse. Further, the presence of these cooperative traders has applied pressure on larger firms, such as Starbucks, to begin to carry fair trade coffee.¹⁶

Local foods initiatives

Smaller local foods initiatives are also emerging in at least 100 locales across the country. It is unlikely that all of these could be named, since there is no central registry of local foods projects. Nor do all of these groups publish on the world wide web. Still, robust efforts are growing in a variety of counties, towns, urban centers, states and multi-state regions. These help build a foundation for future local food systems. A partial list of locales with foods initiatives can be found in the Appendix [page 49].¹⁷

A few brief stories from these local foods initiatives will show the quality of their work:

- * The Tohono O'odham tribe of Southern Arizona is trying to bring back traditional and wild foods, drawing upon scientific studies that showed these foods reduce both the incidence and impact of diabetes. Although the disease was unknown to the reservation prior to 1960, tribal leaders say the tribe now has one of the highest rates of Type II diabetes in the world—even children are coming down with this "adult onset" illness. Medical research has shown that the disease was caused by a change in diet. Tristan Reader, project director for the Tohono O'odham Community

Association (TOCA) said the same issues are emerging in tribal communities all over the continent. "We just happen to be one of the most extreme examples." Under a USDA food security grant, TOCA sponsored more than a hundred outings to collect wild foods, and distributed more than 1,000 packets of traditional seeds. Eighty gardeners on the reservation have begun to plant traditional varieties. While these gardens cover only 4 acres—the planting is limited by the supply of traditional seed stock—this has inspired growers in nearby villages to do the same. Ultimately, TOCA hopes, the tribe will dedicate more of its 10,000 acres of cultivated land to traditional food crops, reducing the acreage now devoted to cotton and hay. Reader adds that restoring traditional and wild cultivation also helps bring back the tribe's culture. "Our culture is based on our food system. Our celebrations revolved around the seasons when we harvested our foods. We had a decline in our cultural practices as we moved away from our traditional foods. Now our youth are learning to harvest *saguaro*. Last year, we brought back the rain dance ceremony, which had not been performed for 35 years. Since the dance was right next to where we are planting, it really mattered to our crop. As one of our members said, 'This year I sang the songs like I meant it.' " Reader adds that the food project has given the tribe a feeling that they can do take their own initiative to quell the diabetes outbreak. "Before, we only thought of this as a medical condition. We thought there was nothing we could do about it. Now we know there is something we can do ourselves."¹⁸

- * Outbreaks of disease also led the Los Angeles School District and Occidental College to create a "Farmers Market Fruit and Salad Bar" at 55 schools so students would have daily access to fresh foods. This initiative also drew upon scientific studies that connected inadequate nutrition with obesity and diabetes among children, especially in Mexican-American and African-American families. A follow-up study showed that students' daily caloric intake fell by 200 calories, and fat intake fell by 2%, as a result of the program.¹⁹ Similar food-to-school initiatives have been launched in Boston, San Francisco, Chicago, Los Angeles, Rochester and New York, in addition to the Food Trust programs mentioned above in the Philadelphia area.²⁰

- * Emerging a decade ago, through the vision of a farmer near Boston who built a connection with cogent neighborhood organizing in the Dudley Street neighborhood, is the Food Project. Its mission is to create a thoughtful and productive community of youth and adults from diverse backgrounds who work together to build a sustainable food system. Here, inner city and suburban youth have collaborated to grow fresh foods that are then donated to food banks and homeless shelters, as well as sold at local farmers markets. In 2001, 60 youth raised 73,000 pounds of produce on a 21-acre field in Lincoln, Massachusetts, and another 6,000 pounds on a reclaimed urban lot in Dorchester. The organization now has a staff of 16 and a budget of \$1.7 million, and will soon open a commercial kitchen. The youth also performed a door-to-door survey of homes in the Dudley Street neighborhood, learning that the community had 156 front- and back-yard gardens.²¹

- * Youth were also leaders in the Youth Farm and Market Project in Minneapolis-St. Paul, where 227 youth (mostly youth of color) raised fresh produce, selling \$27,600 worth to local markets and restaurants over a three-year period.²²

- * The Six Iroquois nations launched a traditional foods project through the Daybreak Farming and Food Project of the Seneca, Cayuga, Onondaga, Oneida, Mohawk, and Tuscarora tribes. Through food fairs the Food Project introduces American Indian and non-Indian cooks to Native cooking while at the same time introducing non-Indian cooks to Indigenous growers. An organic certification project has also been established to make it easier for Native-grown products to enter national markets.

- * A "local food systems" effort with national scope has been launched from Bolivar County, Mississippi, a county founded and built by ex-slaves in 1887. Here, the Mound Bayou Sweet Potato Cooperative sold sweet potatoes direct to inner-city consumers in Detroit, Gary and Chicago. This initiative was launched in 1996 by a former resident who returned home after driving truck in Chicago for 34 years. He connected his urban neighbors with growers in his home county after convincing the

farmers they could make more money if they switched from "cash" crops to specialty production.²³

- * In northeastern Iowa, a group of farmers is selling food directly to their rural neighbors. The Sunflower Fields Farm CSA (CSA stands for Community Supported Agriculture) enrolled 160 of their neighbors to buy shares. Their members now receive weekly food shipments during growing season. This, in turn, spawned a wholesaling cooperative, GROWN Locally, that sells in larger quantities to local nursing homes and schools.²⁴
- * Consumers have also organized themselves to improve their food choices, forming "healthy foods" circles, buying clubs, and cooperative groceries in thousands of communities across the nation. A rising number of nutrition programs, weight-watching groups, diet support groups and cooking classes create other potential contexts in which consumers could choose to support local food networks.

Local food councils

Another way local food system efforts have been launched is through local food policy councils, in which local civic leaders have met to plan the growth of effective local food systems. Knoxville was the first city to create a food policy council; at least 28 other cities have since formed one of their own, along with 3 counties and 11 states. Most have involved prominent civic leaders, farmers, and businesspeople, who set policy goals and strategies to build local foods initiatives. Some of these councils are listed in the Appendix [page 49].

Clearly, the creation of a food policy council does not in itself spark the birth of a local food system. Local planning must be accompanied by effective local action to build markets for local foods. Some of the coordinating functions a public food council might be expected to play have in fact been taken on by private parties through networks like the ones listed above. At the same time, of course, a well-defined public food policy initiative could certainly make it far easier for local food systems to flourish.

Michelle Mascarenhas, interim director of California Alliance for Family Farms (CAFF), who has worked closely with local food policy councils, says she has seen them work very effectively. She adds that "there needs to be a base of community members and groups organized in parallel, if not before, the creation of a food policy council." This constituency base will help push public bodies to make useful policies.²⁵

Two planners in Madison, Wisconsin, after completing a food planning report for that city, argued in the *Journal of the American Planning Association* that the field of community planning overlooks the need to train professional planners to plan for local food futures. The authors, Kameshwari Pothukuchi and Jerome Kaufman, found that in 2000, none of the 93 planning schools in North America offered a food system specialization. They argued that such planning is as vital to urban health as is the planning of sewer or water systems.²⁶

Technical & support organizations

Knitting distinct food producer and consumer organizations into coherent local food systems is often made easier by drawing upon the professional skills found in a wide variety of technical assistance and support organizations that work with local foods enterprises. Hundreds of such groups apply their talents to movement-building. A few examples follow, but this is in no way to say these examples are better than many others that are not listed:

- * FoodRoutes Network, in Millheim, Pennsylvania, is a non-profit organization that offers strategic communications and evaluation assistance to local foods and sustainable farming initiatives across the country. FoodRoutes works with local partners who want to survey potential consumers, frame a "buy local" campaign, and shape implementation of state and local food system policies. FoodRoutes recently launched a national web site that hosts an interactive map of farmers markets, CSAs, and direct-marketing farms all across the country. Simply viewing this national map <<http://www.foodroutes.org/localfood/>> is an excellent way to visualize the fact that such enterprises have sprung up in every state of the union. Going further, one can zoom in all the way to the county level, to locate names and travel directions for each of the food enterprises listed. This makes it easy for consumers to find fresh

food sources, and also reduces marketing costs to individual growers. FoodRoutes has also merged with the Fires of Hope initiative, which seeks to build a nationwide community of learners who will take leadership in strengthening the national CBFS movement.²⁷

- * The Community Food Security Coalition (CFSC) in Venice, California, helps connect local food security efforts across the nation, notably by providing a network in which USDA Food Security grant recipients can share information and expertise.²⁸
- * The Association for Enterprise Opportunity (AEO) lists more than 30 specific resource groups nationally that assist local food initiatives to develop a stronger business and community presence. AEO's "Entrepreneurial Development in the Food Sector" guide can be found at <http://www.microenterpriseworks.org/services/food.htm>.
- * Oxfam USA is a savvy and seasoned technical service provider for international food efforts, including the global fair trade coffee movement, and a supporter of the Federation of Southern Cooperatives.²⁹
- * A national network of community-based food initiatives is being built by Community Alliances of Interdependent Agriculture (CAIA), based in Hartington, Nebraska.³⁰
- * The Sociology Department of the University of Missouri has developed a "food circles" model for community-based strategic action to foster local food networks. An overview of this food circles approach can be found at <http://www.foodcircles.missouri.edu>.
- * Sustainable Agriculture Research & Education Program (SAREP) at University of California—Davis has launched research projects that strengthen local food organizing, especially in nearby California counties.³¹
- * Minneapolis' Institute for Agriculture and Trade Policy (IATP) has supported community-based efforts through research, and by providing an umbrella for local foods activity. IATP has brought incisive analyses of global trends in agriculture to local food leaders; Peace Coffee also was created with assistance from IATP.³²
- * The Henry A. Wallace Center for Agricultural & Environmental Policy in Arlington, Virginia, a project of Winrock International, promotes alternative and sustainable agricultural and food systems through research, dissemination of information,

outreach, and training. The Wallace Center also focuses on policy recommendations, assessing the impact of specific rural policies, and measuring the environmental and social effects of industrialized food systems

- * The National Catholic Rural Life Conference (NCRLC) in Des Moines plays a strong educational and advocacy role in supporting local food systems, with a broad constituency that advocates for supportive policies.³³
- * Land Stewardship Project addresses issues of soil erosion, community development, sustainable agriculture, and rural policy from several offices in Minnesota. Its Multiple Benefits of Agriculture study helped quantify non-economic benefits of sustainable farming practices.³⁴

There are many other groups that have played a strong role in building local food systems: market analysts, communications experts, nutritionists, researchers, extension agents, and others. It is not possible to list them all here. Still, the breadth and diversity of the movement may be glimpsed through the examples above.

Why are community-based food systems emerging?

Why do so many people work so hard to form CBFS? This is by no means obvious. Many U.S. farmers like to think of their country as the breadbasket of the world. Using advanced technology, farmers produce massive crop surpluses. Productivity has never been higher, at least if measured on a cost-per-unit basis. In the past decade, prosperous urban consumers have gained easy access to global food specialties. On the surface it is unclear why thousands of Americans would be working against such great odds to create new channels for distributing fresh foods.

People gravitate toward local food systems for multiple reasons. Among them are:

- 1) both farmers and consumers seek to change their lifestyles to have better health;
- 2) consumers trust locally grown foods;
- 3) low-income people want better access to fresh foods,
- 4) both producers and consumers feel isolated from each other by mainstream farming practices; and

- 5) the economics of commodity agriculture are not working for many farmers.
- 6) local food systems can value agriculture for the multiple benefits it may create beyond food production, including soil, water and wildlife stewardship, inhabited green space, coherent community life, and local wealth creation.

Health & lifestyle

Perhaps the most compelling reason for assuring that fresh local foods are constantly available everywhere in the U.S. are the findings of research cited by communities of color. As tribes such as Crow and the Tohono O'odham have moved away from traditional lifestyles, diet-related diseases have escalated. Similarly, urban Latino and African-American communities have experienced persistent outbreaks of diet-related diseases. Heart conditions, strokes, obesity and diabetes have become the greatest threats to life in many communities of color. A Food Trust study of specific diseases in Philadelphia found that disease rates were higher in inner-city neighborhoods with less access to supermarkets.³⁵

Yet communities around the country suffer from important food-related diseases, with less awareness of the causes or the consequences. Ironically, more than half of American adults are overweight, while nearly one half of the elderly seeking medical treatment are malnourished.³⁶ A USDA study concluded that 30,000 cases of coronary disease could be prevented annually if consumers reduced saturated fat intake by only one percent.³⁷ The Worldwatch Institute found that "diet-related diseases are responsible for more than half of all deaths in the industrial world," and cited evidence that "changes in diet alone could prevent 30-40 percent of all cancers worldwide."³⁸ The Centers for Disease Control and Prevention reports that gastrointestinal illnesses have risen 34% since 1948, with 76 million illnesses treated by 325,000 hospitals, and 5,000 deaths due to food poisoning per year.³⁹ Such data suggest a profound lack of balance in the country's food habits.

The economic impact of food-related diseases is staggering. Obesity is perhaps the most poignant example, in a nation that also suffers from malnutrition. Estimates of the medical costs of obesity in the U.S. range from \$60 billion to \$240 billion per year. Even taking the moderate figure of \$118 billion per year, as calculated by Harvard researchers, the medical costs of obesity amount to *25% of the cost of all food purchased by the nations' consumers each year.* This figure does not include the medical

treatment of related heart conditions and cancers. As the Worldwatch Institute points out, this figure is "more than double the [health] costs attributable to cigarette smoking."⁴⁰

Data like these, of course, suggest that consumers may well have a rational self interest to pay a premium price for fresh produce from a local producer in order to reduce health care costs. As will be seen below, consumers already pay a premium price for some foods due to concentration in the food industry. Thus, the local foods movement, in a very real sense, aims to shift consumer habits so this premium is paid to producers rather than to processors.

Moreover, people are increasingly eating fresh foods as a *treatment* for disease, not simply for prevention. This evidence provides compelling arguments for sustained public and private investments that help build local food systems.

Consumers who buy food from local farmers may also feel greater assurance that their food is actually grown under healthy conditions, and with less pesticide use, because they have the opportunity to actually see the farm that produces their food, and to know the outlook of the individual grower.

Health also is a crucial concern to farmers themselves. Already holding one of the occupations found most risky by OSHA, many farm families have long suspected that farm chemicals have heightened cancer rates in rural neighborhoods. In fact, the founder of Sunflower Fields Farm in Iowa traces that farm's birth to an encounter with chemicals. "One day I spilled some of the chemical I was applying to the field," recalls Michael Nash. "For years, nothing grew on the spot. I had always believed the chemicals were safe, but now I knew different. I wondered what else was being killed by my chemical applications? What was getting into the water we drink?"⁴¹

To cite a few examples out of many: researchers in Nebraska have shown that irrigation is leaching nitrates into a major aquifer. State officials in Minnesota state that agriculture is by far the most important source of contamination of wells—and one-fifth of all wells tested by the state have failed state health standards. New York City has begun to pay farmers in the far reaches of the city's watershed if they adopt ecologically sound practices, since this saves billions in cleanup costs downstream.⁴²

Some farm families view growing directly for consumers as a personal investment for healthy lifestyle. Selling directly to consumers, rather than to impersonal global markets, gives many farmers a feeling of greater power over their future. Farmers report this can both reduce stress and break down their sense of isolation.

Consumer trust

A second motivation for the growth of CBFS is consumer trust. Marketing studies repeatedly show that consumers consider safety of food sources, freshness, taste, and supporting local farmers to be more important factors than price in their shopping decisions.⁴³ Food security also became a more potent concern to some consumers after the events of September 11, 2001.⁴⁴

Several consumer studies have shown that consumers are far more interested in supporting local growers through their food purchases, than in looking for "sustainable" or "organic" labels. Still, the explosive growth of corporate organic labels offers caution to this analysis. At core, local foods may be an issue of trust—of sensing that if the people who eat know the people who grow the food, farmers will be more accountable over time to raise healthy foods. Yet this is a trust that must be built over time, and cannot be assumed. Buying locally also suggests that money is cycling through the community, and may return as income to the food shopper himself. Conversely, farmers could expect consumers who know them personally to pay them adequately for their labor.

Where consumers buy food may also make a difference. Consumers in one Oregon town said they were willing to pay average premium prices of 29% more for local products bought at a farmers market than they would at a grocery store. Other studies have shown that the quantity of local sales increases in "local-oriented" environments such as farmers markets.⁴⁵

Low-income access to food

A third major motivation for launching local foods networks is that low-income people often do not have good access to high-quality food. Many inner city locales are far from suburban supermarkets, and many have lost long-term grocery stores. Many low-income citizens do not have sufficient income to purchase a complete complement of foods, nor reliable access to fresh foods.

Despite U.S. food surpluses, the USDA estimates that 10% of the nation's population (31 million households) has an insecure supply of food because their income is below poverty level. Second Harvest serves 26 million Americans (9% of the population), and 26 million of the nation's school children (50%) take advantage of free and reduced lunch programs.⁴⁶

Local food systems often address two issues simultaneously by ensuring that WIC coupons can be used to buy fresh foods at farmers markets. This means low-income people get healthy food while farmers earn a better income and expand their consumer base.

Youth farming projects across the country are finding that learning how to raise food has been a powerful experience for inner-city youth in cities like Boston, St. Paul, San Francisco, Chicago, Los Angeles, Rochester and New York.⁴⁷ Not only does gardening provide a source of income, these youth have learned to eat better, have gained experience working cooperatively in a business, and have strengthened their personal connection to culture and nature. Some youth say they have been transformed by working with their hands in the soil.

Breaking down isolation

Connecting youth to farmers highlights the fourth major motivation for building local food systems. Communities benefit by building connections among people who had been isolated from each other. By sharing the risk that farmers inevitably shoulder due to natural forces, and by learning the patience required to nurture a crop, consumers gain a different relationship to their food, and a stronger feeling of solidarity with others in their region. New social capital is built, giving the community greater resiliency in time of crisis, and greater strength to pursue their own goals.

A classic story of the disconnection between inner city residents and farmers is the comment made by a resident of Chicago's Interfaith House for the homeless. Upon learning about vegetables, this resident turned to a staff member and said, "You mean, all this time I have been hungry and sometimes have had to go without food, and now I find out food grows in the ground?"⁴⁸

Nor is this issue limited to inner city areas. Market research—even in rural communities—shows that many consumers do not buy fresh fruits and vegetables because they do not know how to prepare them.⁴⁹

Moreover, when rural folks get together with city folks, they often find they have unexpectedly strong issues in common. Urban-rural dialogues were held by the Minnesota Food Association in the 1980s, and again were sponsored by inner-city groups two decades later. These groups have typically concluded that they share a common plight as members of the "Third World" inside the U.S. Local food systems can mobilize this awareness into helping build a stronger local economy.

Farm viability & rural vitality

Finally, economic reasons are also strong motivators. Struggling in global markets, more than one third of all farms rely on government payments.⁵⁰ As mentioned above, the Mound Bayou Sweet Potato Cooperative began to take root as small farmers in the South decided to distance themselves from a "cash commodity" economy that was actually driving them broke. Elsewhere, plummeting commodity prices also inspired farmers in other states to reassess their farm operations, and to devote at least part of their acreage to raising food for people they know.

American consumers purchase \$474 billion worth of food each year,⁵¹ and the nation's farmers sell an aggregate of \$197 billion dollars worth of food products each year.⁵² Yet much of the wealth generated by this farm production flows to processors, distributors and retailers, rather than to farmers. Only 1.3% (\$551 million) of all farm produce sold in the U.S. is marketed by farmers directly to consumers.⁵³

This means that rather than "feeding the world," as many mainstream farmers like to imagine, growers are more essentially *producing raw materials for industrial processing*. Their crops and livestock may be processed into value-added food products to be sold in supermarkets or restaurants. But cash crops like corn and soybeans are also important sources of chemicals for everything from paints and printers' inks to explosives. The production farmers' position is defined by the fact they provide relatively standardized, and relatively inert, commodities to processors who add value to those products. The cultural bonds people once formed around growing and eating food are lost in

such an impersonal system. Yet even in growing commodities for well-established and highly lucrative markets, farmers require subsidy.

Nor do prevailing market mechanisms connect growers and eaters. More than 40% of all food sold in the U.S. is sold through the top five supermarket chains.⁵⁴ There is no balance between food supply and food demand, because the people who eat do not know the people who raised their food, and cannot communicate directly. To invest in creating local foods systems is also to invest in the creation of competitive markets.

Academic research has documented that industrial food markets are not competitive. Researchers at the University of Connecticut tracked 32 major food industries, and found that all but five suffered from a lack of competitiveness. Concentration of power in agribusiness resulted in substantially higher prices for food consumers, while simultaneously lowering prices at the farm gate.⁵⁵

Another glimpse of the economic potential of local food systems emerged out of a study of the farm and food economy of Southeast Minnesota. This study, created to help inspire a local food network, also shed a great deal of light on the dilemmas of mainstream food systems. In this seven-county region—a traditionally strong agricultural area with excellent soil, favorable climate, and pioneering expertise in soil conservation—the report found that national and global food markets are not serving the region well. *Finding Food in Farm Country* documented that the 8,436 farms in the regions produce nearly one billion dollars worth of food each year. Yet the region's 303,256 consumers spend another half billion dollars buying food raised *outside* the region. The net effect is that \$800 million flows out of the region *each year*, as residents farm and eat.⁵⁶ Moreover, there is sufficient food demand *in the region alone* to support 3,500 additional farms—although many would be part-time operations.

It is likely that most any agricultural region that performed a similar study would find similar results. Such studies are likely to show that the commodity system, in short, produces considerable cash flow but not a great deal of wealth that stays in local communities. One of the important goals of community-based food systems is to reverse these outflows and build local wealth.

The faulty balance sheet of the commodity economy is important even when food is considered as a source of energy, since industrial food processes invest 10 kcal of fossil fuel energy to supply each 1 kcal of energy in food.⁵⁷

Multiple benefits of agriculture

Finally, the community-based foods movement is also growing because farmers and consumers alike have begun to place greater value on the nonagricultural benefits that farming brings to society.

For decades these complex benefits have been praised by rural families who reminded urban dwellers that "farming is not simply a business, it's a way of life." In this analysis, farmsteads were seen as a great place to raise healthy children who hold a strong work ethic. Farms also served as a prime example of how the American family could be productive and self-determined, creating a *livelihood* rather than holding a *job*. Part of this involved a tradition of passing down technical wisdom from parent to child. Rural communities were also praised for their self-reliance and their interpersonal care for each other, and for the can-do spirit that allowed rural people to tackle practical challenges with great resourcefulness.

Still, as farm families became producers of commodities instead of food, and as they began to *consume* technical advice given them by experts rather than relying upon their own native wisdom, farming became more of a reflection of the needs of agribusiness, and less a "way of life." Farms became more narrowly valued for the potential cash flow they could generate, and less for the community context they helped create. Even farm families succumbed to the very urban pattern of working such long hours on split shifts that entire families hardly sat down to eat in the same room at the same time. For some, the rural way of life crumbled.

As farmers and consumers began to discuss what was now missing in their lives, the loss of complexity and community bonds became a paramount concern. Thus, the Kansas City Food Circle began in 1996 to speak of creating a "values added" agriculture. Their work was strengthened by a recent University of Missouri sociology study showing that the number of farms in Missouri counties was the single indicator most related to child well-being.⁵⁸

European policy makers have long offered subsidies to small family farms based upon the nonagricultural benefits of farms and farm families. Thus, French farmers who worked hilly foothill regions near the Alps were given support because, by growing pasture crops, they helped keep soil erosion in check. Some who opened their homes as rest stops for tourists hiking in the mountains were given aid for keeping a tourist industry—and therefore rural cash flow—alive. Farm families were also credited for reducing potential security costs by populating remote regions, or for building social capital by organizing cooperatives.

The Land Stewardship Project brought this line of thought into the U.S. context in its 2001 *Multiple Benefits of Agriculture* report. This study showed that use of best soil management practices could substantially reduce soil erosion (by 25 to 31 percent) and improve river water quality. Annual costs of downstream sedimentation could be reduced by 50 to 84 percent at no greater cost than current farm programs. Importantly, the study also showed that Minnesota citizens would be willing to pay \$200 per household per year to protect soil and water quality. This approach obviously echoes the steps taken by the New York City watershed, noted above.⁵⁹

Thus, CBFS are built for a cluster of related reasons: to promote health, to build relationships of trust, to create food security and better nutrition, to build community connections, to create local wealth, and to value the multiple benefits of farms.

Elements of a community-based food system

CBFS are still saplings, having grown solid roots and holding strong potential for growth. What would a more mature CBFS look like? The essential elements of a developed community-based food system seem to be:

- 1) Ownership of healthy, productive land.
- 2) Access to clean water and air.
- 3) Organized community members who will work hard to ensure they have access to foods produced within the community.
- 4) A broadly accepted long-term vision for building a community-based food system.
- 5) A democratic leadership group capable of advancing a holistic campaign to achieve that vision, and committed to engaging itself and its constituency in continuous learning.

- 6) Regular events that bring food producers and consumers into direct contact with each other as co-learners and fellow community members.
- 7) A cluster of food-producing and consumer entities capable of growing, storing, transporting, processing and delivering food. This will likely include: individual producers, cooperative associations, private businesses, lenders, health and nutrition professionals, sympathetic public investors, supportive social networks, empowerment-oriented technical assistance, and organized consumers.
- 8) A shared spiritual awareness that recognizes that food has a meaning greater than being a commodity for economic exchange, and that celebrates the community's endeavors to keep food at the center of its shared life.
- 9) Local credit sources sufficient to offer local producers and consumers choices in where to turn for credit, and strong enough to reinvest in the community-based food system.

While all of these are necessary elements of a complete community-based food system, none is sufficient in itself to create a community-based food system. Rather, activities toward all of these ends must be accomplished in a harmonized manner, guided by local realities.

Local constraints may be complex. It is, of course, difficult to imagine a strong community-based food system being built without clean soil and water. Yet a community may build its own capacity by reclaiming polluted soil or developing new sources of pure water, or by importing soil to build a new greenhouse. While a strong leadership circle may inspire effective action, such a circle may in some cases only be built through years of concrete activity and reflection.

Few of the community-based food systems that now exist developed in a strictly linear manner in which one action step led logically to the next in a planned sequence. So much of what is possible depends upon who surfaces with inspiration, and who takes steps to address their own needs. Any campaign to strengthen community-based food systems must draw upon existing community assets, reflect the wisdom previously gained by local activity, and inspire local creativity. The process through which each food system is developed will be unique to each community. Each will necessarily respond to constraints posed by local culture, economy, ecology and climate.

Any given community may require decades to successfully build a comprehensive food system. The slowness of each system's growth—just like the relative slowness of the growth of any plant—is likely to be its very strength.

What is needed to strengthen CBFS?

Each "orchard" that makes up the national CBFS movement is distinctive, and each local path being pursued to build CBFS is shaped uniquely by its own locale. Given this diversity of approaches, there is no single answer to the question of how to strengthen CBFS enterprises. In fact, if there were a single formula, it would mean the movement were being shaped from outside.

At this stage in the movement's growth, three general principles might guide how this question is answered:

- 1) Build upon the unique assets and strengths already present in each locale
- 2) Remove barriers to the growth of community-based food systems
- 3) Strengthen the capacity for local residents to direct local food systems

Build upon the unique assets and strengths. At the start, it is useful to imagine some of the possible paths that CBFS groups may create. The structure of the report thus far gives some clues. There is only one major regional community foods broker to date. Still, the rapid growth of Red Tomato in the New England and Mid-Atlantic states suggests there may be soon be room for similar regional food brokers to emerge in at least six regions of the U.S.—and perhaps more, depending upon local initiative and market realities.

For example, this might include one for the Southeastern states, one for the Midwestern industrial belt, another for the prairie and high plains regions, perhaps another in the Pacific Northwest, and two more covering northern and southern California. Even this list leaves some potential gaps. One can easily imagine that others could also flourish, or that smaller brokers will compete fiercely to gain a foothold in the direct sales market.

The number of educational and food access networks is limited primarily by the number of individual or institutional consumers willing to alter food shopping patterns by connecting directly to local growers, and by the number and scale of leadership circles that coalesce to ensure local food systems are solidly constructed. The Food Alliance already aspires to create national visibility as the sustainable agriculture label. While they could face competition from other quarters it would be surprising if consumers were attracted to more than one or two "sustainable" labels. More could easily be seen as confusing.

Similarly, although many states have set their own standards for organic crop production, many of these "organic" labels in turn refer to standards adopted by other states. A single national "organic" label could develop, but it is also possible that climactic and pest conditions will differ enough in diverse regions that regional labels will be useful. So far, however, regional labels have a mixed record. While CISA is thriving with its "Be a Local Hero" campaign, MWFA found that many regional labels had failed.⁶⁰

In the case of both "sustainable" and "organic" labels, an effort to create a single national (or global) label may disappoint shoppers who have the most exacting standards. Even now, many of the most informed customers rely very little on labels, and rather insist upon a visit to the farm that supplies their food. This may not prove to be a practical strategy in mass markets, but could still shape the level of quality implied by any labeling program.

Clearly there will also be countless local and regional efforts to devise consumer mobilization campaigns in locales as small as a fraction of a county and in regions as large as several states. Just what will be the proper scale will depend on travel costs, population density, climate, food storage, consumer interest, leadership, and investment limitations.

For the most part, very local mobilization efforts seem the most vibrant. These can energize multiple voices in each community—and by directly engaging consumers in food visioning, these local efforts build solid social networks and community capacities in ways that larger efforts may not be able to accomplish. Local efforts may also respond more closely to local dietetic needs, or local cultural inclinations, as well. On the other hand, larger geographies may at times gain strategic advantage by having more political clout, or larger budgets.

Given the prevailing concentration in the food industry, it will be important to determine the appropriate scale, and the proper channels, for regional food marketing. Community-based food systems that aspire to *connect* producers and consumers will need to keep these social and educational connections as the core of their work. Local work will be of fundamental importance to assure that new social bonds are built, as well as new marketing channels. Merely placing more locally raised produce into a concentrated national retail system will not necessarily build new wealth for growers.

Specific "value added" initiatives are likely to conform to local climate and soil boundaries to the extent producers are brought together by an effort to process foods that are well-suited to a given locale. Such efforts are also highly impacted by state policies, and are likely to take on a different cast from one state to the next.

Similarly, various farm-to-school initiatives will reflect local soil conditions, the local youth population, local school finances and state education policy.

Local food policy councils may be appropriate at many levels of geography. Any city, county or region that decides to frame policy to assure a secure and sustainable food supply will have reason to build such an effort. These may easily be overlapping or nested policies, as an urban area, for example, discovers it must mount new state policy initiatives if inner city food supplies are to be assured.

Finally, resource and technical assistance groups may specialize nationally around specific technical capacities (a single national web site for finding CSAs, farmers markets, and other groups seems highly useful, although this would not preclude local groups from posting their own directories). The movement may also specialize locally where knowledge of the local players, or the local markets, is essential (while a national marketing firm may know how to do market research, a local firm may know better what local people actually buy). A healthy mix of local and national resource groups seems very desirable.

This complexity is reflected in the fact that each of the groups mentioned in this report has its own distinct vision of where it would like to head in the short term. A capsule summary of their plans follows.

CISA focuses on capacity building for growers and retailers, and broader community building, and does not invest in building facilities. Investing in the staff's capacity to work with more growers and consumers is a priority. CISA is also looking at new programs to target specific populations in its area, specifically low-income seniors whose nutrition needs are great and who often do not have access to fresh, local foods. Other populations, particularly ethnic groups in urban areas, are also of great interest to CISA as it expands its "Be a Local Hero/Buy Locally Grown" education and public awareness campaign.

Staff at The Food Trust want to expand into more schools, to open more farmers' markets, and to address policy changes that will make it easier for institutions to buy local foods. They may also expand their school market program into a national one.

In the immediate future, CAFF hopes to build greater statewide coordination so their five regional clusters can work more effectively, keep their radar attuned to new developments elsewhere in the nation, and coordinate more effectively with each other. CAFF is also a partner in a new statewide effort to expand the farm to school approach to more California schools and to assess its impact. In this effort, CAFF's role will be to identify the most effective strategies for farms that wish to sell direct to local schools. CAFF also seeks to improve their own capacity to communicate to the farmers and consumers who are their members, and they also want to build their capacity to promote change through public policy. Overall, they feel that one of the most critical issues they face is to locate more unrestricted funding sources, so CAFF can work with more flexibility and respond more rapidly to emerging issues.

To the Federation of Southern Cooperatives, the key to the future is building more reliable consumer markets, obtaining more financing, and developing a land bank so farm land does not pass out of the community as farmers retire.

The Food Alliance considers one of its main challenges to be to connect to consumer demand. They especially seek to interest one large player to buy foods carrying the Food Alliance Approved label. They also want to expand their sales reach nationally.

One group that is likely to assist in this expansion is AERO, who hopes to get guidance from both the Alliance and CISA as it creates more distribution channels for Montana produce. AERO is also developing more sophisticated tools for devising local food system plans.

MWFA's Jim Ennis reports that although the group already cannot keep up with consumer demand, they hope to convince even more consumers to get on the bandwagon "We want to expand our ability to communicate to consumers about all the benefits of our program. We will need to mount a broader campaign to do this. The more we can sell, the more retailers will get off the fence." Retailers, he adds, are looking for a broader supply of produce, especially, and are looking for consistent supplies of antibiotic- and hormone-free meats to keep pace with consumer concerns about food safety. Meats have been difficult to carry, he adds, because the consistent product consumers now expect is difficult to supply without a large capital investment.

TOCA will be placing their effort into developing agricultural training programs at a tribal community college, so that a core of expert gardeners can ensure that native varieties flourish, and that the tribe has people skilled enough to scale production up to larger fields.

The greatest need in Pennsylvania, PASA says, is to develop the organizational capacity to respond to the rapidly expanding demand for fresh local products. In its next phase, PASA will organize 4-6 regional offices, each of which will focus on local marketing. The next regional office will be opened in the Scranton/Wilkes-Barre region, and will include an effort to strengthen the remaining dairy farms in that region. The statewide PASA office will continue to take the lead on education, community building and policy issues.

Red Tomato just opened a new warehouse with greater capacity to meet the rising demand they have generated. They hope to expand into new stores and to develop year-round sales by contracting with growers in other climates such as the southern states and the Caribbean.

Simply put, there is no single formula that will apply to all community-based initiatives. That is, of course, exactly what makes the movement strong—that each region reflects its own food heritage, its own storehouse of community capacity, its own definition of what it needs. External investors would do well to foster each group's unique character, rather than seeking a one-size-fits-all strategy.

As the W. K. Kellogg Foundation concluded in its report, *Food for Thought*: "community-based food systems spur economic development for rural communities—provided the enterprises are locally owned and controlled. That is the key."⁶¹

If the goal of expanding the community-based food sector were to increase direct sales of farm products, change may come relatively slowly. To increase direct sales by 5% would require creating new sales of \$27 million. This could be accomplished by forming 540 new CSAs with average sales revenue of \$50,000 each—almost a doubling of the number of CSA farms nationally.

Or growth may occur more rapidly in wholesale arenas. Since community-based food brokers sold about \$7 million of fresh foods in 2001, a 5% increase would require \$350,000 in new sales. One single large distributor joining the network could easily surpass that figure—provided nearby farms have the capacity to deliver.

Remove barriers to growth. The future of the community-based farm movement will also be shaped by how it *removes the barriers to growth*.

One of the major barriers is resistance from institutional buyers, who often claim that existing purchase contracts do not allow them to buy food from new sources, such as direct from producer cooperatives or local farmers markets. Others claim that year-round purchase commitments make it impossible for them to shift to local produce when it is in season. Still, there is wide softening on these issues. Twenty years ago, these reservations were considered gospel. Now, hundreds of buyers have opened paths that allow local produce to be handled.

A second barrier that has emerged is insurance. With more and more tainted or contaminated food products emerging in the mainstream food system, some buyers have insisted that producers insure themselves against food contamination or disease. The cost of such insurance may prohibit a local

cooperative from forming. In some instances, larger investors have assumed these insurance costs on behalf of growers. The community foods movement may find it can reduce these insurance concerns as more consumers get to know local producers. Quality labeling may also reduce risk to insurers.

Another barrier to the growth of community-based food systems is the assumption that all farms must be full-time farms. For many farmers, especially in the crucial start-up years, raising foods for local consumers is going to be a part-time proposition. Initial sales are likely to be small and sporadic until permanent markets are built. To some rural folks, part-time farming is belittled as "hobby" farming, not a serious way of making a living. To others, part-time farming is just the opposite—an ideal way to combine a care for the land and a devotion to raising food for nearby consumers with other career pursuits. Still others are concerned that the movement will not take off unless farms are full-time.

Strengthen local capacity to direct local food systems. Overall, in pondering the possible financial futures of the community-based foods movement, it is also important to keep the admonitions of the local foods groups in mind: often the most important outcome is the capacities that are built in the community. This includes the connections built among community members—the links that transform local *activity* into local *systems*. Although measuring these may be more difficult than collecting sales figures, they could be more satisfying indicators of success.

This, in turn, leads to a brief discussion of which indicators of success will be most useful to the community-based food systems movement.

Indicators of success

Measuring the success of the movement is also a complex business. Success for one region may be viewed as a reversal by another. Expansion that is desperately needed in one may weaken another.

Still, the groups interviewed for this report expressed interest in having a more systematic accounting of the growth of the movement. Each group offered its own suggestions for how this might best be done.

Some general principles do apply. These include:

- 1) Look deeper than the obvious answers
- 2) Build upon the experience of CBFS themselves
- 3) Measure systemic change

Look deeper than the obvious answers. In assessing the emergence of the community-based foods movement, it is important to look past the most obvious answers, and to delve down for a deeper analysis of the character and potential of the movement. Some of the measures that are most often quoted, or the easiest to collect, have limited usefulness. The most telling indicators may be quite obscure.

Some of this complexity can be glimpsed by reviewing how the groups mentioned in this report gauge their own success. A quick summary of comments by groups in the field follows. Following that, we will make a few preliminary suggestions.

The most obvious question that gets asked about the growth of the movement is, how much food is sold? This turns out to be difficult data to collect, since several of the regional coordinating groups have clear policies—they do not ask participating farmers how much produce they sell. Brokers who work through distributors often do receive a report of how much food was sold. Given the decentralized nature of the movement, it will be difficult to arrive at satisfactory totals.

Sales could also be reported in pounds instead of in dollars, which may prove advantageous since it tends to mask dollar figures. Still, it may also be difficult to compare weights: consider a pound of blueberries next to a pound of watermelon.

Many groups count the number of acres under production, which has the advantage of not revealing sales figures. Yet, this, too is problematic. Any given farm may devote, say 25 acres to vegetable production, but may take several acres out of production for a year or two, rotating crops or leaving them fallow to restore soil nutrients. Moreover, it is difficult to compare an acre devoted to strawberries with an acre devoted to sweet corn. It is impossible to equate an acre of rangeland with

an acre of crops devoted to intense fruit production to an acre that can produce soybeans or hay. A handful of acres in Tohono O'odham may make a world of difference to cultural survival, but scarcely be noticed in a national tally.

Moreover, it is difficult to get good counts on the number of acres devoted to "sustainable" production without a common definition of sustainable farming. At the least, such counts could be broken down into categories, such as tallying the number of acres using integrated pest management (IPM) techniques, the number of acres that could be certified organic through state of California certification, and so forth. Then acres of a distinct type could be compared with each other, rather than across categories.

Some groups would argue that it is interesting to track number of acres cultivated using sustainable practices. Here, too, there are complications, since there are different definitions of sustainable production. There are also different standards for organic production, and regional differences in what the soil can bear. An acre that is listed as "sustainable" one year may be "organic" the next. Land that is counted as tomato acreage one year may grow alfalfa the next.

Build upon the experience of CBFS themselves. The strategies adopted by CBFS themselves to measure their own success is useful in showing both the complexity of the task and the variety of possible strategies.

CISA does extensive survey research each year with consumers, farmers, retailers and restaurant owners to find out whether or not their program has been successful. To date, they report, results have been very positive.

PASA believes that the best measure of progress is the success of its individual members, especially farmers. To a great extent, they view this in terms of the attitudes held by PASA members. "We take great pride," said director Bryan Snyder, "that in any random group of farmers gathered for various purposes around the state, the most vibrant, engaged and forward-looking participants are already PASA members." Moreover, PASA hopes to report its progress as a "balance sheet" that compares PASA's organizational *capacity* to the *sustainability* of Pennsylvania farms and farm families.

"It will be impossible to achieve either of those objectives without simultaneously achieving the other," Snyder adds.

To the Federation of Southern Cooperatives, participation is the key. Tracking the number of people who participate in their cooperatives, particularly those who stay involved over the long haul, to them expresses the social connectedness they hope their cooperatives will nurture.

Similarly, TOCA finds that the number of people participating in traditional rituals, especially those based around food, is a significant indicator of their success. As mentioned above, TOCA also counts the number of acres of land devoted to traditional crops. They are likely to keep track of wild foods harvested by youth harvesting teams. They seem to informally track the number of tribal members who stay active in self-help health efforts.

To the Food Trust, one important measure of success is the pounds of fresh fruit consumed in participating school districts. The Trust would also like to keep track of the number of healthy snacks served in the schools. Over the long haul, they would like to think that rates of malnutrition, obesity, and food-related diseases would decrease in the schools and neighborhoods where they work—but clearly these numbers will not change rapidly.

CAFF seeks to build a popular movement that will support family farms as well as policies that foster local food systems. While they realize the movement is larger than their membership, what CAFF can most easily measure is the number of farmers and consumers who join CAFF as members. Another measure of the strength of this movement is the vitality of the family farms that raise food using sustainable practices. Another indicator of success for CAFF is the presence of institutional policies and programs that support family-scale agriculture.

The Food Alliance relies on fairly straightforward counts: the number of farmers who participate in the certification program, the number of retailers who handle "Food Alliance-Approved" products, and the number of consumers who actively seek out Food Alliance-Approved products and support certified farmers with their food purchases.

MWFA measures its success in three ways. "First, we measure our penetration in consumer markets." Jim Ennis is pleased that so far, 15% of customers in the stores that carry the MWFA label are aware of that label. "Secondly, we count the number of retailers who are enrolling—we increased from 13 to 38 in the last year, and that is a good sign. Third, we count the number of growers. This increased from 34 to 61 over the past year."

To Red Tomato, the measures of success include (a) steady growth in sales; (b) favorable qualitative assessments by farmers (as collected in an independent evaluation) of their experiences in working with the firm; and (c) slow and steady progress to eliminate dependence on grants.

AERO's emphasis so far has been upon creating participatory planning processes that enable local communities to take effective action in building local food systems. They gauge the success of these ventures by tracking the number of people who participate, and the diverse interests who are represented. Ultimately, their partners measure captured dollars of value added by processing Montana crops. And increasingly, AERO seems interested in tracking the number of very small growers (5-25 acres) who are able to market their crops to local markets successfully.

There are some complexities in each of these methods of counting, but each has some utility if taken with due caution. Several groups also pointed out that qualitative reports are often more useful than quantitative tallies.

Measure systems change. What, then, are some of the key indicators that will be most useful in assessing the growth of the community-based farm movement? Answering this question fully requires more resources, and deeper conversation among CBFS participants, than fell within the scope of this project. Still, a few preliminary answers can be set down here.

One way to look at this is to consider what quality is most unique about the community-based food system—in other words, what activity occurs in the community foods movement that would not occur in the corporate food system. One essential difference is this: while the corporate food system inherently spends considerable money to *advertise specific products that are habit-forming* (i.e., containing caffeine, sugar, fat, and high caloric content), the community foods movement devotes its outreach efforts to *mobilizing citizens to support local foods networks*. This could be seen as a choice

between two advertising strategies (whether the advertising dollar is spent on creating habits or on marketing the *concept* of local food sales), but this is more than strictly a marketing concern.

Animators who wish to build a local food system require a combination of strategies that resemble a community organizing effort or a political campaign more than simply a standard marketing campaign. Not only does the concept of local food need to be marketed, the availability of local food sources must be created and then made known. The idea that people can work in collaboration to create local food systems must also be "sold," and there must be tangible victories that reward participants for their early efforts. Volunteer energy must be mobilized to hand out promotional materials, open marketing locations, and spread the word through the local community. This is a process of engaging citizens in a deeply active level, not simply a matter of establishing consumer preferences.

In fact, some leaders of the community foods movement express strong concerns that consumers will have healthy food simply "marketed" to them, and will switch to buying, for example, organic milk from an impersonal corporate source—and that this will subvert the chance to create genuinely community-run food systems that build community connections.

Thus, the amount of money spent by CBFS groups to mobilize and connect citizens becomes an important indicator of the growth of the movement. It is certainly possible that this will be more useful measure in the early years of the movement than in its more mature years. Still, the fact that many firms in the corporate economy feel a need to advertise food products that themselves are habit-forming suggests that community-based food systems will require ongoing community mobilization if they are to persist.

Compiling data on this matter will require some subtlety. It is not necessarily useful to equate a dollar spent on community organizing with a dollar spent on a produce directory. Such expenses should be reported in diverse categories, for instance:

- * Dollars expended to promote concept of local foods
- * Dollars expended to promote specific local crops
- * Dollars expended to advertise local shopping networks/facilities
- * Dollars expended to foster better nutrition

- * Dollars expended to foster preventive health care
- * Dollars expended to promote the concept of cooperation and community building
- * Dollars invested in community building activities
- * Dollars invested in capacity building for participating staff and organizations
- * Dollars invested in mounting specific community mobilization efforts
- * Dollars invested in public education and outreach
- * Dollars invested in creating media awareness
- * Dollars invested in communicating to the media and to the public

This should not be considered an exhaustive list.

To gain a more thorough sense of the shift from corporate food systems to community-based systems, it would be most satisfying to measure both sides of this equation. That is, to compare the ratio of dollars expended to *build connections among producers and consumers* (by pursuing strategies such as those listed above) with the amount spent to advertise habit-forming food products in a given food market. This ratio could be difficult to measure due to proprietary secrecy, but may be elicited through public pressure or legal action. Moreover, market analysts already obtain excellent data on advertising costs for the food industry as a whole. These ratios may prove to be distressingly small for a number of years. Still, as these ratios change, they will provide a core measure of the shift to CBFS.

Another key indicator of the growth of local foods *systems* would be the amount of cross-investment in a given community. If diverse community stakeholders invest in each other's businesses—and in local food systems organizations—this would be a significant sign that local residents are using a systemic analysis. In such cases, one would expect to find that, for example, farmers own shares or stock in local distribution and marketing firms, local consumers own stock in local farms, and local grocers own invest in the protection of farmland. Tracking the extent of such cross-investment is unlikely to happen in a strictly commercial economy. However, public and private funders may wish to build tracking systems that accurately report cross-investment, as a way of ensuring that systematic activity is underway, and that local loyalty and community linkages are in fact being built.

Another example of cross-investment was devised by the Fair Trade coffee movement, that committed themselves to purchase raw beans from producers at "fair trade" prices that may be higher than prevailing market rates. The number of, and value of, similar agreements made by

consumers and food buyers also serves as an effective indicator that a systemic approach is being taken to food security. A similar tally could of course include CSA shares held, and their value.

The amount of dollars of food sold directly from farm families to consumers is an important indicator of the growth of community-based food systems. This is already compiled by USDA. However, this would not track all community-based sales, since many local food sales are still carried out through local grocers or brokers, rather than through direct sales. Moreover, it has been markedly difficult for many local foods groups to ask producers how much they sell to consumers. Local schools, nursing homes, universities, grocers and restaurants that publicize how much they purchase from local producers will be earning substantial local good will.

For those local foods initiatives that rely on cooperative organization of farmers and consumers, the number of coop members, annual sales, coop assets, member equity, and diversity of local credit sources all would be rich measures of local cooperative activity.

Credit is also a powerful lens, since the strength of local credit sources provides one way to gauge the balance of money flowing into a community versus how much money flows out. Indeed, in the most prosperous eras of the American farm economy, farmers could obtain loans from individuals and other local credit sources.⁶²

Another useful measure would be to assess what percentage of local consumer spending for food (both at home and away from home) builds wealth for local residents. This again is a difficult indicator to extract from existing data bases, but could be measured inside a deliberate community foods initiative. Clearly, this also suggests the utility of measuring *how much* wealth is created. In a community that builds cooperatives and local credit unions, some local wealth can be fairly straightforwardly measured. This is a difficult measure to propose in strictly private markets. Of special interest would be the amount of wealth built by people of color who are producing food. This is one of the core tests of any local food system: if it does not build measurable new wealth for community members, it is probably is not offering an alternative to the commodity foods system.

Following the example of AERO, it would be important to measure how much "value added" production also builds wealth in the local area.

Somewhat easier to measure would be the number of farm laborers who make a living wage producing food. Such a count would be fairly easy to make under a sustainable labeling program such as that of the Food Alliance. For the purposes of this measure, "laborer" should include all people who work for hire on a given farm, including farmworkers, proprietors, interns, and so forth. Since the wage level is of public concern, especially were minimum wage levels to apply to agriculture, this data should be reportable by any farm that wishes to sell under a sustainability label.

Two other forms of community wealth are the social connectedness, and the skill base, of a community that is building a local food system. As new community connections are forged through grassroots action, social connections can be tracked, and new capacities gained can be measured in scientific ways. Harvard's Robert Putnam has developed a way to measure "social capital" (social cohesion) in a given locale; this may provide the movement with important measures of its success. Community initiatives already track the number of members who gain specific skills and experience through their grassroots activity.

Similarly, another unique aspect of local foods systems, at least, is the potential for reduced transportation costs. It is generally accepted that the typical morsel of food in the U.S. travels at least 1,300 miles from producer to consumer.⁶³ Reducing this distance would be an important indicator that local food systems are becoming stronger. Less transport would also mean local foods would become more competitive due to avoided costs. However, a smaller number of miles food travels would not by itself document the strength of community-based food systems without more evidence of local ownership and local wealth creation.

An indicator used in the aftermath of the OPEC oil crisis was the energy costs of food. At the time 60 percent of the cost of food was in fact an energy cost. This tallied the oil used in working the land, transporting the crop, processing the product, shipping the product, shelving it in grocery stores (often refrigerated or frozen), and driving it back home. Collecting such measures seems to have fallen out of favor in recent years. Still, reducing energy costs is likely to be an important goal of CBFS, and local food systems organizations may be able to document energy savings realized by local distribution channels.

Simply counting the number of elements of a food system that are present in a given region may also prove useful. If diverse businesses are working together, including technical assistance groups, educators, and market analysts as well processors and distributors, there is good reason to suspect that some systemic activity, and integrated thinking, is going on in a given region.

If regional labels flourish over national labeling, then to simply count the number of regional labels will be one way to measure the growth of local food networks around the U.S. However, early evidence shows that local labels have not always taken hold. If national labels have greater impact, then a count of the number of retail outlets accepting labeled products will serve as a useful measure.⁶⁴

The number of urban market and community gardeners, especially youth, serves as a useful signal of consumer dedication to locally raised foods. This is true even if the amount of produce actually raised does not make up a substantial part of the local food diet. Consumers who grow food are more likely to connect with, and understand, local food producers.

One way to measure changes in diet may be for local communities to track the number of residents who formally enroll as members of "healthy eating" circles, community-based nutrition classes, or weight-watching groups. The number of residents engaged in such self-help efforts may will show the breadth of community activity devoted to healthy eating. These circles in turn may wish to total their own purchases of locally grown foods.

Finally, it would be important for communities engaged in local food systems mobilization to track changes in diet and health. Especially important will be public health data showing the incidence of diabetes (especially "adult-onset"), cardiovascular disease, obesity and malnutrition. Changes in these indicators may not be rapid. The causes of any changes that occur will not be strictly due to diet and local foods availability. Yet these measures get to the core health reasons causing local food systems to emerge. If these disease rates do not abate as local foods become more available, it will be important for local leaders to learn why.

To repeat the caution mentioned above, this is only a preliminary list. The most effective indicators will be developed through conversation between local food systems participants and evaluation

professionals. They may be developed only as a result of months or years of practical experience. Hopefully, as an initial step, the suggestions above may lead to more satisfying results in the future.

Any long-term effort to build CBFS amidst the prevailing logic of the commodity economy will want to ask itself each year, "What have we learned about how to change the food system we operate in? What are the most strategic points at which we can apply leverage to make greater changes in these systems, and to build community-based systems?" From the learnings of such discussions, effective indicators of systemic change are likely to be discovered over the long haul.

Conclusion

Like any cluster of orchards, the community-based food movement requires a stable and fertile land base, a favorable climate, careful stewardship, and committed support from the people who want to eat its produce.

Currently, the CBFS movement owns considerable support in each of these arenas. In a relatively few years, and against startling odds, it has sent a deep tap root into hundreds of communities across the U.S. After just a few years it is gaining in both financial strength and visibility. Yet, the movement still has its fragilities.

The distinctive path each local CBFS initiative has taken is one of its most inherent strengths. These local and regional qualities must be enhanced—for cultures are formed and regenerated around the local rituals that surround the growing, harvesting, and eating of food.

In building a movement that puts the face of the farmer back on the food that consumers eat, local food activists have created a movement that itself wears many faces. Responding to crucial challenges that have been left unsolved by the prevailing food system—the need for consumers to be informed and responsible about eating healthy foods, the social cohesion that can be built when producers and consumers both know and trust each other, the need for addressing hunger and health concerns in low-income communities, the benefits of breaking down social isolation, the need to keep farms and rural communities viable, and the wisdom of valuing the complex benefits of

having families working and owning farmland—determined visionaries are unleashing the creative energy of farmers, gardeners, youth, elders, retailers, technical advisors, and public officials.

The growth of this movement will be shaped in large part by the capacities and opportunities present in each specific locale in which it is emerging. These distinctive local characters must be enhanced and protected as the movement expands, from scattered clusters of local animators into a national system of community-based food enterprises.

As the movement is supported, and as results are measured, it will be important to protect the opportunity for local cultures to form around the rituals that surround the growing, harvesting and eating of food. It will be important to listen to the local wisdom gained by local leaders, even as broader solutions and national systems are being patiently constructed. The goal of bringing producers and consumers into stronger bonds of community must be upheld.

Finally, it will be crucial to think in terms of systemic action. That is, to build complex and complementary activity on the part of multiple stakeholders in any given community, and to form *systems* of relationships that support healthy fresh foods, healthy consumers, fair economic exchange, community wealth, and healthy ecosystems all at once.

These new systems will be the lasting infrastructure that lies behind the food that holds the farmer's face on it.

Appendix

Local foods broker

Red Tomato — Boston

1033 Turnpike Street
Canton, MA 02021
Contact: Iliana Rivas
telephone: (781) 575-8911
e-mail: redtomato@redtomato.org

Scope of activities: Distributes produce from more than 30 growers and grower cooperatives to supermarkets in the greater Boston and Philadelphia areas. Outreach efforts include the development of a brand identity, in-store tastings, in-store point-of-sale materials, an internet newsletter, fact sheets, and some media outreach.

Education and food access networks

[alphabetical order]

Alternative Energy Resources Organization (AERO) — Montana

25 South Ewing, suite 214
Helena, Montana 59601
telephone: (406) 443-7272
fax: (406) 442-9120
email: aero@desktop.org
web site: www.aeromt.org

Scope of activities: value-added processing of local food crops, potential local food label, sustainable agriculture and community building; smart growth and transportation choices; renewable energy

Community Alliance with Family Farmers (CAFF) — California

PO Box 363
Davis, California 95617-0363
telephone: (530) 756-8518 ext. 36
fax: (530) 756-7857
email: info@caff.org
web site: www.caff.org

Scope of activities: Works with five regional communities and throughout the state to foster community connections with local farmers through a direct market farm directory, farm tours, farm to school programs, buy local campaigns, and other strategies.

Community Involved in Sustaining Agriculture (CISA) — Western Massachusetts

893 West Street
Amherst, Massachusetts 01002-5001
telephone: (413) 559-5338
fax: (413) 559-5404
email: cisa@buylocalfood.com
web site: www.buylocalfood.com

Scope of activities: educates producers and consumers to strengthen local food systems

Federation of Southern Cooperatives (FSC) — Southern states

2769 Church Street
East Point, Georgia 30344
telephone: (404) 765-0991
fax: (205) 652-9676

FSC Rural Training and Research Center

P.O. Box 95
Epes, Alabama 35460
telephone: (205) 652-9676
fax: (205) 652-9676

e-mail: fsc@mindspring.com
web site: www.federationsoutherncoop.com

Scope of activities: Rural training and research, support of small farms and sustainable agriculture, assists farmers with land tenure issues, cooperative marketing, credit unions, cooperative business development member services, communications, advocacy and coalition building

The Food Alliance — Pacific Northwest & national

1829 NE Alberta — suite 5
Portland, Oregon 97211-5803
Telephone: (503) 493-1066
Fax: (503) 493-1069
e-mail: info@thefoodalliance.org
web site: www.foodalliance.org

Scope of activities: This partnership of farmers, consumers, scientists, grocers, processors, distributors, farmworker representatives, and environmentalists certifies produce raised by member growers with a regional "Food Alliance Approved" label showing that the product meets strict standards in the areas of pesticide reduction, soil and water conservation, safe and fair working conditions, wildlife habitat protection, and humane treatment of animals. .

The Food Trust — Greater Philadelphia

1201 Chestnut Street — 4th Floor
Philadelphia, Pennsylvania 19107
Telephone: (215) 568-0830
Fax: (215) 568-0882
e-mail: contact@thefoodtrust.org
web site: www.thefoodtrust.org

Scope of activities: Operates farmers' markets with nutrition education, collaborates with public schools to promote healthy eating and provide nutrition education, helps farmers market their products to supermarkets and other institutions, educates policy makers about the food needs of low-income people.

The Midwest Food Alliance (MWFA) — Upper Midwest

Blair Arcade West—suite Y
400 Selby Avenue
St. Paul, Minnesota 55102
telephone: (651) 265-3684
fax: (651) 228-1184
e-mail: jim@thefoodalliance.org
web site: www.thefoodalliance.org

Scope of activities: Dedicated to promoting sustainable farming methods as practiced on local family farms in the Midwest. This joint project of Land Stewardship Project (Minnesota) and Cooperative Development Services (Madison) is expanding The Food Alliance (Oregon) labeling program into the Midwest.

Mountain Partners in Agriculture (MPIA)

564 Indigo Bunting Lane
Marshall, North Carolina 28753-6430
telephone: (828) 649-9452
fax:(828) 649-9452
e-mail: director@asapconnections.org
web site: www.asapconnections.org

Scope of activities: A Western North Carolina community-based collaborative focused on sustaining farms and rural communities through an integrated action program of farmland protection, sustainable production systems, marketing and education, and policy development. Launched the Appalachian Sustainable Agriculture Project (ASAP); its "Buy Appalachian Guide" is available at www.buyappalachian.org

Pennsylvania Association for Sustainable Agriculture (PASA)

114 West Main Street (PO Box 419)
Millheim, Pennsylvania 16854
telephone: (814) 349-9856
fax: (814) 349-9840
e-mail: info@pasafarming.org
web site: www.pasafarming.org

Scope of activities: Creates networks and markets to strengthen the ties between concerned consumers and family farmers.

Fair trade coffee networks

Only those described in the text are listed. Others can be found at the Oxfam USA web site listed on the next page.

Equal Exchange

251 Revere Street
Canton, Massachusetts 02021
telephone: (781) 830-0303
fax: (781) 830-0282
e-mail: info@equalexchange.com
web site: <http://www.equalexchange.com/>

TransFair USA

1611 Telegraph Ave.—Suite 900
Oakland, California 94612
telephone: (510) 663-5260
fax: (510) 663-5264
e-mail: transfair@transfairusa.org
web site: <http://www.transfairusa.org>

Peace Coffee

2105 First Avenue South
Minneapolis, Minnesota 55404
telephone: (612) 870-3440 & (888) 324-7872
e-mail: peacecoffee@iatp.org

Technical and support organizations

Only those mentioned in text are listed here—this is by no means a complete list

FoodRoutes Network

PO Box 443
Millheim, Pennsylvania
telephone: (814) 349-6000
fax: (814) 349-2280
email: info@foodroutes.org
web site: <http://www.foodroutes.org/>

Community Food Security Coalition (CFSC)

PO Box 209
Venice, California 90294
telephone: (310) 822-5410
fax: (310) 822-1440
cfsc@foodsecurity.org
web site: <http://www.foodsecurity.org>

Association for Enterprise Opportunity (AEO)

1601 North Kent Street—suite 1101
Arlington, Virginia 22209
telephone: (703) 841-7760
fax: (703) 841-7748
e-mail: aeo@assoceo.org
web site: <http://www.microenterpriseworks.org/>

Oxfam USA

26 West Street
Boston, Massachusetts 02111
telephone: (800) 77-OXFAM (776-9326)
fax: (617) 728-2596
e-mail info@oxfamamerica.org
web site: <http://www.oxfamamerica.org>

Community Alliances of Interdependent AgriCulture (CAIA)

56149 Hwy 12
Hartington, Nebraska 68739
telephone: (402) 254-3314
fax: (815) 371-3628
e-mail: caia@hartel.net

web site: <http://www.caia.net>

Food Circles Networking Project

Department of Rural Sociology
University of Missouri—Columbia
105 Sociology
Columbia, Missouri 65211
telephone: (573) 882-3776
fax: (573) 882-1473
e-mail: montoyaa@missouri.edu
web site: <http://www.foodcircles.missouri.edu>.

Sustainable Agriculture Research & Education Program (SAREP)

University of California—Davis
One Shields Ave.
Davis, CA 95616
telephone: (530) 752-7556
fax: (530) 754-8550
e-mail: sarep@ucdavis.edu
web site: <http://www.sarep.ucdavis.edu/>

Institute for Agriculture and Trade Policy (IATP)

2105 First Avenue South
Minneapolis, Minnesota 55404
Telephone: (612) 870-0453
fax: (612) 870-4846
e-mail: iatp@iatp.org
web site: <http://www.iatp.org>

The Henry A. Wallace Center for Agricultural & Environmental Policy

a project of Winrock International
Arlington, Virginia
1621 North Kent Street—Suite 1200
Arlington, Virginia 22209
telephone: (703) 525-9430
web site: http://www.winrock.org/what/wallace_center.asp

National Catholic Rural Life Conference (NCRLC)

4625 Beaver Avenue
Des Moines, Iowa 50310
telephone: (515) 270-2634
fax: (515) 270-9447

e-mail: ncrlc@aol.com
web site: <http://www.ncrlc.com>

Land Stewardship Project (LSP)

2200 4th Street
White Bear Lake, Minnesota 55110
telephone (651) 653-0618
fax: (651) 653-0589
e-mail: lspwbl@landstewardshipproject.org
web site: <http://www.landstewardshipproject.org>.

U.S. locales with local food systems initiatives

[partial list—alphabetical by state—continued on next page]

Sylvania	AL	Lowell	MA
Thomaston	AL	Bowdoinham	ME
Little Rock	AR	Ellsworth	ME
Diné Nation	AZ	Unity	ME
Phoenix	AZ	Detroit	MI
Second Mesa (Hopi)	AZ	Saginaw	MI
Sells	AZ	Minneapolis	MN
Tuscon	AZ	Columbia	MO
Arcata	CA	Kingdom City	MO
Compton	CA	Unionville	MO
Davis	CA	Cleveland	MS
Escondido	CA	Jackson (+)	MS
Pasadena	CA	Crow Agency	MT
Rancho Cordova	CA	Durham	NC
Sacramento	CA	Trenton	NJ
Santa Monica	CA	Rociada	NM
SF Bay Area	CA	Santa Fe	NM
Venice	CA	Taos	NM
Watts (LA)	CA	Albany	NY
Boulder	CO	Buffalo	NY
Denver	CO	Hudson	NY
Newark	DE	Iroquois Six Nations	NY/ONT
Gainesville	FL	New York City	NY
Gretna	FL	North County	NY
Griffin	GA	Rochester	NY
Honokaa	HI	Athens	OH
Kamuela	HI	Homestead	PA
Kauwai	HI	St. Helen's Island	SC
Pahoa	HI	Mission	SD
Wai`anae	HI	Sneedville	TN
Ames	IA	Treadway	TN
Boone	IA	Washburn	TN
Bremer County	IA	Houston	TX
Grinnell	IA	Lubbock	TX
Johnson County	IA	Abingdon	VA
Plymouth County	IA	Alexandria	VA
Chicago	IL	Fairfax	VT
Bloomington	IN	Richmond	VT
Topeka	KS	South Burlington	VT
Whiting	KS	Lopez Island	WA
Lexington	KY	Shelton	WA
Baton Rouge	LA	Spokane	WA
DeRidder	LA	Tacoma	WA
Holyoke	MA	Glenwood City	WI
Lincoln	MA	Green Bay	WI

Menominee
Huntington

WI
WV

Romney
Moyers

WV
WV

Note: To be listed here a locale had to meet one of the following criteria:

- * Some local food systems effort is underway (includes USDA local food systems grantees)
- * Two or more local food groups are listed on the Community Food Security Coalition mailing list
- * A local food plan has been adopted

Note: communities with a local food policy council are listed on the following page, and not on the list above.

U.S. locales and states having local food policy councils

[partial list—alphabetical by state]

Berkeley	CA	Austin	TX
Los Angeles	CA	San Antonio	TX
Salinas	CA	Seattle	WA
San Bernardino	CA	Madison	WI
San Francisco	CA	Milwaukee	WI
Hartford	CT		
Orlando	FL	Marin County	CA
Des Moines	IA	Placer County.	CA
Chicago	IL	Onandaga County	NY
New Orleans	LA		
Baltimore	MD		
Portland	ME		
Wiscasset	ME		
Saint Paul	MN		
Kansas City	MO		
Missoula	MT		
Omaha	NB		
Albuquerque	NM		
Syracuse	NY		
Cincinnati	OH		
Portland	OR		
Philadelphia	PA		
Pittsburgh	PA		
Knoxville	TN		

State-wide food policy councils:

Connecticut
Iowa
Maine
New Jersey
New York
North Carolina
Oklahoma
Ohio
Pennsylvania
Utah
Vermont

The locales and states listed above have formed a local food policy council at some point in recent years. Some are more active than others.

Endnotes:

¹ This is a conservative estimate of the author, made by totaling up sales reports from the larger community-based food networks. However, there is no consistent tracking system that reports sales numbers consistently or thoroughly.

² Care, Brendan M. (2002). "Better Days for Coffee Producers," *Dallas Morning News*, February 7. Viewed at http://www.dallasnews.com/world/mexico/stories/coffee_07bus.ARTO.a8ae3.html on June 12, 2002. See also the Transfair web site at <http://www.transfairusa.org/>.

³ USDA data found at www.ams.usda.gov/farmersmarkets/facts.html. Viewed April 12, 2002. See also www.ams.usda.gov/directmarketing/8058usda.pdf for a copy of the National Directory of Direct Marketing Associations (2001).

⁴ FoodRoutes provides a national directory of farmers markets, CSA farms, and farms selling their products directly to consumers on their web site: <http://www.foodroutes.org>. The site features an interactive map of the U.S. that can be viewed at a county level showing the locations of several thousand direct marketing outlets.

⁵ Brown, Katherine H. (2002) with Bailkey, Martin; Meares-Cohen, Alison; Nasr, Joe; Smit, Jac; and Buchanan, Terri. "Urban Agriculture and Community Food Security in the United States: Farming from the City Center to the Urban Fringe." Venice, CA: Community Food Security Coalition, February, 15. Available at http://www.foodsecurity.org/pubs.html#urban_ag.

⁶ American Community Garden Association (1998). Community Gardening Survey (covering 1996). See www.communitygardening.org. Viewed April 12, 2002.

⁷ Tauber, Maya & Fisher, Andy (2002). "A Guide to Community Food Security Projects." Venice, CA: Community Food Security Coalition. Available for free download from www.foodsecurity.org/cfsc_case_studies.pdf. USDA Food Security data drawn from unpublished summary provided by Zy Weinberg, USDA.

⁸ USDA data found at www.ers.usda.gov/briefing/organic. Viewed on April 12, 2002. Two large sellers of organic products are especially noteworthy. Organic Valley, which formed out of the CROPP cooperative of Wisconsin growers, now boasts \$100 million in annual sales of organic products. Organic Valley purchases its products through farmers' cooperatives. Horizon Organics, based in Boulder, reported sales of \$159 million in 2001, through 15,000 retailers. In addition to purchasing direct from farmers, Horizon manages its own dairy farms, including a 3,800-acre operation in Idaho and an 800-acre farm in Maryland. All told the firm says its sales support 200,000 acres of cropland. Sources: Horizon Organics fact Sheet, May, 2002, viewed at <http://www.horizonorganics.com> on June 14, 2002. Interviews with Joe Pedretti and Susan McGovern of Organic Valley, June 13, 2002. See also *Organic and Natural News* and National Marketing Institute's *Organic Consumer Trends 2001* (See www.ota.com/consumer_trends_2001.htm.) See also <http://www.organicandnaturalnews.com/articles/0c1feat1.html>. Note that the *Nutrition Business Journal* lists total organic sales for 1999 at only \$4.7 billion (See <http://www.foodindustryreview.com/bigorganic.gif>).

⁹ Robyn Van En Center for CSA Resources web site, "What is Community Supported Agriculture?": <http://www.csacenter.org/movement.html>. Viewed April 12, 2002. Helena Norberg-Hodge, writing in *The Ecologist*, points out that the CSA movement began in Switzerland in the mid-1970s. See Norberg-Hodge, Helena (1999). "Reclaiming our food: reclaiming our future." *The Ecologist* 29:3, 209-215.

¹⁰ Draft business plan for Red Tomato (2002) and interview with founder Michael Rozyne, June 14, 2002. Catalogue for Philanthropy summary of Red Tomato, viewed at www.catalogueforphilanthropy.org/cfp/2001/red_tomato_494.htm on June 12, 2002. Also, USDA Community Food Security program (1998). "Community Food Projects Awarded in 1998," <http://www.recusda.gov/crgam/cfp/award98%20activities%2000.htm>. Viewed on April 12, 2002.

¹¹ Berkenkamp & Mavrolas, p. 14, interview with Bryan Snyder, PASA executive director, June 11, 2002, and personal communication from Snyder, July 14, 2002.

¹² Berkenkamp & Mavrolas, p. 13, 18; interview with Jim Ennis, July 18, 2002.

¹³ Interview with Michelle Mascarenhas, CAFF, June 13, 2002. CAFF's web site is <http://www.caff.org>.

¹⁴ Interview with Jonda Crosby, AERO, June 14, 2002.

¹⁵ Appalachian Sustainable Agriculture Project, <http://www.asapconnections.org>, viewed July 6, 2002.

¹⁶ Source: Oxfam USA, <http://www.oxfamamerica.org/advocacy/art1582.html>, viewed June 12, 2002. Also Equal Exchange, and Care, Brendan M. (2002). "Better Days for Coffee Producers," *Dallas Morning News*, February 7. Viewed at http://www.dallasnews.com/world/mexico/stories/coffee_07bus.ARTO.a8ae3.html on June 12, 2002. See also Bachman, S.L. (2002). "Coffee price drop hurts farmers" in *San Jose Mercury News*, May 29. Viewed July 17, 2002 at <http://www.bayarea.com/mld/bayarea/living/food/3357464.htm>. See also Specialty Coffee Association of America site at http://www.scaa.org/press_releases_files.cfu; and the Transfair web site at <http://www.transfairusa.org/>.

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- ¹⁸ Interview with Tristan Reader, TOCA, on June 12, 2002. Also Tauber, Maya & Fisher, Andy (2002). "A Guide to Community Food Security Projects." Venice, CA: Community Food Security Coalition. Available for free download from www.foodsecurity.org/cfsc_case_studies.pdf.
- ¹⁹ See Tauber and Fisher (2002). See also Brown, Katherine, *et. al.*, (2002). "Urban Agriculture and Community Food Security in the United States: Farming from the City Center to the Urban Fringe." Venice, CA: Community Food Security Coalition, Urban Agriculture Committee. Free download from <http://www.foodsecurity.org/urbanag.html>.
- ²⁰ Tauber, Maya & Fisher, Andy (2002). "A Guide to Community Food Security Projects." Venice, CA: Community Food Security Coalition. Available for free download from www.foodsecurity.org/cfsc_case_studies.pdf.
- ²¹ What Kids Can Do (2001). "Common Ground: Young People Harvest Food and Community." Volume 1 Number 3 of the Making Youth Known series. Providence, RI, Fall. Available at <http://www.thefoodproject.org/newtftp/culture/news.shtml> (viewed July 6, 2002). See also <http://www.whatkidscando.org>.
- ²² USDA Community Food Security program (1997). "Community Food Projects Awarded in 1997," <http://www.reeusda.gov/crgam/cfp/awarded97activities%2000.htm>. Viewed on April 12, 2002.
- ²³ W. K. Kellogg Foundation, Food & Society program. <http://www.foodandsociety.org/documents/morris.htm>. Viewed April 4, 2002.
- ²⁴ The Sunflower Fields Farm web site is www.sunflower-fields.com. See also Meter, Ken (2001). *Finding Food in Farm Country*. St. Paul: Community Design Center, 25. This report available for free download at <http://www.crcworks.org/ff.pdf>.
- ²⁵ Interview with Michelle Mascarenhas, CAFF, June 13, 2002.
- ²⁶ Pothukuchi, Kameshwari; & Kaufman, Jerome L. (2000). "The Food System: Stranger to the Planning Field." *Journal of the American Planning Association*, Spring, 66:2, 113.
- ²⁷ The FoodRoutes web site is <http://www.foodroutes.org>.
- ²⁸ The web site for the Community Food Security Coalition can be found at: <http://www.foodsecurity.org>.
- ²⁹ The Oxfam web site is: <http://www.oxfamamerica.org>.
- ³⁰ To learn more about CAIA, view their web site at: <http://www.caia.org>.
- ³¹ The SAREP web site is <http://www.sarep.ucdavis.edu>.
- ³² The IATP web site is: <http://www.iatp.org>.
- ³³ NCRLC's web site is: <http://www.ncrlc.com>.
- ³⁴ The web site for LSP is: <http://www.landstewardshipproject.org>.
- ³⁵ The Food Trust (2002). *Food for Every Child: The Need for More Supermarkets in Philadelphia*. For a capsule description see <http://www.thefoodtrust.org/reports.html>.
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- ³⁸ Gardner & Halweil, 38.
- ³⁹ Walters, Jonathan (2001). "Spoiled Food Federalism" in *Governing Magazine* (formerly *Congressional Quarterly*), May, 12.
- ⁴⁰ Colditz, Graham, "The Economic Costs of Obesity and Inactivity," unpublished manuscript from the Harvard School of Public Health, cited in Gardner, Gary; & Halweil, Brian (2000). The higher estimate of costs of obesity was released in an e-mail broadcast by Paul Hawken, director of the Natural Capital Institute, on April 25, 2002.
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- ⁴³ University of Nebraska Institute of Agriculture and Natural Resources, Food Processing Center (2001). "Attracting Consumers with Locally Grown Products." Prepared for the North Central Initiative for Small Farm Profitability.

Lincoln: October, 3-4. See also Fires of Hope and Vanguard Communications (2002). "Summary of Findings from Focus Groups with Farmers and Consumers re: Sustainable Agriculture," unpublished.

⁴⁴ This is especially true in England, where the terrorist attacks combined with hoof-in-mouth outbreaks to inspire consumers to search for healthier food supplies. See Moir, Jan (2001). "Are You Ready to Order?" London *Daily Telegraph*, Dec. 29, 78. FoodRoutes Network consumer studies, however, did not show major concerns for food security in U.S. communities sampled.

⁴⁵ Stephenson, Garry & Lev; Larry (1998). "Common Support for Local Agriculture in Two Contrasting Oregon Cities." Paper presented at the 61st Annual Meeting of the Rural Sociology Society (Portland, Oregon); and Lev, Larry & Stephenson, Garry (1998). "Analyzing Three Farmers' Markets in Corvallis and Albany, Oregon." Oregon State University Extension Service: Small Farms Working Group, October.

⁴⁶ Source: USDA (2000). *A Millennium Free from Hunger*. U.S. National Progress Report on Implementation of the U.S. Action Plan on Food Security and the World Food Summit Commitments, 2. See also World Hunger web site, www.worldhunger.org/hun_pov/default.asp. Viewed April 12, 2002. The National Association of Secondary School Principals counted 53 million public and private school students in the U.S. in 2000. See http://www.principals.org/publicaffairs/views/nxt_pres_edwk11100.htm, viewed July 6, 2002.

⁴⁷ See Tauber and Fisher (2002). See also Brown, Katherine, *et. al.*, (2002). "Urban Agriculture and Community Food Security in the United States: Farming from the City Center to the Urban Fringe." Venice, CA: Community Food Security Coalition, Urban Agriculture Committee. Free download from <http://www.foodsecurity.org/urbanag.html>.

⁴⁸ Emily Friedman (2000). "Meanwhile Back at the Ranch," *Health Forum Journal*, Nov./Dec., 6. See <http://www.healthforum.com/HFPubs/asp/ArticleDisplay.asp?PubID=&ArticleID=13146&Keyword=Emily+Friedman>.

⁴⁹ University of Nebraska Institute of Agriculture and Natural Resources, Food Processing Center (2001). "Attracting Consumers with Locally Grown Products." Prepared for the North Central Initiative for Small Farm Profitability. Lincoln: October, 3. See also Meter, 27.

⁵⁰ USDA National Agricultural Statistics Service, U.S. Agricultural Census (1997). <http://govinfo.library.orst.edu/cgi-bin/ag-list?04-state.usa>. Viewed April 4, 2002.

⁵¹ Source: Food Industry Review (2002). See www.foodindustryreview.com/bigorganic.gif. Viewed April 12, 2002.

⁵² USDA National Agricultural Statistics Service, U.S. Agricultural Census (1997). <http://govinfo.library.orst.edu/cgi-bin/ag-list?01-state.usa>. Viewed April 4, 2002.

⁵³ USDA National Agricultural Statistics Service, U.S. Agricultural Census (1997). <http://govinfo.library.orst.edu/cgi-bin/ag-list?04-state.usa>. Viewed April 4, 2002. Rural leaders claim this data from the Agricultural Census may understate the level of direct marketing, since thorough records are not always kept by individual farmers, and agency attention has been more closely focused on "cash commodities."

⁵⁴ Smith, Rod (2002). "Five largest grocery retail systems increase control of food markets." *Feedstuffs*, June 10, 5.

⁵⁵ Lopez, Rigoberto A; Azzam, Azzeddine M; & Lirón-España, Carmen (2002). "Market Power and Efficiency: A Structural Approach." *Review of Industrial Organization* 20:115-126.

⁵⁶ Meter, Ken (2001). *Finding Food in Farm Country*. St. Paul: Community Design Center. Available for free download at <http://www.crcworks.org/ff.pdf>.

⁵⁷ Gussow, Joan; & Clancy, Kate (1986). "Dietary Guidelines for Sustainability," *Journal of Nutrition Education*, 18:1-5.

Cited in Peters, Jeanne (1997). "Community Food Systems: Working Toward a Sustainable Future," *Journal of the American Dietetic Association*, September 97:9, 955.

⁵⁸ Hendrickson, Mary & Heffernan, William (1997), unpublished manuscript covering Kansas City Food Circle. In a July 22, 2002, interview, Hendrickson also offered information about the sociology study: Peters, David J. (2002). "Revisiting the Goldschmidt Hypothesis: Social Indicators and Economic Structure in Rural Areas." Submitted to *Rural Sociology*.

⁵⁹ Boody, George & Krinke, Mara (2001). *Multiple Benefits of Agriculture*. Land Stewardship Project, November. See http://www.landstewardshipproject.org/mba/mba_executive_summary.pdf; viewed July 17, 2002.

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⁶¹ W. K. Kellogg Foundation (2002). "Food for Thought: Community-Based Food Systems Enterprises."

⁶² Meter, Ken (1990). *Money with Roots*. Crossroads Resource Center. Available at <http://www.crcworks.org/roots.pdf>.

⁶³ This study is often attributed to Department of Defense researchers addressing the Iran crisis of 1979, and is cited by Jeanne Peters (1997). "Community Food Systems: Working Toward a Sustainable Future," *Journal of the American Dietetic Association*, September 97(9), 955-956.

⁶⁴ Interview with James Ennis, director of Midwest Food Alliance, July 18, 2002.