

Local Foods; Local Economiesⁱ

John Ikerdⁱⁱ

Local has replaced organic as the most dynamic sector of the retail food market. Sales of local foods grew from \$4 billion in 2002 to \$5 billion in 2007 and are projected to reach \$11 billion by 2011.¹ Organic food sales are still far larger, approaching \$20 billion, but the rate of growth in organic foods sales seem to be slowing while sales of local foods are accelerating. For many people, *local* has become the new *organic*. In fact, the word “locavore” was chosen by the New Oxford American Dictionary as their 2007 “word of the year.” The term was first associated with the “100-mile diet,” but is described more generally as someone who shows a strong preference for foods that are locally grown, seasonally available, and produced without unnecessary additives or preservatives.²

The local food movement is about far more than a search for freshness and flavor. The Chefs Collaborative, a network of more than 1,000 American chefs, promotes the “joys of local, seasonal, and artisanal cooking,” proclaiming that “cultural and biological diversity are essential for the health of the earth and its inhabitants. Preserving and revitalizing sustainable food, fishing, and agricultural traditions strengthen that diversity.”³ These same cultural and ethical values are reflected in the Slow Food movement, a worldwide organization with more than 80,000 members, that is committed to “building food communities.” Their website states, “We believe that the food we eat should taste good; that it should be produced in a clean way that does not harm the environment, animal welfare or our health; that food producers should receive fair compensation for their work, and that all people should have access to good and clean food.”⁴ *Good, clean, and fair* are becoming the watchwords of the local foods movement.

The growing popularity of local foods is but the latest phase in a long-term trend that is fundamentally transforming the American food system. The organic and local food movements are simply continuations of the *natural* foods movement begun with the “back to the earth” movement of the 1960s. The “hippies” of the ‘60s produced their own food, started local farmers markets, and formed the first cooperative food buying clubs and natural food stores. They grew their foods organically because they were concerned about the health and environmental risks associated with the synthetic fertilizers and pesticides used by industrial agriculture. However, a deeper philosophy of organic farming was embodied in their communities – in their organic way of life. The natural food movement spread far beyond the “hippie” communities during the 1970s and 1980s, as more people became aware of potential health, environmental, and social problems associated with industrial foods.

ⁱ Prepared for presentation at “Going Green – Sustainable Communities and Farms,” Wisconsin State Conference of Resource Conservation and Development districts, Oconomowoc, WI, September 11-12, 2008.

ⁱⁱ John Ikerd is Professor Emeritus, University of Missouri, Columbia, MO – USA; Author of, *Sustainable Capitalism*, <http://www.kpbooks.com>, *A Return to Common Sense*, <http://www.rtedwards.com/books/171/>, *Small Farms are Real Farms*, Acres USA, <http://www.acresusa.com/other/contact.htm>, and *Crisis and Opportunity: Sustainability in American Agriculture*, University of Nebraska Press <http://nebraskapress.unl.edu>; Email: JEIkerd@centurytel.net; Website: <http://web.missouri.edu/~ikerdj/>.

The natural food movement laid the foundation for the booming organic food market of the 1990s, during which organic food sales doubled every three to four years. *Organic* certification gave official sanction and definition to what had been called *natural* foods. Most of the early growth in organic foods was for vegetables, fruits, grains, and soy products, reflecting continuing environmental and health concerns linked to use of agricultural chemicals. Animal products, led by organic milk, began to break into organic markets in the late 1980s. Widespread use of antibiotics and growth hormones in industrial livestock operations were the major concerns for consumers of meat, milk, and cheese. The inhumane treatment of animals in large-scale confinement animal feeding operations (CAFOs) helped fuel demand for free range, pasture based, and naturally raised meat and dairy products. Concerns for the exploitation of family farmers and those who work in the food industry also grew as agricultural operations became larger and more geographically concentrated.

Several recent books have documented a growing list of important ecological, social, and economic concerns that are driving the organic and local food movements. Best-selling books, particularly *Fast Food Nation*⁵ and *Omnivore's Dilemma*,⁶ have awakened mainstream society to the dramatic changes in the ways their foods have been produced, processed, distributed, and marketed over the past few decades. These books vividly portray a food system that has not only compromised food quality and safety but also has helped homogenize the landscape, widen the chasm between rich and poor, fueled an epidemic of obesity, and promoted American cultural imperialism around the world. These best-sellers sparked the interests of other investigative authors, resulting in books such as *The End of Food*⁷ and *America's Food*⁸ which covers virtually all aspects of today's food system. These books are filled with statistics and facts and are extensively referenced and they all tell the same basic story. The natural-organic-local food movement is about a demand for fundamental change in the American food system.

As we look to the future, still greater challenges confront the current food system. Declining availability of fossil energy, mounting evidence of global climate change, and growing social and economic inequity are raising additional concerns. The concept of "peak oil" refers to the fact that once a new oil field is discovered, it takes about 30 to 40 years to bring it into peak production.⁹ At that point, about half of the total quantity of recoverable oil remains in the ground, but that remaining half is more difficult and costly to retrieve. Equally important, production inevitably declines after peak production has been reached. U.S. oil discoveries peaked in the late 1930s and 1940s, with major discoveries in Oklahoma and Texas. U.S. oil production peaked in 1971 and has been declining ever since. The peak in *global* oil discoveries occurred in 1962, indicating a peak in global production sometime in the early 2000s, with estimates ranging from 2005 to 2025. Even the major oil companies, such as BP, Exxon-Mobil, and Chevron-Texaco, have begun to focus on alternative energy sources for their future.

Kelly Cain of the University of Wisconsin-River Falls refers to "peak oil" and global climate change as the "evil twins." The buildup of carbon dioxide and other greenhouse gasses in the atmosphere is a direct consequence of the release of stored energy from fossil fuels. Fossil energy is stored in the bonds that connect molecules of carbon, hydrogen, oxygen, and other elements from the air with nitrogen, phosphorus, potassium, calcium and other elements from the soil in forming the tissues of living organisms. When the energy is released, these bonds are broken and the various chemical elements, including carbon dioxide and other greenhouse

gasses, are released into the environment. This problem is intrinsic for all fossil energy sources and particularly for coal. We cannot replace declining supplies of petroleum by relying on any other fossil energy sources without exacerbating the risks of global climate change. There may not yet be a scientific consensus regarding peak oil and global climate change but the predominance of scientific evidence clearly validates the legitimacy of growing public concerns.

Growing economic and social inequities have received less public attention but are no lesser threats to the long run sustainability of society. The disparity in incomes between the wealthy and the rest of us in the United States has reached unprecedented levels. The poorest *one-half* of Americans currently lives on only one-eighth of total U.S. income while the top *one percent* takes in more than one-fifth. In the words of Alan Greenspan, former Federal Reserve Chairman, “The income gap between the rich and the rest of the U.S. population has become so wide, and is growing so fast, that it might eventually threaten the stability of democratic capitalism itself.”¹⁰ A similarly growing gap between the rich and poor nations of the world is an even greater threat to global stability and sustainability.

Our current food system is a major contributor to all these problems. For example, today’s industrial food system accounts for about 17% of all fossil energy used in the United States and requires more than 10 kcals of fossil energy for each kcal of food energy it produces.¹¹ U.S. agriculture accounts for an estimated 22.5% of all greenhouse gas emissions in the U.S., with livestock production contributing more than 80% of that total.¹² With respect to income disparity, farm laborers and food industry workers are among the lowest paid workers in the U.S. and most receive few if any additional benefits, leaving many without health care. In addition, the poor suffer from more diet related illnesses, including obesity, diabetes, and heart disease – obvious reflections of a nation that is simultaneously overfed and undernourished. Recent scientific studies documenting the nutrient deficiency of industrial foods may provide a logical explanation for this apparent paradox.¹³

Ultimately the issues of food quality, peak oil, global warming, and economic inequity are all issues of *food security*. No individual, community, or nation that depends solely on the economic marketplace for their basic food needs can ever be food secure. The markets will produce foods that are most profitable, not necessarily foods that are the safest or highest in quality. In addition, the markets cannot and will not ensure *long run* food security, because economic value is individualistic in nature, and thus places a large premium on the present relative to the future. Economic value must be expected to accrue at least during the lifetime of the individual decision maker, and the closer in time, the higher in value. Those of future generations cannot express their food needs and preferences in today’s marketplace. The local food movement today is being driven by growing concerns about the inherent lack of *sustainability* of the industrial food system – its inability to meet the real food needs of the present without compromising the food opportunities for those of the future. These concerns are logical and well-grounded in reason.

The fundamental question confronting society today is whether an alternative food system can be developed that will address these ecological and social concerns. The answer is a resounding, yes! Thousands of farmers all across America and around the world are already showing the way. They may label themselves organic, biodynamic, ecological, natural, holistic, practical, innovative, or nothing at all; but they are all pursuing the same basic purpose. They

are creating an agriculture that is capable of meeting the real needs of the present while leaving equal or better opportunities for the future. They are creating a sustainable agriculture.

A number of studies have indicated that farmers pursuing various organic and sustainable farming strategies are able to reduce their fossil energy use by 30% to 60%.^{14,15} A shift from industrial to organic farming – restoring the organic matter to levels needed for healthy, productive organic soils – could more than offset the current net emissions of CO₂ by U.S. agriculture, according to a recent study by the Rodale Institute.¹⁶ When beef animals are finished on pastures rather than finished in feed lots, kcal of protein can be produced using less than one-third as much fossil energy.¹⁷ Furthermore, CO₂ emissions from beef production could be cut by 80% by shifting from grain-fed to grass-fed beef, on pastures rather than CAFOs, according to Animal science professor, David Tisch.¹⁸ Grass-fed and pasture-based production of meat, milk, and eggs are some of the most common and most profitable examples of sustainable agriculture. Farmers are proving that organic, local and other approaches to sustainable agriculture can produce high-quality food while addressing the ecological challenges of the twenty-first century.

Questions of social and economic equity and opportunity are at the very heart of sustainable agriculture. In sustainable agriculture, the farmer does the thinking and the farmer has the opportunity to reap the economic rewards. Industrial agriculture, on the other hand, transforms farms into factories, fields and feed lots in biological assembly lines, and farmers into little more than low-skilled, low-paid assembly line workers. With industrial agriculture, particularly contract agriculture, someone other than the farmer does most of the thinking. Someone other than the farmer developed the seeds, fertilizers and pesticides for industrial farming and developed the breeds, feeds, and confinement facilities of industrial animal agriculture. In many cases, someone other than the farmer make the important decisions concerning planting, harvesting, breeding, feeding, medicating, and marketing. As a result, someone other than the farmer quite logically reaps the economic rewards.

Sustainable farmers work with nature, rather than attempt to conquer nature. They fit the farm to their land and climate rather than try to force nature to fit the way they might prefer to farm. Their farming operations tend to be more diverse and complex because nature is diverse and complex. Diversity may be expressed through a variety of crop and animal enterprises, crop rotations and cover crops, or in multi-species livestock grazing systems. By managing diversity, farmers are able to reduce their dependence on the pesticides, fertilizers, and other commercial inputs that threaten the environment and squeeze farmers' profits. Working with nature requires knowledge and understanding of nature – it requires thinking – but it yields both ecological and economic rewards.

Sustainable farmers build relationships rather than exploit short run market opportunities. They have a sense of personal connectedness with their customers and realize that each person values things differently because each has different needs and preferences. They must have a deep sense of respect for people and an understanding of the needs and preferences of their particular customers in order to produce the things that their customers value most. They market to likeminded people who care where their food comes from and how it is produced – locally grown, organic, natural, humanely raised, hormone and antibiotic free – and, they receive

premium prices for their products. Relationship marketing requires a knowledge and understanding of people – it requires thinking – but it yields both social and economic rewards.

Sustainable agriculture is a knowledge-based approach to management. Peter Drucker, a time-honored consultant to twentieth-century industry, writes of a post-industrial, knowledge-based society in his book, *Post-Capitalist Society*. "In the knowledge society into which we are moving, individuals are central," he writes. "Knowledge is not impersonal, like money. Knowledge does not reside in a book, a databank, a software program; they contain only information. Knowledge is always embodied in a person, carried by a person; created, augmented, or improved by a person; applied by a person; taught by a person, and passed on by a person. The shift to the knowledge society therefore puts the person in the center."¹⁹ Industrial agriculture is centered on capital and technology; sustainable agriculture is centered on people. Industrial agriculture is of the past; sustainable farming is the future.

Sustainable agriculture and local foods are typically associated with farmers markets and community supported agricultural organizations or CSAs. USDA statistics indicate the number of farmers markets in the United States has increased from 1,755 to 4,385 between 1994 and 2006, increasing two and a half times in just over a decade. Current unofficial estimates of numbers of CSAs range from 1500 to 2000 nationwide compared with less than 100 in 1990. However, the local foods movement is probably most accurately defined by a growing commitment of discriminating restaurants and natural food stores to sourcing as much food as possible from local growers.

One of the pioneers in developing this new "higher-volume" local food system is New Seasons Market in Portland, Oregon, which currently operates nine stores and has plans to open two more in 2009.²⁰ New Seasons' stores look pretty much like other modern supermarkets, with delis, bakeries, and other amenities American food shoppers have come to expect. Their stores are typically located in areas bordering lower and higher income neighborhoods, drawing their loyal customers from both, and helping to strengthen both communities. They offer both organic and conventional foods in their store and virtually every item in the store is labeled with respect to not just the country but the "farm of origin." They promote local-grown products and have long-term commitments with hundreds of local and regional farmers which ensure that everyone shares in their success.

Another local foods pioneer is Good Natured Family Farms, a cooperative of thirty-plus farmers in southeastern Kansas and southwestern Missouri.²¹ They have teamed up with Hen House Markets, a 13-store supermarket chain operated by Ball Foods Inc., a family corporation with a long history and strong commitment to the Kansas City community. The cooperative owns and manages their own Good Natured brand, which now includes an expanding line of branded food products, including beef, chicken, eggs, milk, and sausages. The cooperative also serves as marketing liaison for other local producers. The Good Natured-Hen House "Buy Fresh, Buy Local" campaign has grown in retail sales of local products by 35% per year over the past several years, with sales topping \$10 million in 2007. Some of their local products are organic, but customers rely most on the integrity of local producers.

However, the model for the sustainable, local food system of the future may resemble more closely organizations that are called multi-farm CSAs or local food buying clubs, depending on whether farmers or consumers take the organizational initiative. *Grown Locally*,²² *Idaho's Bounty*,²³ and *the Oklahoma Food Cooperative*,²⁴ provide some insights into the future potential for sustainable, local food systems. Most such organizations offer a variety of vegetables, fruits, meats, eggs, cheese, baked goods, flowers, soaps, and herbs. Many items are available as CSA shares, standing orders, or for week-by-week purchases. Customers may have the option of on-farm pick-up, local delivery points, or delivery to the door for an added charge. Different products and different delivery schedules are provided for different seasons. Organizational websites allow producers to post what they have available each week, ensuring that products sold are available for delivery, and allowing customers to place or revise their orders on the website.

In the not too distant future, virtually everyone in the United States will have access to the internet. Community-based food associations could establish local assembly and distribution systems to pick up products at local farms and assemble customer orders. Existing retail delivery system networks, such as UPS and Fed-Ex, are already making deliveries into most neighborhoods on a daily basis and will become even more frequent as internet sales for all products increase in the future. A local food association could help establish and maintain personal connections between farmers and their customers through local food events, scheduled farm visits, and “dinners at the farm.”²⁵ Healthy farms, healthy foods, healthy communities.

The local food movement is just one aspect of a far larger economic relocalization movement. As in the case of food, the movement is being driven by growing concerns about the ecological and social sustainability of the increasingly global economy. Economic relocalization is not being driven solely, or even primarily, by high and rising transportation costs. In general, transportation makes up a relatively small percentage of the total costs of producing and distributing most consumer products. The concentration of economic activities in large urban centers is a reflection of the need to bring together large amounts of resources to accommodate large, industrial organizations. The economic efficiency of such organizations is inherently dependent of cheap fossil energy, as was the whole industrial era. Relocalization is essentially deindustrialization.

Contrary to popular belief, large cities are not energy efficient; they are just more efficient than the “sprawl” that typically surrounds them. Mass transit among smaller population clusters could be much more energy efficient than individual travel into large urban centers. Smaller, geographically dispersed communities, with their own scale-appropriate sources of employment and employees, have the potential for reducing the use of fossil energy and the associated emissions of greenhouse gases. Relocalization is driven primarily by concerns about the negative environmental and social consequences of the large-scale, industrial operations associated with the geographic concentration of production.

Local economies can be more environmentally sound because the concentration of too much production in one place, whether industrial or agricultural, invariably results in concentration of more wastes than natural ecosystems can assimilate. The inevitable result is pollution of the air, water, and/or soil. There is some truth to the statement, “the solution to pollution is dilution,” but even more truth in, “the preventer of pollution is dispersion.” The more localized the production,

the more dispersed the production and the greater the ability of nature to assimilate the waste and mitigate the pollution.

Local economies can provide greater economic security. A community that relies on outside investment for local employment security can never be economically secure. Outside investors will relocate their business operations anytime they see an opportunity to earn a greater economic return elsewhere. The recent “offshoring” of millions of jobs has disseminated the economies of hundreds of American communities. As in the case of food, a community need not be economically self-sufficient, but the greater their reliance on outside capital and technology, the less able the community will be to cope with economic adversity – the less secure.

A number of specific programs are available to assist communities in localizing their economies. The Natural Step is a nonprofit organization founded in 1989 by Swedish scientist, Karl-Henrik Robèrt.²⁶ The Natural Step seeks to minimize the accumulation of wastes from both naturally occurring and manufactured substances while maintaining the productivity of natural ecosystems and sustaining a healthy, productive local society. A number of *eco-municipalities* across Canada and the United States are working to develop “ecologically, economically, and socially healthy communities for the long term.”

The Business Alliance for Local Living Economies is an international alliance of more than 50 independently operated local business networks dedicated to building local living economies.²⁷ A *living economy* is defined as one in which economic power resides locally, for the purpose of sustaining healthy community life and natural life as well as long-term economic viability. There is no shortage of programs to guide development of sustainable local economies. The challenge is to convince people of the advantage and necessity of investing their time, energy, and money locally.

Perhaps the most important motivation for creating local food systems and local economies is the need to reconnect locally. The industrial era, with its emphasis on specialization, standardization, and consolidation of control, has been driven by the pursuit of individual material self-interests. This competitive quest for financial independence has weakened our sense of connectedness to each other and to the earth. Humans are no less dependent on each other and on the earth than when we were hunters and gatherers; the connections are just more complex and less direct. However, we have lost our sense of commitment to the “common good” and to the “good of the commons.” Local food systems reconnect consumers with farmers, and through farmers, with the earth. Local economies do much the same thing by creating a common commitment to the long run economic wellbeing of the community, which depends on local people and local natural resources. Economic localization empowers people to express their social and ethical values by considering the ecological and social consequences of their economic decisions.

Some people question whether local food systems can ever replace the industrial food system of today. Fifty years ago, however, most food in America was locally grown. Construction on the interstate highway system had just begun and supermarkets and franchise restaurants were just beginning to catch on. In an ever-changing world, it seems logical to assume that changes in the food system over the next fifty years will be at least as great as in the past fifty years. With

growing challenges of ecological, social, and economic sustainability, including national and global food security, it is obvious that future changes must be in a direction fundamentally different. The natural/organic/local/sustainable food movement is at least as advanced today as the industrial food movement was fifty years ago. There is no logical reason to expect anything other than the relocalization of America's food. There is quite simply no logical alternative. By the same basic logic and reasoning, there is no reason to expect anything other than the relocalization of the American economy. Relocalization is not an option; it is a necessity.

End Notes

¹ *Packaged Facts*, "Local and Fresh Foods in the U.S.," May 1, 2007. <http://www.packagedfacts.com/Local-Fresh-Foods-1421831/>

² UOP Blog, Oxford University Press, USA, "Oxford Word of the Year: Locavore," <http://blog.oup.com/2007/11/locavore/>

³ Chefs Collaborative website: <http://www.chefscollaborative.org/>

⁴ Slow Foods International website, http://www.slowfood.com/about_us/eng/philosophy.lasso

⁵ Eric Schlosser, *Fast Food Nation: The Dark Side of the All-American Meal* (Boston & New York: Houghton Mifflin Co., 2001).

⁶ Michael Pollan, *The Omnivore's Dilemma: A Natural History of Four Meals* (New York: The Penguin Press, 2006).

⁷ Paul Roberts, *The End of Food* (Boston & New York: Houghton Mifflin Co, 2008).

⁸ Harvey Blatt, *America's Food: What You Don't Know About What You Eat* (Boston: The MIT Press, 2008).

⁹ Patrick Murphy, *Plan C: Community Survival Strategies for Peak Oil and Climate Change* (Gabriola Island, BC: New Society Publishers, 2008).

¹⁰ Alan Greenspan, as quoted in "Rich- Poor Gap Gaining Attention," *Christian Science Monitor*, <http://www.csmonitor.com/2005/0614/p01s03-usec.html>, June 14, 2005.

¹¹ David and Marcia Pimentel, *Food, Energy, and Society* (Niwtot, CO: University Press of Colorado), 1996.

¹² Wikipedia, "greenhouse gas", and "Climate Change and Agriculture,"

http://en.wikipedia.org/wiki/Greenhouse_gas and http://en.wikipedia.org/wiki/Climate_change_and_agriculture.

¹³ For a list of peer review scientific studies documenting the health and nutritional benefits or natural foods, see *The Organic Center*, <http://www.organic-center.org/>.

¹⁴ David Pimentel, Paul Hepperly, James Hanson, David Douds, and Rita Seidel, 2005, "Environmental, Energetic, and Economic Comparisons of Organic and Conventional Farming Systems," *BioScience*, 55, No. 7: 573–582.

¹⁵ Helena Norberg-Hodge, Todd Merrifield, and Steven Gorelick. *Bringing The Food Economy Home: Local Alternatives to Global Agribusiness*. (Bloomfield, CT : Kumarian Press. 2002), 45.

¹⁶ Laura Sayre, "The New Farm Field Trials," Rodale Institute, October, 2003.

http://www.newfarm.org/depts/NFfield_trials/1003/carbonsequest.shtml

¹⁷ Pimentel, *Food Energy and Society*.

¹⁸ David Tisch, in an interview with Bruce Gellerman, host of radio program, "Living on Earth, February 8, 2008, Tisch is a Professor in the College of Agriculture and Technology, State University of New York, Cobleskill, NY, <http://www.loe.org/shows/shows.htm?programID=08-P13-00006#feature4>

¹⁹ Peter Drucker, *Post-Industrial Society* (New York; HarperCollins Publishers, 1993).

²⁰ Visit the *New Seasons Market* website, <http://www.newseasonsmarket.com/>

²¹ Visit the *Good Natured Family Farms* website, <http://goodnatured.net/>

²² Visit the *Grown Locally* website at <http://www.grownlocally.com>

²³ Visit the *Idaho's Bounty* website at <http://www.idahosbounty.org/>

²⁴ Visit the *Oklahoma Food Cooperative* website at <http://www.oklahomafood.coop/>

²⁵ Visit website, "Dinners" at <http://www.plateandpitchfork.com/>

²⁶ Sarah James and Torbjorn Lahti. *The Natural Step for Communities: How Cities and Towns Can Change to Sustainable Practices* (Gabriola Island, BC: New Society Publishers, Inc., 2004).

²⁷ BALLE, Business Alliance for Local Living Economies, "Mission and Principles Statement," <http://www.livingeconomies.org/aboutus/mission-and-principles-1>.