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## "Buy Local" Consumer Behavior and Wood Products: A Case Study

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## "Buy Local" Consumer Behavior and Wood Products: A Case Study

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B.A., University of Colorado, 2007

### A Thesis

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Requirements for the Degree of

Master of Science

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## Master of Science Thesis

"Buy Local" Consumer Behavior and Wood Products: A Case Study

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#### **ABSTRACT**

Consumers in the United States are increasingly interested in buying locally grown/produced (LG/P) agricultural products (Connor et al. 2009). In comparison, consumer interest in buying local wood products is not evident. In the same way that the LG/P agriculture phenomenon has helped preserve farmland and foster awareness of where food originates, expanding local production of forest products may also create similar benefits for forestland both locally and globally. However, studies examining the "Buy Local" phenomenon and its potential to inform the local production of wood products are not apparent in the literature.

This study examined consumer attitudes and beliefs that influence consumption of locally grown or produced agricultural products using the Pioneer Valley of western Massachusetts as a case study. Opinion leader interviews and consumer surveys were designed to answer the questions: why do consumers purchase local agriculture products?; what are the consumer attitudes towards buying local agricultural products?; and would these attitudes also support local wood consumption?

Results from this case study revealed that consumers in the Pioneer Valley buy locally produced agriculture because they have favorable attitudes towards supporting local economies, and because of personal connections with local farmers. It was further revealed that attitudes that support local agriculture would also support purchasing local wood products, but consumers may not associate buying local wood products with supporting local economies. As such, educational and marketing efforts will be required to make clear connections between using local wood products and supporting local economies and communities.

#### 1. INTRODUCTION

Consumers in the United States are increasingly interested in buying locally grown/produced (LG/P) agricultural products (Connor et al. 2009; Berlin et al. 2009; Chambers et al. 2007; Guptill and Wilkins 2002; Kloppenburg et al. 1996). In comparison, consumer interest in buying LG/P wood products is not evident. Globalization of agricultural production has been associated with a range of negative ecological, economical and social consequences (Berlik et al. 2002; Tolbert et al. 1998). For example, carbon emissions and pollution from transportation, the rising price and decreasing supply of fossil fuels, environmental degradation associated with large-scale agriculture, etc. have raised serious questions about the sustainability of our current agroeconomic system (Kloppenburg et al. 2000; Feenstra 1997). Alternatively, local sourcing eliminates long-distance transportation, and thereby decreases the consumer's carbon footprint (Peters et al. 2008; Kloppenburg et al. 2000). Shortening the distance between production and consumption, and all steps in between, reduces the overall environmental impact of any given product (Kloppenberg 2000; Feenstra 1997). Purchasing LG/P goods stimulates local economies via a multiplier effect whereby profits re-circulate within the community rather than outside of it (Goodman 2004). Social benefits of local food systems include increased civic engagement, social capital and civic welfare (Vermeir and Verbeke 2006; Weatherell et al. 2003; Hinrichs 2003), especially in regions experiencing negative effects of economic globalization such as the northeast U.S. (Lyson and Green 1999; Tolbert et al. 1998). "Buy Local" initiatives that are based on

interpersonal relationships between producers and consumers promise various benefits to individuals and communities (Connor et al. 2009).

In short, the resurgence of local food systems, as exemplified in Buy Local campaigns, is a complex phenomenon with the potential to deliver economic, environmental and social benefits (Hinrichs and Allen 2008; Marsden and Murdoch 2006; Hinrichs 2003; Feenstra 1997). Increasing demand for LG/P agriculture products (Goodman and Goodman 2008) has made small farms economically viable, and in many areas of the country, their numbers are increasing (U.S. Census Bureau 2007). Since abandoned or non-functioning farmland makes up a large portion of land converted to commercial and residential development (Kittredge 2009), the revival of abandoned farms is an alternative to development (Irland 1999), and buying LG/P food is a mechanism for farmland preservation (Connor 2009; Peters et al. 2008; Feagan 2007; Morgan et al. 2006; Kloppenburg 2000). Although some scholars question the scientific basis of claims about the specific benefits and effects of local food systems (e.g. Jones et al. 2008; Born and Purcell, 2006; Schlich and Feissner 2005), most agree that place-based agriculture production and consumption is positive (Morgan et al. 2006; Feenstra 1997).

In the same way that the LG/P agriculture phenomenon has helped preserve farmland and foster awareness of where food originates, expanding local production of forest products could create similar benefits both locally and globally (Foster and Labich 2008; Wernick et al. 2000). Americans demand large quantities of wood products but are opposed to extracting this wood from domestic forests, preferring instead to import products made from timber harvested in foreign countries, often under less stringent environmental protection (Bradley and Kearney 2007; Wolf 2007; Berlik et. al 2002; ;

Dekker-Robertson and Libby 1998). Berlik et al. (2002) refer to this as an "illusion of preservation," and call for increased domestic extraction that takes place under responsible forest management. Responsible forest harvesting mimics natural disturbance, encourages regeneration, improves health, and maintains aesthetic landscapes (Foster and Labich 2008). Consuming timber from local sources might help clarify the important relationship between people and woodlands, allowing for more reflexive consumption of wood products and a heightened sense of stewardship. However, to date, studies examining the LG/P phenomenon and its potential to inform the local production of wood products are uncommon.

This study examined why the LG/P phenomenon has worked for agricultural products but hasn't expanded into the realm of wood products. Employing a case study approach, the LG/P phenomenon was examined in a geopolitical, segmented area—the Pioneer Valley of western Massachusetts (Figure 1). The social psychological factors influencing buying behavior, such as attitudes and beliefs, were examined. Specifically, the following three questions were addressed: (1) Why do consumers purchase LG/P agricultural products?; (2) What are their attitudes towards LG/P agricultural products?; and (3) Do these attitudes support local wood consumption? The results of this study will inform forestry professionals, resource managers, policymakers, and business entrepreneurs concerned with wood products and/or local production about motivating consumers to purchase LG/P wood products.

#### 2. RESEARCH DESIGN AND METHODS

#### 2.1 Purpose

Using a case study approach, this study attempted to analyze, describe and explain why consumers increasingly choose to buy LG/P agricultural products to gain a better understanding of the potential consumer support for local wood products. With this scope, I investigated attitudes and beliefs surrounding LG/P agricultural products in two groups of people—opinion leaders and consumers.

I used surveys to address the attitudes and beliefs that influence a consumer's choice to buy LG/P agricultural products. Specifically, What are the attitudes and beliefs that influence a consumer's choice to buy LG/P agricultural products?; Do the consumer attitudes that influence consumption of LG/P agricultural products support local wood consumption?; and What are the barriers to expanding markets for local wood products? I hypothesized that people who buy LG/P agriculture products will also buy LG/P wood products.

#### 2.2 Study Site

Any case study needs a defined unit of analysis, or case, upon which the study is based. The unit of analysis in this study is a specific geographic region in which consumers of LG/P agricultural products, opinion leaders communicating about LG/P agricultural products, organizations actively promoting LG/P agricultural products and an infrastructure that enables LG/P agriculture are evident. The Pioneer Valley of western Massachusetts (hereafter referred to as the Pioneer Valley) encompasses three counties (Hampden, Hampshire and Franklin) surrounding the Connecticut River in northern

Massachusetts, USA (Figure 1). Together 1,900 farms across the Pioneer Valley produce \$121 million in products each year (Massachusetts Department of Agricultural Resources 2010). Massachusetts ranks second in New England in direct sales from farms to consumers, with \$42 million in products accounting for 40 % of New England's total direct marketing sales (Mass. Department of Agricultural Resources 2010). These statistics indicate a strong presence of Buy Local

agricultural consumption. Organizational support is evidenced by the presence of several organizations actively promoting Buy Local consumer behavior (e.g. LocalHarvest, Pioneer Valley Local First, Pioneer Valley Relocalization Project, etc.) including Communities Involved in Sustainable Agriculture (CISA; www. buylocalfood.org), whose "Buy Local/Be a Local Hero" campaign has been used as a model for local food systems in at least eight regions across the country (Allen and Hinrichs 2007).

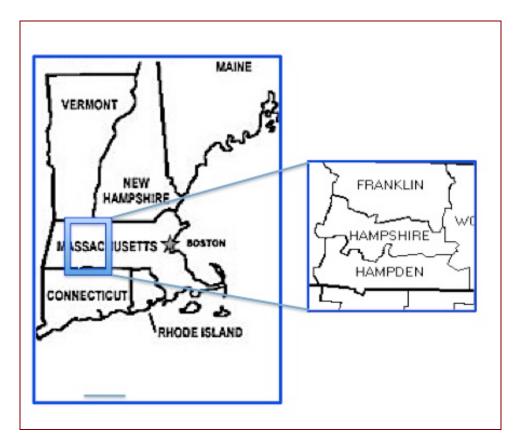


Figure 1. Location of the western Massachusetts' Pioneer Valley, in the northeastern United States.

#### 2.3 Theoretical Background

The shift from conventional to alternative forms of consumption, as seen in the Pioneer Valley's LG/P phenomenon, can be understood through theories and conceptual frameworks, along with key concepts, that describe consumer behavior in general. In classical economics, the theory of rational choice (Simon 1955) suggests that individuals behave purposively, and act in such a way as to maximize utility and minimize costs. Rational theories of behavior and decision-making, such as that proposed by Simon (1955), assume known and fixed outcomes of decisions but critics (e.g. Coleman 1992) argue that outcomes are adaptive and constantly changing. The theory of bounded rationality (Jones 1999) proposes that individuals attempt to satisfy multiple goals of varying importance simultaneously. Decision-making and behavior are affected by both rational (e.g. factual) and irrational (e.g. emotion) thinking and occur with imperfect information. Rather than making a detailed calculation of pros and cons, individuals use heuristics, or cognitive shortcuts, to make choices.

#### 2.3.1 Theories of Consumer Behavior

A number of theories have been used to examine consumer behavior in the context of local (and organic) food consumption. For example, the theory of planned behavior (Ajzen 1991) and the theory of reasoned action (Fishbein 1980) have been used to examine consumer behavior, especially as it relates to information. Actor-network theory (Callon 1990) has been used to examine relationships between the various actors in local food systems, including producers, distributors, retailers, and consumers (Goodman 2002; Jarosz 2000; Murdoch 1998). Researchers employ conventions theory

to examine different conventions of "quality" as institutional spaces in which economic regulation is more than just regulation by price and instead is based upon agreements about different forms of "quality" (Parrott et al. 2002; Sylvander et al. 2004). From this perspective, different conventions of quality govern economic transactions and influence consumer behavior.

#### 2.3.2 Operational Framework: The Reflexive Consumer

The theory of reflexive consumption (Beckett and Nayak 2008; Weatherell et al. 2003; DuPuis 2002; DuPuis 2000) was used to guide this research. Reflexive consumption encompasses the concepts of embeddedness and identity formation. In general, postmodern theories of consumer behavior attempt to connect the social and economic factors involved in market transactions. For example, the concept of social embeddedness (Granovetter 1985) refers to the idea that economic transactions are embedded within, rather than independent from, social systems. In its simplest form, embeddedness refers to the non-economic factors and the social contextual variables that influence economic transactions. Embeddedness provides insight into the role of interpersonal and inter-organizational networks that form in successful local food systems and is critical to understanding the processes driving formation and persistence of local food systems (Hinrichs 2003).

While embeddedness suggests that consumption takes place in a social context, reflexive consumption views consumption as a form of politics, "a political activity" in which consumers weigh competing claims and narratives in their social network and make judgments based on their own attitudes and values as well as practical factors such

as cost or availability (Hinrichs 2003; Weatherell et al. 2003; DuPuis 2000). In a study of consumer perceptions of local goods, Weatherell et al. (2003) concluded "individuals continually construct meanings to make sense of their choices in light of their positions relative to others and the environment." In other words, individuals actively construct meaningful, viable and coherent self-identities through reflexive choices, with consumption playing a key role in identity formation (Beckett and Nayak 2008).

Consumption, and thus identity formation, occurs in a context regulated by social norms and values (Dilley 2009), where identities are derived from available narratives (Somers 1994). Consumption is no longer based on demographic factors but rather consumers' shared values, lifestyles or self-images (Warde 1997). In the context of the Buy Local phenomenon, consumers and producers are engaging in entirely different relationships based on trust, reciprocity and common values (Weatherell et al. 2003). [Reflexive consumption and the reflective consumer are used interchangeably in the literature (see Beckett and Nayak 2008; DuPuis 2000)].

#### 2.4 Data Collection and Analysis

#### 2.4.1 Study Group 1: Opinion Leaders

In the first phase of this study, semi-structured telephone interviews were conducted with opinion leaders. Snowball sampling was used to identify a total sample of nine opinion leaders. In order to initiate snowball sampling, I identified two opinion leaders, who were then able to refer me to the other seven opinion leaders. One of these initial opinion leaders was identified through a Google search of the terms "'Buy Local' agriculture, Pioneer Valley." The first five results directed me to a non-governmental

organization entitled "Communities Involved in Sustaining Agriculture" (CISA), and eventually to one of the Directors of CISA. An additional opinion leader was identified through an interview with a University of Connecticut employee highly connected to the agricultural sector in Massachusetts.

Opinion leaders are individuals who influence opinions, actions and behaviors of groups of people through communication (King and Summers 1970). They convey messages to the public and play a role similar to that of the media in interpreting and disseminating information related to a specific subject. These individuals often have direct experience and involvement with the given subject or product, which motivates communication about that subject or product (Katz 1957). As much as 80 percent of purchasing decisions are a result of direct recommendations and word-of-mouth, and opinion leaders initiate much of this interpersonal communication (King and Summers 1970). Following Dillman's Tailored Design Method (Dillman 2007), questionnaires consisting of both open- and closed-ended and leading questions served as the interview protocol in both surveys. Each questionnaire was pre-tested to identify wording and timing issues as well as technical problems (e.g. telephone recording). Opinion leader interviews were tape recorded and transcribed.

#### 2.4.2 Study Group 2: Consumers

The second component of this study was a survey of local agriculture consumers in the Pioneer Valley. On-site structured surveys were conducted with 44 consumers at a winter farmer's market in the Pioneer Valley. Dillman's Tailored Design Method (Dillman 2007) was used to guide the interview process. The University of Connecticut's Institutional Review Board (IRB) requires prior approval for any research involving

human subjects. An application for approval was submitted, along with each survey instrument and all researcher-subject correspondence such as introductory letters and informational handouts. Additionally, signed consent forms were obtained from each of the nine opinion leaders.

Directed content analysis was used to analyze and interpret transcripts of opinion leader interviews (Hseih and Shannon 2005). Transcripts were reviewed continuously and text categorized into existing analytical categories. As new analytical categories emerged, transcripts were re-reviewed and exemplary phrases or paragraphs were sorted into new themes. I used a theoretical framework to guide inquiry with analytical categories derived primarily from the research questions.

#### 3. FINDINGS AND DISCUSSION

The theory of reflexive consumption identifies four factors—claims, practical factors, attitudes and beliefs—that contribute to a person's decision to purchase a given product (DuPuis 2000). The evaluation of competing claims by various actors within an individual's network lead to the development of certain attitudes and beliefs about a product or group of products (Somers 2004; DuPuis 2000). Practical factors such as cost and availability lead to the formation of additional attitudes and beliefs about the product (DuPuis 2000). Together, these claims, practical factors and the resulting attitudes and beliefs influence an individual's decision to purchase the given product, or the decision not to purchase the product (DuPuis 2000; Weatherell et al. 2003). This research, which used the theory of reflexive consumption as a theoretical framework, consisted of two types of surveys; the first involved semi-structured interviews of opinion leaders, and the second involved a survey of consumers of LG/P agricultural products. Using the Pioneer Valley in western Massachusetts, USA, as a case study, each survey addressed perceptions of local agriculture and perceptions of local wood products in their respective sample population.

#### 3.1 Agricultural Themes: Opinion Leaders

I think it makes everybody feel good, you know, local products, that they know it's grown here, they're supporting local farmers, its fresher, it's more nutritious for the most part, and you know, I think people like getting out to the farm, seeing and meeting the farmers and their families, and getting to know them a little bit. They're there neighbors and their friends in many cases and you know that kind of feeds into it as well...I think people feel good about supporting the local businesses.

-Richard Burke, State Executive Director, Massachusetts Farm Services Agency (Interview by the author, Amherst, Massachusetts, January 6, 2011)

#### 3.1.1 Consumer Attitudes and Beliefs

Consumer attitudes and beliefs are an important driver of the Buy Local agricultural phenomenon (Zepeda and Leviten-Reid 2004). The survey instrument used in opinion leader interviews included several questions addressing the reasons why consumers buy LG/P agricultural products (Appendix 1). Like the quote above, all opinion leaders indicated multiple reasons driving the consumption of LG/P agriculture. According to opinion leader Charlie Thompson (interview by the author, Boston, Massachusetts, February 2, 2011) "they all kind of layer on."

All opinion leaders identified supporting local economies and/or local communities as a reason consumers buy LG/P agriculture. However, supporting local economies was expressed as more complex than simply keeping dollars circulating within one's community, and can include other factors such as job creation. This was similar to what Hinrichs and Allen (2007) found, where they identified six themes with associated claims about the benefits of buying local food: community, economics, aesthetics, environment, equity and health. Economic claims included increased

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profitability of local businesses; increased employment and the preservation of local businesses, while claims about community benefits included community building and revitalization and enhanced culture. Some opinion leaders interviewed in this study, however, did not distinguish between supporting local economies and supporting communities. One participant, Jay Healy, indicated that supporting local economies is one way in which consumers create and maintain a meaningful connection with the place where they live:

I think we're seeing a little bit of a pushback to multinational...its not only food, I think, its also an attitude of understanding that if you buy everything off the internet you tend to lose your communities and some of the quality of life that you like if you do live in rural areas (Jay Healy, interview by the author, Shelburne Falls, Massachusetts, January 19, 2011).

In the same interview, Healy also stated that "sometimes the local connection is as important or more important than whether they can save forty cents a gallon on some product that comes out of the multinationals." One opinion leader identified a "local patriotism aspect of it [buying local agricultural products]" (Elisa Campbell, interview by the author, Amherst, Massachusetts, January 14, 2011). As Goodman and DuPuis (2002) found, it appears there are a variety of interrelated reasons why consumers feel strongly in favor of supporting their local economy and/or community including job creation, negative attitudes towards multinational corporations and positive attitudes towards local businesses.

In my study, opinion leaders identified several potential consumer perceptions regarding LG/P agriculture products. For instance, that locally grown products are fresher than those grown hundreds of miles away, that there may be health concerns related to

long-distance transport of food that are mitigated by buying LG/P products, and that consumers may not distinguish between locally grown and organic agriculture products. Many opinion leaders felt that locally grown food products tend to be lumped together with organic products in the minds of consumers. Berlin et al. (2009) found that consumers in New England did not distinguish between the concepts of local, organic or small-scale and their associated benefits. On the other hand, Bean and Sharp (2010) found distinct attitudinal differences between local and organic consumer groups, though perceptions about local and organic product quality were intertwined.

Additionally, the desire to preserve the landscape of the Pioneer Valley is what motivates some consumers to buy LG/P agriculture products. One opinion leader stated that "many of us like agricultural views, and recognize the connection between keeping their views and open spaces and supporting the people who own them trying to make a living" (Elisa Campbell, interview by the author, Amherst, Massachusetts, January 14, 2011).

In addition to attitudes and beliefs, there is a perception among opinion leaders that consumers in the Pioneer Valley are highly educated and sophisticated, and that these characteristics positively influence the consumption of LG/P agriculture. Healy, for example, stated:

In western Massachusetts there's a lot of pretty sophisticated customers that are aware of where their food comes from, and they do look at the labels and maybe also they've got a little more income in their pocket so they can afford to go to a farmers market and pay ten percent more—educated, sophisticated consumers I think are important to the future of Buy Local campaigns (Jay Healy, interview by the author, Shelburne Falls, Massachusetts, January 19, 2011).

However, Healy also pointed out that not all consumers who support local agriculture fit this description:

We were surprised that the greatest amount of sales of that product were not in Longmeadow or East Longmeadow or maybe a wealthy suburb or Northampton or Amherst- it was in an area where they knew the farmers and though they didn't have huge amounts of disposable income they still bought more of that milk than any county in western Mass. Sometimes the local connection is as important or more important than whether they can save forty cents a gallon on some product that comes out of the multinationals (Jonathan (Jay) Healy, interview by the author, Shelburne Falls, Massachusetts, January 19, 2011).

As demonstrated above, consumption does not appear to be constrained by income or education level, especially if strong positive attitudes towards supporting LG/P agriculture are present in the consumer. Zepeda and Li (2006) concluded that consumers with a range of education and income levels are equally likely to consume LG/P agricultural products, while in contrast, consumers frequenting farmers markets in New Jersey had above-average levels of income and education (Govindasamy et al. 1998).

Even among these many reasons for buying locally grown agricultural products, supporting local economies and communities were the most often cited reasons among opinion leaders in my study. In a focus-group study, Zepeda and Leviten-Reid (2004) also identified supporting local economies, communities and local farmers among the top reasons for buying locally grown agricultural products. Similarly, in a survey of 950 consumers in Washington, nearly every respondent associated "locally grown" with positive attributes of either the products, the farmers, or the economic impacts related to local food systems (Ostrom 2006). Consumer sentiments about supporting local farmers are

intertwined with a desire to support local economies in general (Ostrom, 2006). In a recent national survey of consumers, the majority of respondents cited freshness (82 %), support for the local economy (75 %) and knowing the source of the product (58 %) as reasons for buying LG/P agricultural products (Food Marketing Institute 2009, from Martinez et al 2010).

#### 3.1.2 The Buy Local campaign

Opinion leaders and academics (see Allen and Hinrichs 2007) in the Pioneer

Valley associate the emergence of the Buy Local phenomenon with the launching of the

"Buy Local/Be a Local Hero" campaign by the non-profit organization Communities

Involved in Sustaining Agriculture (CISA). In 1999, with a grant from the Kellogg

Foundation and the support of government agencies, CISA began a marketing campaign

consisting of coordinated messages promoting farmers and farm products produced in the

Pioneer Valley (Allen and Hinrichs 2007). Margaret Christie, Special Projects Director

for CISA, describes the initial investment in market research that provided important

insight into the existing attitudes of consumers:

When we started doing this at CISA we did some market research that indicated that this [buying local] was a concept that people really understood—they didn't need us to come along and educate them about why it was important—that they really understood this. That work that we did has been replicated and the results were very consistent- in a lot of different places, in rural places and urban places across the country, and I think that connection to local economies is something that people really understand and support (Margaret Christie, interview by the author, South Deerfield, Massachusetts, January 20, 2011).

According to Allen and Hinrichs (2007), "food campaigns in the US gained traction through fairly sophisticated application of stock consumer research and marketing

techniques." Test marketing was used to identify messages and slogans with the highest resonance for consumers:

They found that ["Buy Local/Be a Local Hero"], that's what reached people the most in relation to wanting to go and find the products, you know, the farm products that were grown locally (Daniel Finn, interview by the author, Northampton, Massachusetts, January 11, 2011).

Armed with knowledge about their target consumers, and effective slogans and logos, CISA launched an aggressive promotional campaign to increase the visibility of local farms and local farm products in the Pioneer Valley (Allen and Hinrichs 2007). Christie describes their marketing campaign below:

I think CISA's campaign has been very visible. We [CISA] used sort of a mix of paid and unpaid advertising and events and activities designed to make sure that there's regular, you know, unpaid media attention to local farms and local foods (Margaret Christie, interview by the author, South Deerfield, Massachusetts, January 20, 2011).

Allen and Hinrichs (2007) identified CISA as a pioneer in promoting Buy Local initiatives, the first to use conventional advertising, the Internet, and surveys to monitor consumer response to its campaign. According to CISA's Christie, as a result of this promotional campaign, 80 % of people in the Pioneer Valley recognize the "Buy Local/Be a Local Hero" campaign and 65 % said they changed their buying habits because of the campaign ((Margaret Christie, interview by the author, South Deerfield, Massachusetts, January 20, 2011).. Importantly, according to opinion leader Elisa Campbell (interview by the author, Amherst, Massachusetts, January 14, 2011), "the people running it were quite articulate in talking about what they were doing and why."

The "Buy Local/Be a Local Hero" campaign has been used as a model for similar initiatives in several locations around the US (Allen and Hinrichs 2007). Its significance

lies in its recognition of the role of consumers and producers in preserving farms and farmland (Beckett and Nayak 2008; Allen and Hinrichs 2007), and the use of marketing research and strategies to identify and target specific consumer attitudes (Beckett and Nayak 2008; Allen and Hinrichs 2007; Feenstra 1997). Prior to CISA's campaign, efforts to preserve farms were costly, and offered little in terms increasing farm viability. According to one respondent,

We [USDA] [twenty years ago] spent all our money on buying development rights and preserving farmland by buying development rights and we spent very little money on the farmer themselves and to me you need both—you need to have the farmland but if you don't have profitable farming on the farmland it doesn't work (Jay Healy, interview by the author, Shelburne Falls, Massachusetts, January 19, 2011).

In the Pioneer Valley, the Buy Local campaign is consistent and comprehensive, and addresses issues in both the production and consumption of local farm products. One respondent said, "I think that kind of comprehensive sweep of the campaign is helpful.

And I think the consistent visibility is good too" (Margaret Christie, interview by the author, South Deerfield, Massachusetts, January 20, 2011).

Key actors recognized the importance of both producers and consumers in developing robust markets for local farm products. This reframing of the consumer as an active participant in markets is supported by Beckett and Nayak (2008) and articulated within the theory of reflexive consumption. While CISA was largely responsible for promoting local farms and farm products to consumers, a number of actors including CISA's Margaret Christie recognized the importance of developing marketing and other skills in producers:

And we do a lot of work, technical assistance and training with local farms to help them have the skills to take advantage of consumer interests and market demand, so that they're kind of doing the best job that they can in the markets that they're choosing to use (Margaret Christie, interview by the author, South Deerfield, Massachusetts, January 20, 2011).

Several opinion leaders attributed the success of the Buy Local phenomenon in the Pioneer Valley, in part, to the "increasing sophistication of the farmers at getting better and better at retailing more of their farm products" (Mary Jordan, interview by the author, February 10, 2011). Training and educating farmers in new areas such as marketing and advertising is critical to developing local food systems (Tropp and Barham 2008; Ostrom 2006).

Although CISA has been instrumental in the development of markets for local farm products, the promotion of LG/P agriculture in the Pioneer Valley is a collaborative effort (Guptill and Wilkins 2002). Stakeholders involved in the LG/P agricultural phenomenon include actors in retail, media, political, non-profit, farming and public sectors, including but not limited to state and federal government, local and national non-profit organizations, land trusts, businesses, farmers, schools and others (Sedlacek and Gaube 2009; Murdoch 2000). In the words of one opinion leader, "here are lots of other organizations and individuals working on various aspects of the local food-the local food movement in this region, and they've had a significant impact as well" (Margaret Christie, interview by the author, South Deerfield, Massachusetts, January 20, 2011).

Several opinion leaders highlighted the role of government agencies, particularly the Massachusetts Department of Agricultural Resources. Working alongside CISA and others, the Massachusetts Department of Agricultural Resources developed programs and policies to support local agricultural production, assisting producers in overcoming

regulatory and infrastructural obstacles, and take advantage of various technical and financial assistance programs. Martinez et al. (2010) suggest state and local—not federal—policies directly effect the development and expansion of local agricultural production. For example, the development of Farm-to-School program and State Food Policy Councils are initiatives of state and local governments (Martinez 2010).

The collaborative nature of the Buy Local phenomenon, as shown by Guptill and Wilkins (2002), contributes to, in the words of Christie (interview by the author, South Deerfield, Massachusetts, January 20, 2011), "very strong partnerships and collaborations with a lot of different groups" working towards a common goal. Respondent Richard Burke (interview by the author, Amherst, Massachusetts, January 6, 2011) discussed the advantages of these strong partnerships and collaborations:

Once it began, there were benefits for everybody: state government, state agriculture, federal government, the USDA, and most importantly the farmer who is you know reaping more of a profit and making his operation more sustainable through interest that's being generated through these different organizations (Richard Burke, interview by the author, Amherst, Massachusetts, January 6, 2011).

In other words, the Buy Local campaign in the Pioneer Valley was developed and exists within diverse networks of individuals and groups, which directly contributes to its success (Watts et al. 2005).

Another important aspect of the Buy Local agriculture phenomenon is its emphasis on making farm products available to a range of customers, in a variety of venues:

You know, when you drive down the road, you'll drive by local farms, you'll drive by farm stands, you'll drive by signs outside of markets showing that you know, some sign from CISA basically saying that this restaurant buys from local farmers. You know it's in people's everyday life. When they're in a grocery

store or a farmers market and they see the CISA stickers that say 'this food's grown locally', so in many different ways, in some markets more than others, some restaurants more than others, but it's in peoples everyday life (Daniel Finn, interview by the author, Northampton, Massachusetts, January 11 2011).

In particular, the emphasis on direct-marketing in which farmers sell value-added products directly to consumers allows farmers to collect larger profits than if products were sold in wholesale markets (Martinez 2010). Small farms in the Pioneer Valley lack the economies of scale needed to compete with larger industrial agriculture operations (Jay Healy, interview by the author, Shelburne Falls, Massachusetts, January 19, 2011). Direct sales of value-added products eliminate intermediaries, shorten the supply chain and allow farmers to capture more profit (Gale 1997). Healy expressed the importance of direct marketing and value-added production as a tool for small farms:

It was clear at least to me in Massachusetts that on average, as farmers, we get maybe 17,18,19 cents of that consumer dollar, and you can't compete in the Northeast or in our region, there's no way you can keep your farm going selling a commodity product. So its clear to me you've got to add value—maybe you sell to a restaurant or a customer or a farm stand—and the whole Buy Local effort with doing the advertising and getting the word out and getting the farm maps out and all the stuff now that's done by almost everyone was pioneered by the CISA people. (Jay Healy, interview by the author, Shelburne Falls, Massachusetts, January 19, 2011)

This emphasis on retail and direct-to-consumer sales re-embeds agricultural markets in their socio-geographic context, and establishes trust between producers and consumers through personal interaction (O'Hara and Stagl 2001).

Several studies highlight the important role social relationships play in defining and shaping local food systems (Bean and Sharp 2010; Selfa and Qazi 2004; O'Hara and Stagl 2001; Feenstra 1997). Fifteen percent of consumers in Washington state define "locally grown" products in terms of their relationship with a particular farmer based on

trust (Ostrom 2006). Lockeretz (1986) found that the social experience of farmers markets directly effects consumption of LG/P products. A focused effort to connect producers with a range of consumers has contributed to the vitality of markets for locally grown agricultural products in the Pioneer Valley. The Buy Local phenomenon, according to one respondent, "has emerged from just being the direct farm to consumer via farmers markets and roadside stands to really being, you know, broadening it's opportunities to working with wholesalers, working with retailers, farm-to-school initiative...we have a very strong farm-to-school initiative" (Mary Jordan, interview by the author, Boston, Massachusetts, February 10, 2011).

Through innovative and organized events such as that mentioned below, farmers connect with restaurants and other complementary businesses:

There have been other things, almost like speed dating in a way, where it matches up local farmers and local restaurant owners, and they sit down with each other for a few minutes and they each tell about their farm or their restaurant and then they move on to the next farm or the next restaurant and so you know they really get to know each other. The connections throughout the community increase in that way and they find out what products are available (Daniel Finn, interview by the author, Northampton, Massachusetts, January 11, 2011).

Together, the above factors have resulted in a coherent, comprehensive and highly visible campaign for LG/P agriculture composed of various stakeholders linked by strong connections and common goals. Similar to the findings of Guptill and Wilkins (2002), the development of diverse and collaborative relationships among farmers, producers, retailers and consumers is critical to any local food system.

#### 3.1.3 Other Factors

It appears that structural factors also have contributed to the success of LG/P agriculture in the Pioneer Valley. Opinion leaders referred to the "lay of the land" in the Pioneer Valley as advantageous to the Buy Local phenomenon. Burke described the interplay of urban and rural characteristics, stating "the one thing we do have here [in the Pioneer Valley] is a population base, and the population base is located in relatively close proximity to these farms" (Richard Burke, interview by the author, Amherst, Massachusetts, January 6, 2011). The geography of the Pioneer Valley is such that small farms exist within communities, and occupy a place in the landscape that people see on a regular basis. The visibility of farms reinforces their importance in the mind of the consumer such that "consumers can really see the benefit of supporting local [farms] because the farms are hopefully keeping in business, and they're exposed to them" (Mary Jordan, interview with the author, Boston, Massachusetts, February 10, 2011). When asked why the agricultural phenomenon has been so successful in the Pioneer Valley, more than one respondent stated it's because "the farms are here."

There is evidence that networks, not nodes, of producers and others involved in production form a strong foundation for success in Buy Local campaigns (Watts et al. 2005). Watts et al. (2005) define one type of network—relationships based on mutual compatibility and mutual cooperation—as advantageous for producers of LG/P agricultural products. Essentially, the more cooperation, the more resources an individual can save, the better. In addition, some opinion leaders perceive the political culture of the Pioneer Valley as a culture that supports the consumption of LG/P agricultural products. Thompson (interview by the author, Boston, Massachusetts, February 2, 2011) pointed

out that "the political part of it is particularly strong here too", describing the Pioneer Valley as an "either politically active or politically correct place, however you want to interpret it."

An alternative interpretation is that the Buy Local campaign frames buying local farm products as "the right thing to do" (Daniel Finn, interview by the author, Northampton, Massachusetts, January 11, 2011) or "something they [the consumer] can feel good about" (Richard Burke, interview by the author, Amherst, Massachusetts, January 6, 2011), establishing a subjective norm and compliance pressure. In other words, normative influences rather than political motives could contribute to an individual's decision to purchase LG/P agricultural products. In fact, subjective norms, along with other factors, influence behavioral intention, and are used in behavioral prediction models (Ajzen 1991).

In summary, opinion leaders perceive several reasons contributing to the widespread consumption of LG/P agricultural products in the Pioneer Valley.

Consumer's positive attitudes towards factors associated with buying LG/P agriculture are a key factor. Additionally, the comprehensive and collaborative campaign to Buy Local, led by CISA, has been instrumental engaging the support of consumers, producers and a variety of organizations and individuals in achieving common goals.

#### 3.2 Agriculture Themes: Consumer Survey

Overall, results of the consumer survey supported information obtained in interviews with opinion leaders. Consumer attitudes towards LG/P agriculture were overwhelmingly positive. Of the 44 consumers surveyed, 32 buy LG/P agricultural

products because it supports their local economy; 20 buy LG/P agriculture because it is fresher and/or better quality (Figure 2).

Twelve, 13 and 14 consumers said they buy LG/P agriculture products for each of the following reasons, respectively: to support their local farmer, it's more socially responsible, and because it's better for the environment. Ten consumers said they buy LG/P agricultural products because they feel it helps to conserve rural landscapes. As reflected by both opinion leaders and consumers, different people connect to LG/P agricultural products in different ways, but the majority of people buy LG/P agriculture products because they feel it supports their local economy

Consumers buy LG/P agriculture products at a variety of places, but the majority, 32 out of 44, cites local markets/grocery stores as the point of purchase (Figure 3). Asked where consumers get information about purchasing LG/P agriculture, 24 respondents get information from friends, 13 from family, twelve from local farmers, and eight from CISA or other non-governmental organizations. Only six consumers each report getting information from the Internet and newspaper, respectively, and only two consumers report getting information from advertisements.

Although initially the promotion of LG/P agriculture relied heavily on advertising, it is now promoted and advertised largely through informal networks and word-of-mouth. Watts et al. (2007), through interviews with producers, show how informal and formal networking practices generate word-of-mouth advertising and have direct material benefits for producers. The momentum of the Buy Local phenomenon in the Pioneer Valley is such that it is now sustained and promoted within social networks, and as one opinion leader said, "it has a life of it's own." In rural areas, new networks

emerge from existing social/industrial structures to form new, dynamic and innovative networks (Murdoch 2000).

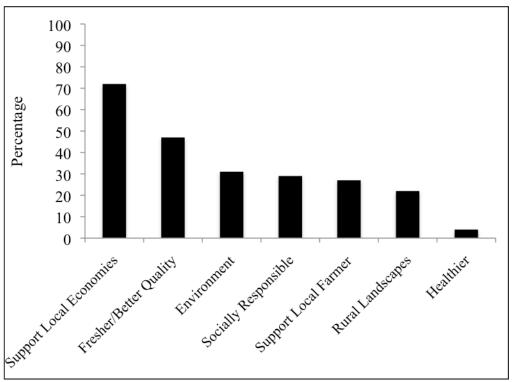


Figure 2. Stated reasons for purchasing LG/P agricultural products from a survey of consumers at a winter farmers market in the Pioneer Valley of western Massachusetts (n=44).

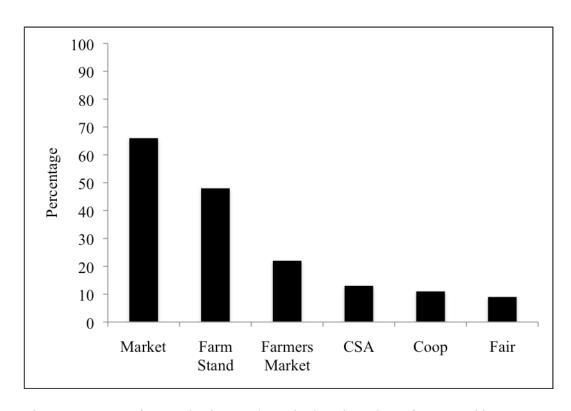


Figure 3. Venues for purchasing LG/P agricultural products frequented by consumers in the Pioneer Valley of western Massachusetts (n=44).

#### 3.3 Wood Products Themes: Opinion Leaders

Is it convenient? Can you find it where you want to go to shop? Is it labeled? Do you know that it's local? Does it have the other attributes you want? Can you find the range of products you're interested in finding? Has anybody pointed out the advantages to you?

—Margaret Christie, Special Projects Director, CISA (interview by the author, South Deerfield, Massachusetts, January 20, 2011)

The next section will discuss themes related to the development and promotion of local wood products. Although there are efforts to promote local wood products in the Pioneer Valley, there is agreement among opinion leaders that these efforts are in their formative stages. As the above quote implies, and as the theory of reflexive consumption supports (DuPuis 2002), there are many steps and factors leading up to a consumer's decision to buy a LG/P agricultural or wood product. There is general agreement among opinion leaders that efforts to promote local wood products are far less effective than those efforts of Buy Local campaigns. According to Daniel Finn (interview by the author, Northampton, Massachusetts, January 11, 2011), "in relation to the farm products that are sold, the level of locally produced wood that is sold, I would say maybe five percent. You know hopefully I am wrong." Jay Healy described a similar belief, stating that "the Buy Local campaign for wood I would guess is maybe 20 % as effective...you know, if you gave a ten to the Buy Local campaigns for food, I would give a two to the Buy Local campaign for wood" (Jay Healy, interview with the author, Shelburne Falls, Massachusetts, January 19, 2011).

Common themes that emerged in opinion leader interviews and consumer surveys are discussed below concerning various aspects of local wood products and the barriers to establishing more robust markets for local wood products.

# 3.3.1 Visibility of local wood products

There is a perception among all opinion leaders that the effort to promote local wood products has a low level of visibility in the Pioneer Valley. When asked about local wood products in the Pioneer Valley, one opinion leader pointed out "there's relatively little sense of there being an industry" (Charlie Thompson, interview by the author, Boston, Massachusetts, February 2, 2011). According to CISA's Margaret Christie (interview by the author, South Deerfield, Massachusetts, January 20, 2011) "there are consumers who are responding to that [local wood products] but I don't think it has the degree of visibility." The perceived low visibility of local wood products could be in part because, as Christie pointed out," that promotion is a little bit more in its infancy" (Margaret Christie, interview by the author, South Deerfield, Massachusetts, January 20, 2011). It is only in the past year that Massachusetts Department of Agricultural Resources decided to include forestry and local wood products in the Commonwealth Quality Program. The same is true in neighboring Connecticut, which recently expanded its "Connecticut Grown" label to include wood products (Connecticut Department of Environmental Protection, 2010).

A small body of research on consumer attitudes towards certified wood products may offer insight into local wood products markets. For instance, Kozak et al. (2004) found that most participants in a focus group study had little or no knowledge of

environmental labeling and certification of wood products, which the authors attributed to the lack of a promotional campaign for certified wood products (Kozak et al. 2004). The lack of visibility of local wood products may be in part due to the absence of a promotional campaign focused on local wood products.

Opinion leaders agree that there isn't any one coherent group promoting local wood products. Bob O'Connor (interview by the author, Boston, Massachusetts, February 3, 2011) described how "its just a few producers that have latched on to this. I don't think it's very widespread." Thompson discussed aspects of local wood products consumption in the Pioneer Valley:

There are plenty of local wood products that are in circulation but as kind of a conscious, intentional political decision I think it's not all that prominent. I mean, there are cases of it and there are people, but just how widespread is the question. But as a coherent, coordinated effort I would say its in its infancy compared to the food thing. And it has some pretty big handicaps too. (Charlie Thompson, interview by the author, Boston, Massachusetts, February 2, 2011).

Some opinion leaders identified other factors that contribute to the overall low visibility of local wood products. In Massachusetts, the wood products sector "used to have four or five hundred sawmills...I think we're down to 22 or 21 and were going down to having almost none" (Jay Healy, interview by the author, Shelburne Falls, Massachusetts, January 19, 2011). Charlie Thompson, an opinion leader in the forest products industry, described the declining production capacity as a possible handicap. "One of [the barriers] is that a lot of the sawmills are going out of business. The local capacity for processing is much reduced," and yet "at the same time I think there is an opportunity to increase the awareness of it [local wood products] and the market for locally grown forest products" (Charlie Thompson, interview by the author, Boston, Massachusetts, February 2, 2011).

Interestingly, there is a perception among those opinion leaders knowledgeable about wood products in Massachusetts that wood products businesses will not be able to survive if something doesn't change. "I think a lot of people feel like the time is right; it's like their last chance. If they are to stay in business, this [Buy Local campaign] is a way to do it" (Bob O'Connor, interview by the author, Boston, Massachusetts, February 3, 2011).

In summary, few groups or individuals are actively promoting local wood products in the Pioneer Valley, and what little promotion does exist is relatively new and uncoordinated. Studies suggest that promotional campaigns are an effective tool for generating awareness about local agriculture (Allen and Hinrichs 2007) and green wood products (Kozak et al. 2004). Given the lack of a promotional campaign and the general decline in wood products businesses, it is not surprising that local wood products have minimal visibility in the Pioneer Valley.

# 3.3.2 Knowledge/education/promotion/cooperation

According to the literature, one of the main barriers to expanding production and consumption of local wood products is consumer's lack of awareness and knowledge about local wood products and about the benefits associated with buying local wood products (Kozak et al. 2004; Teisl 2003). Opinion leaders identified this lack of knowledge as a barrier to establishing local wood products markets. As Bob O'Connor (interview by the author, Boston, Massachusetts, February 3, 2011) pointed out, "the level of intelligence of the consumer as to why maybe they should buy local wood products is really very minimal, and very little penetration into the consciousness of the

consumer especially when you compare it to the almost total penetration from the food Buy Local point of view."

Opinion leaders recognize that consumers may not inherently understand the benefits of buying local wood products, and that education is one way to increase understanding:

They see consumer education as so, so important. But the whole consumer education, you know, going beyond just cutting down a tree. This year they want to sell water in their booth. They want consumers to understand that if you have a healthy well-managed forest you're going to have a better water system. People don't understand that the forest is important and a part of their water system. Consumer education is the big thing, which is part of these Buy Local initiatives (Mary Jordan, interview by the author, Boston, Massachusetts, February 10, 2011).

Opinion leaders saw education as a critical step to increase knowledge, and ultimately generating consumer support for local wood products:

So I think there's a lot more education that needs to go on with customers to have them understand that the bottom line for people who own forests is just like it is for people who own farmland—If you can't make enough money on those to cover your costs, they're going to go into development and they're going to go into purposes that are often contrary to the best interests of the town or community that one lives in (Elisa Campbell, interview by the author, Amherst, Massachusetts, January 14, 2011).

One opinion leader described the failure of the forestry sector and others to educate the public about forestry in order to build awareness and support for local wood products, saying "it's a failure of everybody...it's definitely a failure of foresters and loggers and whoever else is involved" (Charlie Thompson, interview by the author, Boston, Massachusetts, February 2, 2011).

While education is an important foundation to generating support for local wood products, marketing and advertising are critical vehicles for educating consumers as they

allow for increasing product visibility and developing consumer awareness of local wood products (Ostrom 2006). Marketing and advertising require resources, as Thompson (interview by the author, Boston, Massachusetts, February 2, 2011) pointed out:

And like a lot of these things take a lot of work, a lot of consistency, a lot of repetition, and a fair amount of money. You know, if you look at something like CISA, you know, they've spent a lot of money. And it costs a bunch to create awareness of a brand or a label; it costs a lot to sort of make, to work that so that it eventually becomes a routine part of the fabric of the economy of a region. It's not a snap your fingers kind of thing—it's a sustained effort and ultimately I think, just like most things, it actually requires a fair amount of money to make it happen.

Marketing done individually by firms is probably not cost effective or capable of generating sufficient visibility, and opinion leaders see cooperative marketing as integral to increasing production, and therefore consumption, of local wood products:

What happens with our agriculture industries, or those that market more on a wholesale level, they tend to operate in a vacuum or market themselves in a vacuum. Or they don't pool their resources and capitalize on the greater volume in numbers...And I think some industries have been suffering for whatever reason, I'm thinking the dairy industry, they all think their individual producers, which they are, but the dairy farm industry has realized that for survival they have to pool together and really work together in their promotion, promoting the whole group instead of just one. And I think the forest industry feels the same way, you know? So I think that's part of the wood and forestry folks, you know, we've got to work together—its not that I'm competing with my neighbor, but we have to work together for both of us to survive (Mary Jordan, interview by the author, Boston, Massachusetts, February 10, 2011).

Cooperation between producers extending beyond marketing is seen as a necessary requisite for expanding production and consumption of local wood products:

Because we have so many small, independent mills each one may not have enough inventory if we really did gear up the demand for local wood. So one thing that we need is an increase in cooperation between the mills who have traditionally been strong competitors (Bob O'Connor, interview by the author, Boston, Massachusetts, February 3, 2011).

In addition, collaborative marketing and cooperation in general might help establish a unified, coherent identity for local wood products producers, and mitigate some of the challenges caused by the decentralized nature of the wood products industry in the Pioneer Valley:

A lot of other efforts [e.g. agriculture], there's common interest and a relatively small number of producers. A lot of other things that are produced have a smaller number of people that own the resource and process the resource so it's easier to get unity of purpose in communications and political action. So, you know, [with wood products], there's no such thing as a typical landowner, there's hundreds of loggers, there's many sawmills, and getting unity of purpose is very hard compared to some other industries, including agriculture (Charlie Thompson, interview by the author, Boston, Massachusetts, February 2, 2011).

Cooperation among producers is thought to be an important and necessary characteristic in order to, as Thompson (interview by the author, Boston, Massachusetts, February 2, 2011) put it, "keep all the links in the chain and sort of get to the ra-ra part of locally grown." As Hull and Nelson (2011) point out, networking among producers is critical to the success of forest products entrepreneurs. In particular, cooperative marketing decreases marketing costs incurred by individuals (Watts et al. 2007).

### 3.3.3 Consumers and producers

Another theme present in opinion leader interviews is the complexity and range in wood products consumers. Consumption decisions could involve an architect and contractor or an individual homeowner, and purchases could be anything from a salad bowl to dimensional lumber to cabinets to firewood to furniture. There are various types of consumers each buying different types of products. Given that "not too many [individual] people buy wood too much" (Charlie Thompson, interview by the author, Boston, Massachusetts, February 2, 2011), individual and homeowners who occasionally

purchase wood may not create sufficient demand for local wood products, and other types of consumers need to be considered:

Homebuilders, I think, need to be more tied into this too. Because they're the ones if they knew about the local options and talked to their customers about it, if they're interested then they're the ones that would have to secure the supply. I think the number of, like, homeowner projects where they go to Home Depot to get a few pieces of wood, is not the main market were talking about (Bob O'Connor, interview by the author, Boston, Massachusetts, February 3, 2011).

Similar to Buy Local agriculture (Allen and Hinrichs 2007), opinion leaders recognized the need to engage and target various types of consumers in order to generate sufficient demand for local wood products. One opinion leader pointed out that people who buy wood might be influenced by different factors than people who buy LG/P food, reinforcing the need for cooperation among producers:

So it may be that a campaign really focused on wood needs to reach out more to contractors because those people are having a big impact on the decisions of their clients, or you know architects or designers because if those people are suggesting particular products their clients are more likely to use them whereas certainly people's buying decisions around food, there's a variety of influences on those, you know marketing decisions. You know, ultimately people feel like they go to the store they can pick which tomato they want, whereas if they're looking at flooring they may sort of go to an expert for an opinion (Margaret Christie, interview by the author, South Deerfield, Massachusetts, January 20, 2011).

However, creating networks of support among producers and others in the supply chain is directly related to the success of local food systems (Watts et al. 2007; Selfa and Qazi 2004).

# 3.3.4 Fundamental differences between food and wood

I gradually became more and more aware of the difficulties of trying to do either wood harvesting without the neighbors getting really upset and also owning the mill and trying to have it make money instead of lose money and having markets for the products and stuff like that.

-Elisa Campbell (interview by the author, Amherst, Massachusetts, January 14, 2011)

Some opinion leaders perceived fundamental differences between food and wood products as a potential barrier to increasing the consumption of LG/P wood products. In terms of a marketing campaign, one opinion leader stated:

I think food is something that really resonates with people and so it can be harder to make the same emotional case when you're not talking about food products, although many of the other concerns remain the same (Margaret Christie, interview by the author, South Deerfield, Massachusetts, January 20, 2011).

When asked whether people who buy LG/P agricultural products would be more likely to buy LG/P wood products, Christie (interview by the author, South Deerfield, Massachusetts, January 20, 2011) and others indicated "they would be more inclined to do so" but only "if they were available, and if they were marketed." Another opinion leader with a marketing background responded:

Oh absolutely! It's a mindset. Absolutely. Again it's humans...we track this in marketing. Humans like to travel in traditional clusters and herds. You've got golfers, and golfers hang out with other golfers, tennis folks, you know, whatever, whether it's a sport or it's a culture for eating good, organic, vegan, people just naturally hang out with other like-minded people. So, if you've already got the mindset where you're looking to support locally and you don't want to buy at Wal-Mart or Target, they yes, you're going to be looking for other sources, other products. It becomes a way of life (CS Wurzberger, interview by the author, Greenfield, Massachusetts, February 16, 2011).

Importantly, as Christie (interview by the author, South Deerfield, Massachusetts, January 20, 2011) pointed out, "people don't necessarily make the jump." Some opinion leaders perceived significant differences between locally grown food and locally grown wood. As Jay Healy (interview by the author, Shelburne Falls, Massachusetts, January 19, 2011) pointed out "I don't think it's apples and apples from their perspective—I think its apples and oranges." Healy described fundamental differences between food and wood as a potential barrier to a local wood products campaign:

I think it is different because people don't eat it and they also are pretty uneducated with what happens with the wood around New England, and frankly it's not nearly as big an issue for them than what might go in their kid's mouth. If they're on an oak floor or a cherry floor that comes from Brazil, they're much more worried, understandably, about what goes in their kids mouth at five or six than what kind of floor they're walking on (Jay Healy, interview by the author, Shelburne Falls, Massachusetts, January 20, 2011).

Opinion leaders did recognize that "though it can be harder to make the same emotional case when you're not talking about food products, many of the other concerns remain the same" (Margaret Christie, interview by the author, South Deerfield, Massachusetts, January 20, 2011), Although in my study, health concerns influence some consumers, my survey data showed that health reasons were not the main factor motivating LG/P agriculture purchasing (Figure 2). As mentioned earlier, to date surveys have not always been consistent, and generalizations are difficult due to geographic and temporal differences (Martinez, 2010). For instance, in a recent national survey of consumers, freshness, supporting local economies and knowing product origin were the most important reasons consumers cited for buying LG/P agriculture products (Food Marketing Institute 2009), while in another survey, supporting local economies and

sustainable land use were the main reasons motivating consumers to buy LG/P agriculture (Zepeda and Leviten-Reid 2004).

## 3.3.5 Opposition to logging

Finally, some opinion leaders perceive negative attitudes towards logging as a barrier to the development of markets for local wood products. Thompson (interview with the author, Boston, Massachusetts, February 2, 2011) described how "for whatever reason, there are plenty of people who believe that local everything is good, and logging is a swear word for them," pointing out that "there's a lot of anti-logging sentiment here [in Massachusetts]." According to Thompson, "it's harder to get easy acceptance of economic activity there [in forests]; it's fundamentally different from anything else."

Several studies have demonstrated controversy around, and negative attitudes towards, timber harvesting (e.g. Bradley and Kearney 2007; Wolf 2007; Wernick et al. 2000; Polzin and Bowyer 1999; Dekker-Robertson and Libby 1998). However, Kozak et al. (2004) have demonstrated that public distrust associated with environmentally certified forest products could be mitigated by educating consumers about the benefits of certified products. Other studies have shown that consumers are willing to pay more for certified wood products if they are provided with information about the environmental benefits associated with certain products or production practices (O'Brien and Teisl 2004; Teisl 2003). Likewise, educating consumers about the benefits of local wood products might positively influence consumer attitudes towards local wood products. Another opinion leader implied that by adopting agriculture's Buy Local model, wood producers could break down some of the barriers:

I see the Buy Local campaign as kind of the best kind of defense against that [opposition to logging]. If you can really get people to appreciate why you should buy local wood, and to understand some of the safeguards we have when we oversee harvesting. I mean Massachusetts has one of the strictest cutting practices laws in the country.

While there are clear and fundamental differences between buying LG/P agriculture and wood products that may act as barriers to expanding markets for locally grown wood products, there are also consumers with strong attitudes in favor of supporting local economies. According to O'Connor (interview by the author, Boston, Massachusetts, February 3, 2011) "the local angle is probably a better angle than the FSC (Forest Stewardship Council) [certification]...you know, the Massachusetts Woodland Cooperative is FSC certified and they were thinking that that would be the ticket to get consumers to look at their products, but it may not be that." Healy (interview by the author, Shelburne Falls, Massachusetts, January 19, 2011), a wood producer, echoed O'Connor's sentiment:

For the customers that do come in the door...most of them come in the door because we're local. Very few come in the door because were green certified or we treat our forestland sustainably in an environmentally positive way. Most of our customers do come in because were local.

Kozak et al. (2004) found product origin to be an important attribute of wood products, and that purchasing local wood products reflected a desire to support local economies and jobs. The same attitudes influencing consumers to buy LG/P agricultural products may also influence people to buy LG/P wood products. The majority of consumers purchase LG/P agriculture because they feel they are supporting their local economies and communities by doing so:

I think that the wood producers are seeing the need to be involved in some sort of association connecting it to being a Buy Local product or a product that's

produced in the state, that they have to capitalize on that opportunity. So it's gone from wood producers just producing something, but now its more of a concept, that its local and its going to be a better product—you know, we should take pride in the integrity of this product, being produced in the state, and let's not call it just an artisan product, that it goes beyond that (Mary Jordan, interview by the author, February 10, 2011).

Opinion leaders in this study provided tremendous insight into the Buy Local agriculture phenomenon in the Pioneer Valley, and its implications for establishing and expanding local wood products markets. The Buy Local agriculture campaign in the Pioneer Valley may provide for a useful model for a local wood products campaign.

### 3.4 Wood Products Themes: Consumer Survey

In the survey of consumers, 59 % of the respondents indicated that they buy local wood products (Figure 4). Fifteen respondents indicated they do not buy local wood products, and three respondents weren't sure if they bought local wood products (Figure 4). Of the 26 respondents who do buy local wood products, 16 buy firewood or wood pellets yearly or twice a year. Only seven reported one-time purchases of local wood products in the form of furniture and/or cutting boards. Some respondents reported that they did buy LG/P wood products, but "rarely" or "a few years ago" (data not shown).

The majority of consumers indicated they would buy LG/P wood products if they were available (Figure 5). Stipulations included "especially if the price is right," "as long as it's not too expensive," "only if it's local!" and "if I was in the market for it." Several respondents emphasized their intention to buy locally sourced products whenever possible. Two respondents expressed negative attitudes towards Home Depot, and their intention to support local vendors if possible. Opinion leaders identified this attitude as a kind of "pushback to the multinationals" by consumers.

Of those respondents who would not buy LG/P wood products if they were available, eight said they "don't really need any wood products." This is in support of the opinion leader belief that consumers who buy LG/P agriculture don't have a lot of demand for wood products. Education may be necessary in order to inform consumers about what constitutes a local wood product. Some consumers thought that any product bought at a local hardware or lumber store was a local wood product. This is supported by the perceived indeterminate status and low visibility of local wood products articulated by opinion leaders.

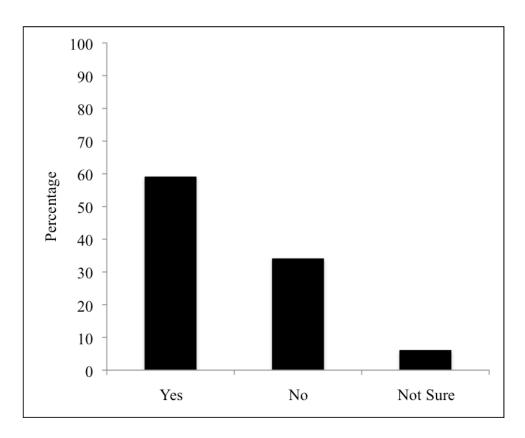


Figure 4. Local wood products purchasing by consumers of LG/P agricultural products in the Pioneer Valley of western Massachusetts (N=44).

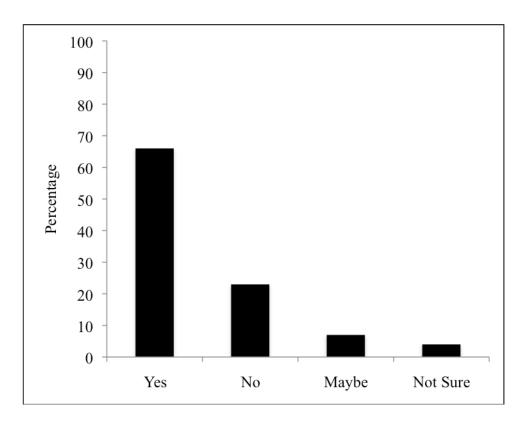


Figure 5. Hypothetical intention to purchase local wood products by consumers of LG/P agricultural products in the Pioneer Valley of western Massachusetts (n=44).

### 4. RECOMMENDATIONS/SUGGESTIONS

Buy Local agriculture campaigns such as that in the Pioneer Valley recognize the important role of consumers and consumer attitudes in establishing and maintaining robust markets for LG/P agricultural goods. Local wood producers would benefit from identifying their target customer base and implementing a promotional campaign that appeals to the *salient* attitudes of their target consumer.

Consumer attitudes are dynamic and are influenced by a range of factors (Beckett and Nayak 2008; Ajzen 1991), including information, social and cultural norms, beliefs, values and perceptions (Ajzen 1991; Ajzen and Fishbein 1980). Claims made by respected others, such as opinion leaders, play a significant role in the development of an individual's attitude toward a certain product (DuPuis 2000; Ajzen 1991). Therefore, providing consumers with information about the benefits of local wood products through labeling, branding or other promotional efforts will directly influence attitudes towards local wood products (Tokarczyk and Hansen 2006; Ajzen 1991).

Producers of local wood products may benefit from expanding their own knowledge of consumers. Gaining insight into existing consumer attitudes and beliefs through market research and test marketing, such as that done by CISA, would enable producers to deliver effective marketing messages that resonate with consumers (Allen and Hinrichs 2007). Promotional messages must appeal to consumers psychological concerns (Tokarczyk and Hansen 2006). The promotional campaign by CISA included paid and unpaid advertising and outreach events. This two-pronged approach built awareness of locally grown foods and, importantly, established relationships between producers and consumers based on trust (O'Hara and Stagl 2001).

As opinion leaders pointed out, successful producers understand the attitudes and beliefs of their target consumer, and position themselves in order to appeal to consumer attitudes and beliefs. Additional training of producers in marketing, communication, retailing or related areas is likely necessary for success in promoting local wood products (Tokarczyk and Hansen 2006). Collaboration and cooperation among producers and other stakeholders is also critical (Feagan 2007). By collaborating with a wide range of stakeholders, such as architects, homebuilders, landowners, and others, producers of wood products can build a broad base of support through the creation of support networks (Murdoch 2000). Again, this may require marketing, communication or other skills beyond those related to wood production.

Though forests provide important ecosystem services (e.g. Costanza et al. 1997) consumers may not understand the role of local wood products markets in ensuring forests exist for future generations. Education emphasizing the complex relationship between keeping forests as forests and consuming local wood products may provide a foundation for a local wood products campaign.

## APPENDIX 1. OPINION LEADER BIOGRAPHIES

**Richard Burke:** Mr. Burke began working for the USDA in 1976 as a loan officer for the Farmers Home Administration, which later became the Rural Development Agency. In his 33 years working for the USDA he held various supervisory positions and worked on several programs to enhance farm viability. Most recently, he was working for the State of Massachusetts as the Director of Agricultural Business Programs. In 2009 Mr. Burke was appointed to the position of State Executive Director of the Farm Services Agency, a position he currently holds. He works directly with farmers and producers on financial assistance, farm loans and commodity production as well as direct marketing. He has a B.A. in Forestry and Natural Resources from the University of Massachusetts.

<u>Daniel Finn:</u> Mr. Finn works for Pioneer Valley Local First (PVLF), a subsidiary of Businesses Alliance for Local Living Economies (BALLE) on efforts to enhance the viability of local communities through promoting local businesses. He serves on the Executive, Marketing and Membership, and Events Committees for Pioneer Valley Local First, and regularly attends BALLE conferences on local economies. Prior to PVLF, Mr. Finn worked for the New England Businesses for Social Responsibility. He has a B.A. in Environmental Studies.

Elisa Campbell: Ms. Campbell is an Environmental Activist for various boards, groups and committees. She has been involved with the Sierra Club, and most of her efforts in the past two decades have been to protect Massachusetts' state-owned public lands. Ms. Campbell served as a member of the Board of Managers for the state's Department of Environmental Management from 1995 through 2000. She is active with the Wildlands and Woodlands organization and she is also a free-lance columnist for the Amherst Bulletin where she publishes monthly opinion pieces on environmental issues and conservation planning.

<u>Jay Healy:</u> Mr. Healy and his family have owned and operated the 475-acre Hall Tavern Farm since the early 1900's. Today the forests of Hall Tavern Farm have been transformed to an economically and environmentally sustainable forestry operation through employing innovative forest management practices that protect the natural habitat and optimize more profitable ways to operate. In 2002, Mr. Healy received a grant from the Massachusetts Farm Viability Program through the Department of Agricultural Resources that enabled him to expand his business operation. Each year, he targets 10 to 15 acres of woodlands for forest improvement. Mr. Healey was a former state legislator and agricultural commissioner.

<u>Margaret Christie:</u> Ms. Christie served as CISA's executive director from 1997-1999, when the "Buy Local / Be a Local Hero" program was launched, and interim executive

director in 2008. She is currently in charge of new project development at CISA and is focused on infrastructure and research projects related to large-volume sales of locally grown products. Prior to joining CISA, Ms. Christie worked for the University of Massachusetts Integrated Pest Management Program and the Northeast Organic Farmers Association. She has a bachelor of science degree in sustainable agriculture from The Evergreen State College and a master of science degree in rural sociology from the University of Wisconsin-Madison.

<u>Charlie Thompson:</u> Mr. Thompson works as a forester for GMO Renewable Resources, one of the largest Timber Investment Management Organizations in the world. He serves as a member on the Technical Steering Committee for the Massachusetts State Forestland Management Committee. He was previously the Executive Director of the New England Forestry Foundation.

**Bob O'Connor:** Mr. O'Connor coordinates land conservation programs for the Massachusetts Executive Office of Energy and Environmental Affairs. He works on agriculture and forestry issues, and participates in discussions about forest policy in the Forest Forum and beyond. He has worked at various jobs in state agencies for the past 25 years. He runs the Massachusetts Forest Forum, which has as one of its main goals to emphasize and strengthen value-added local wood processing and marketing. He has a Bachelor of Arts in Forestry from SUNY Syracuse and a Master of Science in Administration from the University of Massachusetts.

Mary Jordan: Ms. Jordan is the Director of Agricultural Development for the Massachusetts Department of Agricultural Resources, Division of Agricultural Markets. She has served as Director since 1996, when she was appointed by then Commissioner Jay Healy. The Division of Markets works to promote the growth and viability of Massachusetts' agricultural markets locally, regionally and nationally. Ms. Jordan oversees all of the programs within the Division of Markets, including Commonwealth Quality Program, Farm-to-School Initiative, "Mass grown and Fresher" Logo, Specialty Foods and Value-Added Production, Farmers Markets, and Export Development. Ms. Jordan works closely with over 50 agricultural and commodity organizations as well as with a broad-breadth of local, state, and federal level entities. She received a Bachelor of Arts from Framingham State College in 1987.

<u>CS Wurzberger</u>: Ms. Wurzberger is the manager of marketing at Our Family Farms. Her background and expertise are in marketing, and recently she began working on various aspects of Buy Local marketing and consumer research.

# APPENDIX 2: SURVEY QUESTIONARRES

Interview Questions: Opinion Leaders

### FIRST TASK: INFORM THE PARTICIPANT OF THE SURVEY RESEARCH

- Explain my role as a researcher doing research on local agriculture in the Pioneer Valley. Explain that I am a Masters student at the University of Connecticut.
- 2. The purpose of the research is to better understand why people buy locally grown agricultural products in the Pioneer Valley. The results of this research will be published in a thesis and a peer-reviewed journal.
- 3. Explanation of ethical issues: "I anticipate the interview should take no more than one hour and you may stop it at any time"; "answer any and all questions you choose, and refuse to answer any question"; "may I disclose your name in my report or would you prefer to be anonymous?"
- 4. Permission to audio-record: "may I record this interview or would you prefer I not record it?"

#### PART 1:

*Opening (trust-building) questions:* 

- 1. Can you tell me when you first became aware of the "Buy Local" phenomenon, or when you first became engaged in it?
- 2. Can you tell me about your employment history? Education?

Addresses the consumer attitudes and beliefs

- 3. In general, why do you believe more people buy locally grown or produced agricultural products every year? What prompts them to do this?
- 4. Specifically, why do you think people in the Pioneer Valley buy locally grown or produced agricultural products? If more than one reason, which is most prevalent? What are the consumer attitudes and beliefs?

Addresses the various actors making competing claims

- 5. How did the Buy Local phenomenon evolve in the Pioneer Valley? When did it begin? Gain traction? How has it changed over time? Why has it been so successful here?
- 6. Who are the proponents of the Buy Local agriculture phenomenon? Are there opponents? Has this changed over time, and if so, how? Why?

## Addresses the local wood products movement/potential

- 7. Are you aware of locally grown or produced wood products in the Pioneer Valley? If so, can you tell me about this? When did you first become aware of or engaged with them? (e.g. Homegrown wood)
- 8. Do people in the Pioneer Valley buy locally grown or produced wood products? If so, why? What are the concerns of consumers of local wood products? Are there certain locally grown/produced wood products that are popular?
- 9. What barriers do you see that would prevent people from purchasing local wood products? What are advantages?

Addresses the various actors making competing claims

- 10. How did locally grown or produced wood products evolve in the Pioneer Valley? When did it begin? Has it gained traction? When? Has it changed? Is it successful and if so, why?
- 11. Are there proponents of locally grown or produced wood products? Are there opponents? Has this changed over time? What changed?
- 12. Are people involved in the Buy Local agriculture movement also involved with locally grown or produced wood products?

Closure

- 13. Is there anything else you would like to tell me? Did I miss anything?
- 14. Can you suggest anyone else you believe is close to the Buy Local agriculture movement \*(or locally grown/produced wood products) that I should speak with? How can I reach them?

# Survey Instrument: Consumers

Hello. My name is Charlotte Rand and I am a graduate student at the University of Connecticut. I am doing research on the Buy Local agricultural phenomenon in the Pioneer Valley, and part of my research involves a survey of consumers. Please help yourself to an information sheet with more details. Would you mind taking 2-3 minutes to answer a few questions?

*Opening (trust-building) questions:* 

15. Do you buy locally grown or produced agricultural products (Yes; No; Don't know)? If so, how often?

Daily

Weekly

Monthly

Yearly

Other

Don't know

16. What do you buy, and where do you go to buy it?

Addresses consumer attitudes and beliefs

17. Why do you buy locally grown or produced agricultural goods?

Supports local economy

Conserves rural landscape

Protects the environment

Fresher and better quality food

More socially responsible

Other

Don't know

18. If more than one reason, which is the strongest?

Supports local economy

Conserves rural landscape

Protects the environment

Fresher and better quality food

Lower carbon footprint

Better price

Fair wages for laborers

Other

### Don't know

Addresses the various actors making competing claims

19. Where do you get information about locally grown or produced agricultural goods?

Local Farmers

Friends

Family

Media \*( Radio TV Advertisements)

Non-profit organizations

Government agencies/workers

Other

Don't know

20. Do you follow local environmental issues, and if so, what issues are most important to you **(Yes, No, Don't know)**? Do you follow local political issues? Which political issues are most important? What about local social issues? Which social issues are most important?

Addresses local wood products

21. Do you buy locally grown or produced wood products (Yes; No; Don't know)? If so, how often?

Daily

Weekly

Monthly

Yearly

Other

Don't know

22. If yes, why do you buy locally grown or produced wood products? If more than one reason, which is the strongest?

Supports local economy

Conserves rural landscape

Protects the environment

Better quality

More socially responsible

Other

Don't know

23. If yes, are there certain locally grown/produced wood products you specifically buy or you would buy if available?

Paper

Construction timber

Artisan wood crafts

Landscaping timber

Other

Don't know

24. Is there anything more you would like to tell me? Did I miss anything?

Thank you for taking the time to answer my questions.

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