

# Observations and Recommendations

*“We have spent 100 years dismantling America’s local food systems. It’s time to grow them back.”*

– PAUL MULLER, FULL BELLY FARM  
GUINDA, CALIFORNIA

In the course of our study, we interviewed dozens of experts in food, agriculture, environment, business and economics to enliven the statistics we gathered with their observations about the San Francisco foodshed and the prospects of taking “eating locally” to scale in this region. We give them credit in the acknowledgements section of this report. Since much of what we heard is opinion, we consider the entirety of this section an extended hypothesis about the shortcomings of the modern food system, how local food could begin to correct it, and how that could be accomplished.

## *Provenance and Traceability*

What are the most important things we have learned from our study of the San Francisco foodshed? Perhaps the most central lesson is that, if we want to eat locally, we must be able to trace food back to a local source. Years ago, that was fairly easy, for the food system – actually systems -- in America were almost entirely local or, at most, regional. But today, after decades of expansion, modernization, consolidation and standardization, primarily serving the interests of convenience and economy, the American food system generally does not enable one to track the provenance – the what, where, who and how -- of the food on supermarket shelves, in restaurants and school cafeterias.

## *Chicken-and-Egg: Challenges to the Expansion of Local Food Systems*

Thus, the first challenge to expanding local food systems in northern California or elsewhere is to re-establish the connection between farm and fork, between producer and consumer, between the food and its story. But to do this, another obstacle must be overcome; what we call the chicken-and-egg challenge. Today, consumers have become so accustomed to “incognito” food that most do not know about the alternative of local food with a provenance, much less demand it when they shop or dine out. So, most mainstream food retailers have little or no incentive to identify locally-grown food, which perpetuates consumers’ lack of awareness and interest, and so forth. Somehow, this vicious circle must be broken.

Farmers markets, CSAs and other self-consciously local food outlets constitute the fastest-growing segment of the U.S. food system. But, as the statistics show, they remain a tiny fraction of overall food production and, perhaps through no fault of their own, seem to appeal mainly to consumers with more disposable income. Some supermarket chains such as Safeway and particularly Whole Foods are beginning to market locally-grown produce as such, and in terms of taking local food to scale, may offer more promise than farmers markets and CSAs. But supermarkets are held back by their reliance on economies of scale and standardization that tend to become less economic as their transaction costs rise, for example, if they have to deal with too many smaller producers of too many different food varieties.

In short, “food with a story,” despite its benefits – and perhaps *because* of its benefits -- seems to come at a price that most consumers today are not ready to pay,

or so the major retailers seem to believe.<sup>1</sup> It is almost certainly true for lower-income consumers in San Francisco, many of whom do not have ready access to farmers markets or even neighborhood supermarkets. They often must rely on convenience stores and fast-food outlets that, it goes without saying, do not market locally-grown food. Ultimately, it is only when demand for local food gets to an appropriate scale that it will compete with “incognito” food. The question remains, how to get there.

### *Cost and Risks to Would-Be Local Producers and Distributors*

There is another series of challenges on the production and distribution side, particularly when it comes to organic or “sustainably” grown food. Agricultural producers themselves have become dependent on economies of scale and standardization. To satisfy the demands of their wholesale, retail and institutional customers, farms have become larger and less diversified – not to mention fewer in number -- and the crops they grow are bred more for industrial processing and long-distance transportability than for freshness, taste and nutritional content. The methods used to grow them rely heavily on mechanization, fossil fuels and chemicals.

This description is not intended as a critique of modern farming – that can easily be found elsewhere – but simply to help define the challenge facing agricultural producers who may want to switch to growing for local markets. Conventional agriculture is presently not set up to produce the kind of food that locavores demand. Growing sustainable local food requires an entirely different set of horticultural and marketing skills, labor relations and, in many cases, specialized farm equipment. To get the goods to market, without mixing them with conventionally-produced products, new storage, processing and transportation infrastructure are needed. And in order for locally-sourced food to compete economically with the conventional food system, the distribution networks that

deliver it will need to be efficient in terms of time, money and fossil fuel use, and it will be necessary to educate consumers on the benefits of local products to help create demand.

Acquiring or developing all this will require quite an investment of intellectual and financial capital. It also entails considerable economic risk because local food and markets are still emerging. This suggests another big challenge to taking local food to scale. In a forthcoming study of the credit needs of local producers, Gary Matteson and Rob Heuer, both associated with the Farm Credit System, note that, “Local food system initiatives cannot ramp up supply without financing. However, small-scale innovators [in both production and distribution] dealing with seasonable and perishable farm products are likely to have difficulties obtaining credit.”<sup>2</sup> Plus, there is the risk that “if transaction costs rise at the same rate as total revenues, the gain to the farmer of selling to local markets would be lost.”<sup>3</sup>

Another challenge on the production side is that certain crops popular among San Francisco consumers cannot easily be produced within 100 miles of the Golden Gate. These include wheat for bread and pasta, citrus fruits and avocados. A much longer list of crops can be produced within the study area only during certain seasons. This has a couple implications. The first is that local growers must necessarily share the market with those outside the region. Second, as a consequence, the price they receive for their product is influenced, even in season, by what is charged by other growers, including those from Latin America and Asia who have made significant inroads in North American markets.

### *Opportunities to Expand Local Food in San Francisco and Beyond*

Though the challenges of taking local food to scale are formidable – and more complicated than implied above -- there is significant reason to believe they can be

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1 It isn't clear whether locally-grown food *per se* is more costly or the premium associated with it, if any, is attributable to the fact that much of it is organically or sustainably produced. It is reported that organic food is 10 to 40 percent more expensive than conventionally-produced food. C. Winters and S. Davis, *Organic Foods*, *Journal of Science* 71(9), 2006; but see, T. Duggan, How shoppers can save when buying organic, *SF Gate* (May 3, 2006) <http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2006/05/03/FDGE0IGLAA1.DTL&hw=farren&sn=001&sc=1000>

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2 G. Matteson and R. Heuer, Farm Credit Council, *Growing Opportunity: The Outlook for Local Food Systems* (to be published in 2008)

3 *Id.*, quoting L. Kirby, C. Jackson and A. Perrett, *Growing and Expanding the Western North Carolina Food and Farm Economy* (2007).

overcome and that San Francisco and other Bay Area communities will someday have greater access to healthy, fresh locally-grown food.

For one thing, local food seems to have tremendous momentum. As described in the section on distributors and “connectors,” the local food movement in the Bay Area is vigorous and innovative. Consumer awareness is growing. Education initiatives like the Roots of Change Fund’s Vivid Picture Project are highlighting the social, economic and environmental benefits of eating locally and sustainably. Major retailers like Safeway and Whole Foods are stepping up to the plate to offer locally-grown food options to consumers. The San Francisco Department of Public Health, other City agencies and the school district are making a deliberate effort to find healthy, local sources of food for public institutions. Private business is also seizing the opportunity. Local firms like Bon Appetit Management Company and Veritable Vegetable are specializing in sustainably-grown produce in the restaurant supply and catering sectors. Kaiser Permanente, the health care provider, is “walking the talk” by reworking its cafeteria menus to include fresh, local products, hosting farmers markets at its facilities, and sponsoring CSAs for its employees. The Marin Agricultural Institute’s “Farm to Fork” enterprise is establishing new transportation infrastructure specifically for sustainably-produced local food. Mainstream agricultural institutions such as the local Farm Credit banks are exploring the market potential of locally-grown food. In short, local food has tremendous momentum in and around San Francisco.

Another factor that could powerfully influence the growth of local food in the region and elsewhere is the rising cost of fossil fuel. It now takes between 7 and 10 calories of fossil fuel energy to deliver each calorie of food energy to the consumer’s plate.<sup>4</sup> Because conventional agriculture is so dependent on fossil fuels, everything from producing and processing food to transporting it long distances – 1,300 miles on average between farm and the consumer<sup>5</sup> -- will be affected. In theory, this could favor local sources of food produced with fewer fossil fuel inputs and shipped fresh in season. In effect, it might hasten a

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4 M. Pollan, *Omnivore’s Dilemma*, The Penguin Press: New York, p. 182

5 H. Hill, *Food Miles: Background and Marketing*, National Sustainable Agriculture Information Service, 2008, [www.farmland.org/documents/37012/foodmiles.pdf](http://www.farmland.org/documents/37012/foodmiles.pdf)

reversal of the historic evolution of modern agriculture, which is one of substituting energy and technology for human labor and land. That doesn’t necessarily mean a return to Jeffersonian agrarianism so much as a blending of the best of the old and new in locally- or regionally-based food systems that take full advantage of information and energy-efficient technologies, while emphasizing the provenance of food.

Perhaps the most important opportunity to expand locally-grown food is the one that is most often taken for granted: the resource base responsible for the amazing cornucopia of northern California agriculture. As we said at the outset, few if any cities in the world are as blessed with such a coincidence of superior farmland and beneficent climate around them. Because of these natural assets, California growers have become the global leader in the variety and value of agricultural products they bring forth. And because of them, the San Francisco foodshed region could become the world leader in consuming and supporting locally-grown food – if the land from whence it comes is carefully nurtured and is not squandered on urban sprawl.

## *Recommendations*

In this brief report, we have been able to analyze the San Francisco foodshed, its challenges and opportunities in only the most general way. Our recommendations are similarly broad but, hopefully, are a good blueprint for more particular action and further investigation.

- ◆ The food system should be made more transparent so that food can be traced from farm to fork and its provenance, in the broadest sense, can become more of a selling point. To break the chicken-and-egg cycle, consumers can demand more information about their food in supermarkets and restaurants – including fast-food outlets. Distributors can harness information technologies to provide details, not just about origin and nutrition, but a more complete and compelling story behind the food.
- ◆ Universities and agricultural extension institutions that educate growers about the latest cultural and marketing techniques, need to devote more

resources to research and education that will promote fresher, tastier, healthier locally-grown food that conserves energy and other resources.

- ◆ Infrastructure for storing and transporting local food in-season, and for processing and preserving local food for out-of-season consumption, should be expanded. Locally-produced convenience products, which represent a significant portion of many diets, should be created and marketed.<sup>6</sup>
- ◆ Financial institutions need to find ways to provide the capital and management expertise growers, processors and shippers will need if they want to transition from globally- to locally-marketed agricultural products.
- ◆ Consumer education about local food benefits and availability should be expanded. An especially intriguing idea is incorporating the provenance and seasonality of food into dietary guidelines modeled on the USDA Food Pyramid, as has been done in the Northeast Regional Food Guide.<sup>7</sup> Injecting regional food information into a food guide will help consumers follow “sustainable diets<sup>8</sup>” that include seasonal variation and are rich in a particular region’s foods.
- ◆ Private sector companies should consider buying and facilitating transportation of locally-grown food for their corporate cafeterias and by sponsoring CSAs for their employees. They should attempt to take advantage of economies of scale by partnering with other firms in their area.
- ◆ Public institutions like schools, hospitals, prisons and government agencies should explore similar arrangements. The City should redouble its efforts to work with suppliers to provide healthy, locally-grown food to the neediest San Franciscans. It

should encourage food retailers to move into parts of the city that are currently underserved, offering tax and other incentives if necessary.

- ◆ Incentives for farmland conservation and stewardship should be increased to safeguard the resource base, taking full advantage of expanded funding in the 2008 Farm Bill. Local governments should adopt accountability measure to increase development efficiency and minimize the loss of high quality farmland.
- ◆ Consideration should be given to the formation of a blue ribbon committee, broadly representative of agricultural and urban interests with a stake in local food, to conduct a more detailed examination of the challenges and opportunities in the San Francisco foodshed study area (and perhaps beyond) with a view to devising a plan for expanding both the production and consumption of local food in the region.

This report has barely scratched the surface of the local food phenomenon in San Francisco and the foodshed that surrounds it. There is much more to learn and do before the full potential of the cornucopia that is northern California agriculture can be harnessed, the food distribution system can adapt and consumer preferences can evolve to the extent necessary to take “eating locally” to scale. What is needed is nothing less than a paradigm shift toward a more sustainable society in which food, like energy, water and other natural resources, is valued in a different way than it is today. In a way that recognizes the full cost of the choices we make to our health, our children and the planet we will pass along to them. On one hand, the local food phenomenon seems to be a manifestation of the quest for greater security in an increasingly uncertain and troubling world; an attempt to take personal responsibility for the future. On the other, it is in the here-and-now a delicious and delightful celebration of the best that the Earth and those who make it fruitful have to offer. Either way you look at it, eating locally is a very appealing choice for more and more people. And that offers great hope that, sooner rather than later, the local food systems in this region -- and throughout the country -- can, as Paul Muller put it, be “grown back.”

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6 J. Wilkins, *Eating Right Here: The Role of Dietary Guidance in Remaking Community-Based Food Systems*. Chapter in C. Hinrichs and T. Lyson (eds.) *Remaking the North American Food System*. 2007, University of Nebraska Press, p.179.

7 See, Cornell University Cooperative Extension, <http://www.nutrition.cornell.edu/foodguide/archive/index.html>

8 J. Wilkins, *supra*, p. 167