Lowdown on Buying Local

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EXECUTIVE SUMMARY

A wide array of influential opinion leaders, from foodies to celebrity chefs, and from economic development gurus to environmentalists, are urging consumers to "buy local", especially food. Yet there is little hard information on how the large the buy local movement is, or of its future potential. This report takes a critical look at the realities of buying local.

Buying local is not new. For example, farmers' markets have existed in many countries for millennia. Even in the United States, large retailers have long allowed local managers autonomy to source certain products locally, and farmers have sold directly to consumers from their farms. Over 30 years ago, the U.S. Congress passed the Farmer-to-Consumer Direct Marketing Act of 1976, to promote direct sales from farmers to consumers.

The resurgence of interest in "buying local" has been driven by concerns about the energy used and emissions generated by long-distance supply chains, antipathy to industrial agriculture, the desire to help small farmers, and the opportunities some retailers saw to gain a strategic advantage over competitors.

There is little agreement among farmers, retailers or consumers about how "local" should be defined. Most now define "local" to match their current needs or perceptions. However, as the category becomes bigger, there are likely to be calls for a more rigorous, official definition. Even by the present loose definitions, buying produce locally is fragmented and intermittent, and probably accounts for less than one percent of U.S. food sales. Most food for home use is still bought by time-strapped shoppers in traditional grocery stores.

While some consumers buy local to save money, others appear to be willing to pay a substantial premium to buy local. Some believe that the product is fresher or freer of chemicals. Others appear to gain non-monetary satisfactions such as direct interaction with producers, a greater sense of community, and the belief that buying local is helping the environment, small farmers or the local economy.

The empirical evidence supporting such claims is mixed at best. Some of the claims for environmental friendliness have been based on use of the concept of "food miles" (the miles a food travels from producer to consumer). However, energy is used and emissions generated in the entire food system from production through to final consumption and disposal of waste. Studies have shown that food from distant, but more efficient, suppliers may use less energy and generate less emissions (be environmentally more benign) than local food.

While most participants at farmers' markets tend to be small farmers, their average profits from such participation are small. Small farm households earn most of their income from off-farm work. Increased buying of local food will turn few of these farms into profitable operations. Without pooling their resources with other small farms, they will not be able to meet the volume and quality requirements of retail buyers. The primary beneficiaries of increased local buying by retailers or institutions will be large farmers or agribusinesses that qualify as local suppliers near major metropolitan areas, or large agribusinesses that can open branches in strategic locations to qualify as "local" suppliers.

Does producing locally for local consumers provide net benefits to the local economy? The answer is uncertain. For example, if a farmers' market simply replaces business that would have been done in other local outlets, there may be little net benefit to the local economy. Because of soil and climate, many localities may be inefficient producers of many food products. It may be better for them to specialize in products or services where they have a comparative advantage, even if the markets for those products or services are not local.

Undue emphasis on buying local can obscure the great benefits societies have gained from their relationships with the outside world. Trade within the United States has allowed all states to specialize in what they do best. Global trade has been one of the great drivers of world economic growth for 60 years and has aided in the worldwide transmission of technology and innovation. It will be vital in helping feed an additional 3 billion people in the world in the next 40 years.

Despite these cautions, large buyers are likely to expand their "buying local" programs in the near future. Regardless of their location, farmers and agribusinesses will find their competitive situation affected by these programs, and will have to be prepared to adapt their operations in self-defense.

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Fashionable Concept

“Buying local” has become a fashionable concept. It is being promoted by such opinion leaders as the Microsoft Corporation and the New York Times. It is featured prominently in best-selling books like Michael Pollan’s “Omnivore’s Dilemma”. It has been embraced at the local level by development agencies as a way to stimulate local economies. There are few towns now that do not have their own municipally-sponsored farmers’ market.

“Buying local” has been touted as a solution to climate change, food safety concerns, the decline of the small farmer, and the perceived ills of industrial agriculture powered by non-renewable fuel. It has been promoted as building trust in the food system and strengthening community life by bringing farmers and consumers together.

It has generated an army of crusaders who see “buying local” as counteracting the impersonal aspects of modern commerce, and helping to bring back a kinder, gentler, more traditional society. They have persuaded governments at various levels to fund more “buy local” programs. They have put pressure on major food retailers and major institutions, such as schools and hospitals, to buy more of their food locally. Many of these organizations have altered their procurement practices to demonstrate their commitment to buying local. This, in turn, has affected their long-distance suppliers.

While for many, buying local is a desirable goal, for others, buying local has become a way of life. A new word to describe these pioneers has been spawned. It is “locavore”, meaning a person who buys as much as possible of his or her food from local sources. In their light, nirvana will be reached on earth when all of us are locavores all the time.

"Buying Local" not New

It may surprise many of the "Buy Local" crusaders to know that buying local is not new. In countries with favorable climates, regular open-air markets and farmers' markets have flourished for centuries, and continue to flourish alongside modern hypermarket chains. Even large retail food chains have long allowed local managers autonomy to buy seasonal supplies of local fresh fruits and vegetables. Some even allow farmers' markets to set up in their parking lots. Farmers with operations near affluent urban areas have long catered to customers that wanted to buy produce directly from the farm or to enjoy the experience of picking their own produce.

Over three decades ago, the United States Congress passed the Farmer-to-Consumer Direct Marketing Act of 1976. It aimed to provide research and educational support for expansion of direct marketing opportunities through farmers' markets, roadside stands and on-farm sales. The 1976 Act did not create direct marketing. It enhanced a movement that was already under way. Since then, there has been continued growth in the number of farmers' markets and in the sophistication of roadside stands and on-farm outlets. In addition to produce, many of these outlets sell related merchandise and recreational opportunities. They operate like mini-Disneyworlds in farm surroundings.

However, direct farmer to consumer marketing has faced formidable headwinds on both the supply and demand side. Farmers nearest to major highways or major urban centers have been under the greatest pressure from urban sprawl. Between 1970 and 2009, the United States added 105 million people. Each year since 1970, more rural and farm land has been used to provide space for the added homes, schools, hospitals and other amenities needed by an additional 2.7 million people. That pressure is not likely to decrease since the United States is forecast to add 115 million people in the first half of the twenty-first century.

Farmers have faced increasing competition in their local markets as improvements in transportation systems have reduced the cost of sourcing competitive products from around the nation and the world. At the same time, increased employment opportunities in the non-farm sector have encouraged many farmers to either seek full-time, off-farm employment or reduce the share of their time spent farming.

Why the Resurgence in "Buying Local"?

A number of factors have come together to prompt a resurgence in "buying local" food. Chain food retailers have long recognized the conflict between their image of corporate might and their desire to be thought of as the "local" grocer, as an integral part of, and friend to, each community where they have an outlet. Managers and employees have long been encouraged to show their local ties by being active supporters of, and participants in, community activities.

This conflict between the corporate and local image was particularly difficult for natural foods chains, such as Whole Foods and Wild Oats, as they evolved from their activist roots to become major corporations. (Whole Foods has now become even larger by taking over Wild Oats). One way in which they could differentiate themselves from the mainstream food chains was by finding unique local sources for their products. (They were also, at the same time, scouring the world for unique foreign products that would appeal to their upscale customers.)

Two other issues forced all retail food chains to re-examine local supply systems. One was the dramatic increase in world oil prices from $30 per barrel in 2004 to almost $150 per barrel in 2008. The resulting surge in energy costs forced all chains to look at ways to reduce those costs, for example, by improving the efficiency of vehicles, rationalizing supply routes, and buying product nearer to their stores. A second concern was worry about the emissions from fossil fuels, sometimes labeled the "carbon footprint" of a product, that were blamed for contributing to global warming. Saving energy reduced both costs and one's "carbon footprint". It could be viewed as good for one's firm and the planet.

In some countries, "food miles", that is, the number of miles a unit of food travelled, began to be used as an indicator of the environmental soundness of the food distribution system. In theory, by increasing the proportion of local suppliers, a retail chain could reduce corporate food miles and gain a marketing advantage over competitors. Major chain retailers began to trumpet the volume or the share of their supplies that they sourced locally. Checking the validity of these claims was made difficult by the lack of a general definition of "local" and by the many other complicating factors that affect the economics of food production and distribution. Some of these are discussed below.

Components of the Food System

The production, distribution and consumption of food are subject to economic forces that are outside the control of the most dedicated locavore or the largest retail chain. Normally, for even the simplest food, costs are incurred in:

Production
+
Assembly
+
Processing
+
Shipping
+
Distribution
+
Consumption
+
Waste disposal

Production can include ground preparation, cultivation, fertilizing, spraying, harvesting and clean-up for the next season. Processing can include cleaning, sorting and packing the product or changing its form by slicing, drying, freezing, etc. Most individual farmers do not have the expertise, personnel or equipment to do their own processing. Thus, in most commodities, an intermediate stage is required where the necessary volume from many farmers is assembled at a central point for processing. The final product that is shipped from the processing plant will pass through one or more distribution centers, such as a wholesale market, a chain store, or a farmers' market, where it is made available to consumers. Consumers normally must travel to the distribution point to pick up their product. They also incur costs in preparing or cooking the product to be eaten. And, finally, they must dispose of the waste.

Resources such as water, energy and labor are used in each of these seven steps. A full accounting of the resources used is not easy. For example, the fossil fuels used in fertilizing a crop should include the direct use in delivery to the farm and in fertilizer application, and the indirect use in manufacturing the fertilizer.

Food Miles versus Life Cycle Analysis

Clearly, since the "food miles" concept focuses only on the direct energy used and the emissions generated in the shipping phase of the food system, it is a misleading measure both of the total energy used and the emissions generated by any firm or product because it omits so many crucial steps in the system.

Increasingly, scientists, governments and businesses prefer to use the concept of life cycle analysis to measure a product's total footprint. However, life cycle analysis requires detailed knowledge of all stages of a product's journey from planning of its production, to its consumption, to disposal of the remaining waste. For example, in one of the earliest studies in 2006, a team of scientists from Lincoln University in New Zealand compared the energy used and emissions generated for four products, milk solids, fresh apples, fresh onions and lamb carcasses delivered to the UK market from representative New Zealand and UK farms.[1] In each case, they found that the energy used and CO_2 emitted per metric ton of product delivered was lower for the New Zealand product than for the comparable product originating in the UK.

How could this be? In general, greater efficiencies onshore in New Zealand more than offset the additional energy and emissions needed to get the New Zealand product to the UK market. For example, in the case of fresh apples, the representative New Zealand producer had average yields 3.6 times those in the UK. As a result, the energy used and emissions generated per metric ton in producing New Zealand apples was only one-third that of producing UK apples. In the case of lambs, New Zealand producers had access to grass feed all year whereas UK producers had to provide concentrate feed.

The New Zealand study clearly demonstrated that the simplistic concept of "food miles" gave spurious indications of which products were more or less environmentally friendly. Many other entities have attempted to develop life cycle analyses for different countries and different products. However, for life cycle analyses to be considered valid in making comparisons throughout the world, agreement will have to be reached on common methods of analysis and common measures that are applicable in differing supply situations in different countries and districts. That work is still ongoing.

Measurement problems are many. For example, a small orchardist may have one tractor which is used in the production of both apples and sweet cherries. Should the indirect energy used in manufacturing the tractor be allocated to apples and sweet cherries on the basis of acres occupied, or of tonnage produced, or of tractor time used on each fruit, on a 50-50 split, or on some other basis?

Making such allocations becomes even more complicated in the case of animal production. For example, a dairy cow generates methane, one of the gases implicated in global warming. How much of that methane should be charged against the milk the cow produces during her life time, and how much should be charged against the meat produced when the cow is eventually slaughtered?

The effect of different distribution systems on energy/emissions is also difficult to measure. For example, Wal-mart, the largest retailer in the world, and the largest food retailer in the United States, is envied by competitors for its ability to lower its unit costs through the efficiency of its logistical system. Because it was expanding geographically, it could locate its distribution centers and its retail outlets, and optimize the routing and loading of its delivery trucks, in a way that lowered the total cost (and energy/emissions) of its supply system. In contrast, a local producer supplying the nearest farmers' market, or supplying CSA members, has limited control of routing, loading, energy or emissions.

There are also many challenges in valuing the impact of consumer behavior on the energy/emissions in the food system. At one extreme, a consumer may buy all his or her household's food needs in one shopping trip per week to a single large supermarket. Another consumer may make separate daily trips each week to seven different suppliers of fruit, vegetables, meat, dairy products, baked goods, groceries and other items. The former probably uses less energy in shopping, but may use more energy for storage and have more waste. The latter probably uses more energy in shopping, but may use less energy in storage and have less waste.

A number of studies have shown that the total energy/emissions may, in fact, be smaller for a product that reaches the consumer through a large, modern supermarket outlet that supplies many products than for an identical product that is supplied from a local producer and collected individually by the consumer. As the techniques for life cycle analyses are refined, we will be much better able to assess what contributes to energy/ emissions.

Economics Still Important

Economic forces have played a major role in the development of the present food distribution system. Those same forces will affect the long-term prospects of any "Buy local" movement.

1. Producers have an incentive to gain economies of scale. For example, if one tractor can adequately serve 200 acres, a farmer with only 100 acres will have twice the fixed tractor cost per acre as the farmer with 200 acres. All other things being equal, the larger farmer will have lower unit costs and higher profits. There is a strong incentive for successful farmers to get bigger. A similar principle applies to packers, processors, marketers and other agribusinesses. Smaller operations will tend to disappear in favor of fewer, larger entities.

2. Producers will seek to exploit their comparative advantage. Producers tend to specialize in what they do best in their current location. That means they will raise oranges in Florida, corn in Iowa and apples in Washington State apples. Specialization and the drive for economies of scale, will lead to large, low-cost producers of oranges in Florida, apples in Washington State, and so on.

3. Delivered cost wins customers. As shown for the New Zealand example, if two products are identical, the one with the lower delivered cost will tend to be preferred by buyers. To overcome a price advantage, a product will need other compensating quality attributes (See item 5).

4. Price does count. Buyers normally seek to maximize their satisfaction in the allocation of scarce resources to different goods and services. Savings on any one product or service frees up income to be spent on other goods and services.

5. Quality also counts. Products and services have both intrinsic and extrinsic attributes. One important intrinsic quality in food is color. For example, some customers prefer red grapes and some green grapes. However, customers also value extrinsic qualities such as product origin, organic production methods, fair trade, product reputation, brand history, etc. The attribute of being "local" is just one of many extrinsic attributes that affect consumers' choices.

Defining "Local"

Up to this point in time, everyone has felt free to define "local" as loosely or as inconsistently as they wished. However, without a clear definition of "local", it will be impossible to verify claims that a product is "local." The greater the potential for deception in local claims, the more rapidly the term will become debased. "Local" has been defined in a number of major ways:

1. Jurisdiction. Local has been defined as within a single county or cluster of counties, within a single state or cluster of states, and even occasionally, as within a single nation. For example, the Meijer chain of supercenters defines local as produce grown in any of the five Midwest states where it has outlets.

2. Geographical feature. Local has been defined as within a single valley, or on a single plateau, or in a single area bounded by mountains, lakes, rivers or oceans. The activities of many consumers are limited by such natural boundaries.

3. Miles. Others have defined local in terms of the miles from producer to consumer. Some like the round number of 100 miles. Others have preferred more or less than the 100 mile figure.

4. Travel time. A similar measure uses travel time between the producer and consumer. However, there is little consensus on what is the appropriate time boundary between local and non-local. For corporate purposes, Whole Foods requires that producers be within 7 hours (one working day's drive) of a Whole Foods distribution center. However, on its web site, it directs readers to consult local managers for their individual definition.

At this point in time, most retailers prefer to leave the definition of local as elastic as possible, for obvious reasons. However, the effect of this fudging is to leave them open to challenge for any claims they make about how important local products or local suppliers are to their total operation. For example, a chain with 10 distribution centers may have one located in the Salinas Valley. It can correctly claim that 100 percent of that center's salad supplies were local. For the other 9 distribution centers, none of its salad supplies may be local. However, it could still claim that, on average, 10 percent of all its salad supplies were local. Critics might question its commitment to supporting local producers in the 9 other regions.

How Consumers Define "Local".

Consumers also have considerable ambiguity and inconsistency in what they define as local in terms of outlets, products or suppliers. For example, how much local ownership, management or employees are needed for a business outlet to be considered "local"? Is a locally-owned franchise of a national restaurant chain, such as McDonald's, or a national grocery chain, such as Supervalu, or a multi-state agribusiness considered equivalent to a locally-owned independent outlet? The answers to these questions remain unknown. However, clearly consumers' perceptions of an outlet could affect the credibility of that outlet's "local" claims.

Similar problems arise in defining a "local" product, but a number of studies have provided guidance on this issue. For example, the Hartman Group reported that in 2008, 50 percent of respondents to a national survey had selected "made or produced within 100 miles" as the statement best defining local product, while 37 percent had selected "made or produced in my state [2]." Using the Hartman Group findings as a starting point, Durham, King and Roheim administered surveys in two different metropolitan areas, Minneapolis/ St Paul and Portland, Oregon, and in the state of Rhode Island, to see how location affected definitions of local [3].

Of respondents in Minneapolis/St Paul, about half defined local as within a 50-mile radius while half defined local as within a 175-mile radius. In Portland, Oregon, the predominant choice was within a 50-mile radius. State boundaries had little influence on the definition of local. However, in Rhode Island, many respondents selected part of that small state as local. For example, residents of south Rhode Island more often defined local as being produced in south Rhode Island. Rhode Islanders did not consider Connecticut local even though it is within a 100-mile radius. The authors concluded that geographical factors, physical factors, "and possibly psychological and cultural factors", as well as distance, affected how respondents interpreted the term "local."

A separate study in Ohio by Darby, Batte, Ernst and Roe, found that respondents did not distinguish between strawberries marked "grown nearby" and "grown in Ohio", but did distinguish those two from strawberries marked "grown in the U.S." or without an origin indicated [4]. Consumers know what "local" means to them, but their perceptions are not uniform across locations.

Intangibles in Perceptions of "Local"

Other research has demonstrated that the term "local" symbolizes many other product attributes of a less tangible nature. For example, to different individuals, "local" may connote "freshness", "trustworthiness", "grown by a small farmer", "self-sufficiency", or "benefiting friends and neighbors". Conversely, a preference for local may reflect the consumers' antipathy to, and suspicion of, large, distant corporate farmers and agribusiness suppliers. These reactions are most likely to occur when consumers are comparing local farmers, products or outlets with their non-local equivalents.

Darby, et al, in the study cited above, did limited tests of some of those perceptions. They found that belief in freshness and the designation of "locally-grown" affected consumers' purchasing decisions independently, and significantly. But, corporate origin of a product did not significantly affect choice.

The actual experience of shopping locally may also have numerous benefits in addition to the satisfaction with the products bought. For example, a number of studies have suggested that rather than being a cost, for some attendees at farmers' markets, chatting with farmers and visiting with neighbors may be a recreational activity. For patrons of community supported agriculture, visiting or helping out on the supplying farm may be a separate source of satisfaction. For many families, visits to a pick your own farm may be considered by parents as an educational activity for their children. In other words, patrons get satisfactions from shopping locally over and above those gained from buying local products.

To test this hypothesis, Carpio, Wohlgenant and Safley analyzed consumers' decisions in buying pick-your-own strawberries or pre-harvested strawberries in North Carolina [5]. They found that patrons who picked their own fruit tended to enjoy benefits from the time spent in that activity even though that time spent in alternative shopping experiences would normally be viewed as a cost, not a benefit. The likelihood of choosing pick-your-own over pre-harvested fruit increased as the number of males or females or the number of children in a party increased. It also increased for those who travelled farther to the site. This suggests that visitors deliberately sought the pick-your-own experience for the added enjoyment received.

Who Buys Local?

Numerous partial surveys have been conducted of buying local behavior by consumers in different communities and with different outlets, such as farmers' markets, roadside stands, on-farm sales or CSAs. However, it is impossible to combine these results into more precise measures of the overall size of the buy local movement in food in the United States or other countries. Almost all of the Buy Local outlets are seasonal in nature, intermittent in supplies of different products, and more vulnerable to weather interruptions than the typical covered, temperature-controlled grocery supermarket whose supply chain is designed to provide a continuous flow of a wide array of products. Data from various sources suggest that buying local still accounts for less than one percent of all retail food purchases.

In a review article, Thilmany, Bond and Bond reported on previous studies that explored consumer motivations for buying local [6]. In one study, consumers were divided in terms of their general shopping behavior into four major clusters, Urban Assurance Seekers, Price Conscious Consumers, Quality and Safety Consumers and Personal Value Buyers. Local production was more highly valued over organic production, and pesticide-free product ranked highly. In another study, consumers were divided into those who shop direct occasionally (50%), those who prefer to shop direct always (30%), and those with no preference (20%). Thilmany et al found that those who prefer to shop direct always "appear to place relatively greater importance than the other groups on a set of product attributes, including vitamin content, freshness, locally grown, and relationships with producers, and tend to discount the importance of packaging and color." The segment that prefers to shop occasionally was large, but the meaning of occasional is open to wide interpretations.

In general, demographic factors such as income did not have a significant effect on preference for buying direct, although whites and those living in the Mountain region were more likely to prefer to purchase direct. Another finding, that appears to be supported by other recent studies, was that those who prefer to shop direct always were not significantly influenced by the availability of organic products. Many people appear to prefer to buy local rather than buy organic from distant suppliers.

Will Consumers Pay More for Local?

The answer to the question of whether or not consumers are willing to pay more for local produce appears to be "It depends." For example, in a farmers' market, the process of "shopping" involves comparing quality and price among different vendors of the same item. Clearly, many shoppers will be the Price Conscious Consumers discussed above. However, even those shoppers may be willing to pay more for the perceived benefits of local produce from a farmers' market than for non-local produce from a chain supermarket. Economists have used many techniques to establish how much consumers are willing to pay for different attributes such as local or organic. However, all these exercises share the limitation that they apply to small samples of consumers in unique situations who provided their responses on only a few, select products.

Thilmany et al ran one such test of consumers' willingness to pay for a melon identified as "locally-produced and sold direct by producer." Respondents were willing to pay an average premium of 38.6 percent. The premium was higher for those concerned about produce being pesticide-free, and lower for those either looking for good value or concerned about convenient shopping. In the Ohio study by Darby et al, consumers were willing to pay a substantial premium for local strawberries. In a study by Best and Wolfe, a very high proportion of all respondents were willing to buy locally-produced milk, but less than one quarter was willing to pay a premium because they did not see locally-produced milk as unique [7]. Consumers that shopped for premium food labels or that had high health concerns more often expressed their willingness to pay a premium for locally-produced milk.

Consumers' willingness to pay a premium for locally-produced product and the amount of the premium they are willing to pay at any point in time is likely to be affected by the type of consumer, the uniqueness of the product in question, consumers' knowledge of prices in alternative outlets, and their reasons for buying local (for example, to save money versus to help the local community). It is also likely to vary over time. For example, shoppers may be more willing to pay a premium for local produce early in the season. The size of the premium will also be affected by the scarcity factor. The more locally-produced product that is available, and the more outlets there are in any area for locally-produced product, the lower is likely to be the premium.

Does Buying Local Adequately Reward Small Farmers?

In theory, the gross and net income of farmers should rise when their product is sold locally, even without a price premium. They are no longer incurring the charges from wholesalers and other intermediaries that they would incur in long distance marketing. However, they may still have to bear many such costs within their own operation. They must still assemble and prepare the product for market, deliver it to the market, and spend time in sales, promotion and accounting activities that were previously outsourced.

The available data suggest that revenue from sales of local produce tend to be small for most farmers. A study by Payne found that in 2000, the average vendor's sales at farmers' markets was $11,773 per year, and 28 percent of farmers used farmers' markets as their sole marketing outlet [8]. A 2006 USDA update reported average vendor sales of only $7,108, with 25 percent using farmers' markets as their sole marketing outlet [9]. Remember, these figures are for gross sales and not for net income. To put this in perspective, the average net household income in the United States in 2000 was $48,201.

A national survey of CSA farms in the U.S. in 1999 found gross sales averaging $15,000 per farm [10]. In a similar study in 2001, 46 percent of farmers responding were satisfied with their ability to cover operating costs, while almost half were unsatisfied with their own compensation from the farm [11]. Lizio and Lass reported that for a four-year period studied, CSA farms in the Northeast United States only covered their costs if farm operator labor was not included [12]. However, net income did increase with experience in operating a CSA.

In contrast to these results, there is anecdotal evidence from trade magazines of on-farm markets that have built up multi-million dollar businesses selling local produce and related merchandise and providing entertainment of various kinds for visitors. These operations tend to be most successful near major metropolitan areas or major tourist attractions. They tend to sell higher-value products such as fresh fruits in season, and other high-value items, such as juices, jams, jellies, preserves, pickles, etc, that can be available out of season. These operations are essentially retail outlets using farm nostalgia as a draw for consumers.

Opportunities for Farmer Participation

Advocates of buying local food believe that it will strengthen the small farm sector of the local economy. However, the reality of small farm life in the United States is quite different from most people's perceptions. Normally, farms are characterized by the value of farm sales. However, that tells us nothing about other key factors that determine how a farm will operate. Briggeman, Gray, Morehart, Baker and Wilson used data from the USDA's ARMS data base on over 2 million farms to identify six major types of farms [13].

U.S.: Six Major Farm Types, 2003

Types of Farm	Percent Of Total Farms	Operator Farm Hours	Spouse Farm Hours	Operator Off-farm Hours	Spouse Off-farm Hours	Household Farm Income
Single Income Ruralpolitan	22.3	942	111	2,016	167	-$1,231
Double income Ruralpolitan	22.5	910	251	2,150	1,974	-$3,351
Active Seniors	24.4	1,067	70	60	42	$ 3,527
Farm Operator with Spouse working off the farm	12.3	2,104	252	94	2,015	$17,410
Traditional Farms	9.0	2,656	1,937	459	210	$21,191
Commercial Farms	8.5	2,359	140	145	99	$47,584

Data in the table above is shown only for hours worked by the operator and spouse on and off the farm, and for household farm income. Briggeman et al's article also includes data on farm and non-farm assets, earned and unearned off-farm income, age, education and household size. The term "Ruralpolitan" indicates that the operator and spouse on these farms devoted most of their time, and earned most of their income, from off-farm work. Both Ruralpolitan categories had sizable farm assets, close to $360,000. Together, Ruralpolitan farms made up almost 45 percent of all farms. These smaller farms had net losses on their farm operations. In most cases, these farms were being used for life style or tax benefits, or as a savings or retirement fund.

Farms operated by Active Seniors accounted for almost one quarter of all farms. Operators of these farms spent only half their time working on the farm. However, they spent little time in work off the farm, suggesting that much of their time was devoted to retirement pursuits.

The fourth category, Farm Operator with Spouse working off the farm, had average farm assets of $626,909, about twice the level of the three previous categories, indicating larger operations, but not large enough to support two adults. However, their net farm income was less than half the average for all U.S. households. Less than 22 percent of their total income came from farming.

The fifth category, Traditional Farms, with both operator and spouse working more than 85 percent on farm, represented only 9 percent of all farms. About 36 percent of their income came from farming. The sixth category, Commercial Farms, represented 8.5 percent of U.S. farms. They had farm assets of over $1.9 million and net income from farming close to that of the average U.S. household. In addition, they earned as much off the farm as on-farm, giving them total annual household income of $97,474 with limited work input from the spouse.

Anecdotal evidence would suggest that most of the farmers currently participating in farmers' markets or roadside stands belong to the first three farm types listed above, Single Income Ruralpolitan, Double Income Ruralpolitan or Active Seniors. Operators in both Ruralpolitan categories are already working about 50 percent more than the 2,000 hours (8 hours X 5 days X 50 weeks) in a standard work year. They are unlikely to have the management time needed to meet the volume and quality needs of a "Buy Local" program from firms like Whole Foods or Wal-mart. Even if they were to pool their resources with other Ruralpolitan farmers to meet such requirements, they would have to develop some coordinating organization, such as a cooperative, to manage grade, quality, logistics, etc. Such organizations of small farmers have been difficult to sustain under U.S. small farm conditions.

Thus, it would appear that the farms that are most likely to be able to serve the local produce needs of firms like Whole Foods or Wal-mart are 600,000 farms in the three categories of larger farms, especially those that are near to large metropolitan markets like New York, Chicago or Los Angeles. These farms are already geared to competing in the mainstream supply system. They can qualify as local either from being in the same state or within 100 mile radius. By virtue of their location they have a competitive advantage in situations where major retailers are attempting to expand their local sources. These larger farms would also be in a better position to provide the volume, quality and security of supply required by buyers for major institutions, such as schools, colleges and hospitals.

Will Demand for Local Revolutionize Purchasing?

Major food retailers, restaurants and institutions have expressed their desire to expand their sources of local foods for reasons discussed earlier, such as concerns about climate change, the firm's carbon footprint, and their need to burnish their local credentials with influential consumers. However, the "local" angle will remain just one of the many characteristics that they will demand from suppliers.

While these major organizations must remain cognizant of the needs of their customers, they are also responsible to their boards of directors and shareholders for generating continued growth of sales and profits. To do that, they must remain responsive to the actions of competitors and to the needs of their employees, the government, the media and the general public. Customers have diverse preferences and wants. Some of these wants will change slowly, others more dramatically. For example, price discounters have gained competitive advantages because of recent widespread unemployment. Just as the Buy Local movement has begun to challenge the organic movement, some other concern may come along to challenge buy local. Government intervention to define "local" more precisely could also inhibit retailer strategies.

The competitive advantage to any one retailer of having more local product will gradually dissipate as competing retailers increase their local supplies, forcing all retailers to seek new points of differentiation. To stay ahead of the competition, retailers must constantly explore opportunities for potential future advantages.

For suppliers, the bottom line is that it will not be enough to have an edge over competing suppliers in being more local. They will also need to remain competitive across a wide array of other attributes, including intrinsic qualities, such as price, size, taste, color, aroma and ripeness; extrinsic qualities, such as reputation, image and status; and pre- and post-sales services, such as quality control, timing of supplies, on-time delivery, packaging, branding, promotion and rapid redress when products or services fail to meet the buyer's needs. Major buyers may tolerate some slippage in quality during the period when they are trying to encourage more local supplies, or may discriminate against distant suppliers during that period. However, once the market for local products approaches satiation, such tolerance will disappear. Purchases will be made from those firms that excel across many different criteria.

Does Buying Local Help the Local Economy?

It is an article of faith with promoters of buying local, especially of food, that it is of special benefit to the local economy. However, there are many reasons to question the soundness of that faith. A local economy will do best when it is maximizing the output from its resources of land, labor, capital and enterprise. In many cases, growing food may not be the best use of any of those resources.

Most food crops require suitable soils and climate to flourish. Managers or workers in any locality may be better suited to being tinkers, tailors, soldiers or sailors (or their modern equivalents, auto mechanics, fashion designers, policemen or long-distance truck drivers), rather than farmers. Capital may yield a better return from a hairdressing saloon than from a small farm. As shown previously, most small farms lose money. In a similar vein, most enterprising youth in our dynamic, modern economy are likely to see many more opportunities off the farm than in farming.

There will be exceptions. We have noted the success of some on-farm or roadside markets that have become very successful mixtures of farming, retailing and entertainment. However, the opportunities even for such enterprises are limited by the total demand for such experiences in their catchment area.

A number of studies have attempted to measure the local economic impact of farmers' markets. The measured effects included the jobs and revenue generated directly at each market, the increased jobs and revenue generated by businesses adjacent to the market, and the resultant multiplier effects as those gains circulated through the community. However, if farmers' markets simply pull trade away from other local locations or businesses, the net gain to the local economy may be negligible. While the positive effects of a flourishing farmers' market may be observed directly, losses of business that are dispersed across other produce suppliers may be less obvious.

One study by Hughes et al attempted to measure the net economic impact of farmers' markets in West Virginia [14]. They found that there was a negative impact on competing sectors such as food and beverage stores, truckers, the wholesale trade and garden supply stores. However, those losses were outweighed by the positive benefits to farmers' markets and to the supplying farmers.

Much has been made of the benefits farmers' markets and other farm-to-consumer direct marketing systems provide such as the increased opportunity for social interaction and the sense of community engendered by such systems. However, communities also derive major benefits from stronger ties with the outside world. This has become even truer as the world has shrunk, and as events in any obscure corner of the world can impact other countries and continents.

Long-distance trade has brought tremendous economic benefits to the world, whether that trade was between communities, states or nations. Even in prehistoric times, the tribes of Asia, Europe and the Americas understood the benefits of trade in enriching their food, clothing and tools. Early empires, such as those of Greece and Rome, exploited the advantages of specialization in production and trade. However, since the industrial revolution, the combination of new production technologies and new transportation systems like railroads and steamships has allowed specialization to occur on an unprecedented scale. Among the colonies of the British Empire or federations of states like the United States, a single supplier could flourish by serving many distant customers.

After World War II, under the leadership of the United States, the world was increasingly opened up to trade. The "economic miracles" of Japan, the Asian Tigers (Hong Kong, Singapore, South Korea and Taiwan), Southeast Asian countries like Thailand and Malaysia, and China, India, Chile and many other countries, have been based on selling their specialized production to distant, richer markets. Trade also gave many, once isolated, countries access to progressive ideas, innovation, science and new technologies. While trade in goods tended to dominate in the first phase of development, trade in services such as banking, insurance and distribution, became more important in the second phase, providing even wider opportunities for businesses and consumers.

While long-distance trade has been important in establishing specialized industries and services, it has been equally important in the creative destruction of those that had lost their competitiveness. Trade forces firms and industries to constantly improve their ideas, skills and efficiency. When one form of specialization is no longer profitable, firms, communities and countries need to find other sources of comparative advantage. External competition is as valuable in services as in goods. Local firms improve just as much in response to a Wal-mart supercenter or McDonald's restaurant as to a product imported from China.

Outlook for "Buying Local."

Much of the current impetus for buying local food is based on questionable arguments about the alleged benefits to small farmers, the local economy, the local community, or the environment. In the best case scenario, buying local food may help some farmers and some communities and make a small contribution to reducing greenhouse gases. However, in the worst case scenario, government policies or subsidies to expand the availability of local food may actually divert scarce resources from more critical issues.

For example, the world's urban population is expected to increase by 3 billion people by 2050. Much of the increased supplies of food will have to come from producers in other countries. It will require optimum use of the world's agricultural resources to meet those needs. Subsidization of farm-to-consumer food marketing by national governments may keep inefficient farmers in business.

Similarly, subsidization of farmers' markets by local governments may divert funds from more important economic development or welfare needs in the community. If consumer demand for shopping at farmers' markets is as strong as proponents maintain, consumer purchases should be sufficient to cover the fixed and operating costs of those markets and amply reward the farmers who supply the produce, without the need for subsidies.

However, the biggest single factor that is driving major retailers to buying local is the perception that there continues to be unmet demand among consumers for local produce. Retailers will continue to expand their purchases of local food until that gap is closed. The more retailers that act on that perception in any market, the more rapidly the gap will close.

Another key factor will be the ability of local suppliers to meet all the other criteria demanded by retailers in terms of intrinsic product qualities, extrinsic product qualities or additional services required. Retailers may be more flexible in their demands while they are building up their roster of local suppliers. However, once local suppliers reach a critical mass where their product could affect the image of the retailer, local suppliers will have to meet the same rigorous standards as all other suppliers.

Retailers can gain economies from buying large volumes of product from a single supplier. Buying the same volume from many small, local suppliers will create diseconomies in purchasing, quality control, merchandising, etc. To offset these higher costs, retailers must either earn a premium price from consumers, or pay their local suppliers less per unit of product. Retailers' decisions on acceptable margins for local produce will affect both consumer demand and producers' supply response.

The current lack of agreement on the meaning of "local" and the absence of any official definition leaves the term open to manipulation and deception. Retailers are free to interpret "local" in terms of distance, shipping time or even multi-state sources. However, suppliers within 100 miles of a market are likely to resent suppliers within 200 miles of the market being treated as "local". Suppliers within one state will resent suppliers from other states being considered "local". As the economic rewards for local suppliers increase, the battle over definitions will become more intense.

The producers and marketers that will be most easily able to capitalize on the increased demand for local produce are firms that already have the size and capability to meet the needs of major retailers within their own state, for example, suppliers of fresh apples in New York, fresh potatoes in Michigan or fresh oranges in California. Clearly, it will be easier for local producers to enter or expand production of annual crops like fresh vegetables than to gear up to produce perennial crops like asparagus, tree fruit or bush berries. Large, established firms will have a distinct advantage in perennial crops. Firms that can supply both local markets and distant markets will have an additional advantage in spreading risk.

In the long run, local produce will continue to have to compete with the best produce from around the world. This means, that local producers will need to focus on those products where they appear to have the greatest comparative advantage and on those products where it will be easiest to gain economies of scale. The odds in most cases will continue to be stacked against individual, small-scale producers. Their best chance for survival will be if they can work cooperatively with other small producers to gain economies in assembling, grading, packing or delivering product.

Footnotes

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