



Local Food: The Economics

by Sarah DeWeerd

One drizzly Sunday last March, I went to the weekly farmers market in my favorite Seattle neighborhood and bought a bag of potatoes. I stopped at a stall where a farmer, his hands caked with dirt, was filling mesh bags with small, just-dug potatoes and singing a silly made-up ditty as he twirled each bag shut. “That one looks good,” I said, pointing to the bag in his hands. “Can I have that one?” “Yeah,” he agreed with me, “it has a nice mix of spuds.” I held out a few crumpled dollar bills and he passed me the bag.

Eating local has economic benefits for communities, say proponents of local food, and after such a quintessential farmers market moment that conclusion seems obvious, the logic inescapable. After all, I’d handed my money directly to the farmer who grew my food—rather than passing it along a chain of faceless and distant middlemen—and what’s more, he honestly seemed to be having a good time.

That’s different from the economic logic of the mainstream food system, which de-emphasizes place and sees trade as a disembodied, win-win endeavor. Different communities can specialize in growing different foods—or in activities other than growing food altogether—thereby developing production efficiencies that enable them to offer their products at a lower price. Money flows freely among communities, and everyone gets a more varied diet for less money.

Well-drained Farms

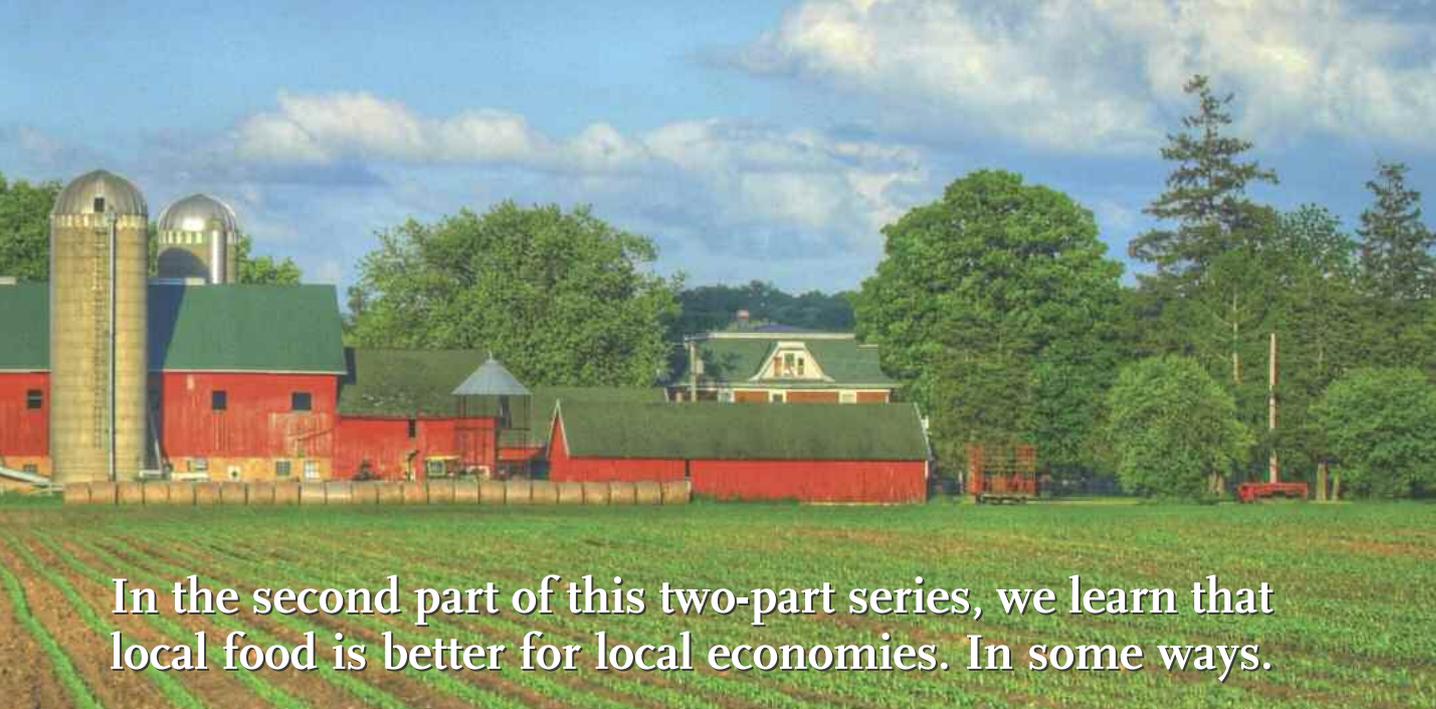
The trouble is, that’s not all that’s going on. Over the past decade, Ken Meter, president of the Minneapolis-based Crossroads Research Center, has documented the way the current food system drains money and vitality from farming communities throughout the United States. His first investigation, focusing on the seven-county Hiawatha region of southeast Minnesota, is representative. In that 2001 study, Meter and Jon Rosales, of the Institute for Social, Economic, and Ecological Sustainability at the University of Minnesota,

found that farmers in the region sold an average of US\$912 million worth of farm commodities every year. But they spent \$500 million on farming inputs—things like seed, animal feed, fertilizer, and (crucially) credit—sourced from outside the region. Moreover, the region’s consumers spent an additional \$500 million on food purchased from elsewhere. All of the money—and then some—that the region earned from farming was drained right back out of the community by the food system itself.

Meter has found a similar pattern in landscapes as diverse as Iowa, Arizona, and Washington State: farmers often operate at a loss, spending more to grow their crops than they earn from selling them. (In the southeast Minnesota study, farmers spent \$996 million to grow \$912 million worth of crops. Some of this difference, but in many regions not all, is made up for by farm subsidies.) Most of the inputs necessary to produce those crops come from outside the community. And most of the food that farm families eat is purchased from far away.

Even where farmers aren’t producing at a loss, the food system as a whole drains money from the local economy. In Meter’s study of the eastern shore of the Chesapeake Bay, farmers collectively earned \$70 million more each year than they spent to produce their crops. Yet they sourced about \$375 million in farm inputs from outside the region annually, and consumers in the region purchased about \$400 million in food from afar. That amounts to a net loss of \$700 million from the region each year—about the same as the value of all agricultural products produced there. “Basically every region that I’ve studied is losing hundreds of millions of dollars a year” as dollars flow out of the community, Meter says. He adds, “It’s building wealth for some people, but not for the farmers.” Instead, most of the profits in this system flow “to the supply industries, the service industries, to agriculture, and the financial sector—not to the farm and certainly not to the rural community.”

Local food has been promoted as one solution to this economic imbalance. “More local or regional food commerce is



Brian Lamy

In the second part of this two-part series, we learn that local food is better for local economies. In some ways.

Spring corn crop sprouts on this family farm in Wisconsin.

going to benefit local and state economies,” says Rich Pirog, associate director of the Leopold Center for Sustainable Agriculture at Iowa State University. A variety of studies, from the Leopold Center and elsewhere, have calculated the economic rewards communities could reap by buying more food produced nearby.

In their southeastern Minnesota study, for example, Meter and Rosales found that if people in the region bought just 15 percent of their food from local sources it would generate two-thirds as much income as the region’s farmers receive from federal farm subsidies. In a study by economist Dave Swensen of Iowa State University, if Iowans purchased a quarter of their produce from Iowa farmers, it would create \$139.9 million in new economic output and more than 2,000 jobs for the state. If people in the Central Puget Sound region (Seattle and nearby cities, including Tacoma, Bellevue, and Everett) spent 20 percent of their food dollars at local food businesses such as farmers markets and locally owned restaurants, it would inject an extra billion dollars every year into the region’s economy.

Even a small shift in spending can have a big impact because of what economists term the local multiplier effect. Every time money changes hands within a community, it boosts the community’s overall income and level of economic activity, and fuels the creation of jobs. The more times money changes hands within the community before heading elsewhere, the better off the community is. And spending money at a locally based business has a greater multiplier effect, the theory goes, because locally owned businesses are more likely to re-spend their dollars locally.

This thinking isn’t unique to the food system. In the United Kingdom, the New Economics Foundation has documented how directing a small portion of public sector spending to locally owned businesses in disadvantaged areas would multiply through, and help revitalize, these struggling economies. In the United States, many local multiplier studies have focused on the economic impacts of spending at mom-and-pop stores versus big-box chain retailers.

In the case of food, some impressive numbers are found in *Why Local Linkages Matter*, the study of the Central Puget Sound region referenced above. In that study, independent economist Viki Sonntag calculates that spending \$100 at a local restaurant results in \$79 in additional income to local businesses, while spending the same \$100 at a chain restaurant results in just \$31 being re-spent locally. When farmers in the region grow food for export, each dollar of sales generates \$1.70 of community income, but every dollar spent at a farmers market generates a whopping \$2.80 for the region’s economy. Similarly, a 2005 study from the Iowa Farmers Market Association found that every two jobs at an Iowa farmers market gives rise to three jobs elsewhere in the economy.

On the Other Hand...

The local multiplier effect is the foundation of the claim that local food benefits local economies. But studies of the potential benefits of shifting food dollars to the local food system are just that: potential. They rely on economic models to predict how a hypothetical change in consumer behavior would ripple through the economy at large. To date, according to Pirog, there’s been no instance of a community actually undertaking such a shift and seeing the predicted economic benefits materialize. The local food movement is still too new, and too small, for that to have happened. (Even in the Seattle region, a hotbed of enthusiasm for local food, the stuff accounts for only about 1–2 percent of food purchases, according to Sonntag’s study.)

But Pirog points to some encouraging developments in northeastern Iowa, where a recent focus on strengthening the local food system as a means of economic revitalization is starting to have a marked effect. “When you get enough people doing it, then the input suppliers start to move back,” Pirog says. An area equipment dealer has begun to carry and repair farm implements needed by small farmers that sell to local and regional markets, he reports. A new food edu-

Farm workers sort spring onions grown on Mike Fox's farm near Mexicali, in Mexico. Fox is one of a group of American farmers farming over 20,000 hectares in the area, where workers' wages are about a tenth of those north of the border in California.



Stringer/Reuters © 2008

cation non-profit has formed to help with school and community gardens.

That's good news for northeastern Iowa, but Pirog's comment points to another important caveat regarding food system localization studies. Crucially, these studies depend on an approach that mainstream economists call import substitution. They look at products that local residents are already buying from far away, and ask what would happen if people bought these same products from closer to home. They carefully account for the economic pluses and minuses of such a switch for the community in question. For example, if Iowa farmers grew more produce, they would have to grow less corn and soybeans. So Swensen's study considers the loss of income from corn and soybeans that would occur as some acreage was switched from commodity crops to melons, tomatoes, and the like.

However, import substitution studies don't take into account the impacts of such a switch on *other* communities—if Iowa grows more of its own vegetables, for example, the California farmers currently supplying those vegetables will lose out. So if some communities localize and not others, there will be winners and losers. And if all communities localize, it's a bit of a wash.

"It's not like you're creating additional new jobs in the economy, you're shifting those jobs around," Pirog acknowledges. But, he argues, "that's why it's important to broaden this debate beyond economics"—when local economies are healthier, "crime problems go down, health problems decrease, people have more of a sense of connectedness." Indeed, it's almost

impossible to talk about local food without ending up talking about values rather than just money. But that, Viki Sonntag argues, could be considered a failing of economics itself. "We don't really have very good formal economics models to represent social capital and the importance of social capital to the development of financial or economic stability," she says.

Means, Not Ends

Still, the meaning of localization studies depends on the scale at which you're considering them. Looking at a single community or region in isolation—particularly an agricultural area that's been economically hollowed out by the current food system—these studies have a powerful, up-by-the-bootstraps appeal. Viewed from a broader perspective, they can seem parochial, or even, at the national level, protectionist.

That is, localizing food systems in the United States would produce a net increase in agricultural jobs for the country. That's because the United States, like other wealthy countries, imports a significant and growing proportion of its food from developing nations (in the case of the United States, primarily Mexico). So some of the jobs gained in the United States would simply be shifted—or more precisely, shifted back—from Mexico. It's not clear that food system localization at a grand scale would increase the number of jobs globally.

In the United Kingdom, which imports significant quantities of fresh produce from Africa, this line of reasoning has led some to suggest that in fact people *shouldn't* buy local food, precisely because the livelihoods of impoverished farmers in the developing world depend on food exports to wealth-



Açaí berries being loaded on a truck in Abaeteuba, Brazil. Touted as one of the newest “super foods,” full of anti-oxidants and vitamins, they will be exported for use in energy drinks, cosmetics, and health bars.

ier nations. Benito Müller, director of energy and environment at the Oxford Institute for Energy Studies, points out that Kenya earns UK£100 million per year from produce sold to the United Kingdom alone, and argues that Europeans have “a moral duty to eat African strawberries at Christmas.”

On the other hand, purchasing food imported from developing nations doesn’t necessarily improve economic wellbeing for the farmers who grow it. In fact, switching to export-oriented agriculture often *increases* food insecurity in the developing world, pushes small farmers off the land, and traps those that remain in a cycle of debt. There’s some intriguing, if limited, evidence that local food systems could have economic benefits in developing countries as well. Jules Pretty, a sustainable agriculture researcher based at the University of Essex in the United Kingdom, has worked with farmers in the Santa Catarina state in southern Brazil, where diversified small farmers (on one farm, more than 50 crops, plus pigs and chickens, on just 10 hectares) are building small-scale, on-farm processing facilities, forming associations with like-minded neighbors, and marketing directly to consumers in nearby cities—and seeing better economic returns than they’d get from contract farming for agricultural conglomerates.

Or, alternatively, there are fair-trade arrangements, which attempt to ensure that developing-country farmers get a fair price and a living wage when they grow foods for export. Taking these complexities into account, Pretty suggests “what you might call a ‘near and far policy,’ that you should localize food as much as you possibly can wherever you are...and grow whatever you can locally, but then source the stuff that

needs to come from the tropics or from elsewhere in the most fair-trade, just, appropriate way that you can.”

Other analysts question whether buying local ought to be the default policy in the first place. Depending on the structure of the business, buying local might not, in fact, do much for the local economy. (After all, every global mega-corporation is “local” somewhere.) In an influential 2006 paper, Branden Born and Mark Purcell, two urban planning professors at the University of Washington, call the assumption that local food is automatically better—not only better economically, but better for the environment, fresher, more nutritious, and so on—the “local trap.” Instead, they argue that there’s nothing inherently better or worse about any particular scale—local food might be just or unjust, and non-local food might be better for the environment in some instances or much worse in others. Instead, they argue that localization should be a means to an end, and not an end in itself.

“Local”...or “Sustainable”?

In the first article in this series [May/June 2009 *World Watch*], we concluded that the environmental benefits of local food aren’t always intrinsic to its local-ness, and the same is true in the economic realm. That’s clear from a closer look at several of the studies concerning the economics of local food. For example, Swensen’s study of the potential benefits of increased local fruit and vegetable consumption for Iowa assumes that half of the increased local production would be sold through farmers markets and other direct-marketing schemes—in effect, shortening the food supply chain. Shorter food supply



Liquid manure from a hog farm being spread on cropland in Iowa.

chains are a common strategy for increasing the portion of the purchase price that goes to the farmer. But while shorter supply chains are often associated with local food, the two aren't intrinsically linked (the same approach underlies many fair-trade schemes that connect producers with very distant consumers, after all).

Then there's the question of what we eat, not just how far it travels. Many farmers don't grow food, they grow raw materials for industry. And a number of recent efforts to rebuild rural economies have focused on reintroducing fruit and vegetable production into areas currently dominated by commodity farming. That strategy leads to economic gains in part because the value per hectare is so much higher for produce compared to commodity crops. In Swensen's study of increased local produce consumption in Iowa, the greatest economic benefits were seen in scenarios that assumed Iowans would also increase their total fruit and vegetable consumption to the recommended five servings a day (a goal that only about 20 percent of the state's population currently reaches). Of course, Pirog points out, more fruit and vegetable consumption would lead to a healthier population, which would have economic benefits of its own—fewer sick days, lower health care costs. But there are several issues at play here, and not all are strictly about local-ness.

"What we need to do is shift from talking about local food to talking about sustainable food," says Jim Sumberg, an expert on agriculture and food systems who is currently the director of research and programs at the New Economics Foundation. For Sumberg, sustainable food means "food that's associated with high levels of wellbeing, of social justice, of stewardship,

and of system resilience." While it would take some discussion to agree on a definition of each of those aspects of sustainability, this approach at least moves us beyond a narrow focus on food miles/kilometers or local economic self-interest.

To be sure, some of the solutions to increase wellbeing and social justice in the food system would be local ones. For example, Ken Meter suggests that farmers could reduce their spending on inputs sourced from far away by re-adopting old systems that combine crops and livestock, grazing livestock on renewable pasture and using the manure to fertilize their

fields. That kind of arrangement really only makes sense on a local scale. (It's worth noting that it would have environmental benefits as well.) Restoring local and regional processing networks might shorten supply chains and put growers on a more equal footing with processors. Other possible solutions, like shifting transportation funds away from major highways and toward secondary roads to help rebuild regional distribution networks, would require action at an even higher level. Decentralization of the food system is a common theme of these solutions, but the details matter. Who will own the regional processing plants? Who will work there? How can farmers be assured of a fair price for their commodities? That's different from a reflexive insistence that local is a goal in itself.

When I got my farmers market potatoes home, I cut them in half, roasted them in a hot oven, and then tossed them in a dressing made with smoked paprika (about the furthest thing possible from a local ingredient). The potatoes were astonishingly sweet, in a rounded way that tasted of healthy earth, and as I ate them I thought again of the farmer I'd bought them from. I could hardly imagine a more perfect dish of potatoes. Was that dish also better for the place I call home than the one I could have made with potatoes bought at the supermarket? Probably so—but there's a lot more to the story.

Sarah DeWeerd is a Seattle-based science writer specializing in biology and the environment.



For more information about issues raised in this story, visit www.worldwatch.org/ww/localfood.