



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Comparing Locally Oriented and Mainstream Farming: Observations from the Oregon Blueberry Industry

Wesley Bignell¹

Introduction

Local food continues to grow in popularity among consumers and gain interest among policy makers. Many large grocery chains, hospitals, and schools have begun to source products from local farms. The U.S. Department of Agriculture has launched initiatives such as “Know Your Farmer, Know Your Food” to expand local food markets. While local food sales represent a small share of total agricultural sales, growth in this sector could reshape where food is grown, how far it travels, and the composition of farms that supply the nation’s food. This paper helps improve understanding of the local food trend by examining how the characteristics, motivations, and information networks of locally oriented farms differ from farms that focus on mainstream markets.

Previous studies indicate that locally oriented farms differ in a variety of ways. On average, farms that sell locally and/or direct-to-consumer are smaller (Martinez et al., 2010; Starr et al., 2003; Monson, Mainville, and Kuminoff, 2008).² They are also more likely to sell fruits and vegetables (Ostrom and Jussuaume, 2007; Detre, Mark, Mishra, and Adhikari, 2009), grow a diverse variety of crops (Starr et al., 2003), and use organic production methods (Detre et al., 2011; Martinez et al., 2010; Ostrom and Jussuaume, 2007; Monson, Mainville, and Kuminoff, 2008). Operators of locally oriented farms tend to be younger (Uematsu and Mishra, 2011), more educated, and less experienced (Low and Vogel, 2008; Monson, Mainville, and Kuminoff, 2008).

This paper compares three types of farms – those that sell almost exclusively through mainstream, non-local supply channels (mainstream); those that sell almost exclusively through local channels (local); and those that sell through a combination of local and mainstream channels (combination). The results show that, among the farms in the study, those farms selling primarily through mainstream channels systematically differ from farms that sell locally. Overall, the local farms are smaller, more recently established, less capital intensive, and less profit-oriented. Combination and local farms also differ. The local farms are smaller and newer than combination farms. Compared with mainstream or combination producers, local producers are less experienced and more interested in using their farms to accommodate their lifestyles and personal values. Analysis of the data reveals that differences between each of these types of farms are driven by the economic and social contexts of mainstream and local markets as well as by the personal characteristics of the producers who self-select into each market.

¹ The author is a graduate student in the Department of Sociology at University of Washington. The research was conducted while he was a graduate student in the Department of Agricultural and Resource Economics at Oregon State University.

² Though direct sales are often used as a proxy for local sales, many local transactions are not direct and many direct sales are not local (Lev and Gwin, 2010).

Study Location, Definitions, and Method

The study looked in detail at one agricultural product (blueberries) in one growing region (Oregon's Willamette Valley). The Willamette Valley region is a major center of blueberry production with over 800 farms and over 6000 acres planted (USDA, 2009). The region is also home to a thriving local food movement with over 60 farmers markets and several organizations that facilitate and promote local food markets. In the Northwest U.S., 18 percent of farms sold through direct supply chains compared with six percent nationally in 2007 (King et al., 2010). Fresh direct-to-consumer blueberries are widely available in this region through u-picks, farm stands, and farmers markets. However, the quantity of blueberries produced in the area far exceeds local demand.

Across the local food movement and local food research, definitions of 'local' vary considerably (Hand and Martinez, 2010). This study defines 'local' as the Willamette Valley region and 'local food' as any food that farm operators produce and sell directly to local consumers or through channels specifically targeting local consumers. Farms are divided into the mainstream, combination, and local categories based on an estimate of the proportion of each farm's sales that are local.^{3,4}

The study's purpose is to develop insights into the marketing strategies pursued by different types of farms. In order to explore several aspects of different marketing arrangements, an exploratory multiple case design was used (Yin, 1994).⁵ Both farms and marketing categories are used as cases at two distinct levels of analysis. Farm cases were selected based on geographic location and publicly available information about their marketing practices. Only farms with at least one full-time, primary farming occupation owner were considered. Data were collected in spring of 2009 through on-farm interviews, observation of relevant farm-related events, and compilation and review of publicly available documents on the farms and markets studied. The general research strategy was to (1) purposefully select a small number of farms using the above criteria, (2) collect and organize data about those individual farms, (3) analyze the data at the individual farm level, (4) compare individual farms for similarities and use that as the basis for determining category level characteristics among farms with shared marketing practices, and (5) compare differences among marketing categories.

Results

Farm Characteristics

The results reveal clear differences between local, combination, and mainstream farms. Table 1 (below) shows how farms in each category compare in size, production, employment, and years of operation. The three mainstream farms are characterized by large size, specialized labor forces, and capital-intensive operations. They range in size from 250 to 1000 acres and produce between 655,000 and 2.1 million pounds of blueberries annually. Each farm produces only a few crops and emphasizes blueberries. Two of the farms were established over 70 years ago.

³ In practice, dividing the farms into three categories was not difficult because the mainstream farms sold almost nothing locally, the combination farms all relied significantly on both local and mainstream sales, and none of the local farms indicated any sales outside of local channels or outlets.

⁴ Classification is based solely on owners' responses to questions regarding how they sell their products and independent of any other information about the farm.

⁵ Exploratory qualitative research methods have been advocated by many economic researchers (Bitsch, 2005; Piore, 2006; Westgren and Zering, 1998; Blinder, 1990; Bewley 2002).

The other is less than 20 years old, but the owner has worked in the blueberry industry much longer.

Each mainstream farm maintains a year-round specialized staff that includes multiple tiers of management and employs between 175 to 400 workers during harvest. Two of these farms have large technologically advanced packing, processing, and storage facilities. The other mainstream farm focuses on production and continuously seeks out and experiments with new technologies and practices.

Table 1. Farm Characteristics

	Mainstream			Combination					Local				
Production Acreage	1000	950	250	250	200	170	80	25	12	7	6	3	1
Blueberry Acreage	500	100	75	2	75	1	17	25	12	1	6	0.4	0.5
Blueberry Production (lbs)	2.1m	1.2m	655k	20k	500k	8k	65k	120k	n/a	200	55k	500	4k
Employees (peak)	175	200	400	20	40	40	130	50	n/a	6	15	5	6
Decade Founded	1990	1910	1930	1990	1900	1980	1980	1980	2000	2000	1990	1990	1990

In contrast, the five local farms are small and run by a single individual or household. Three local farms focus almost exclusively on blueberries, one focuses on strawberries, and one is more diversified. They range in size from 1 to 12 acres and produce between 200 to 55,000 pounds of blueberries annually. They were established relatively recently, with the oldest founded in the early 1990's.

The local farms perform production and retailing for most of what they sell and operations are much less capital intensive. Owners complete most tasks themselves and hire additional labor on a seasonal or as needed basis. Two of the farms employ one year-round part-time employee. Because they are much smaller, the local farms employ only five to fifteen people during harvest season.

The five combination farms fall very much between the mainstream and local farms in each of the factors considered. They are larger than any of the local farms and smaller than any of the mainstream farms.⁶ Four of the farms have between one and eight year-round employees. Two of the farms focus primarily on blueberries, one focuses on strawberries, and two produce a diverse variety of crops. Local direct-to-consumer sales are the first priority for four of the five combination farms. The fifth farm uses direct-to-consumer sales as a means of advertising to generate interest among local and non-local retail outlets and consumers to purchase through mail order.

One combination farm has a technologically advanced packing and processing facility. This producer has ambitions to expand his operation and serve a larger, more geographically dispersed set of buyers. The other combination farms do not have the same post-harvest equipment, though they do own or lease large-scale production equipment.

⁶ Farm size was generally unknown prior to the interviews, but it turned out to be perfectly aligned with marketing practices with mainstream farms being the largest and local farms the smallest. Ideally, there would have been some overlap in size among the marketing categories.

Consistent with previous studies, the cases in this study suggest that the decision to sell through local marketing channels is related systematically to farm size. The variation in labor specialization and capital intensity likely follows from differences in size and may also be attributed in part to the local producers' interest in low-tech, 'sustainable' practices and contentment with their current levels of production.

Producer Background and Motivations

Many factors enter into a producer's farm decisions. These decisions depend in part on the knowledge the producer derives through experience and training. Table 2 (below) shows each producer's family background in agriculture and indicates college education in an agricultural field. Farm decisions may also depend on the producer's preferences for certain types of work (Key and Roberts, 2009; Hunt, 2007) or providing social or environmental goods (Alkon, 2008; Chouinard, Paterson, Wandschneider, and Ohler, 2008; Lichtenberg and Zimmerman, 1999; Starr et al, 2003). Table 3 (below) summarizes the interview responses of farm owners regarding the choice to own and operate a farm.

Table 2. Producer Background in Agriculture

	Mainstream			Combination				Local					
Grew up on Family Farm	•	•	•	•	•		•	•	•			•	
Worked on Family Farm	•	•	•	•	•		•	•					
College Ag Education				•			•						

All of the mainstream producers grew up farming and all have family ties to the blueberry industry. Two mainstream producers took over well-established blueberry farms and packing and processing operations from their parents. The other mainstream producer grew up on a farm and learned the blueberry business through working for a well-established blueberry operation owned by a family member. In the interviews, the mainstream producers explained that some of their decisions were based on their preferences for engaging in certain tasks, but throughout their responses they made clear that their central concern is to maximize profit.

Two local producers grew up on a family farm, but neither indicated having had an active role in its operation. One learned to grow blueberries through conversations with other nearby growers in the year before establishing his farm. The other learned through trial and error and by spending time with a family member who farms. Of the local producers who did not grow up farming, two learned agriculture through gardening and one learned by doing after purchasing the farm.

Lifestyle and values are particularly important for local producers. They all acknowledge that they want their farms to provide income, but none expressed interest in significantly expanding her operation. They indicated that they farm for the lifestyle and enjoy living on the farm and having the opportunity to interact with customers. They also indicated the importance of using their farms to demonstrate sustainable farming practices and serve their communities.

Four combination producers grew up farming. Two took over well-established blueberry farms from their parents. Two others earned bachelor's degrees in agricultural fields, worked in jobs related to agriculture, and saved until they were able to purchase their own farms. One combination producer, however, was raised in a suburban community and acquired his knowledge of agriculture through work experience on an organic farm.

Like the mainstream producers, the combination producers expressed a focus on operating a profitable business. All of the combination producers, however, placed considerably more emphasis on locating outlets with greater price stability and where they had more influence in negotiations than with their current mainstream buyers. Four of the combination producers indicated enjoying the farming lifestyle and working hard to remain in the industry. Two combination producers indicated a strong value orientation in their production practices. One focuses on food nutrient content. The other is developing farming techniques that go beyond organic standards and uses the farm to educate customers about his practices and provide food to local charities.

Table 3. Producer Motivations to Own and Operate a Farm

	Mainstream			Combination					Local				
Income/Profit	•	•	•	•	•	•	•	•	•	•	•	•	•
Run Own Business	•				•		•		•		•		
Enjoys Production	•		•	•	•	•	•		•	•	•	•	•
Enjoys Marketing		•	•		•				•	•	•	•	•
Interact with Other Farmers	•					•				•		•	
Farming Lifestyle				•	•	•			•	•	•		•
Continue Family Business		•						•	•				
Good for Family/Children									•		•	•	
Interact with Customers						•			•	•	•	•	•
Customer Satisfaction						•	•			•	•	•	•
Customer Health					•	•				•		•	
Community Involvement						•			•			•	
Protect Environment						•				•		•	•

The producers’ background and motivations reveal important differences between farms. The local producers have less extensive backgrounds in agriculture than the mainstream or combination producers. Rather than learning through experience on their family’s farm or through formal agricultural education, they learned through gardening experience, neighboring farms, and trial and error. They are also less concerned with maximizing profit than mainstream or combination farms.

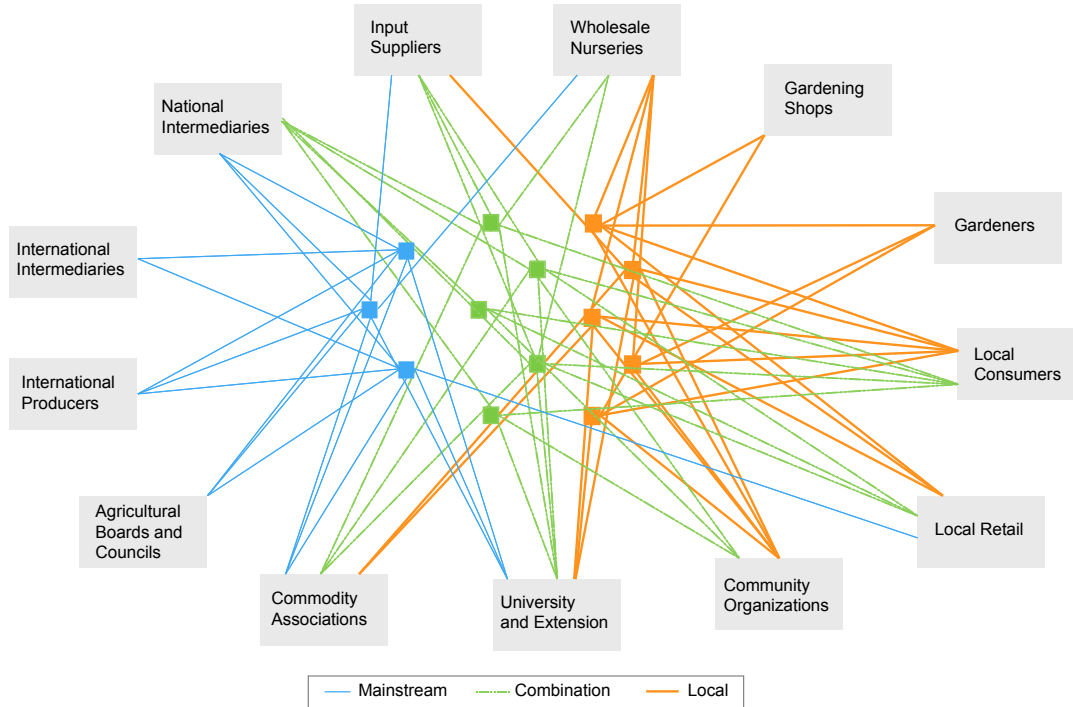
Producer Information Linkages

In addition to knowledge and personal motivations, producer decisions also depend on access to information. The figure below shows linkages between case farms and the groups that provide them with important information for their production and marketing decisions. It reveals that the mainstream, combination, and local producers in this study occupy different positions within blueberry-related information sharing networks.

The mainstream producers share with other participants in the blueberry industry locally, nationally, and internationally, and with organizations and researchers who support that industry. Local producers share information primarily with other locals, including local producers, community organizations, consumers, and gardeners. While both local and mainstream

producers participate in commodity associations and interact with university researchers, those interactions are qualitatively different because each of the mainstream producers holds a leadership position in at least one association, which they claim provides them with better access to important participants in the blueberry industry and better access to researchers. Local producers have very limited connections to participants in the mainstream blueberry industry, particularly to large-scale buyers and international producers. Mainstream and local producers also report relatively limited interaction with one another.

Figure. Important Information Sharing Linkages for Case Farms



Though the mainstream and local producers are largely segregated in terms of utilized information sources, both groups interact with combination producers. The combination producers' information seeking behavior overlaps that of both local and mainstream producers. They report receiving important information from large buyers, local retailers, and consumers, and actively participate in both commodity associations and community organizations. Two of the combination producers are involved in ongoing university research projects. This overlap in information sharing with participants in both mainstream and local markets provides a communication bridge between the two groups.

Discussion

Consistent with previous literature on local marketing, this study finds that farm size and local sales are directly related. Interviews suggest local markets are too small to absorb very large quantities of a single product and require too many small transactions to be attractive to large farms. Even as some combination farms expand their local sales, they expressed that they would continue to have excess production for the foreseeable future. At the same time, however, even the larger combination farms have difficulty competing in mainstream markets. Four combination farms in this study started out selling only to mainstream buyers, but turned to local sales because the prices in the mainstream markets were too low and unstable to be profitable at their relatively moderate scales of production. The small local farms are not interested in entering mainstream markets for a variety of reasons including lack of profitability, risk, desire to interact with customers, and even moral opposition to mainstream agricultural markets.

This study also found that information sharing and utilization capacities provide larger farms with an important advantage in mainstream markets. Production practices and crop varieties continuously evolve and producers must keep up with new developments in order to remain competitive. Additionally, identifying and communicating with buyers is an information and time intensive process. Mainstream farms have large internal organizations. The owners and their staff can dedicate more time to attending events, monitoring market conditions, conducting transactions, staying current on new production practices, and conducting on-farm experiments. The time and expense that large farms dedicate to these peripheral activities costs less per unit than for smaller farms.

Similarly, the producers in this study who grew up and worked on their families' mainstream farms, which include four of the five combination producers, have a more competitive position in mainstream agriculture. They are familiar with running large-scale operations and selling to large mainstream buyers. Their existing relationships with industry actors and other mainstream farmers help to connect them to resources and opportunities, verify reputations when needed, and quickly solve problems. Additional experience reduces the expense of learning and important social ties reduce search and information costs relative to less experienced and less connected farmers.

Local farms lack the land, equipment, mainstream connections, and experience of mainstream and combination farms. The owners, however, have a broader set of motivations for farming and their decisions depend less directly on the desire to maximize profits. Some local farm owners claim to make very modest incomes, much lower than if they worked in a different occupation. They also show very little interest in increasing the scale of their operations. These producers turned to agriculture for the lifestyle and the opportunity to express their values. Local food markets allow them to live on a farm, work outside, use their preferred production practices, interact with community members, and provide public services.

Conclusion

This set of case studies helps provide a better understanding of how and why farms that pursue local market channels differ from those that focus on mainstream channels. Large, well-established, well-connected blueberry farms have important economic advantages that are unavailable to other farms. Their scale of production and low per unit costs allow them to compete more effectively in mainstream markets, which makes those markets more economically attractive to them relative to other farms. Local food markets enable smaller farms with owners who value nonpecuniary aspects of the farming occupation to stay in business and

continue to develop innovative practices, provide specialized products, and personally engage with local businesses and consumers.

At present, there are relatively few economic studies regarding why farms sell through local marketing channels. Future research should consider the range of benefits that accrue to locally oriented farm owners through their work, and attempt to value those benefits and assess their impact on farm decisions. Future research should also investigate how local food markets are changing over time. In particular, some major grocery chains are attracting larger farms and suppliers to local sales by offering an opportunity to fill large orders at prices above wholesale. These new entrants could impact prices received by existing local farms and, in turn, the composition of farms that sell local food.

References

- Alkon, Alison Hope. 2008. "From Value to Values: Sustainable Consumption at Farmers Markets." *Agriculture and Human Values*. 25: 487-498.
- Bewley, Truman. 2002. "Interviews as a Valid Empirical Tool in Economics." *Journal of Socio-Economics*. 31: 343-353.
- Bitsch, Vera. 2005. "Qualitative Research: a Grounded Theory Example and Evaluation Criteria." *Journal of Agribusiness*. 23(1): 75-91.
- Blinder, Alan S. 1990. "Learning by Asking Those Who Are Doing." *Eastern Economic Journal*. 16(4): 297-306.
- Chouinard, Hayley H, Tobias Paterson, Philip R. Wandschneider, and Adrienne M. Ohler. 2008. "Will Farmers Trade Profits for Stewardship? Heterogeneous Motivations for Farm Practice Selection." *Land Economics*. 84(1): 66-82.
- Detre, Joshua D., Tyler B. Mark, Ashok K. Mishra, and Arun Adhiraki. 2011. "Linkage between Direct Marketing and Farm Income: a Double-hurdle Approach." *Agribusiness*. 27(1): 19-33.
- Hand, Michael S, and Stephen Martinez. 2010. "Just What Does Local Mean?" *Choices*. 25(1).
- Hunt, Alan R. 2007. "Consumer Interactions and Influences on Farmers' Market Vendors." *Renewable Agriculture and Food Systems*. 22(1): 54-66.
- Key, Nigel and Michael J. Roberts. 2009. "Nonpecuniary Benefits to Farming: Implications for Supply Response to Decoupled Payments." *American Journal of Agricultural Economics*. 91(1): 1-18.
- King, Robert P, Michael S Hand, Gigi Digiacomio, Kate Clancy, Miguel I Gómez, Shermain D Hardesty, Larry Lev, and Edward W Mclaughlin. 2010. *Comparing the Structure, Size, and Performance of Local and Mainstream Food Supply Chains*. ERR-99, U.S. Department of Agriculture, Economic Research Service.
- Lev, Larry, and Lauren Gwin. 2010. "Filling in the Gaps: Eight Things to Recognize about Farm-Direct Marketing." *Choices*. 25(1).

- Lichtenberg, Erik and R. Zimmerman. 1999. "Farmers' Willingness to Pay for Ground Water Protection." *Water Resources Research*. 35: 833–841.
- Low, Sarah A., and Stephen Vogel. 2011. *Direct and Intermediated Marketing of Local Foods in the United States*. ERR-128, U.S. Department of Agriculture, Economic Research Service.
- Martinez, Steve, Michael Hand, Michelle Da Pra, Susan Pollack, Katherine Ralston, Travis Smith, Stephen Vogel, Shellye Clark, Luanne Lohr, Sarah Low, and Constance Newman. 2010. *Local Food Systems: Concepts, Impacts, and Issues*. *Agricultural Marketing*. ERR-97, U.S. Department of Agriculture, Economic Research Service.
- Monson, Joseph, Denise Mainville, and Nicolai Kuminoff. 2008. "The Decision to Direct Market: An Analysis of Small Fruit and Specialty-Product Markets in Virginia." *Journal of Food Distribution Research*. 39(2): 1-11.
- Ostrom, Marcia, and Raymond Jussaume. 2007. "Assessing the Significance of Direct Farmer-Consumer Linkages as a Change Strategy in Washington State: Civic or Opportunistic?" In *Remaking the North American Food System: Strategies for Sustainability*, ed. C. Clare Hinrichs and Thomas A. Lyson, 235-259. Lincoln and London: University of Nebraska Press.
- Piore, Michael J. 2006. "Qualitative research: does it fit in economics?" *European Management Review*. 3(1): 17-23.
- Starr, Amory, Adrian Card, Carolyn Benepe, Garry Auld, Dennis Lamm, Ken Smith, and Karen Wilken. 2003. "Sustaining Local Agriculture: Barriers and Opportunities to Direct Marketing between Farms and Restaurants in Colorado." *Agriculture and Human Values* 20(3): 301-321.
- Uematsu, Hiroki, and Ashok K. Mishra. 2011. "Use of Direct Marketing Strategies by Farmers and Their Impact on Farm Business Income." *Agricultural and Resource Economics Review*. 40(1): 1-19.
- U.S. Department of Agriculture. 2009. "2007 Census of Agriculture." National Agricultural Statistics Service, U.S. Department of Agriculture, Washington, D.C.
- Westgren, Randall, and Kelly Zering. 1998. "Case Study Research Methods for Firm and Market Research." *Agribusiness*. 14(5): 415-423.
- Yin, Robert K. 1994. *Case Study Research: Design and Methods*. Newbury Park, CA: Sage.