

# **Prospects for the Market for Locally Grown Organic Food in the Northeast US**

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Comments from the following reviewers from Cornell's Department of Applied Economics and Management were instrumental in the final version of this paper; their efforts are acknowledged and appreciated: Wen-Fei Uva, Senior Extension Associate; Professor Gerald White; Professor Ralph Christy.

Funding for this research, in part, comes from the Northeast Organic Network (NEON), an innovative consortium of farmers, researchers, extension educators and grassroots nonprofits working together to improve organic farmers' access to research and technical support. NEON is funded with grant from the US Department of Agriculture's Initiative for Future Agriculture and Food Systems.



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# **Prospects for the Market for Locally Grown Organic Food in the Northeast US**

## **Abstract**

*This paper examines the current state of the market for the locally grown organic food in the Northeast U.S. Based on a series of interviews and discussions with key players, as well as information from government and private agencies, the overview, situational analysis and research needs for the industry are discussed.*

## **Introduction**

The purpose of this document is to outline the present state, future prospects and research needs of the market for local organic food (LOF) in the Northeast United States. It is the result of a number of interviews and discussions with key players in the industry from the region, and data available from various on-line sources. Although the respondents were not randomly sampled, they represent a wide array of players in this market: growers, retail buyers, growers' cooperative managers, academics, and representatives of non-governmental organizations. Many growers are participants of the Northeast Organic Network (NEON, an innovative consortium of farmers, researchers, extension educators and grassroots nonprofits working together to improve organic farmers' access to research and technical support); agents from marketing channels are mainly from the greater Ithaca, NY area. The opinions expressed are the views of the interviewed agents, and not necessarily those of the author or representative of the industry as a whole. A total of eleven interviews were conducted for this project.

Commerce in locally grown organic food is an emerging market: its products are well placed to contribute positively to community economic and social capital development. Its use of innovative marketing strategies (e.g., Community Supported Agriculture (CSA), farmers market and farm stands, etc.) directly link growers with consumers and contribute to healthy communities and the development of a sense of place for struggling rural towns (Ikerd; Lyson and Green). Its production techniques hold great promise for addressing many ecological problems associated with the current industrialized food system (Reganold et al; Green). Its service of local markets decreases dependency on fossil fuel and the environmental problems associated with the shipping of food products over long distances.

This paper is intended to highlight key issues that firms, policy makers and researchers must face if this increasingly vital sector of the agricultural economy is to achieve its full stature. It begins with an overview of the current state of the industry, then continues with an analysis of its SWOTs (Strengths, Weaknesses, Opportunities and Threats) and industry's felt needs for research.

## **Industry overview**

According to the 1997 Census of Agriculture (Economic Research Service, USDA), there are about 1,347,000 acres in organic production (crop and range/pasture land) in the U.S. including about 26,000 in New York State. Vermont has about 21,000 organic acres; Maine and Pennsylvania each have more than 6500. The acreage for New York State includes grain (5,572), beans (2,255) hay and silage (9,995) vegetables (1,615) and fruits (326). Vermont easily has the greatest percentage (23%) of total vegetable acreage in certified organic production of any state. When the results of the 2002 Census of Agriculture are available, they will very likely show that acreage has grown dramatically since 1997. Nationally, commerce in organic food grew at about 20% per year since 1990 and reached \$7.8 billion in retail sales in 2000 (Major).

The New York main organic certifying agency, NOFA-NY, currently lists 195 certified organic farms on their website (<http://ny.nofa.org>). Maine's and Vermont's certifying agencies (MOFGA and NOFA-VT) each list over 200 growers. These farms produce a full spectrum of goods, including fruits and vegetables, herbs, transplants, flowers, food and feed grains, hay, dairy, meat, processed foods, maple syrup and wine. These farms utilize a similarly broad variety of marketing channels, like farmers' markets, CSAs, wholesale, farm stand, pick your own and sales to retailers, restaurants and processors. It is clear that organic farms in the Northeast are diversified and willing to be creative and nimble in their pursuit of marketing opportunities.

## **SWOT's**

### ***Strengths***

Buyers for retail establishments (grocery stores, cooperative markets, health food stores, etc.) discussed the positive traits they attribute to LOF: freshness, longer shelf life, more nutritious, less water loss, less shipping and handling, and support of local farms and economies. They believe that their customers have a positive perception of LOF and prefer to buy it if given the opportunity. The Hartman Group finds that a great number of consumers would be willing to buy organic if it were available in stores they already patronize.

Smaller, diversified farms tend to be better able to weather poor growing seasons, price volatility and credit crunches better than their large, industrialized counterparts who are burdened by asset fixity, production of monocultures and high capitalization (Strange). They are also able to adapt to changing market forces and new product demand.



## ***Weaknesses***

The obvious weakness this industry faces is the limits of season and farm size. The growing season in the Northeast is limited to about six months (May-November). Northeast farms tend to be smaller than their Midwest or West Coast counterparts. Retail buyers find it easier to deal with single distributors who can supply the store's needs in a single delivery, ideally on a year round basis. Northeast growers may face higher production costs as well, although more research is needed to make such a comparison.

Rural areas and small towns, where many of these growers are based, tend to have less favorable conditions for organic food markets. One grower living in a rural area plans to discontinue selling to his neighbors through a CSA and instead focus on selling in larger towns, in part because few of his neighbors have much concern about or demand for local organic foods, and the few that do tend to grow gardens of their own.

## ***Opportunities***

The Northeast's geographical location presents a prime opportunity for its growers. These farms do not need to look far away to find a market: they are placed within a day's delivery time of several large cities, including New York City, Boston, Washington, Philadelphia, smaller cities like Pittsburgh, Rochester and Buffalo. The affluence and ethnic diversity of these cities present opportunities for high value niche products like fresh herbs and ethnic (e.g., Asian) vegetables.

Growing concerns about food safety, the environment, energy supply, farmland disappearance and rural communities are generating new interest in community food security and local sustainable food systems. Local organic farms deliver food with fewer pesticide residues, free of Genetically Modified Organisms (GMOs), food that is fresher and has traveled smaller distances (consuming less energy, producing less pollution and providing less wear on transportation infrastructure). Small farms are able to exist on urban fringes and other areas with high development pressures. Furthermore, the LOF system puts consumers in touch with producers, putting a face on the product, decreasing transaction and information search costs, and fostering relationships and building social capital upon which community health is based.

Many retailers, restaurants and other institutions are eager to promote their use of LOF. They are willing to overlook the inconveniences of limited season and quantity in exchange for what they perceive as a superior product. Grocery stores and cooperative markets often have special promotions for produce from local farms, including photos of the farm and farmer, write-ups, contact information, recipes, cooking demonstrations for unique or unusual products, etc. Buyers for retail stores emphasize that opportunities exist for growers to sell to these establishments, as long as minimal quantity and quality requirements are met.

## **Threats**

Because of its growing popularity, the market for LOF faces many threats. Increased demand for organic food has led to a tremendous supply response from traditional agricultural areas like California as well as increased imports from abroad. These areas enjoy seasonal and economic scale advantages that pose problems for small Northeast growers. Trade liberalization and the implementation of national organic standards (Lohr) promise to heighten this trend.

The US Department of Agriculture (USDA)'s National Organic Program itself poses problems for small growers serving local markets. The national regulations forbid the use of the word organic by anyone not certified by an agency USDA endorses. Rising certification fees and audit trail requirements place a burden on small growers, whose volume often cannot justify the costs. USDA requirements against "co-mingling" of organic and conventional crops may also require new storage, shipping and handling protocols for retailers, wholesalers and shippers.

Many observers are also concerned about contamination of organic crops by Genetically Modified (GM) pollen. Currently, regulations forbid the use of GMOs in organic food. Yet pollen from GM crops has been found to drift large distances. Farmers fear losing their organic certification if GM pollen contaminates their crops; retailers wonder how they can ensure the integrity of their products. Current regulations concerning GM pollen drift and assigned liabilities are murky and leave many unanswered questions.

The trend of retail consolidation (see Heffernan; Lyson and Raymer; Hendrickson et al.; Lewis et al.) also threatens the LOF market. A growers' cooperative representative stated that while the produce buyers at local chain grocery stores are eager and willing to sell LOF, the parent company, preferring they buy everything from a single wholesaler, opposes such practices. Service requirements and slotting fees (now in place for items such as bagged lettuce) may also create problems for small growers, shippers, etc. (Lewis et al.). Small Northeast growers may need to rely more extensively on direct market channels or market and distribute collectively (e.g., through growers' cooperatives) to supply the growing demand for LOF.

A scarcity of labor also promises to be a growing problem for growers. Organic production is very labor intensive, relying upon hand cultivation and weeding, maintenance of traps, barriers and other pest control measures. Generally, the high "eyes to acres" ratio needed to manage the complex biological systems on an organic farm requires much more labor than conventional farms, which utilize chemicals and energy inputs to accomplish these tasks.

Many farmers are forced to turn to migrant laborers or hire young apprentices or interns (who trade off higher wages for the opportunity to learn how to farm); each group has high turnover rates that make it difficult to plan for labor needs. In general, farmers have trouble finding reliable local permanent workers who are willing to work seasonally and for wages farmers can offer.

A final perceived threat comes from the sudden popularity in LOF issues in academic circles. Growers remain very skeptical and mistrustful of the Land Grant Universities (LGUs) and its model of expert consultants. This is understandable, given the historical neglect of organic agriculture that the LGUs and USDA have shown in their research and extension efforts (Sooby). These research and education institutions are seen by some in the organic community as pawns of agribusiness, chemical and input suppliers, and industrial agriculture advocates like Farm Bureau. Growers are resentful that these institutions are now receiving credit and research money for the advancement of organic agriculture while all the past achievements, risk-taking and commitment has largely been on the part of the growers.

Certainly, this increased attention and funding also present an opportunity as well, if these institutions take steps to include growers' and other agents' concerns and visions when designing and implementing their research and extension agendas. A participatory approach will both quell these concerns and ensure the research efforts solve real problems and address real needs that growers and marketers face.

## **Research Needs**

When asked about their perceived needs in the realm of the economics of organic agriculture, the most common answers came under the headings of production costs, profitability and promotion. Growers emphasized the need for research into the true costs of production, including comparisons with large scale and conventional growers, in which external costs (e.g., environmental, health, etc.) are included. These data will allow growers and their advocates to better communicate with consumers and policy makers about the benefits and importance of supporting local organic agriculture. Better tools are also needed to measure the profitability of specific crops, enterprises, etc., to guide growers' production decisions.

There is also a perceived lack of information on the marketing of organic food, most notably, in the pricing and promotion. The Product Life Cycle hypothesis (Kotler) states that in the growth phase of a product, pricing and promotion are the key elements in the firm's promotion strategies. Clearly, the LOF market has not yet reached maturity. Growers have a difficult time determining a good price for their wares; they are at best able to calculate a "break even" price to establish the minimum price goal that they will accept. Better information on organic food prices in areas with surpluses (with freight charge added on) would allow for calculations of the price in an efficient market without arbitrage opportunities. This would be an important benchmark for growers, brokers and processors in setting prices.

Industry actors, particularly growers dependent on direct marketing channels, frequently mentioned the need for better communication with consumers. They cite a need for consumer education to encourage consumers to consider the broader implications of their purchasing decisions. Such ideas are commonly understood among the organic community and discussed in various publications, but the message rarely finds its way to a wider audience.

Research needs outside of the economics include pest control, crop rotation (to avoid having to import soil nutrients), input recommendations for specific soil types and more research into understanding the “interconnectedness” of the whole farm ecosystem.

These felt needs present research and educational opportunities to researchers and extension educators. Currently, some work on cost of production and farm profitability (as well as pest management, crop rotation, and soil nutrition) is being done under the Northeast Organic Network (NEON) project. Much of this work utilizes a systems approach, looking at the farm as an integrated unit rather than looking at individual pieces (the reductionist approach). Future work on promotion (e.g., consumer preferences, relative importance and willingness to pay for traits such as local, organic; strategies for better communication and education efforts between farmers and consumers) is being considered.

## References

- Economic Research Service, USDA.  
<http://www.ers.usda.gov/Emphases/Harmony/issues/organic/organic.html#datatables>
- Green, E. (2002). Organic Farms Viable Despite Lower Yields, Study Finds. Los Angeles Times, May 31, 2002
- Hartman Group, The. (1996). The Hartman Report. Food and the Environment: A Consumers' Perspective, Phase I. Prepared for The Food Alliance by The Hartman Group, Bellevue, WA
- Hendrickson, M., Heffernan, W., Howard, P. and Heffernan, J. (2001). Consolidation in Food retailing and Dairy: Implications for farmers and Consumers in a Global Food System. Report to the National Farmers Union.
- Heffernan, W. (1998). Consolidation in the Food and Agriculture System. Report to the National Farmers Union
- Ikerd, J. (1999a). Sustainable Agriculture As A Rural Economic Development Strategy <http://www.ssu.missouri.edu/faculty/JIkerd/papers/sa-cdst.htm>
- Kotler, P. (2000). Marketing Management, The Millennium Edition. Prentice Hall, Upper Saddle River, NJ
- Lohr, L. (1998). Welfare Effects of Eco-label Proliferation: Too Much of a Good thing? (Presented at the FAMC Conference on New Approaches to Consumer Welfare, Alexandria VA, January, 1999)

Lyson, T. and Green, J. (1999). The Agricultural Marketscape: A Framework For Sustainable Agriculture and Communities in the Northeast. *Journal of Sustainable Agriculture* 15, (2/3).

Lyson, T. and Raymer, A. (1999). Stalking the Wily Multinational: Power and Control in the U.S. Food System. *Agriculture and Human Values*.17(2), 199-208.

Major, M. (2002). New Standards in Produce. *Progressive Grocer*, June 1, 2002, pp.70-71.

Reganold, J., Glover, J., Andrews, P. and Himman, H. (2001). Sustainability Of Three Apple Production Systems. *Nature* 410, 926 – 930.

Sooby, J. (2001). State of the States: Organic Farming Systems Research at Land Grant Institutions, 2000-2001. Organic Farming Research Foundation, Santa Cruz, CA (available at [www.ofrf.org](http://www.ofrf.org))

Strange, M. (1988). *Family Farming: A New Economic Vision*. University of Nebraska Press. Lincoln and London.

## OTHER A.E.M. RESEARCH BULLETINS

RB No	Title	Fee (If applicable)	Author(s)
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