

Direct Producer-to-Consumer Marketing:
A Feasibility Study for Increasing Local Food Access to Limited Income Communities in
Lewiston-Auburn, Maine

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By Karen Ullmann
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Abstract

Direct producer-to-consumer marketing in a local food system transfers produce straight from farmers to consumers. This research examines the feasibility of a variety of direct-to-consumer strategies in the urban twin cities – Lewiston-Auburn, Maine – a community that is working to marry food systems, public health and environmental efforts. Officially labeled a “Food Desert,” the challenge faced by this community is to address issues of access, availability and affordability. This study assesses the feasibility of four direct producer-to-consumer strategies – farmers’ markets, community supported agriculture (CSA), food buying clubs and mobile food trucks – as a means to cultivate community, support local agriculture, improve health and address access to food. Based on the premise that solutions begin and end with the community, qualitative and quantitative data were triangulated to capture community feedback on these strategies: 98 consumer surveys, 24 producer surveys, 12 key informant interviews and 1 low-income community focus group. Barriers to greater adoption of local foods include the perceptions that local foods are too expensive and the observation that fewer people cook, buy seasonally and shop at local markets due to inconvenience. Limited income community members are particularly challenged, because they may not have the time, energy and resources to access healthier foods. Informants suggest incentive programs, policy changes and increased fiscal support from private and federal investors to increase access to healthy food. From a business perspective, market feasibility depends largely on strong management, organized operations, strategic use of technology, and well-defined consumer and producer targets. Interest from various actors – farmers, businesses, nonprofits, community partners, and investors – evidence growing momentum and support for local foods across Maine. The success of direct producer-to-consumer marketing in limited income, urban communities, however, is a “wicked problem”, one that will depend on larger social, economic and political value shifts.

Introduction

Amidst economic crises, oil shocks, and apprehension of global change in an already resource-contained, conflict-ridden world, food security has become one of humankind's most pressing problems. (Metcalf and Widener 1243)

Food insecurity is a current global and local issue. Food insecurity exists, “whenever the availability of nutritionally adequate and safe foods or the ability to acquire acceptable food in socially acceptable ways is limited or uncertain” (Haering and Syed). Today 1.02 billion people worldwide are undernourished, and in the United States 14.6% of the population is food insecure (Neff et al. 1591). The globalization and industrialization of food systems, characterized by dependence on mechanization, fuel, fertilizers, and pesticides, has resulted in, “the centralization process of food production, coupled with marginalization of rural populations and increasing hunger and nutrition” (Kremer and Deliberty 1252). Ensuring food security is compounded by issues of, “ecological and resource threats intertwined with that of peak oil, including climate change, population growth, projected peaks in other fuel sources, soil depletion and contamination, water shortages, and urbanization” (Neff et al. 1587). Social consequences include poverty and poor nutrition. With rapid changes in the production and consumption of food, those who are food insecure are, “frequently overweight and obese, contributing to health inequality suffered by those in lower socioeconomic classes” (Haering and Syed 34). Food security is a complex environmental, social and economic issues embedded in a range of challenges, such as, economic vitality, public health, ecological sustainability, social equity and cultural diversity.

Several authors consider such complex issues a ‘wicked’ problem (Rittel and Webber 1973; Mason and Mitroff 1981). Established by Rittel and Webber (1973), ‘wicked’ problems, “defy a singular solution,” because unlike conventional management techniques, adaptive ecosystems tend to include larger system issues (Metcalf 1242). A multi-faceted systems approach considers a range of interrelated questions, such as, how does today’s global industrialized food system, and its

dependency on oil for fueling farm machinery, producing pesticides and transporting food, impact community health? How can public health advocates and policy makers address these issues on a local level? How are communities of lower socioeconomic status impacted? Bylthe et al. establish some issues with addressing 'wicked' problems, to include the need to assemble community, elusiveness of effective communication, the difficulty defining the problems and the challenge of mobilizing action (283). The issue of food security can appropriately be described as a 'wicked' problem.

Local food systems are discussed as one solution to these issues of our globalized food system (Kremer and DeLiberty 1252). Connelly et al. describes, "local initiatives have blossomed as a sector of activity with a specific focus on expanding alternatives and transforming conventional approach to the way we produce and consume food" (Connelly et al 313). Local food systems are based in direct marketing initiatives that focus on, "bringing consumers and producers together, with the longer-term goals of more sustainable and just food systems" (Feagan 162). This 'turn to the local' movement places emphasis on place-based and community-based responses to local and global problem (Connelly et al. 313). Local food systems are embedded in the, "natural and social networks formed through common knowledge and understanding of particular places" (Kremer and Deliberty 1252). Local food initiatives make explicit linkages across multiple public interests such as environmental sustainability, public health and economic revitalization. Working towards a local food system brings into question broad-based societal structures and processes that need greater examination for communities to address food security.

Empirical context

This research examines aspects of the food system in the context of the urban twin cities – Lewiston and Auburn, Maine – an active community within the local food movement that is working to address 'community food security'. Hamm and Bellows (2003) define 'community food security'

as, “a condition in which all community residents obtain a safe, culturally acceptable, nutritionally adequate diet through a sustainable food system that maximizes community self-reliance, social justice, and democratic decision-making.” Community food security embraces efforts to enable access to affordable and nutritious foods through systems that are sustainable and just (Pothukuchi 351). ‘Sustainable’ in this context includes, reduction of food miles, markets that sell local foods and healthy food access in low-income communities (Pothukuchi 351). Metcalf argues that food security, “strengthens community resilience via the three dimensions of sustainability – reducing the urban ecological ‘foodprint,’ improving public health, and supporting the local economy” (Metcalf 1249). ‘Community food security’ addresses multiple public health, environmental, social and economic concerns.

Officially labeled a ‘food desert,’ Lewiston-Auburn residents have difficulty accessing healthy and affordable foods. A ‘food desert’ is defined as, “deficient access to the most well-stocked outlets, the large stores or supermarkets that usually provide abundant, good quality, low-priced food choices” (Hubley 1224). In the past couple years, many studies have addressed the relationship between the built environment and high obesity rates in the United States, especially in impoverished communities (Gordon-Larsen et al.; Fuzhong et al.; Odoms-Young et al.). Research finds that low-income urban communities suffer high rates of diet-related disease due to the great abundance of processed, high-calorie foods of low nutritional quality (Pothukuchi 351). One of the challenges in Lewiston-Auburn is the high prevalence of fast food restaurants and convenience stores in the downtown. There are more unhealthy foods than healthy foods in close vicinity to low-income households, and prices are higher (Walter 160). Issues of access are felt disproportionately with low-income residents.

The Lewiston-Auburn community has several active networks, projects and resources dedicated to addressing community food security. Emergency food providers (EFPs) within the downtown, such as St. Mary’s Food Pantry, The Salvation Army and the Trinity Jubilee Center, are

food points accessible to downtown residents. Less than 50% of single-parent households live within 1 kilometer of a soup kitchen or a food pantry (Walter 160). St. Mary's Nutrition Center is involved in a variety of local food initiatives, including but not limited to, community gardens, cooking and education classes, garden-education programs, job-training programs and the Lewiston Farmers' Market (Walter 159). The collaborative community-based project, Good Food for Lewiston-Auburn (GFLA), is also a sign of initiatives to address food security. The goal of this organization is to develop and support comprehensive approaches that improve access to healthy food for consumers, support local producers, and create sustainable food system solutions. Their vision is to make local, healthy, and culturally appropriate food, "accessible, affordable, and available for all community members through a range of activities, programs, policy recommendations, and collaborations" (GFLA Winter 2011/2012). The efforts of this organization represent the growing interest in community and regional food systems that is bolstered by, and in turn supports, a "broader social movement for sustainable and just food systems, an emphasis on localism in food, and public health concerns related to the global obesity crisis" (Pothukuchi 350).

Research Derivation and Intent

The purpose of this research is to assess the feasibility of increasing local food access to limited income communities in Lewiston-Auburn. The derivation of this research is community-based. Representatives for Good Food for Lewiston-Auburn were interested in exploring alternative direct marketing methods for increasing local food access. Direct marketing is largely defined as, "various producer-consumer pathways, both old and new, which shorten the conventional food chain, bringing these two groups of actors closer in proximity – and what might this might actually and potentially denote" (Feagan 161). Direct marketing has the potential to address, "underlying questions about community food-security, justice, sustainability and poverty-alleviation," in the

context of extremely complex social and political issues that depend on community values (Feagan 162).

Community partners requested specific evaluation of following four direct markets: farmers' markets, community supported agriculture (CSA), food buying clubs and mobile food trucks. Quantitative and qualitative data was collected to capture community feedback on the above strategies. Representatives for Good Food for Lewiston-Auburn helped develop the following research objectives:

1. Understand what direct producer-to-consumer markets, or resources and infrastructure to build direct markets, currently exist in Maine and Lewiston-Auburn;
2. Learn what gaps need to be addressed and/or filled to increase direct producer-to-consumer markets in L-A;
3. Learn from expertise and background of key informants;
4. Assess community understanding of direct producer-to-consumer marketing and interest in buying local foods;
5. Assess farmer willingness to enter new markets if made available and/or what resources they need to meet increased demand.

These above objectives drove the design of 12 key informant interviews, 98 Lewiston Winter Farmers' Market consumer surveys, 24 Lewiston Winter Farmers' Market producer surveys and 1 downtown community focus group. The findings will serve to inform Good Food for Lewiston and the Lewiston-Auburn Food Policy Council's next actions for addressing local food access in the Lewiston-Auburn community.

This study provides an opportunity to explore the potential for local food initiatives to improve health, social justice and environmental practices towards a community that is more food secure. To this end, how can the urban twin cities of Lewiston and Auburn – with high levels of poverty and challenges of healthy food access, availability and affordability – restructure its food system to better serve the needs of its inhabitants? Based on community perspective, this study

considers the market feasibility of alternative direct producer-to-consumer markets as a means of meeting the needs of limited income residents in Lewiston-Auburn's food desert.

Direct Marketing and Local Food Systems

Overview

There is no universally accepted definition of “local” food. Sometimes “local” is defined by the geographic distance between food producer and consumers. Other times “local” is defined by social and supply chain characteristics (Martinez et. al 3). For all purposes, this paper will define “local” as direct marketing from producer to consumer, resulting in consumers buying food straight from producers.

There are two types of direct marketing: direct-to-retail/foodservice and direct-to-consumer (Martinez et. al 4-5). Direct-to-retail/foodservice involves straight-lined produce transfer from farm to school, restaurant, hospital or store. This form of marketing typically involves higher yields and can sometimes involve a co-operative system in which multiple farms collaborate to meet the demands of multiple institutions. The Interval Food Hub in Burlington, Vermont is a good example of a non-profit direct-to-retail initiative that connects small and midscale farms through a community supported agriculture (CSA) network to deliver local products to businesses, restaurants, retailers, institutions, and individuals (Schmidt et. al 157). Direct-to-retail/foodservice marketing is a way for well-established organizations to transfer large quantities of produce to different institutions.

Direct-to-consumer marketing, on the other hand, transfers produce straight from the farmer to the consumer or individual. In this marketing arrangement, the middleman distributor is removed, leaving the farmer to assume many responsibilities including storage, packaging, transportation, distribution and advertising of their product (Martinez et. al iv). Farmers are more likely to engage in direct marketing if they are a “small” farm, meaning they have gross sales less than \$250,000 per year (USDA, Economic Research Service, 2010), and are located in or near

metropolitan counties (Martinez et. al 18). The general profile of the direct-to-consumer farmer is a self-sufficient, small-scale producer who lives in or near a metropolis.

These direct-to-consumer farmers engage in markets that place them in direct contact with their consumers. Examples of direct-to-consumer marketing include farm stands, pick-your-own farms, on-site farm vending, farmers' markets, community supported agriculture (CSA), food buying clubs and mobile markets. Such market alternatives are considered to be non-traditional and community-oriented because there is added emphasis on the social linkages between producer and consumer. Through these markets, farmers develop consumer relationships that hopefully widen their consumer base and create repeat patrons. In return, consumers know their farmer and are more likely to understand how and where their produce was grown, which accounts for better traceability and accountability within the market. These non-traditional, community-oriented marketing strategies are predicated on a mutual relationship between farmer and consumer.

A short supply chain enables social relations between farmer and consumer, but also makes production and operations smaller and more efficient. Direct marketing supply chains are shorter, meaning production is smaller and crops are more diverse (Kambara and Shelley 5). The distance traveled from farmer to consumer is less than the distance traveled for imported products. The market is limited to capacity and resources of the given locality, but less time, energy and waste is lost to processing, packaging and transporting imports. As a marketing strategy, these options for improving the food environment are often less expensive, require less space, and can be quicker to implement than programs such as store revitalization and farm-to-institution distribution networks (Ver Ploeg et. al 107). Direct-to-consumer methods also have shorter hours of operation, which typically last a couple hours once a week, requiring less employee or volunteer work than community gardens, for example (Ver Ploeg et. al 107). Direct-to-consumer marketing alternatives can function year-round, but often their products are sold seasonally due to farming patterns and

set backs from weather and blight. Direct marketing strategies create a short supply chain where all means of production and operation occur within and are determined by the local resources.

Overall, the goal of direct marketing is to provide consumers with farm-fresh, local food directly from the producer. Specifically direct-to-consumer marketing will be the focus of this paper. The following section will provide an understanding of direct-to-consumer market as it is seen within the larger agricultural industry, including competition with larger agribusiness firms, market trends, research and funding, and important stakeholders. Following this section, I will provide an overview of four specific direct-to-consumer marketing strategies – farmers’ market, community supported agriculture (CSA), food buying clubs and mobile food trucks.

Competition with large agribusiness firms

Small, direct-to-farmers must compete with large agribusiness firms for the growing demand in healthy, organic food. Recently there has been an increased demand for healthy, fresh and locally sourced foods. There is increasing consciousness of where food comes from and how it is produced. The increased demand has resulted in more variety, quantity and availability of organic products within the retail sector over the past 15 years. The retail sale of organic foods increased from \$3.6 billion in 1997 to \$21.1 billion in 2008 (Dimitri and Oberholtzer iii). There has also been a shift in where these organic products are sold, from healthy food stores to food cooperatives, like Whole Foods, to mainstream supermarkets such as Safeway, big-box stores such as Wal-Mart, and club stores such as Costco (Dimitri and Oberholtzer 1). Organic farming is no longer a niche market dominated by small famers.

More than ever, the organic farming sector is diversifying and expanding. The issue with such large-scale diversification and expansion is monopoly of the organic supply throughout the country (Adams et. al 12). Supermarket chains now “coordinate purchases through a central warehouse, and with this centralization and concentration of buying power, have become one of the agricultural industry’s ‘price makers’” (Kambara and Shelley 3). As producers lose control over

price and consumers grow more distant from their food source, food becomes commoditized by a dollar value, just like any other household item, clothing or electronic. Cantor and Strohlic found in a survey of small to midscale farmers in California that small farmers faced significant marketing challenges, particularly in their ability to match volume and price of larger farms (Cantor and Strohlic 11). Kambara et al. refers to this tension and disparity between small growers and larger organic corporations as the “uneven playing field” of the agricultural industry (Kambara and Shelley 3).

Fortunately, farmers have adapted to this “uneven playing field” in a way that plays to their strengths. Local food is the small farmers’ biggest strength. Locally-grown produce accounts for increased proximity between consumer and buyer, shorter supply chain and face-to-face interactions with consumers. For starters, proximity lends itself to better quality and fresher produce. These foods tend to be produced under safer conditions such as fewer pesticides, humane treatment of animals and equal worker rights. Second, a shorter supply chain enhances product traceability and accountability (Anderson 1). Consumers are more likely to know how and where their food was produced. The transparency of a short supply chain creates what Hamm refers to as a “values-based value chain,” in which the “values desired by consumers begin with the producer and are identity-preserved as they move through the food chain to the consumer” (37). A short supply chain, with close proximity between grower and consumer, characterizes local food and creates a market advantage for small farmers.

Another advantage of local foods is face-to-face interaction between producers and consumers. In this market scheme, consumers and producers act less like “atomized units of consumption and production” and more like individuals that are part of an “embedded” social community (Kambara 5; Hinrichs 295). “Embeddedness” implies a feeling of social connection, reciprocity and trust that serves to modify and enhance human economic interactions (Hinrichs 296). Such relationships fuel a sense of “civic agriculture” where food-focused relationships

between people are valued and a greater appreciation for community, health, and the environment is fostered (Hamm 37). In the face of a growing organic industry, locally grown foods are the marketing edge small farmers have over large agribusinesses. "Local" is the new "organic."

Market trends

Direct marketing is now a small but fast growing segment within the agricultural industry. Over just ten years, direct marketing sales doubled from \$551 million to \$1.2 billion in 2007 (Martinez et. al iii). The USDA Agriculture Census Data found direct marketing represented 0.4 percent of agricultural sales (Martinez et. al 5). Diamond and Soto argue that the report underestimates direct marketing sales because non-food crops not normally marketed to consumers were included: oilseed and grain farming, nursery and floriculture, cattle feedlots and horse and other equine products (Diamond and Soto 8). When they compensated for this discrepancy, they found direct marketing sales within the industry should have been 0.3 to 3.5 percent higher (Diamond and Soto 8). Growth in direct marketing represents increased demand for local foods by consumers and increased opportunity for profits for farmers.

Direct marketing enables small farms to remain competitive. By eliminating the wholesalers and other middlemen, farmers capture higher dollar value return (Adams 3 et. al; Martinez 19). Instead of competing directly with large agribusiness firms, "local growers are able to carve out a local market niche and thereby increase their financial viability" (Kambara and Shelley 5). Farmers who formerly could not access locked or distant markets, now have an opportunity to have a successful business (Adams 3). With direct marketing, farmers regain autonomy over their business and specialized markets from product mix to price to channel of distribution (Kambara and Shelley 5). Direct marketing enables higher return and more autonomy for producers.

Circumventing the middleman also has many potential benefits to the community and the environment. For communities, direct marketing provides access to locally grown, fresh and healthy food. Fresh food has the potential to prevent obesity and other diet related diseases

(Anderson 1). Buying close to home also keeps money circulating within the community. Locally directed buying and selling, “connects the community’s resources to its needs resulting in relationships that serve to restore the land and regenerate community” (Sonntag vii). In turn, a stronger economy improves entry in to the food industry and increases jobs in food production, processing, distribution and retailing (Anderson 1). Such a market system helps protect against potential economic repression or food storages. For the environment, direct marketing reduces pollution from transportation, increases diversification and sustainable production, and protects against widespread food contamination and disruption from natural resources (Anderson 1; La Trobe 181). Overall, direct marketing helps farmers succeed against larger competitors, while earning higher returns and benefiting themselves as well as their community and environment.

Research

For farmers, the ability to maneuver strategically within the market, to respond to the ebbs and flows in demand, to have an edge against larger competitors, is a matter of business success or failure. Farmers are committed to finding a successful market, one that provides sufficient demand and plays to a farmer’s particular niche or specialized product. The organization Appropriate Technology Transfer for Rural Areas (ATTRA), published an article “Direct Marketing: Business Management Series” that reinforces the need for farmers to remain updated on the market,

“Marketing does not begin after production, but well before the first seed is planted. For farmers working outside the conventional system, the importance of marketing cannot be over-emphasized. Consumer-focused marketing is the single most important factor that determines the success of an enterprise. Marketing is not just about selling. It requires a clear and astute understanding of what consumers want and the ability to deliver it to them through the most appropriate channels for a profit. It includes the planning, pricing, promotion and distribution of products and services for consumers, both present and potential” (Adams 3)

As ATTRA emphasizes, farmers must manage many jobs that run up, down and along side of a condensed, yet multifaceted supply chain. It is not uncommon for farmers to capitalize on a variety of marketing techniques. The USDA reports that over 70 percent of small farmers combined direct

sales with other forms of entrepreneurial activities such as organic production, tourism, and custom work (planting, plowing, harvesting etc. for others) and consequently reaped larger profits (Martinez et. al 21). Farmers essentially act as agricultural entrepreneurs that must be constantly innovative and resourceful.

In order for farmers to be successful in many areas, it is helpful for them to have access to market analysis and research. Guides on how to market, budget, diversify and evaluate their business can be helpful for starting farmers. For existing and start-up farmers it is important to know, for example, the barriers to local food-market entry and expansion: “capacity constraints and lack of local distribution systems into mainstream market; limited research, education and training for marketing local food; and uncertainties related to regulations that may affect local food production, such as safety requirements” (Martinez et. al iv). Such market facts and statistics help farmers determine how, what, where and when they are going to market their food products. Farmers are the foremost driver for marketing funding and research because of their direct interest in market knowledge and fluctuations.

Funding

The federal government provides the most comprehensive set of resources for farmers to understand marketing. Most research and funding is either created or financed by the United States Department of Agriculture (USDA). Every five years, the USDA’s National Agricultural Statistics Service (NASS) produces a report called the Census of Agriculture, which outlines all the current U.S. farm economy (Diamond and Soto 1). This report and many more can be found on the USDA’s website. The USDA has its own division, Agriculture Marketing Service (AMS), committed to “improving food and agricultural product distribution” (USDA, Agriculture Marketing Service, 2011). The division alone includes a listing of publications, services and funding programs dedicated to farmers markets and local food marketing. The division provides services for starting farmers and grant programs such as the Beginning Farmer and Rancher Development Program

(BFRDP), Sustainable Agriculture Research and Education Program (SARE) and Farmers Market Promotion Program (FMPP). The federal government provides many research and funding resources for farmers and records national trends in marketing and agriculture.

Stakeholders

Policy makers and politicians have a vested interest in agriculture because of national health and economic concerns. The growing national obesity rates and the diminishing number of young and beginning farmers requires more money expended on health care and weakens local economies (Anderson 1). Despite fewer farmers entering the market, there is still demand for healthy foods. U.S. organic farmland more than doubled between 1997 and 2005 from 1.3 million acres to a little over 4 million acres in 2005, but supply still fell short of demand (Dimitri and Oberholtzer 10). Policy makers want to support small farmers because they help fill gaps in supply through non-traditional markets and keep the national economy diverse; a security net in the event of economic recession or food shortage.

Other stakeholders interested in direct marketing include for-profit and non-profit organizations. Several websites, run through private funds, advertisements, or mere interest in the interface between local foods, entrepreneurship and social media, serve as educational hubs for producers and consumers. These websites help connect consumers to local foods and producers to consumers. These sites allow producers to expand their business and to advertise their products. LocalHarvest.org, for example, is a national directory of food related businesses ranging from food cooperatives to family farms to CSAs to farmers' markets. Consumers can search local foods within their area under any of the above businesses. The website includes over 20,000 members, with a growing rate of 20 members per day (Local Harvest, 2011). Membership is free so entry is accessible to a variety of producers and businesses, making Local Harvest a fairly comprehensive overview of the local food movement cross-nationally. Online directories can help connect consumers to local foods.

Other websites help advertise additional forms of direct marketing outside of CSAs and farmers' markets. Roaming Hunger is another example of an innovative internet directory that advertises mobile food trucks around the nation. Food vendors can easily become members and create a profile that includes everything from pictures to menus to locations. Consumers can search for nearby food under different search categories such as cuisine and vegetarian options. For those technologically advanced, Roaming Hunger provides real-time vendor searching for consumers with smart phones. Such information can be helpful, especially as food vendors are always on the move (Roaming Hunger, 2011). The internet creates a mechanism for marketing local foods where ingenuity, social media and entrepreneurship have combined to promote local foods on a national level.

The non-profit sector of stakeholders generally includes health representatives, environmentalists, economists or other interested parties who want to improve local food networks. Non-profits typically facilitate relationships between farmer and consumer by developing stronger marketing channels and resources for community activists.

Marketumbrella.org is a nonprofit organization operating in New Orleans, Louisiana that has helped to build and develop the local Crescent City Farmers Market since 1995, which has grown from 800 to 2,500 customers weekly. With such success, marketumbrella.org now helps other communities develop flourishing farmers' markets in their area. They provide a program called "Marketshare," which helps managers and individuals run a successful market to include lessons, tools for economic measures and reference materials. Marketumbrella.org is an example of a non-profit organization with regional implementation, yet national outreach and influence (Marketumbrella.org). Non-profits can help strengthen direct-to-consumer marketing channels and facilitate the relationship between producers and consumers.

Many well-rounded food coalitions in major cities also act as facilitators between producer and consumer. These programs are primarily concerned with community food security and have

addressed this issue from a variety of angles, including and in addition to direct marketing strategies. Examples include the Food Trust (Philadelphia, Pennsylvania), D.C. Hunger Solution (Washington D.C.) and the People's Grocery (West Oakland, California). These programs are well-established and federally funded. Across these examples, the most popular programs have been farmers' markets and CSAs. These forms of direct marketing are effective in large cities because they have the population and demand to build bigger public markets and establish "bundle" CSAs in which multiple farmers meet the demands of many consumers and outlets. Large non-profit organizations within cities have a lot of experience and provide strong models for smaller organizations to follow.

Smaller community-oriented coalitions, operating in rural, small, and mid-sized areas, symbolize the spreading grassroots effort to increase accessibility, availability and affordability to healthy, local and fresh foods. Most community groups are driven by the unequivocal need of low-income areas where there are economic and social barriers to healthy foods. These coalitions are often governed by a food policy council, a diverse group of individuals including government representatives, educators, local businesses and community members. This council collectively assesses their local food system and decides how to implement programs to improve food security. Smaller, grassroots community coalitions are growing cross-nationally and deserve greater analysis and attention.

The variety of stakeholders in the local food movement shapes the available direct marketing guides and resources. As stated above, the USDA controls the creation and funding of most current programs and educational tools. USDA reports are the strongest source for data on the local food movement. Overall, there is a need for more guides and toolkits designed to help non-profits and community coalitions assess the feasibility of building or strengthening their local market network. These organizations would be interested in knowing, is direct marketing successful? Do these alternatives really increase social relationships? How would a community

begin to initiate such markets and what resources would be required? Are these options viable for low-income areas? A symposium of national case studies could also ground research in lived experiences and help communities determine which market option is most appropriate for them. The remainder of this chapter is an attempt to provide a comprehensive overview of four direct-to-consumer marketing strategies – farmers’ market, community supported agriculture (CSA), food buying club and mobile food truck - with the interests of non-profits and community organizers in mind.

National Trends

Farmer’s Markets

Definition and Background

A farmers’ market is a “common area where several farmers gather on a recurring basis to sell a variety of fresh fruits, vegetables, and other farm products directly to consumers” (Martinez et. al 5). Products include but are not limited to fruits and vegetables. Many markets also host a variety of specialty items and homemade products such as cheese, meat and poultry, fresh flowers, baked goods, honey, maple syrup, and jellies (Kantor 22). Most markets run once or twice a week in either an indoor or outdoor setting. They range in size from a “small community-based market to a large market run by a farmer organization and serving several thousand shoppers” (Kantor 22). Most well established farmers’ markets are managed by hired individuals to oversee the organization, rules and regulations, and promotions for all growers (Martinez et. al 5). Some farmers markets are also run by non-profits or community coalitions. Overall, farmers’ markets are predicated on a simple concept: producers bring food to a centralized spot where community members congregate to buy local food items.

In addition to food, farmers’ markets foster a sense of community. For one, they provide a place for people to congregate such as a public building, park or school. These places are often a source of pride for community members and farmers’ markets can help highlight their significance.

Green and Hilchey echo that in addition to access to fresh, nutritious foods, farmers' markets "often contribute to downtown revitalization, providing a vibrant public crossroads and enhancing a sense of vitality and quality of life in the community" (42). Second, farmers' markets provide a "social experience" that intertwines food, community and place. In comparison to the typical trip to the supermarket, these markets create a more social shopping experience, with entertainment, crafts and food tasting (La Trobe 183). The ability to enliven community and enrich a sense of place differentiates farmers' markets from other forms of direct marketing.

While the interchange between community, food and place may appear novel, the concept of farmers' markets is not. Farmers' markets have been around for many years. Formerly, farmers' markets were the primary form of buying and selling produce. They enlivened towns, acting as a hub for socialization and activity. Embedded in this socialization was a mutual relationship between farmer and consumer, described by Hinrichs as neither a formal nor contractual but "rather the fruit of familiarity, habit and sentiment, seasoned by the perception of value on both sides" (298). Memory of the social and community benefits were lost in the advent of WWII when production and distribution shifted from a regional to a global system (Roth 1). Once regionally produced foods were replaced by foreign imports and farmers' markets began to disappear. While the popularity of farmers' markets diminished, the fundamentals, based in social and economic relationships, remain the same.

Current Trends

Farmers' markets are making a comeback. Statistics from USDA's National Directory of Farmers Markets show that there has been a 17% increase in farmers' market between 1994 and 2011 (USDA, Agricultural Marketing Services). More farmers markets equal more vendors. Many new farmers, "seeking diversified and decentralized marketing options and alternatives outside the traditional marketing option," have entered the market in response to the recent demand for locally sourced foods (Kambara 2). Between 2000 and 2005 there was a major growth in number of new

vendors and market sales, increasing from \$888 million to \$1 billion (Ragland and Tropp 7). Since then sales have slowed slightly, but the USDA speculates new vendors simply have not reached sales comparable to older competitors due to their inexperience in the market (Ragland and Tropp 7). Overall, farmers' market are growing and becoming more successful, especially in the Far West and Mid-Atlantic regions, where average monthly sales are double that of other areas - \$56,742 and \$41,452 respectively (Ragland and Tropp 2).

To keep track of all these markets, many governmental, state and non-profit groups have tried to measure and record their progress. In addition to the USDA National Directory of Farmers' Markets, several states have centralized information on farmers' markets, and a number of statewide farmers' markets associations have been formed (Adams et. al 15). The Farmer's Market Federation of New York is an example of a statewide farmers' market association. This federation is a membership organization of farmers' market managers, market sponsors, farmers and market supporters that helps build the "number and capacity of farmers' markets in the state, develop the scope of professionalism in farmers' market management and improve the ability of markets to serve their farmers, their consumers and their host communities" (Farmer's Market Federation of New York, 2011). Their website advertises farmers' markets and events across the state, helping connect consumer to producers. Newly developed infrastructure for organizing and maintaining farmers' markets suggests this form of direct marketing will remain a prominent method for marketing local produce.

Community Supported Agriculture (CSA)

Definition and Background

In comparison to farmers' markets, community supported agriculture (CSA) is a relatively new concept. The movement stems back to the 1960s in local communities of Switzerland, Germany and Japan (Hinrichs 299). In both Japan and Europe, the movement was initiated by women concerned over the increased use of pesticides and level of processed and imported foods (Wood et.

al 1). Instead of settling for unsatisfactory foods, these women took it upon themselves to communicate directly with local farmers to obtain fresh, organic and locally grown produce. The Japanese refer to this community-farmer partnership as “teikei,” translated as “food with the farmers’ face on it” (Wood et. al 1). With origins in Europe and Asia, the CSA movement developed out of a desire for locally grown, unprocessed foods that was grounded in a stronger connection between community and farmers.

The concept of community supported agriculture reflects the philosophies of the international food movements in the 1960s. community supported agriculture is a form of direct marketing in which consumers buy a “share” or portion of a farmer’s crop for the upcoming season (Hinrichs 299). Members are charged based on the total number of members and the projected farm production costs for the year (Bolen and Hecht 25). Most CSAs require members to pay upfront, causing consumers to commit to the season’s successes and failures. Such commitment is risky for members, “entering a relationship based on such indeterminacy requires some measure of trust” (Hinrichs 300). If all goes well, members receive weekly local produce at below-retail price that can be picked up at the farm or nearby location (Donaker and Shute 4). Community supported agriculture represents a form of direct marketing predicated on the same appreciation for mutual farmer to consumer relationship and local foods as it was in the 1960s.

Current Trends

Once introduced in the United States, the CSA movement started slowly, but grew rapidly. The first CSA started in 1985 in western Massachusetts (Hinrichs 299). One year later, there were only two CSA operations in the United States, but between 2001 and 2005 there was a 50 percent increase in CSAs from 761 to 1,144 (Adam et. al 1). Today, there are rough estimates of 1,400 CSAs cross-nationally with numbers potentially greater than 2,500 according to the online directory, Local Harvest (Martinez et. al 8). The quantity of CSAs varies across the country, from state to state. New York, California and Massachusetts have the largest number of CSAs but rural states like

Vermont, Maine and Iowa have more CSAs per million in population than other urban states (Green and Hilchey 37). Growth in farmers participating in CSA is followed by consumer participation. The average number of members per CSA increased from 55 in 2007 to 75 members in 2009 (Woods et. al 5). The retention rate for returning members is more than half at 63 percent (Strochlic and Shelley v). Over a short period, the number of farms and members participating in CSAs has grown rapidly suggesting CSAs will continue to be a viable form of direct marketing.

Operations and Management

Among the 2,500 plus CSAs that operate today, there is no one formula for how a CSA is run. As Green and Hilchey reiterate, “no two CSAs are the same” (Green and Hilchey 37). Each CSA is shaped by a variety of factors such as geography, consumers, size, business structure and even weather. In general, CSAs are categorized into two types: subscription and shareholder CSAs. The difference between subscription and shareholder CSAs is determined by who manages the CSA. The manager of subscription CSAs is a farmer or group of farmers. Subscription CSAs represent three fourths of all CSAs (Adams et. al 3). Shareholder CSAs, on the other hand, are run by a “core group” of individuals (Adam et. al 2). In this case a “community, agency, organization or group of shareholders may organize a CSA and then recruit one or more farmers to supply it” (Green and Hilchey 37). Sometimes these “core groups” help serve low-income communities and are affiliated with food banks, community farms, community gardens, internships, training, farmers’ markets and advocacy (Adams et. al 2). These groups often try to make shares more affordable through alternative such as flexible payment plans, work-share options and acceptance of food stamps (Donaker and Shute 6). Despite many variations in business structure across different CSAs, knowing who manages a particular CSA can help inform business intent and the community served.

No matter who runs a CSA, all participating farmers must determine what they are going to grow, how much they will charge and where they will distribute shares. CSA farms are unique in the fact that they are designed to offer members a diverse range of products. Most farmers grow

between 50 and 70 distinct crops during the course of a season (Strochlic and Shelley iv). Each week a typical CSA will provide a mix of between 8 and 12 types of vegetables, fruits, and herbs per member (Kantor 23). For membership, consumers will pay a seasonal, upfront cost somewhere between \$150 to \$775 dollars (Donaker and Shute 6). Prices vary depending on the size of the share and length of the season, which is often 10-25 weeks or longer in warmer areas where harvests occur year-round. Most CSAs provide members with two size options: family/single or full/basic (Donaker and Shute 6). When it comes to delivery, three fourths of farmers require members to pick shares up at their farm. The remaining quarter deliver products to consumers. The top most common points of delivery from most prevalent to least are generalized regional drop-off points, farmers' markets, home or office and community center or church (Woods et. al 11). Managing production, price and delivery are regular responsibilities for any CSA operation.

Food Buying Club

Definition and Background

A food buying club or a pre-order cooperative is a type of direct marketing where “members pool their resources (money, labor, purchasing and distribution) to buy food in bulk quantities at reduced cost” (Kantor 22). Food buying clubs are a way for community members to purchase at wholesale. Collectively, they function as a larger entity like other institutions such as schools, hospitals or restaurants that have the demand and resources for bulk purchasing. Their collective power enables access to a food market they would not have been able to gain individually (De Lallo 2). Most simply, food buying clubs save community members by buying directly from farmers at wholesale price.

A food buying club is a type of food cooperative. Food cooperatives are “customer-owned entities that are often formed to meet a need not being met by a traditional retail store or to provide an alternative source of food in areas poorly served by retail markets” (Kantor 21). In addition to a food buying club, the other type of food cooperative is the retail cooperative food store.

Like food buying clubs, this form of cooperative purchases large quantities of food directly from farmers. Food buying clubs are essentially retail cooperatives, without a storefront. The bulk items they purchase are stored on shelves and tables just like any other retail or grocery store. In fact, they look no different and maintain an “inventory of food and nonfood items similar to a regular retail store” (Kantor 22). Another difference is that retail cooperatives have access to a larger population of people because non-members can shop at the store and buy farm-direct products. While retail food cooperatives are relevant to food buying clubs in practice and philosophy, this form of cooperative takes a lot more effort to implement and sustain.

Challenges

Trends in retail cooperative food stores may have implications for the success of food buying clubs. In a 1996 National Food Stamp Survey (NFSPS), fewer than 3 percent of interviewed respondents from a low-income area reported shopping at a food cooperative (Kantor 22). Reasons why food cooperatives are poorly attended include lack of community support, poor access to working capital, and federal regulations that require stores to provide a certain variety of food items in order to accept federal nutrition programs (Kantor 22). Research suggests that food cooperatives have not been effective in low-income areas. More research is required to understand the barriers to greater use of retail cooperatives, and food buying clubs by extension.

Computerization

One of the strategies for successful food buying clubs is computerized management and online purchasing. Computerized management is important for any business involved in record keeping and inventory. In the case of food buying clubs, lots of calculations are required to add up consumer demands and to churn out costs per consumer. It would be helpful for food buying clubs to look into software that is specifically tailored to bulk ordering and purchasing. A survey of CSA operators found that 70% used computer software (Quicken, Quickbooks or Excel) to track

production costs (Woods et. al 2). These data suggest that members of a food buying club could just as easily adopt computers to streamline group purchases. Finally, the internet could be a convenient way for club members to make orders without having to gather in-person. The Oklahoma Food Coop is a successful online food buying club with over 4,000 members that sells food and non-food items only within the state of Oklahoma (Oklahoma Food Cooperative, 2011). The National Catholic Reporter newspaper describes this enterprise in 2007 as a “cross between a farmers’ market and a grocery store and it’s located on the internet” (Heffern 12). Computers as a tool for management and online purchasing could help buying clubs streamline operations and provide convenience for members.

While computerization seems like a practical next-step for food buying clubs, research suggests online food shopping is not an overly popular activity. Some larger brand supermarkets have explored options for online consumer shopping (Netgrocer and Walmart). Even large, resourceful grocery stores, who have the finances to develop of user-friendly websites and can provide convenient transportation and delivery services, have not reported significant trends in online purchasing (Delaney-Klinger; Boyer and Frohlich). Online services are currently used by only about one-tenth of 1 percent of households, most of which are two-career household earning between \$45,000 and \$75,000 a year (Bolen and Hecht 25). Trends in consumer online consumer shopping at larger supermarket chains are quite low, almost nonexistent. Research suggests more marketing or a major change in consumer behavior is needed before the public readily adopts internet buying to shop for food. More research in needed to understand patterns of use for online buying clubs.

Mobile Food Trucks

Definition and Background

Mobile food trucks are motorized vehicles that sell either fresh produce or made-to-order healthy, cooked food. As a form of direct marketing, mobile food trucks present provide two unique

advantages. One advantage is their mobility. Food trucks can quickly and easily relocate, particularly to areas with less food access. Second, food trucks have low operating costs (Feldstein 26). For entrepreneurs interested in the food industry, who do not have the means to start their own restaurant, this is a great alternative. Mobile food trucks are characterized by their mobility and affordability, which helps to differentiate them from other direct marketing strategies.

The combination of mobility and affordability has spawned many innovative forms of mobile food trucks. The types of trucks and operations range from the typical food vendor to artisan, local food to a mobile grocery store. The coalition of Mexican-American street vendors in Oakland, which sell fresh fruits and vegetables, tamales, and hot corn on the cob, is an example of an average food vendor promoting local food through cuisine that is true to the culture of the community (Feldstein 25). A second example of the fresh, local and sustainable food truck are the Green Trucks in San Diego and Culver City, California. This truck is publicized for being environmentally and health conscious with vegetarian options, solar panels, a plastic-free policy and an engine run completely on vegetable oil (Green Truck, 2011). The final example is the one-aisle, walk-in grocery store converted from an old bus. This mobile grocery store was developed by the non-profit organization, Fresh Moves from Chicago, Illinois (Fresh Moves, 2011). These examples show the options are endless and continue to grow. Mobile markets have much potential for innovation with their low start up costs and mobility. The key is determining which strategy is appropriate for the present community.

Research

While there are many specific examples of innovative food trucks across the country, there is little academic research to analyze and evaluate their influence. Little is known about the feasibility and sustainability of these programs. More research is required to evaluate the effectiveness of various mobile truck programs, to include their potential impacts on health and the economy.

Policy

Research on the impact of mobile food trucks on the economy and health could also be helpful for local policy-makers, because they control legislation and funding. Policy-makers have the power to decide what permits will be granted and what initiatives will be funded. In this way, policy-makers are major actors in the feasibility of mobile food markets. Local policy-makers can help interested entrepreneurs obtain licenses and certifications (Action Strategies Toolkit 78). They can even provide, “incentives to locate mobile markets (e.g. green carts and trucks) that offer convenient and affordable healthy food in lower-income communities with no access to healthy food” (Action Strategies Toolkit 77). Local policy-makers have the resources and power to finance and facilitate food trucks, which give them significant power over the presence of food trucks within a given area.

The City of Cleveland, Ohio is an example of a government body that promotes local street food through government funding. They initiated a program called the “City of Cleveland Sustainable Street Food Pilot Program” (City of Cleveland 1). The program seeks applicants interested in owning or operating street carts. The city provides selected candidates with a \$5,000 loan and grants up to \$2,500 (City of Cleveland 1). Candidates are encouraged to highlight different cuisine and artisan foods, but emphasis is also placed on sustainability and healthy foods. These prescriptions are intended to boost community health and protect the environment. The city of Cleveland has merged government funding and entrepreneurial activity in way that is economically and socially beneficial to its community.

This first chapter provides a basic overview of direct marketing, looking at competition within the industry, market trends, research and funding as well as important stakeholders. Most importantly, the chapter gives an overview of direct producer-to-consumer marketing strategies to include farmers’ markets, community supported agriculture, food buying clubs and mobile food

trucks. The overview provides some of the positives and negatives of each strategy. The following chapters will use this background to inform the feasibility of these studies as they apply to Lewiston-Auburn, Maine.

II. Food Systems and Community

A local food system depends on communities working together to find alternatives to our current food system. Community is an integral part of the local food system. Through a local food system people develop important relationships, both business and social, and learn to rely on each other.

The next three chapters synthesize qualitative and quantitative data collected from community constituents. Qualitative data were taken from 12 interviews with various key informants across the state of Maine who are actively involved in local food systems. Informants include two farmers' market managers, a retail storeowner, three community organizers, a food distributor, an emergency food provider, a software designer and three farmers. Interviews were conducted between December 13, 2011 and February 13, 2012 with each session lasting between 45 minutes to an hour and 30 minutes. Each informant was asked questions about their occupation, involvement in local foods, knowledge of various direct producer-to-consumer marketing strategies and opinion on the feasibility of an alternative market that address communities of limited income. All interviews were recorded and transcribed verbatim. Upon completion, the interviews were coded by paragraph to analyze for themes.

The second set of qualitative data were taken from a focus group of low-income community members or Lewiston-Auburn residents. The focus group consisted of ten community members who attend and/or volunteer at Trinity Jubilee Center's free lunch and food pantry programs. These residents were asked about perception of healthy eating, federal assistance programs, downtown food access and interest in alternative marketing strategies. Their conversation was recorded and transcribed verbatim.

Qualitative data were taken from two surveys at the Lewiston Winter Farmers' Market. The surveys were designed for the consumers and producers who attend the market. Consumer data was collected on December 15, 2011 and January 19, 2012 markets. A total of 98 consumer surveys

were collected. Consumers were asked about demographics (age, distance of residence, frequency of market participation), reason for attending the market, interest in alternative markets and perceived barriers. Producer data were collected during the market on February 16, 2012. Data were collected from all 24 producers in attendance. Questions included business characteristics (size, number of employees, distance from market), percentage of sales directed to consumer and retail markets, interest in expansion and willingness to enter new markets (refer to appendix for a list of interview and survey questions).

In this chapter on food systems and community themes from key informant and focus group interviews were identified and analyzed. The argument is that collectively, communities have the power to (1) encourage value shifts; (2) change buying behaviors; (3) shape the market; (4) strengthen networks; and (5) build social capital important to making a local food system successful.

Encourage Value Shifts

The corporate food system - big meat, one of six companies down to nationwide down to statewide to the grocery store - and that's not what the local food system looks like at all. Its much more farm to table and it happens in one of a dozen ways, but it's not normal. I should say since the last 100 years it's not normal...Now there's all these different ways where we can still sort of avoid being the farmer, but you know, have that food in our lives. (J.B.)

According to this informant, a local food system is an alternative way for communities to access food that has not existed predominately in the last 100 years. Informants and community members report growing concern about the realities of our current system. One farmer says, “there’s a big push right now amongst a certain group of individuals to know where their food’s coming from and caring about that and seeking out local sources of food” (G.V.). Despite increased awareness, informants suggest the majority of the population do not participate in a local food system.

Greater support for local foods requires a shift in the way consumers value food and the methods by which food is grown. A local food system is difficult to implement because the system is alternative; there are no standards and it is still evolving. One informant says, “the corporate food system has the supply system. The local food system doesn't...that's where we're challenged right now, 'cause we don't have a system, so people don't know how to do it” (J.B.). In contrast to the corporate food system, a local food system is a much more grassroots effort making it a difficult system to initiate and sustain.

Key informants further identify some of the “disconnects” which prevent greater adoption of local foods (G.V.). These “disconnects” are perceptions about (1) cost, (2) cooking, (3) growing food, (4) quality and (5) convenience. Community plays a role in how these barriers are either reinforced or removed.

Informants suggest that perceptions of high cost are a major barrier towards people's adoption of a local food system. Two informants believe local foods are simply too expensive and that organic foods are out of people's price range, especially in a poor economy (S.B. and G.V.). One farmer argues that the health benefits and quality of local foods outweigh higher prices (G.V.). Based on the prevalence of diet-related diseases in our country, her reasonable question is “What is that costing our nation? Far more expensive than it would be to spend an extra 75 cents a pound for a pound of ground beef” (G.V.). Another farmer believes that it takes more money to feed an unhealthy diet in the long run:

If people wanted to eat cheap and eat healthy, you eat grains, cereals, vegetables and fruits, and you don't need as much. You know if you go and eat a whole box of twinkies, well you are still going to be hungry 30 minutes from now...You know you could feed your kid a bowl of oatmeal cereal in the morning and you wouldn't have to feed them until noon time, but if you feed them crap sugar cereal in the morning you've gotta feed them again two hours later. So it takes more to feed crap...I eat that way...I can eat on a low budget. (P.V.)

It appears that the challenge is that cost perceptions come down to our values. One community organizer reflects,

American values are tied to the dollar...you know we think if its cheap, its good and it's really hard to break that...there's some truth that the cost of certain foods are high comparable to others but the reality is where we put our values...our values dictate where we're going to spend our money, so right now it's not good food. (S.B.)

Nonetheless, affordability is an important question for many low-income people in downtown Lewiston-Auburn. A community member reflects on attendance and the perception of cost at the Lewiston Farmers' Market,

I think its probably well attended. It could be better. I know people are turned away because of the cost. I know that a lot of people that I know use their food stamps and when they have the double dollar program they're able to get twice as much for the same amount of money. So they can now for \$10 dollars they can buy \$20 worth of stuff. Now I've heard people talk about the expensive which is one thing that people talk about and it's not a lot of variety. So they're not getting. You know they can go to Wal-Mart and get more variety then what they can here cheaper. Actually, I had one woman tell me that she can take a taxi from here to Wal-Mart and buy what she needs to buy and take a taxi home and be able to get a better deal, including the cost of the taxi, then what she would be getting at the farmers' market, which is kind of a bummer. 'Cause it's probably like \$10 bucks, \$12 bucks to do a round trip ticket for a taxi from the Lewiston to Auburn. (B.R.)

A community member from the downtown community presents the opposite perception, "At least Farmers' Market is cheap. Wal-Mart forget it. We need a co-op is what we need...people getting together to sell stuff at cheaper prices" (Focus Group Informant 1). A community partner acknowledges the challenge of different cost perceptions, "how do you combat the perception that farmers' markets are too expensive," if there is in fact a price difference (A.L.). One food distributor suggests that if people come to appreciate the quality of food, they will be willing to pay a higher price. She describes her market's success with a special variety of carrots,

One of our highest volume products is like chantenay carrots that's a heirloom french variety. It does real well in our climate in Maine because it gets sweeter after frost. That's something where its so unique and the flavor is so good that you know people are less apt to care [about cost], 'cause once you have chantenay you don't really want other carrots so much. (L.C.)

This informant also indicates quality food can foster connection to agriculture in Maine. Comments from interviews indicate that the price of local foods is debated. Some informants find local foods to be too expensive, while others do not. Some informants suggest there needs to be a value shift

around perceptions of health and the cost of food. Regardless, informants agree perceptions of cost impact market attendance.

One in two informants report that cooking is a barrier to greater adoption of local foods. According to one farmer, simply “nobody cooks any more” (P.V.). People want easy, pre-prepared foods, “everybody wants a frozen dinner, a quick meal they can pick up and heat up from the grocery store” (P.V.). The issue is compounded in the low-income populations, because they may not only lack the education and time to cook, but also may not have the utilities and resources. A farmer says, “Do they have a pot? Do they have a stove? Do they have running water? You assume running water but you never know what goes on inside somebody’s house” (P.J.). An emergency food provider in downtown Lewiston tries to provide cans with pop-tops, because it cannot be assumed that everyone owns a can opener, which is “stuff that we often never think of about cause there is always a can opener in the drawer” (J.B.). The fact that people are cooking less and eating more processed foods means people may be more disconnected from the food they eat and where it comes from.

As people become more disconnected from their food, informants find consumers have lost some basic knowledge of how food is grown. Three informants reported that they believe consumers do not understand the seasonality of food. A challenge for one farmer is educating consumers to buy produce past October, because, “I mean southern Maine you are growing well into November and you’re harvesting in December and so people don’t understand that they’re getting fresh produce up till after Thanksgiving out of the fields” (P.J.). A community member confirms that fresh produce can be purchased almost year round,

They are able to operate year round, especially if you have baked good and meats. And it’s amazing but you can get vegetables almost all year round. Fruit crops, you can get the, I think year round now. Carrots, onions, turnips, beets, stuff like that. It’s really great actually (T.S.).

Understanding the basic seasonality of food is important, because it determines when and what vegetables people should purchase. Informants argue that seasonal produce is less expensive than

produce that is not in season. One farmer says, “You know you don’t get string beans first in July, but you get them in the middle of August when everybody has them. Same with canning tomatoes, you don’t get them the first week they’re ripening” (P.V.). A lack of farming knowledge means people may not be making the most cost efficient buying decisions when purchasing local foods.

Informants suggest consumers’ buying decisions are also linked to expectations set at retail stores. A storeowner says that, “expectations in a retail setting are really high...make sure everything looks good, that all the bruised apples are removed and if the cheese starts looking a little funny you take it out” (D.G.). From one farmer’s perspective, people rely on stores to tell them what is local and healthy,

So they are paying attention to where their food is coming from, they are paying attention and caring what's being thrown at them in terms of what and some of this stuff this country is bringing in for food and so they're relying on somebody else like Whole Foods to dictate to them what is local quality organic, rather than them doing the research themselves or looking at, 'okay here is my Nezinscot Farm, they're producing all the stuff I need, why am I traveling two hours to get that?' (G.V.)

Another issue is that consumers are quick to throw away food that looks old. One farmer says, “we’re all a generation of refrigerated food...if it’s got a bad spot throw it away, don’t cut it out” (P.V.). A community member from the focus group tries not to waste any food,

Some of that half rotten stuff, I'll chop it up and use it. Give it away if it's going to spoil, you know what's wrong with that. A lot of people don't think of that...oh it's half rotten...chop it off and give it to somebody...bring it home and use it.

Informants indicate that consumers define the quality of produce based on the standards set at retail stores, a practice that tends to be misleading and wasteful.

Similar expectations seem to be transferred from retail stores to direct markets. Two farmers feel the appearance of their business and produce influences their reputation and ability to produce quality products. This is how one farmer thinks consumers perceive them,

Every time they [consumers] come to farm stand and the farmer might not have a clean cooler or they are wearing baggy clothes that's going to turn some people off...everybody wants, you know, the same quality and appearance as the grocery store. (P.V.)

Likewise, the other farmer asserts that presentation, organization and cleanliness are essential pieces of farmers' marketing strategy. If farmers want to succeed at a market, "We need to represent and present ourselves in a fashion that you know is high class. We need to care about what we're doing" (G.V.). A member of the Lewiston community agrees that certain people judge farmers based on appearance, even smell, "Farmers' market is fine but some of those people I won't deal with...the high and mighty and they think they...I'm sorry they do...and doing garden yea you use horseshit and it does stink, so I know this" (Focus Group). Expectations established by the conventional grocery store not only influence consumer buying behaviors, but also consumers' expectations of farmers and in turn, how farmers present themselves.

All three farmers find convenience to be another obstacle for greater adoption of local foods.

When asked why people do not attend her farmers' market a farmer says,

The major reason I think is convenience, but convenience holds a lot of other things in it too. It's one because people want to do one-stop shopping. They want to do it when they want to...not when the markets are open...they shop say Wal-Mart [...] Time convenience is big. Price is part of...this is a depressed economy around here, to be known a lot of welfare. We're one of the unhealthiest towns in the state and I think that all plays into people who have not been taught well. Education is a big part. So that is kind of to me is convenience, because pricing to me is even convenience. (P.V.)

This farmer identifies a couple of factors that define convenience, including one-stop shopping, education and price. Another farmer agrees that convenience may play another significant role in greater participation, "I think there's a whole population of people that if we can create easy access, without a lot of time out of their day, we can capture a larger percentage of the market" (P.J.). A final farmer notes that convenience is important to her customers, and reports that she drives two hours to Portland every week during the winter (P.J.).

In response, there is a growing effort to make direct markets more convenient. The manager of Lewiston Farmers' Market says, "the idea is a market wants to be a place where somebody can do pretty much all their grocery shopping" (S.B.). Another farmer would like to see a more permanent farmers' market,

When you have a farmers' market you're...that's only open one day a week or every few weeks, you're playing to a certain population and it's that much of a population, so in order to really ratcheted it up, you go to be open 6 days a week, you got to make a store front that everybody can walk through the door whenever they want. (P.J.)

On the other hand, one informant who is a member of food cooperative recognizes local foods are not necessarily convenient, but is willing to sacrifice convenience for quality. He says,

It's all about working around our food and getting the food we want the way we want it and its not super convenient but, we all sort of will spend that time doing that more than going to the grocery store and standing in line for [things] we don't want. (J.B.)

Informants suggest that either farmers and market managers need to make direct markets more convenient or consumers have to be willing to adopt a system that is less convenient.

Obstacles to adoption of local foods include the perceptions that local foods are too expensive and the observations that fewer people cook, shop seasonally and shop at local markets due to inconvenience. Greater community engagement in local foods can help correct some harmful perceptions and break down some difficult social, political and economic barriers. In the end, informants suggest the market is dictated by community values.

Change Buying Behavior

Acknowledging some of the “disconnects” that prevent people from buying local food, how might communities encourage changes in buying behavior? Key informants speak to this question both reflectively and tangibly through their actions, as each informant participates in Maine’s local food system in some way. Their careers (farmer, store owner, market manager, agriculture investor, emergency food provider) reflect their commitment to food, community and a local economy. All informants report on the difficulty of changing buying behaviors, but have creatively found ways to address the issue from their various perspectives. Education, broadly defined, appears to be the critical strategy for engendering support for local foods.

Due to its scope, education is broken down here into three sub-themes of *knowledge*, *outreach* and *communication*. What kind of *knowledge* is required to purchase local foods and who

has access? For *outreach*, how do informants engage with their community to help make them aware of opportunities? For *communication*, how is information disseminated and what other avenues may develop through which information exchanges can occur?

Knowledge

Buying local food requires knowledge about how to buy local food. One intention of a local food system is that it will encourage people to buy high quality, nutritious foods. Unfortunately, shopping locally itself is not easy and does not ensure people are making smart buying decisions or eating healthier. As one frustrated local food storeowner reflects,

You know even though I like to believe that the stuff we carry is healthier, there's still a lot of people that just get a loaf of bread or just get a block of cheese. [...] The busiest man at the farmers' market is always the bread buy. (D.G.)

In order to make healthier food choices, consumers must know how to shop “smart,” meaning consumers must know about different types of produce, understand nutrition, and be able to plan and prepare meals (G.V. and D.G.). An emergency food provider says, “seems to me that there are a high number of people that don’t have the concept of what ‘smart’ shopping would be” (J.B.). “Smart” shopping requires nutrition and cooking knowledge, which reiterates the “disconnect” informants observe, “nobody cooks anymore,” an implication to the larger knowledge gap presented here (P.V.). “Smart” shopping also means buying cost effectively – purchasing seasonal food at lower costs, selecting a smaller quantity of expensive foods with higher nutrient content, comparing prices across markets and utilizing sales and other incentive programs. Shopping “smart” requires a combination of nutrition, cooking and economic knowhow.

Presumably, purchasing healthy and affordable foods is an objective of any shopping experience, but buying locally also requires an added layer of food and market knowledge. As intimated earlier, local food buying can be more difficult, because it means consumer must know where to access local foods, and second what foods are accessible, when. Other forms of local markets also require additional knowledge and planning beyond a trip to the grocery store.

community supported agriculture (CSA) is one example. CSA participants must make meals out of a random sample of seasonal produce with items they may not be familiar or have never cooked with before (D.G.). One storeowner sees this challenge as a positive, “I love the model of just giving people a set amount of things and making them be creative, because otherwise...people ended up being really appreciative when they got a box of vegetables, but they would never walk into Barrels [Market] for example and actually pick out that box of vegetables for a bunch of reasons” (D.G.). Food buying clubs are another market example. Buying clubs require consumers to buy bulk quantities in advance and to know how much to order. In terms of preordering an informant says, “it’s easier to buy what’s in front of you than it is conceptually what you need at the time in your home...so planning is a lot to learn too” (J.B.).

Additionally, it is helpful if consumers know about processing and vegetable-specific storage techniques to help extend the shelf life of food. One member of the Portland co-op reflects anecdotally about his first experience making a monthly purchase,

...what I had to learn was how to bulk, how to store what I bulk bought. Like it's pretty easy to store rice, but its not as easy to store potatoes long for a long period of time and if you happen to be in an apartment that has a small frig there is only so much food you can hang on to...It took me a long time...I wasted a lot flour before I learned better ways of doing that. And really just the idea of buying in bulk and constantly having that rotating in your pantry sort of thing, like when you walk in it looks like I am rich with food because I have these gallon jars filled with beans and quinoa and rice and you know all those things. If I bought all that stuff all at once I would have never been able to afford it, never had a big enough paycheck. It's something that I built up over time as a strategy to keep food in my house at an affordable price in a way that I wanted to buy it. So there was definitely education on that. (J.B.)

The educational process this consumer experiences reflects some of the challenges of buying locally. He must change his habits to adapt to a new market, like storing large quantities of food over a long period of time, behaviors that are a step beyond basic grocery store shopping and cooking knowledge. Again, alternative market schemes require an extra level of time, planning and commitment.

Finally, knowledge about how to buy locally is not equal across all groups. The local food enthusiast, for example, has a clear interest in their food system. Other groups may be interested in buying local foods, but do not necessarily have the time, energy and resources to do so, a theme emphasized by one community organizer who is a voice for the Lewiston-Auburn community (B.R.). Ultimately, local food knowledge preferences populations with time and resources, easing their access to these markets. On the positive side, a desire to fill gaps and equate knowledge across groups may be a source of motivation for communities to collectively make their food system more sustainable.

Outreach

Outreach is one way to address knowledge gaps and disparities. There are many ways informants use education to engage with their community and attempt to change buying behaviors. The types of outreach informants use reflect the ways in which Maine is educating communities about health and local food systems.

Educating consumers at the location of purchase is one method of outreach. All three informants, with either a store or farm stand, use this strategy to educate their consumers. Such spaces provide a place to highlight local foods. One farmer uses her farm stand to educate her consumers on the diversity of products in Maine. She increases farm stand selection by including products from other farmers in the surrounding area. For her, it's about, "constantly educating consumers on the breadth and depth of products in the state of Maine and they're only going to know it exists if its not put in front of them" (P.J.). The other two informants with storefronts utilize their space for on-site cooking classes, food demonstrations and events (D.G., G.V.). One storeowner has a vision for combating perceptions about the high cost of local foods. He describes the plan for his next outreach class below,

...give people like weekly meal plans that have a budget, so it sort of says...rather than make the food itself less expensive, just do better strategies to...I'm also under the opinion it doesn't need to be more expensive if you go about it careful, so if you cook a lot with inexpensive but

nutritious grains, legumes and stuff that sort of construct meals for people that are predominately affordable inputs...like here's how you would cook with you know buy 10 pounds of potatoes, buy 5 pounds of dried beans, buy 10 pounds of whole wheat flour and then here some ways to make meals where you use a minority of meat and a majority of vegetables and grains, and you know for \$100 you can feed a family of four...this is how you go about it. I've been wanting to do that. I haven't yet. (D.G.).

Another farmer chronicles her decision to open a farm store, why she did it and how it serves her “classroom” to educate consumers,

...my background is in community health education and so when I graduated in '88 I worked away from the farm for two years counseling, doing health and nutrition classes, things like that and realized that there needed to be, for me at least, a different way of teaching health...so I came back to the farm with that thought in mind and developed Nezinscot Farm Store...so creating basically my classroom...a place where people can come and learn first hand where food comes from, the importance of local foods ... where to get them, experience them by having them...you know served in the café, or for those concerned about where their food is coming from...it's an opportunity to also have a one-on one-experience with trends of being able to see where their food is coming from. (G.V.)

Similarly, St. Mary's Nutrition Center in Lewiston also does outreach through cooking and nutrition classes. Part of their mission to is hold education classes for children, “our angle is primarily education...youth kids and adults can eat at the programs we run...we think of it as a food access point too...for some of them that is one of the biggest, healthiest meals they have had all day” (S.B.). Two informants echo the importance of doing outreach to children because they carry the legacy of our next generation (P.J.) and because they can persuade their parents' generation, “luckily I think farm-to-school is really taking off, which is great...schools are another great place to start, because kids go home and talk to their parents about it” (D.G.). One farmer feels targeting children is the most sustaining and long-term solution,

I think if a community can start all over I would say target the children. Kids in high school are much more well-aware than kids that graduated 10 years ago about eating healthy, so it's almost contagious. So I think if it was the long term goal, I would say target children just selling them carrots in school for their hot lunch, because it would take quite awhile to reach, but if kids demand carrots at home parents will buy them....I mean someone your age is much more open-minded and they gonna evolve more than someone my age. Probably I am still going to evolve, but not as aggressively as you're going to in your opinions and your habits. (P.V.).

Informants may have the right idea with targeting children. Two Lewiston members report in a focus group that their children prefer healthy to unhealthy foods, which is causing parents to think more consciously about what kinds of foods they serve their children. The first informant says,

I got a few kids, I try and do it [healthy eating] as much as possible, but I...my kids definitely like vegetables so I make...my kids would rather pick fruit and vegetable over ice cream and all that...do you want a chocolate bar or an apple and they're like, "apple."

The second community member says,

"My two...I got seven but my two youngest love vegetable...my two youngest love vegetables...they're more fresh vegetables, like vegetable have to be more fresh...they can't be cooked or they won't eat it cooked."

As much as children demand healthier foods, parents also want to please their children. Their commitment is clear. Without hesitation one community members says, "I have gone without eating for my kids" (Focus Group). Another community member says, "I'm not to let a kid go without eating. I can go without eating. Kids can't. You know?" (Focus Group). Whether or not parents and children in L-A agree with these statements above, there is something to be said for children's ability to influence their parents' behavior and the market as a whole by extension.

According to informant reports, cooking, nutrition and produce education, particularly those tailored to children, seem to be trends in outreach that occur at the market place or in public spaces such as schools and nutrition centers.

Communication

Communication, through marketing and direct conversation, helps disseminate information and increase knowledge. In order for people to know about various outreach initiatives, for example, there must be networks for people to educate each other and spread the word. Key informants speak of two general forms of communication. First, marketing as a conventional form of knowledge dissemination and market advertisement, and second direct conversation, the less visible exchange of ideas and experiences.

Key informants use a variety of intentional marketing strategies to advertise their product and educate consumers. One of the most common types of advertisement is the internet. All informants who are in the business of selling local food use the internet to some degree, either through Facebook, business website, food blog or online market. One farmer thinks of online advertising “as a way to keep my marketing costs down, because I do it myself and then I’m constantly looking at ways to leverage earned media, whether it be newspaper articles or interviews here...in order to get visibility for Jordan’s Farm” (P.J.). Online advertising also taps into the current and trendy technological age. One farmer says, “I look at social media as a way to help step to that tipping point where we are going to grab more of the population” (P.J.). Another farmer says simply, “it is where people are at” (G.V.). Due to convenience, cost and effectiveness, internet strategies for education are very attractive.

Several informants also mention the value of using some form of a newsletter, either emailed or printed, which can be used to update consumers about current markets. Typically these materials will include educational pieces such as recipes, nutritional advice, and producer information. One market manager found that their newsletter greatly increased consumer participation,

...the other thing that changed that’s making the winter markets wildly successful is a volunteer stepped forward in the market to do a weekly newsletter and the weekly newsletter, you know, it’s a little bit social, tells people what’s going on with the marketers, reminds people what’s in season and what they might find at the market and simply reminds that there is a market this weekend (A.L.)

Newsletters help managers advertise their market and simultaneously educate about local foods.

The executive director of a community and economic development organization also finds

pamphlet materials important in educating their consumers.

The products specifically that we’ve created are this local food directory, which sounds really simple but a lot of folks that are interested in local foods either don’t know exactly where to get it...it helps to publicize where the farms are and what types of products they have available and the other thing it does that I think it is good for farms is it lets the farms see what other people are offering for products and where they are located and I think it also in

the long run it helps develop connections between people and the farming community too, especially across the broader area. (T.S.)

Marketing helps sustain market and business viability, but it also serves as an educational tool.

Marketing is a way of teaching people about local foods and advertising the markets that already exist.

The other less obvious strategy related to communication is direct conversation between people. Key informants emphasize the value of personal, face-to-face conversation about nutrition and food. Two community organizers concur when they discuss word-of-mouth marketing as a way of spreading information, “you know one good experience passes on” (B.R., also A.L.). Better yet are situations in which knowledge exchange occurs unintentionally within newly created social spaces, such as farmers’ markets, community meetings and retail stores. One market manager observes that the interaction between consumer and producer increases people’s food awareness (A.L.). Another food distributor talks about the “vibrant exchange” of information that occurs at her grower planning meetings where there is,

...that opening in the conversation where someone talks about something they tried in their backyard, you like, “oh well what’s your favorite tomato variety?” That just helps us with our growing planning as well, both in terms of feelings and pragmatically we benefit from talking to people directly. (L.C.)

The same food distributor does a lot of communicating with the market, because fostering that exchange and educating “our market helps everyone” (L.C.). An informant also finds that his retail store encourages conversation between people who used to be strangers, “all of a sudden they’re seeing each other on a weekly basis and talking about what we did with the swiss chard, you know comparing and sharing those ideas” (D.G.). It is important to recognize these less tangible avenues through which valuable educational and social exchanges occur.

An informant from the Salvation Army, who works with low-income people, also emphasizes personal conversation. The volunteers at this emergency food provider sit down with

community members and work with them individually to determine why they are short on food.

The informant elaborates on their interaction with community members,

And the amount of food we give when they come in is how many people are in their home and try to make it...you could feed them for you know three days. That's the goal. It's really supposed to be an emergency need. Its not really set up to be once every three months, we are your grocery stop, kind of thing. There are a do that way...'cause the idea is that so when you sit with someone, work with them and, you know, why are you short this month, "what happened?" There are all sorts of circumstances, but when it continually happens, then, "what is going on?" (J.B.)

Volunteers use this personal interaction as an opportunity to educate consumers about better buying habits,

Right the buying behavior. It's a learned...So trying to break that cycle or saying, "Hey there is a different way to do this." ... I don't want to be just, You are in need, here's the food, there's the door." That's not what we do. We feel pretty strongly about that. (J.B.)

The Salvation Army works with community members on their issues, recording their history and food preferences (J.B.). Despite their efforts, this informant acknowledges the cycle of poverty,

If [food stamps have] been handed to you and it's been in your pocket and it's for years and years and years, and it's just there, just the thought process there of...I need to got to the grocery store and buy that dozen eggs, the loaf of bread and the pound of lunch meat...I can just run down to the corner store and buy an egg sandwich. (J.B.)

The interaction between emergency food providers and community members may play an important role in buying behaviors.

One final point from four informants is that frequent communication is necessary because changing behaviors takes time (J.B., T.S., P.V., D.G.). As one storeowner stresses, "I think the number one thing is constant interaction and discussion and facilitation with people. The only way you get people to change their habits or whatever is constant communication" (D.G.). Changing buying behavior is a process that requires persistence and patience. One farmer suggests small steps, "if you can keep it simple to start and get them eating that food, then I think it's easier to educate them with a new one [vegetable] to slip in occasionally" (P.V.). Another person says, "Try to get everybody doing something better with their food...I find that its one conversation at a time. It's a long train thing, but like once you solve that person's problems and get them into a system of

something it's solved" (J.B.). Again, frequent communication and interaction is key, because buying behaviors will not change overnight.

In the end, a local food system will not be supported unless more consumers change their buying behaviors. As informants suggest, communities can modify buying behavior through education such as outreach, marketing and communication.

Shape Market

There isn't any one person...we're building something, something bigger than ourselves. (J.B.)

In the same way that consumers will leverage change in the local food system, there is general consensus among informants that communities, specifically consumers, determine their market. As one informant says, it is about, "people organizing themselves to create their own market" (J.B.). In other words, communities *can* determine their market, they *can* shape how that market will look and they *can* step outside conventional forms of accessing food. It can be difficult to imagine an alternative food system, perhaps one where people no longer shop at large supermarkets or one where people no longer buy packaged food, but such ideals can be achieved if the community values them. The point is that communities have the power to shape their market, especially as a collective. A market is only as strong as its participants.

In various ways, informants indicate that each community determines their own market. The community determines if they want to create new markets to access food and if that system will be sustainable. Overall, the market is dependent on the personality and needs of the community itself (A.L.). There are many different market models, so the best strategy is to educate the community on all the different options and then let the market develop,

There's all these different pieces that involve all your food and you can just sort of allow people to know that they learn that that's available they can pick their own directions, and then as you go along you can further define and improve how each one looks in your community, so there's no buying club you can start one, if you have a motivated person. (J.B.)

Another recommendation is to let the market itself decide what producers will be included. An online market in Western Maine keeps the market open to anyone (T.S.). Essentially, farmers who will succeed will be those consumers most endorse (T.S.). Conversely, the availability of produce and producers' willingness to participate will determine market participation and viability. Communities, consumers and producers together, have a strong influence on the existence and success of their market.

In response to more specific questioning, informants provide no direct recommendation for which model may work best in the Lewiston-Auburn community. Informants return again to the question, "What is your community craving? Do they want spaces where they can bump into their friends and listen to music and eat stuff while they're there or are they really all business? (A.L.). Once again, choosing a particular market model is creative, grown organically out of community needs,

The local food system is about us, and so not only are all these things out there - farmers' markets, CSA, growing food for yourself, local markets that do focus on locals, coops, buying clubs - I don't think any of them will go away, like farming it's a very creative thing...like whatever you and the people around you wanna do to bring food and secure your food. (J.B.)

In some ways, the specific market type is not important, because all markets serve the same purpose. The models are also ambiguous, because there is no standardization of food markets. For example, food buying clubs and food cooperatives are used interchangeably. A storeowner observes consumers' confusion, "I think everyone is a little confused and worried about what it really means to join a CSA" (D.G.). Two farmers use this ambiguity to their advantage. Both report higher sales when they referred to their store membership as a "CSA" instead (G.V. and P.J.). The good news is that, "it's not that complicated to switch over if you decide to switch systems," particularly with online set-ups (T.S.). The best model will be what works best for the community.

However, informants provide evidence of practical barriers that shape the market. Community demographics such as urban versus rural landscape, income levels and cultural diversity play a role. Challenges of the urban 'Food Desert' resound, "access is a problem

particularly in urban areas if you can't walk to your nearest grocery store that has fresh fruits and vegetables" (A.L.). Skowhegan is looking into a mobile food capacity because, "many of the surrounding communities to Skowhegan are underserved and they are food deserts" (A.L.). On the other hand, the Intervale organization in Burlington, Vermont has a successful CSA where produce is delivered by a courier service. This market is supported by a community with more expendable income, which would not work well in a community with high levels of poverty (A.L.). In contrast, a CSA pick-up at a rural farm would not be convenient for an urban population, "you don't want all these folks from urban centers and urban areas all driving to a rural location to pick up their CSA share necessarily" (A.L.). A better alternative would be a delivery service that transports the produce to one or a couple designated locations in the city (Lamke). Feasibility is influenced by a community's social, economic and political demographics.

The final point from informants is that there is power in collective action. One member of the downtown Lewiston community says, "you get a bunch of people together that really care about people and you'd be surprised how many people somebody can feed, you know?" (Focus Group). Another person says that a local food system is a way of bringing back community, working together and supporting one another, "just working together to get out food is something we've sort of thrown out the window as a culture...we can't all be farmers, but we can still do a lot of work and spend a lot of time around our foods and sort of be there for each other in lots of ways" (J.B.). A local food system requires a joint effort that can have extended social and community benefits.

An important message to communities is that they have the power to shape their own market. Conversely, community members share the responsibility of ensuring the sustainability of that system, a system that is influenced by the social, political and economic characteristics of the community at hand. The good news is that communities are not tied to one system versus another, and their commitment to a specific market grows and adapts over time. A model determined by the community will also better serve the community.

Strengthen Networks

Positive Partnerships. It has paid to do the work of understanding what other groups in the community are up to and trying to achieve...because if you understand what motivates the downtown revitalization people you can tie your effort to what they're doing and then you can benefit from the promotion that they're doing. (A.L.)

Development of a local food system is more complicated than a community simply choosing their market. In order for a local food system to succeed, people must work together. Working together requires valuing community and the relationships developed between members of that community. A local food system is unique in that it involves a variety of different people from a host of different backgrounds. The system requires collaboration across networks and among different people such as community members, farmers, business people, politicians and nonprofit organizers. Building, developing and valuing interwoven networks is important to the functioning of a local food system.

Key informants emphasize that relationship building and networking are an essential part of the local food system. Relationships are not only positive for building community, but they also serve practical purposes such as business networking, financial support, communication and outreach. As the key informants suggest, there is a growing community effort to bridge efforts and to pool resources and knowledge. Agricultural investment groups, inter-farm alliances, grower meetings, food policy councils and nonprofits that develop markets for farmers are examples of these efforts. These networks provide the basis for a strong, interconnected food system.

Informants seem to suggest that in Maine, there is an active and expanding collection of regional and state networks that support local foods. Food awareness is high and people are working together to provide greater agricultural support, "the philanthropic community really cares a lot right now about food security and local food and farms...one of the really compelling things that people are drawn to from the philanthropy side is the low-income incentives and changing behavior around eating healthy food" (A.L.). Part of the question is trying to channel where and how funds should be distributed, "it's hard to articulate where the money is most

needed...the farmers to grow the stuff and the school and the hospitals and everyone to buy the stuff and that's hard to fund, you know so you end up funding mobs of individuals and small programs and stuff to try and facilitate that" (D.G.).

No Small Potatoes and Slow Money Maine are two groups interested in growing the agriculture sector through investment. Slow Money Maine is a network of community organizers, nonprofits, businesses and funders, where those looking to invest and those looking for investment, can combine interests (L.W.). Slow Money Maine is a testament to the local food activity throughout the state in comparison to the rest of the country,

There's more scale in other parts of the country, bigger businesses but there's a lot of activity. I think one of the reasons Slow Money is...at the forefront is because there's so many things happening in Maine already like MOFGA, all these organic farmers in Maine. People were all ready to take the next step, like Amber and starting a Gist Mill, and then Amber and Sarah starting the Pick Up, Penny doing the online farmers market. Those things were patenting on the ground and so Slow Money could just plug into them and help them keep up their momentum. (L.W.)

In addition, Slow Money Maine provides technical assistance to agricultural business such as marketing, accounting, financial networking and management assistance (L.W.). One informant says, "I think it [Slow Money] should be a pretty relevant piece in any agricultural enterprise's toolbox" (L.C.). Another business owner who is involved with Slow Money Maine says that networking and collaboration with other community efforts is key, especially from a financial perspective, "money flows in when they [investors] see that you're all collaborating and have common goals, and then once you start getting some money, it tend to leverage itself in really amazing ways" (A.L.). Creating these positive partnerships is helping to support local agriculture in Maine.

Planning is a critical aspect of both investing and insuring financial success. Grower planning meetings are an example of people building networks and working together around food. Grower planning meetings, between the market manager and farms, serve to plan the produce for

an upcoming season. For one food distributor, these meetings help, “make sure that our bases are covered...’cause we’re not going to leave everything to chance” (L.C.). Collectively people decide,

...okay well who wants to grow cardoons? You know, there are people that are going to be better suited to do that in terms of skill and technique and in terms of their soil than others, so like with our grower planning we don’t...we don’t have contracts with anybody, we just start and we look amongst ourselves like what do we want to see at what times of the year and then we ask growers what are you thinking about growing, what would you like to grow for us, let’s you know, ball park price. We don’t set price commitments ‘cause you know things change constantly, but we have like pretty much a gentlemen’s agreement with people (L.C.).

The meetings help decide who is going to grow what based on skill and technique, what times of the year people will be growing what, and what will be ball park prices (L.C.). A CSA manager can plan almost the entire year based on what is going to be in season (A.L.). Grower planning meetings to address communication, coordination and planning are important to the functioning of a local food system.

Several farms also work together through formal and informal networks. Many farmers work with others to supplement their farm or product selection (G.V.). One farmer, who started the Cape Farm Alliance, believes deeply in helping her neighboring farms,

Our goals, and that we kind of live by, and those are that we’ll grow high quality food to feed our community and we’ll create opportunities for other farms across the state, so as our business grows we aren’t necessarily producing more products, we’re pulling more product from other farms. (P.J.)

In addition to farmers selling each other’s products, there is also an outgrowth of business circles where agricultural entrepreneurs are joining heads to share advice on a wide range of topics from marketing to legal advice to accountant recommendations to financing loans (L.W.). Signs of more supportive versus competitive relationships are an indication of the inter-dependency required in a local food system.

The crowning example of community partnerships and networking are Food Policy Councils. A Food Policy Council is a formalized product of the local food movement where various community members join together to share ideas and resources to help improve a community’s food system. Food Policy Councils are growing cross-nationally, and as one market manager says, “I think it’s a

testament to kind of the climate, not only in the state, but in the country” (S.B.). People are ready to have some guidance about supporting projects that increase food security and advocate for fair and just policy (S.B.). With any such group, the goal is to bring together multiple players and skill sets. For example, one community created an LLC where farmers are owner-members of their CSA, “we wanted multiple voices at the table...we wanted farmers to feel like their success is at stake here too, and that even though we are going to buy produce at wholesale and sell it at retail value, we’re wanted you to do well” (A.L.). Similarly, the Lewiston-Auburn’s upcoming Food Policy Council will be the “mouthpiece” that will “advocate and support existing work and also kind of connect the dots” to make sure parties are staying connecting and working together (S.B.). An emergency food provider in downtown Lewiston thinks positively about a L-A Food Policy Council, “putting heads together and trying to think what will work best for the downtown is really important...the biggest challenge is...well different people have different takes” (J.B.). Food Policy Councils and similar organizations bring together a wide range of people to merge resources and skills in one larger, collaborated effort.

Across different people in the agricultural sector – farmers, businesses, nonprofits, community partners – informants report a growth in relationship building and networking in Maine. Expanding networks are a reflection of budding interest in local agriculture and a sign that people are working together. Practical benefits of state and regional networks include collaborative efforts, gathering more fiscal support, sharing business skills and diversifying food grown across Maine. A Local Food System depends on these interwoven networks of people.

Build Social Capital

Beyond the practical and business benefits of strong networks, social capital can develop from community engagement in local food system. Social capital includes all the valuable relationships, social spaces and community building that develops from a local food system (Portes

2000). Social capital strengthens community and provides communities with extended social benefits outside our conventional food system. Schneider finds there is growing body of cross-disciplinary research, “focusing on the various forms of social capital that result when people work together in networks and organizations to achieve outcomes” (Schneider 48). The downside is that the social benefits of local foods are less tangible and not well documented. Key informants provide some qualitative details that address issues of social capital. More specifically, informants talk about how local foods encourage greater connections between producer, foster celebration and excitement around food, provide space for a new social activity, and prompt community revitalization.

One benefit of a local food system is that it connects consumers and producers. There is evidence that people are attending farmers markets for the purpose of supporting their local farmer,

The other interesting question that comes up is what's your primary reason for shopping local? Is it 'cause its local or 'cause its organic or because its, you know, you're concerned about food safety or whatever. And people are trying primarily, around here anyway, doing it for sort of the altruistic hope that farmers will stay afloat and farms will stay afloat. So organic is not primary so we know we don't need to market that aspect. And that prices is not paramount around here. (A.L.)

For this businessperson, the observation is that people may attend a farmers' market to support their local farmer. A local resident of Lewiston would also like to support her neighborhood farmer,

Those are the people I'd like to buy from. The little side stands where they got a little tiny farm out back and they bring their vegetables out to their roadside stand to sell them to feed their families. Those are the ones I want to deal with. I don't want to deal with big farms. They got their money. They make theirs on everything whether it's in state, out of state, or whatever. I want to deal with the little guys. They're just like me. They don't have a whole lot, you know? I want to make sure that their family can eat along with my family. (Focus Group)

This resident sees herself as part of a larger system. She reflects one of the major altruistic visions of a local food system, which is community members coming together to support each other and ensure everyone has access to food. For informants who manage markets or nonprofits, the sentiment is the same, “our primary goal has been to figure out how to help some of the small farms

and how to make them stronger and more prosperous” (T.S.). In the same way, a farmer is proud of her family’s multi-generational agrarian tradition (P.J.), and even though farmers struggle with gathering greater support, their belief in community is reciprocal, “the other goal I had, which kind of ties into what you’re here for, which is how do we, you know that how to reach with a community, getting community involved, serving as a community source of food” (G.V.). These anecdotal observations suggest people want to support their local farmer, and in turn, they acknowledge the community benefit of such actions.

Another benefit of a local food system is the potential excitement and celebration around local food. People are increasingly trying to build community around good food (S.B.). Farmers’ markets are a great example of a new social space where people can come together to celebrate good food. Farmers’ markets create “vibrant activity” that is usually filled with music and activities for families (P.V.). A community in Skowhegan found through a consumer survey that the number one reason people attended the farmers market was for fun (A.L.). People clearly appreciate the social aspects of a farmers’ market, and as one Lewiston community member reflects, the farmers’ market is a social activity she can share with her children,

In the summer time I go right here [Lewiston Farmers’ Market]. Now that it takes food stamps like I’ll keep, I’ll literally take \$40 out of my food stamps to get like the blueberries or the strawberries in the middle of the summer. My kids get out of school, let’s go to the farmers’ market. That’s their snack right there. (Focus Group)

In addition to farmers’ markets, other retail markets also create new social spaces. One storeowner concurs, “obviously creating that market space has a huge positive benefit, you know of just that place to mingle and you know shop, just sort of interact...you know people meet each other all the time in there” (D.G.). The Portland Co-op also tries to build community around food, “we’ve created a community and in almost every case we try to do things with each other like have events, potlucks and these meetings...they’re all social interaction” (J.B.). Newly created social spaces enable community members to come together, interact and share in the celebration of local food.

The final social benefit of a local food system mentioned by informants is potential for community revitalization. Newly created social spaces, such as a farmers' market and community gardens, can help improve the aesthetic of a downtown, and in turn, community identity and pride in where one lives. Location of these markets is also important. If market managers can tie their efforts to a building or place in the community that people really care about then the exposure is great (A.L.). The owner of the old Skowhegan jail purchased this community landmark in order to turn it into a CSA pick-up and mill-processing center. The owner reflects that the purchase of her "quirky" building was simultaneously inexpensive and beneficial to the community,

It was in the downtown footprint. It's an attractive building from the outside, it's not like it was an eyesore or falling down. It's sturdy and it needed a revival. It needed to be revitalized in some way for the community good and so we felt like we were filling a bunch of birds with one stone. (A.L.)

Eventually the space will include a kitchen for valued-added processing, farm dinners, cooking and nutrition classes, and events (A.L.). Her business in Skowhegan has gotten a lot of attention from community members and funders, especially since philanthropists are paying a lot of attention to place-space grant making (A.L.). Another informant feels the business has a "lot of potential for community revitalization literally" (L.W.). In the same manner, Lewiston-Auburn also have a lot of potential for community revitalization. The manager of Lewiston Farmers' market comments, there is a lot of "energy around revitalization is pretty strong in Lewiston right now," particularly as more local businesses develop on Lisbon Street and urban gardens expand. The general consensus from informants seems to be that communities that address local food access can in turn revitalize urban aesthetics and encourage economic growth.

Social capital is an extended benefit of a local food system that does not necessarily exist under our conventional food system. The unwritten social benefits of a local food system include relationship building between consumers and producers, new social spaces and activities around the celebration of local foods and the potential for community revitalization. In the end, these

values may be motivation for greater consumer participation, whereby a local food system can grow and be sustained.

Qualitative data from key informants and low-income community members elucidate the interaction between community and the local food system. Overarching themes support the fact that collectively, communities have the power to encourage value shift, change buying behaviors, shape the market and build social capital. Obstacles to greater adoption of local foods identified by informants include the perceptions that local foods are too expensive and the observations that fewer people cook, shop seasonally and shop at local markets due to inconvenience. Nonetheless, communities have the power to shape their own market that will better serve the community. An encouraging observation is that across the agricultural sector – farmers, businesses, nonprofits, community partners – informants report a growth in relationship building and networking in Maine. Growing, developing and valuing networks is important to the functioning of a local food system. Such collaboration is a sign of the social capital benefits, which derive from a local food system, including new social space and activities around the celebration of local foods, and the potential for aesthetic and economic community revitalization. Across all these themes, community is intimately tied to a local food system.

Given the economy of Lewiston-Auburn, how do we apply some of the lessons learned in the previous chapter? What are some of the added challenges in the Lewiston-Auburn community? How do we address access, resources, and lack of cooking and nutritional education that seem to disproportionately affect low-income communities?

Many of the challenges related to changing buying behaviors mentioned in the previous chapter, such as time, energy, resources and convenience are relevant to individuals with limited income. The following statement from a community advocate captures some of these challenges,

There are some people that opt for convenience. If you are working ya know a lot of hours and you've got 3 kids that gonna come home and be starving and you just got out of work 5 minutes before they're gonna be coming through the door, do you really have the time and energy and education to ya know something, or do you throw something in the microwave, like macaroni and cheese, because it's quick and easy. I think most people mean to do well and they want to feed their kids healthy food. It takes education and planning to do that. (B.R.)

Participants indicate that convenience, time, energy, education and planning are barriers for community members with limited income, especially for parents who are responsible for children.

While the issues raised here are significant, I want to focus the following section on the barrier of affordability, because it drives low-income community buying behavior in Lewiston-Auburn. I will then talk about current incentive programs two farmers' markets in Maine use to make local foods more affordable. Finally, I will discuss alternative strategies that key informants proposed to address low-income populations.

Affordability: Price as Bottom Line

Based on the feedback from key informants, affordability is one of the major barriers to local food access. Price is still the bottom line for most individuals and families who believe they have no other options except to eat low cost, often unhealthy food. The consumer dilemma is a question of quantity (cheap calories) or quality (high-density, nutritious and organic) foods that are

more expensive. In the end, unhealthy food is better than no food. One community advocate commented,

And I can remember times of seeing people walking out from Hope Haven [a food pantry] with two or three cakes, like big birthday cakes that they were taking home, which is you know, we have heard it a lot, bad food is better than no food. Hopefully you aren't eating it for breakfast, but it's better than going hungry...Canteen is giving you hot dogs and bologna sandwiches for lunches. It's better than going hungry. Is it the best food? No, absolutely not, but neither is being hungry. (B.R.)

As the quote suggests, it is better to eat something, even if it's cake or hot dogs, than to not eat at all.

In addition, the interviews suggest that healthy food consumption is limited by the food availability at downtown Emergency Food Providers (EFP). Emergency Food Providers (EFP), such as Hope Haven mentioned above, provide an alternative food option, either through a free meal or a food pantry box, to those who cannot afford to buy their own food. Other EFPs include Trinity and Jubilee Center, the Salvation Army, St. Mary's Food Pantry and Good Shepherd. When describing emergency food resources, the Lewiston Farmers' Market manager says the following,

There's several food pantries across Lewiston/Auburn that are open for people to get their emergency food needs met. Depending on who you talk to they're sufficient, and other, you know people, feel like it's not sufficient in terms to meet the needs of what people have right now, but there are...at least in downtown Lewiston, there's two places that offer meals regularly...Trinity and Jubilee Center and the Root Cellar run meals regularly so people can...eat. (S.B.)

Despite some debate over the quality of food provided, EFPs are critical because they are a source of food to people who would not be able to eat otherwise. One community member who works at the Trinity Jubilee Center emphasizes consistency and generosity,

I like the fact that like our food pantry...if you're hungry you can come in, even on an off day, we'll make sure you have something to eat. Okay once a week we have food pantry on Thursdays and we don't...and I mean it's every week. It's not once a month and you see the same people coming and going. They're hungry. They need to eat. What's wrong with these outside people? (Focus Group)

Another community member agrees with Trinity Jubilee Center's commitment to the community, "They'll always make do, they always do. That's one of the things about Trinity. They always come

through for people in the community” (B.R.). There is a strong sense that EFPs are meeting important needs in the community.

Despite earnest efforts, EFPs share in the challenge of accessing and distributing healthy food to the low-income population. One of the representatives at the Salvation Army describes some of the challenges associated with providing fresh, healthy food through a food pantry.

It's basically dried foods and frozen foods. So if we are going to get vegetables it's going to be canned vegetables, pastas. You know, things we can store. We have four freezers so we're able usually to get meat that's frozen with them when they go. Vegetables, fruit, grains, frozen meats and bread. We get bread donated. So that's kind of how we get more fresh. We get it right from Country Kitchen so it's about a few days on. The challenge with the food shelf is that anything that is refrigerated such as fresh vegetables or melon or salad, that kind of thing, we do not have much refrigeration space at all. So that is really a challenge in charge of the food shelf goes. If that bag of corn comes in, how many days is it going to last just sitting in the bag? We don't have refrigeration space for it. That kind of thing. So that's our biggest challenge with the food shelf. (J.B.)

It is clear that infrastructural limitations, such as refrigeration space and resource allocation, more or less obligate them to accept as many food donations as possible. Limited refrigeration space forces EFPs to offer more non-perishable food, processed and pre-packaged food such as “day old cakes and donuts because those are the things that they would last longer...donuts that are wrapped in little individual wraps last a lot longer even if they may be expired or expiring today.” The importance of refrigeration space for the preservation of fresh foods is echoed in the same or similar context by half of the informants. Due to resource limitations, EFPs also depend on their donors, who largely determine what food they can provide. From a small sample of responses, the donations Trinity Jubilee Center receives appears quite disparate, “pizza, veggies, tomatoes, rice, pasta,” “shrimp scampi,” “shrimp and alfredo sauce,” “chicken nuggets” and “French fries” (B.R.). Again, EFPs are challenged by limited by refrigeration space and their dependency on food donors. These obstacles are a product of economic constraints. A representative of the Salvation Army reflects upon their resources,

We run on a pretty tight budget. We run on all volunteers, all our cooks, all our servers are all volunteers. We maintain the kitchen truck when it goes out of a little bit of gas. So when you see those red kettle fund raisers out their during Christmas, it's like that is our money for the

year. But we do get a grant for the food bank and that's where we buy most of our food that we serve, from the Good Shepherd Food Bank. I have not purchased anything at a grocery store in a long time. We use Sam's Club for utensils and powdered drinks and things like that, and we really, I mean our goal is \$500/month to purchase and to feed three days a week for the whole month. Some days we can do that, some days we can't. We get stuff donated too. We'll have a place that will say, "hey here is a box of plates, here's a box of cups" you know what I mean? That keeps the costs down. You don't think, those things add up too. If the Good Shepherd Food Banks wasn't there, we couldn't have a program. I know that for a fact. (J.B.)

Despite their difficult budget, the Salvation Army is still able to feed 600 people per month through their free meal and food pantry programs (J.B.). These efforts and others do not go unnoticed, “if you go into the food banks and you know to the credit of the food banks and the food pantries, they have been noticing and they have been more responsive” to the types of foods they are offering (B.R.). To be fair, not all the food at the Salvation Army is poor nutritionally, “we don’t just whip something together, like today he had chicken quarters and they boiled them, so they’re getting a nice piece of chicken with vegetable and some drinks” (J.B.). Operations that serve multiple meals per week can work with more perishable foods, because they are used within one or two days (J.B.). Other education and outreach initiatives also take place. St. Mary’s Nutrition Center, for example, holds classes to help people put different ingredients together and make a meal (B.R.). One community member articulates the struggle between the issues of limited healthy food access and pervasive food insecurity:

There’s greater awareness about buying local and fresh food...I guess in the flip side there seems to be greater people suffering from food insecurity, but there’s a greater awareness of that and an effort to find solutions for that. I think the work of the food assessment is a really good example of efforts being put forth to try to get to...the understanding of the roots of the hunger...of hunger in this community. (S.B.)

Unfortunately, the “roots of hunger” in the Lewiston-Auburn community are quite deep and widespread. Due to high levels of poverty, the choice between inexpensive food and no food is a reality for many people in Lewiston-Auburn. According to the 2010 U.S. Census data, 21.7% Lewiston residents and 12.9% Auburn residents live below the poverty line, and Lewiston has three of the State’s seven extreme poverty census tracts (rates >40%) (State and County QuickFacts). In

Lewiston, this percentage is nearly double the state average (12.6%) (State and County QuickFacts).

The manager of Lewiston Farmers' market notes,

...depends on where you are in Lewiston/Auburn...Overall I would say there are a lot of the families, low-income to middle-class or lower-middle, and the downtown specifically, they are below the poverty line and a lot of New Americas from Africa, specifically east Africa live here...there's a large Franco-American population too, but its at least second generation now. (S.B.)

The market manager acknowledges the high levels of poverty in Lewiston as well as the cultural diversity from the Franco-American and New American populations. The 2010 Census data has no category for Franco-American, but reports that in Lewiston "black" people comprise 8.7% of the population, over 8 times the state average (U.S. Census Bureau 2010). An anecdotal observation from a community member illuminates the reality of poverty in the community, "you know honestly what really gets to me is I've seen quite a few times, and I've even handed people money before...garbage cans because they can't afford to eat and it's making me sick" (Focus Group Informant 1). Poverty and cultural diversity are important considerations when trying to address food insecurity in Lewiston-Auburn.

Cultural diversity is an important consideration that was not addressed in interviews. Three informants raised questions about cultural diversity without prompting. Below is an observation of one emergency food provider,

What we are finding is that we put some Christmas baskets together and we did the frozen turkey, box of potatoes, stuffing, canned vegetables. There was someone who came in and looked at it from a different cultural background and that is not what they thought of food at all, cans and boxes, frozen. They wanted fresh. So that kind of opened our eyes to that challenge. But I am glad they didn't take it if there aren't going to use it. I never even would think of what food you serve, but you have to if people have different cultural backgrounds, maybe they don't eat pork. We should do beef hot dogs instead of pork hot dogs. (J.B.)

Such observations suggest that there are different perceptions and cultural definitions of "healthy" and "fresh" food that need to be acknowledged.

For those living in poverty, food stamps are typically one primary mean of purchasing food (S.B.). One community member says, "if I am somebody who gets food stamps, even though it's

supplemental, it's supposed to be supplemental, it really is not the case for many people here. It is their sole source of food is food stamps" (B.R.). Due to high participation rates, "food stamps are widely accepted in the community," by different stores and markets in the downtown (S.B.). Another community advocate agrees, "almost all of the stores I think accept them...I think food stamps are probably one of the staple dollars of the little convenience stores" (B.R.). Widespread store acceptance of food stamps and widespread use of EBT machines reflect the economics of the Lewiston-Auburn community.

Many downtown Lewiston-Auburn residents receive food stamps, but community members from a focus group argue that the benefits they receive are not sufficient. One community member describes her economic situation, "I get social security and I get for three people less than \$150 a month for food stamps...that don't go very far and nine tenths of my check goes to rent and lights and bills" (Focus Group Informant 1). Another community member, who gets more money for herself and her boyfriend, responds by saying, "but still I don't see how you can do \$150 with three... 'cause \$200 sometimes doesn't last...especially if you don't go and do your shopping right away" (Focus Group Informant 2). Two community members also report that funding is not equal across states and groups of people. One says, "[I'm from] Delaware and then we give \$123 a month plus \$200 in food stamps, but up here because I don't have a child, they don't give you that" (Focus Group Informant 3). Another says, "a single person can get almost \$200 in food stamps, but a family gets less...what's wrong with this picture" (Focus Group Informant 1). In the end, the community needs larger amounts of "cheap" and "good" food, which one resident articulates as "talk is cheap, you know and we need more things, we need more farmers' markets, we need more coops, we need more food to feed people...cheap food. I mean cheap prices and good food, you know?" (Focus Group Informant 1) Responses from the focus group show an emphasis on price and economics, frustrations with the government, and arguments for more and fairer benefits across the welfare system.

Community members' accounts are consistent with reports of key informants who report that low-income populations do not purchase local foods unless they are affordable. Two farmers, who make their livelihood selling local food, report that low-income individuals are not likely to support their business unless it's affordable. According to the first farmer,

...you know over at Job Lots, or whatever it is that sells cheap, cheap meat they all go over there and buy that. You know they don't care about the value of it, they don't care how poisoned it is. It's because it's cheap. They don't care if they gotta eat it in two days because it's gonna turn brown. (P.V.)

One interpretation of this anecdote is that low-income populations do not care about eating healthy food. On the other hand, low-income residents may not have the resources to respond to "how poisoned it is" (P.V.). The second farmer reflects the same sentiment,

Unless you're educated to care about wanting to feed yourselves well, you're not going to go to a natural foods store or a farm store...you're gonna buy as many calories as you can and that's the difference between two shopping carts or one. (G.V.)

Both statements suggest that economics not only drive buying behavior, but also determine where low-income consumers shop, which is more likely to be larger, chain stores versus a natural foods store or farm store. In addition, the "two shopping carts or one" metaphor underscores the perception that quantity is better than quality, which is not always true. As informants suggest, low-income individuals may not have a choice.

The farmer above also implies that lack of education prevents low-income populations from making "smart" buying decisions. She expands on this with the observation that those who attend her market do not spend their money on "good," local food, "Women Infant Children, the Senior Farm Share Program...there's such a small percentage of them that really care about putting that money towards good food" (G.V.). For example, she notes that these mothers wait until October to spend all their voucher money on pumpkins (G.V.). Another storeowner faces similar challenges, "one of our biggest struggles has been like how to get the food to people and when people do come in to sort of get them to buy more healthy things, experiment more with cooking and what not"

(D.G.). The challenge observed in the downtown is that low-income residents are not using their food stamps economically. As one food pantry manager reflects,

It's amazing to me, speaking of downtown and what grocery stores are available...this is a big concern I have with the food stamp program, you know going to the corner store and buying a sandwich and a soda or whatever they're allowed to purchase on it, they spend an amount that if they went to the grocery store they could get two loaves of bread, a pound of bologna, lunch meat, and some veggies. The same amount and it's just convenient for them to walk in and purchase that, so trying to educate people that you can take the bus, you could go to the grocery store, you could get so much more than \$20 than just one quick lunch at the corner store, which is...It's amazing to me how people do that, how often it is. (J.B.)

This informant indicates that people tend to shop at the corner stores because they are more convenient, but people could probably get more for their money if they went to the grocery store.

A parallel concern that was expressed in interviews is that people have found ways to circumvent the welfare system. Two informants say that some storeowners bend the rules to sell hot, pre-made foods to consumers who desire convenience, even though hot food cannot technically be purchased with food stamps. One community advocate talks about the “very popular breakfast item,” the egg sandwich, and how corner stores pre-make the sandwiches and then sell them cold (B.R.). Evidently, this is something corner stores do with a lot of stuff now, “a lot of the hot sandwiches the smaller stores are making, cooling and then they can be sold on food stamps...they can't be sold on food stamps if they are actually hot” (B.R.) Another emergency food provider recounts a story about people buying cold pizza ingredients at the local corner store with their food stamps, instead of a prepared hot pizza with cash,

I mean I heard a story once that you can't buy a hot pizza with your food card, you can't go to pizza shop and use it I don't believe, so the one corner store/gas station was selling the dough cold with the pack of sauce, you know, for a really exorbitant rate, and all they had to do was pop it in the oven and it was like a take out pizza, but the cost was two times what if you know you and I went to the pizza shop, you know what I mean? They are trying to work around the system. (J.B.)

In the long run, these subtle manipulations of the system might be more convenient, but they are not necessarily the healthiest or most economic strategies.

Of greater concern perhaps is informants' perception that some community members are not using their food stamps on food at all. Apparently, some community members use their food stamps to barter rent or drugs (J.B., Focus Group). One community organizer says, "the whole food stamp thing just boggles my mind, the things that I hear that go on downtown with people trading cards for different things and people paying their rent with their food stamps" (J.B.). A community member from a focus group says,

Half the time you hear even down here I hear it all the time, some...I'm not being rude...but somebody selling their food stamps because they need money for rent or they need money for a bill or something else. You hear it all the time and then you read in the newspaper that article where all the people got busted for it. Now if the government was helping us out for more, don't you think less of that bull would be going on if they were giving us more to eat whether giving us more in AFPC or social security or something else. Don't you think it would be a whole lot better for people? (Focus Group Informant 1).

Alleged abuse of the system also underscores the deep financial burden many community members face. If the system is being misused, the next question is why? What are the larger, underlying issues and causes? Perhaps, as the above community member suggests, people would shop "smart" if they were given enough money through food stamps. Given the choice of being homeless or being hungry—if you can't afford rent, you will use food stamps to retain your home rather than eat.

As key informants contend, knowledge and desire do not always translate into "smart" buying behavior. The consensus is that people know what healthy food is, but cannot afford it. Through the words of one community advocate, "I think we've found and what we see is that people know what healthy food is, it's whether you can afford it or not, you buy so that you could feed family, and if you can afford to feed your family the fresh fruits and vegetables, then I think most people opt to do that" (B.R.). Similarly, a community member from the focus group acknowledges certain buying behaviors are not healthy and that limited resources compound the issue, "When you get disability and stamps, it don't go very far, you know...with a lot of people we hit Burger King or McDonalds once a month, so it's not healthy" (Focus Group). Another community member's

anecdote reveals how strongly economics govern people's grocery shopping, impacting where and how they shop. For this community member, there is a certainly strategy involved,

My boyfriend's Aunt...we'll go for the flyers and she'll take us...like if she hears its cheaper here, we'll go there, and then she'll take us to another place to get like the accessories like potatoes and stuff like that...if it's cheaper someplace else just for the mere simple fact that you have to stretch it, you know what I mean? It's just its hard. (Focus Group)

There is also evidence that people desire healthy foods, but cannot afford them. For example, multiple community members talk about their preference for fresh foods over canned foods, "yea I'm not a fan of canned vegetables...frozen yup," "'cause they're all soggy when you get them in a can, especially green beans," and "asparagus is gross out of a can" (Focus Group). Yet again, their ability to buy fresh versus canned foods is an element of price, "they're gross in the can and half the time you can't afford the real stuff because it's too much" (Focus Group). Conversely, community members' response to 'what kinds of things do you like to cook,' was "fried food," "spaghetti," "bread," "steak" and "whatever if you want to cook a meal or something quick" (Focus Group). No one mentioned fresh fruits or vegetables. Community members' conflicting responses suggest they want to eat fresh foods, but that wish has not translated into behavior.

Despite challenges, community members' efforts to eat healthier and shop smarter are acknowledged by at least one in four informants. There is some stigma around low-income communities and the welfare system, but "This whole perception that poor people would rather make poor food choices and just buy chips and sit around and watch TV all day. It not always true" (A.L.). Another important message from the same informant poses the question, "Who are the poor in your community? Sometimes they're the people on welfare and sometimes they're not, you know sometimes they're the working poor" (A.L.). Her statement is a reminder that the many people face economic barriers, not just those on welfare. Another community advocate argues,

"I think contrary to popular belief, you know, people don't mind earning what they get if there is a way if there is a way that they can earn it that is practical for them and fair. It's not feeling like I am taking advantage of because I really need that so you can treat me like crap in order for me to get it and I just have to take it. There are ways for me to do things that are still fair and just and humane, you know it's just respectful" (B.R.)

Additionally, two respondents reported that community members make efforts to use food stamps effectively. The first person says, “we’ve got some highly educated people on welfare programs, and so for them it is stretching the dollars in terms of...I can get 3 pounds of this stuff or I can get two pounds of this” (G.V.). Even for those who need a free meal once in awhile are making an effort, “You meet a lot of people in the neighborhood, a lot of people that are trying to make their food stamps last, and they just...hot lunch and nutritious meal is good for them” (J.B.). Moreover, there is a sense that at least some of the community is attempting to help themselves nutritionally.

According to all the informants’ perspectives, affordability will determine the success of alternative market strategy. Any proposed market structure will have to be low cost to reach the low-income population. A community organizer in Skowhegan reports, “we are now attracting a more socioeconomic diverse population that isn’t going to pay, you know, double the rate of ground beef for a bite just because it’s bison” (A.L.). Another farmer reinforces the importance of low prices, “you can’t price it out of the everyday consumer price range and that’s one of the things where we continually talk about” (P.J.). One of the challenges is that the low-income population is going to have difficulty investing in alternative programs, especially markets that ask consumers to pay in advance (B.R.). A community advocate talks from her personal perspective,

Even though I don’t get food stamps, I live on a very limited budget. If you were to come to me with this great idea for this buying club, I don’t know if I would have enough money today to buy into the club. It would take me this month to be able to save up enough money to give you what I need to give you for the first month to be able to put my order in. (B.R.)

One of the community members from the focus group concurs with the need for some sort of weighted or incremental payment system,

...say it costs you \$100 for the season, but if you were allowed to pay so much each [week] towards that \$100 I think that it would keep it going 'cause I know I don't have \$100 to walk up here and do right now, but in 2 or 3 weeks I might be able to have that \$100 paid off to you or I can help work it off. I think that people need to do that. (Focus Group Informant 1)

In the end, if any alternative strategies are going to be implemented in the Lewiston-Auburn community, affordability will have to be a predominant concern.

The culminating message is that economics plays a huge role in populations with limited income. The choice between cheap food and no food is a reality for many people in the community. Due to the large population below the poverty line, many people depend on welfare as their sole source of food. Emergency Food Providers make attempts to fill the gaps and provide food to community members, but they too are limited by resources. The theme of affordability is an undercurrent across interviews. The difficult question is whether buying local is or should be a priority for the low-income community; perhaps not, unless it can be very affordable. The lasting message is that any successful alternative market in a low-income population will have to make affordability a key objective.

Current Incentive Programs

Knowing that food security is a concern in Lewiston-Auburn, how are communities addressing local food access for low-income populations? Successful strategies adopted by the Lewiston Farmers' Market and Skowhegan Farmers' Market include the acceptance of welfare benefits and the implementation of incentive programs. An informant from each market reports that these programs increase sales, improve participation and are positively received by community members. While these programs have been successful, the concern is whether these programs are sustainable.

Both the Lewiston and Skowhegan Farmers' Markets accept welfare programs. It makes sense to begin with welfare programs, because so many people receive food stamps, "Maine unlike other states does not seem to have a problem enrolling qualified people for SNAP. I mean our enrollment rate is up in the 90 percent...98 percent of the people that are qualified for SNAP are enrolled for SNAP" (A.L.). Both markets have an EBT machine that allows them to receive electronic Supplemental Nutrition Assistance Program (SNAP) card and WIC (Women, Infants and Children) benefits. The Skowhegan Market finds that SNAP acceptance improves sales, "EBT transactions at

our farmers' market last summer were right around \$18,000 in EBT transactions, and the presence of the machine, the presence of the wireless machine, facilitated another \$25,000 in regular credit card sales to people" (A.L.). The Lewiston Farmers' Market EBT transactions are smaller, but continue to increase,

Between all our markets we did about \$7,200 in food stamp or EBT sales this year, which is double...almost double from last year. And we distributed about \$4,800 in Double Dollar coupons. So for every dollar someone with SNAP, its called SNAP not food stamps, SNAP or WIC spends at the farmers' market they get a dollar match up to \$10 that was over the course of the summer. It lasted...from June to October so it was the full season we did it. (S.B.)

The manager of Lewiston's Farmers' market also mentions Double Dollar coupons, which double low-income consumers' money at the market up to \$10. The coupons are a way for people on federal subsidies to "stretch their dollar" (S.B.). Both EBT acceptance and the Double Dollar coupons improve participation and even increase sales for farmers, because they provide a market they might not have otherwise (S.B.).

Informants from each market also reported the success of the Fruit and Vegetable Prescription Program where physicians prescribe the program to low income families who need nutrition advice. The Lewiston Farmers' Market manager describes it as "kind of a supplement to their weekly groceries of just fresh fruits and vegetables" (S.B.). A family of four gets \$28 extra a week to buy fresh fruits and vegetables for a four month period (S.B.). An informant from the Skowhegan Farmers' Market finds the Fruit and Vegetable program to be highly successful in their community,

That has been a serious game changer. We probably had 12 families involved in that program this year and we're hoping to expand it to 30 families next summer. It's been incredibly successful in the sense that families love the food. The feedback is great about the receptiveness to shopping the market and how they like the food. (A.L.)

In Lewiston, the program served 23 families, two thirds of whom were Somali or Somali Bantu families, which greatly increased cultural diversity at the market (S.B.). The market reported a very high retention rate and many of the families continued to shop at the market (S.B.).

Better yet, the Fruit and Vegetable Program has positively impacted residents and families.

Lewiston residents appear to add greater healthy food selection to their diet by expanding their food budget,

Part of the goal was to lose weight. A lot of our families actually didn't lose weight but maintained weight, but the larger success was how many families reported changes in their diets and the inclusion of more fresh fruits and vegetables, and some of the families outright came and said that they...that without this program they wouldn't have been able to eat any fresh fruits and vegetables that by having this additional supplement to their food budget, they could then spend their food stamps on staples like rice and milk and you know other grains or bread and then they can use the additional tokens to buy fruits and vegetables...its also addressed the issues of food insecurity in that it just expanded their food budget to begin with. (S.B.)

The Skowhegan community has found that these programs have ripple effects encouraging, empowering, and inspiring residents to make other improvements in their lives (A.L.). When resources are invested in the community, it has an impact:

The adults are dropping weight even if the kid was the one at risk for obesity. Right? So the adults are dropping weight and the reports coming in when they meet with their physicians are that "well the program is causing us to go out and exercise more" and "well why is that?" "Well you just you know just when I am less stressed about how I am going to feed my family just seems like we have the time to be more active. So it's kind of like there is no shortage of attention to the obesity problem and nutrition problems right now, but all of that information and that education is usually an unfunded mandate to change your behavior and when the Fruit and Veggie Prescription says, "here is the money to do what we're asking you to do, please go try it," people are doing it. It's too soon to tell what long term effects that could have but...then kind of the social piece too that is just that the soft signs right now are that when you actually invest in an underserved population you say, "hey, its worth it to us to give you the money to make change." They tend to feel valued and willing to take risks to change behaviors in other areas. (A.L.)

The concern expressed by the informants from these two markets is that these programs will not be sustainable: "it might have been something that they would never have come to...but now that they have this incentive they will come and then they'll continue to come, and then the idea is eventually when the incentive goes away that you still have increased your customer base" (A.L.). The hope is that when incentives are removed, consumers will have formed a connection with producers, and will understand that it's not that much more expensive to shop local than at the grocery store (A.L.). Wholesome Wave, the main funder of the Fruit and Vegetable Prescription

Program, “believes that if you help subsidize or increase the value of a food stamp transaction at the farmers’ market, you’d incentivize people to change their habit and come visit you market” (A.L.). For this reason, they want to “gather data from all the locations where they’re using the double dollar program to prove that they’re health benefits of eating locally and try to make changes in the way the USDA spends its SNAP money” (A.L.). The purpose of these incentive programs is to change buying behaviors, but the long-term sustainability of these programs or the behavior change they promote is unknown.

The Lewiston Farmers’ Market manager reports that redirecting and gathering subsidies is one major strategy St. Mary’s Nutrition Center make healthy, local foods more accessible to community members (S.B.). Through her words, it is about “leveling the playing field” between big producers and local producers,

...when you look at the kind of subsidies that corn and, you know, other non-specialty crops get and then you look at the tax breaks that large institutions like Wal-Mart get. It's only fair. It's only leveling the playing field to give certain people the opportunity to buy, to get fresh fruit basically free, which is what like a Double Dollar Program does, you know, by diverting some of those funds into the pockets of the actual producers versus all the middle men involved in an institution like Wal-Mart you're evening the playing field, but that's not sustainable, but that's part of our work too. To put it bluntly is what were doing. (S.B.)

The concern expressed by both informants is that these programs are dependent on private and federal funding (A.L. and S.B.). These informants have to raise money every year to support the Double Dollar and Fruit and Veggie Prescription,: “it’s an innovative thing that’s happening at the farmers’ markets and that’s not necessarily sustainable, because we have to make sure we have funding for it” (S.B.).

Community Strategies

The section on outreach in the last chapter asked the question “how do informants engage with their community to help make them aware of opportunities?” The response was a combination of cooking, nutrition and agricultural education, particularly targeted to children, as well as

individual interaction and frequent communication. This section will focus on the strategies proposed and currently implemented by key informants and community members to address the issue of affordability. Three general categories were derived from their responses: incentives and alternative payment options, work shares and farming, and greater federal support.

Incentives and Alternative Payment Options

Informants talk about trying to make alternative markets, such as community supported agriculture and food buying clubs, more affordable. As suggested earlier, low-income community members have difficulty paying in advance for produce they are not going to receive immediately (B.R. and Focus Group). The focus group and two informants recommend some sort of waited or incremental payment option (B.R., J.B., Focus Group, J.B.). The Portland Co-op, for example, had an incremental payment option for monthly purchases and now has a \$100 membership fee that is \$10 for people who receive assistance (J.B.). Another idea is some sort of store discount. Two storeowners have a “CSA” membership or store account where people receive a discount for paying for store purchases in advance. Another storeowner offers a frequent buyer card where people receive \$20 after they spend \$20 ten times at the store (D.G.). The \$20 can either be used by the consumer or donated back to the community (D.G.). Discounts are motivating, and as one community member says, “I love coupons. I don’t care if there’s a coupon that I don’t seem to use. You know that’s what we should do down here too, start clipping coupons, bring ‘em in, put ‘em in a box and people can have and use” (Focus Group Informant 1). Informants highlight a variety of different alternative payment or discounted payment options.

Informants also talk about incentivizing shopping. Three informants offer deals to encourage first time participation in a market (B.R., P.V. and A.L.). One farmer suggests providing a \$5 incentive for signing up on their website (P.V.). Another suggests a free or reduced first time food buying club order, so that they can save up for next month’s purchase,

It's almost like if they could have a little bit of upfront money so that everybody that buys in initially get \$25 that they have to work off some other way, whether it's a grant that come in or whatever, everybody gets \$25 to buy in initially that's not out of their pocket so that they are able to get there order in and by the time the next order comes you've already gotten your first one paid for. You've got this month to save so that when you order the next one you will have that money. It begins to change the buying habits (B.R.).

For one market manager, incentives help marketing, “that is why we are incentivizing first time CSA participation, because we want people to come in and join and then we want you to like it and stay with us and stimulate word of mouth marketing” (A.L.). The same manager, “just got some private funding to help subsidize first time CSA participation amongst low-income consumers and so what we’re going to be offering is a 15% off rate for a first time CSA share, so essentially it’s gonna be worth \$600 worth of food for \$300” (A.L.). Three informants suggest incentivizing shopping with promotions such as holiday gift shopping, Thanksgiving CSA boxes, and worker gift cards to the farmers’ market (T.S., A.L. and S.B.). One community organizer elaborates,

We noticed when we did the Western Maine Market one of the things we did when we first started it was we did some sort of specials and we had like, I remember one of the ones we did was we said, "if you purchased so much food or make a certain number of orders during the month of August, you get entered into a drawing from one of the local businesses." So it was like, I remember if it was, you had to purchase at least \$50 dollars worth of product and/or place 3 orders during the month of August or something like. And that did help us get some new customers and the idea was that they would be, if they had purchased 3 times, they are starting to form a habit so things that encourage people to use your system over a period of time I think helps too. (T.S.)

Community members from the focus group comment on these various models. A low-income community member agrees with a discounted payment option, “instead of it costing you \$100, it will cost you \$50, because you are going to pick it up and then you can help feed other people” (Focus Group Informant 1). When asked to describe her version of a co-op she responded,

Co-op, just a bunch of farmers or whatever, they just gather a bunch of people but...I'm a farmer, I like to grow stuff. Okay...and I like to give it away because I know people like fresh and it's too expensive at the stores. If you walk into Hannaford's and looked at the price of tomatoes...I mean...nah if I can grow four or five plants and accumulate so many pounds off those plants...I pick it and I give it to you. (Focus Group Informant 1)

The idea is “getting people together to sell stuff at cheaper prices,” but it’s got to be “worth the deal” (Focus Group Informant 1). Another community member describes a program in Boston where

community members pay \$1 for a bag of produce and community members can buy as many bags as they can afford (Focus Group Informant 2). Another community member responds, “do you realize how many people are totally homeless and don't even have a dollar in their pocket and they would love to have that dollar or that bag of food?” (Focus Group Informant 1). For the low-income community, the theme of affordability is paramount.

Informants suggest a variety of creative discount options and ways of incentivizing shopping. However, some sort of subsidized market, such as the discounted CSA in Skowhegan, is a common theme in interviews with informants and community members. A storeowner with experience managing a CSA reports that a “facilitated CSA” would probably work for a low-income population (D.G.). Another community organizer offers a way to decrease market costs:

If access is something you are interested, you could negotiate with farmers at the beginning of the project to say you know, “here is one of our goals, we would like you guys to set your prices within this range, to have it work for you and to have it work for the people we are trying to sell it to serve.” (T.S.)

Contrary to what other informants’ report, one farmer questions exceptions for low-income residents, “everyone feels they are carrying too much baggage for the government already...for supporting people that can’t support themselves...why should I have my other customers pay more for me to give these guys a discount” (P.V.). Despite this hesitation, the majority of informants are making efforts to provide discounted options to low-income residents.

Works Shares and Farming

Three community organizers suggest a work share option for low-income community members to work in exchange for food. The first community organizer says,

Another thought that we had with volunteers that might work with low-income communities was seeing if, because the farms really do get a good service out of this, seeing if they would give certain volunteers a food share to distribute or do whatever in lieu of money. Almost like a free CSA share for certain volunteers. Working for food. Which I think the farms could probably do easier than paying people, depending on the size of the farm. (T.S.)

The second community organizer says,

I think if you want people on welfare if they can come in and volunteer and swap time for food, especially in this economy you have some pretty talented people that don't have jobs, I think it would be beneficial because one too it's not a hand out, it's not cheap food and then they can see the value of just handling one side that goes into giving. (P.V.)

A third community organizer discusses the feasibility of work shares in the Lewiston-Auburn community:

Yea I think that there would be people that would be interested in doing that. I can think of a couple of people right off the top of my head that would jump a the chance to be able to go and work on the farm and be able to grow their own or that's how they're working it off. (B.R.)

This community member feels the market will need to be creative in thinking about ways to involve community members. Their participation does not just have to come from farming alone. She comments,

Make it so that is accessible and everybody could just participate in a way that they are able to participate, so I can't go and physically work the farm, but I can drive people from my neighborhood who want to work on the farm and that's how I can contribute to the farm. I am making phone calls, I'm updating your Facebook page, I'm doing whatever, I'm bagging the stuff when it comes from somewhere. The more ways that you can have people be involved that is creative as possible. (B.R.)

Similarly, a community member responds enthusiastically to the idea of a work share and reiterates the challenge of transportation,

You can't do a whole lot in the city, unless you have transportation where you can go way out to Minot or Windham, whatever. You might seem something, but you're lucky if you can bum a ride from somebody to get to a farm. You want to set up a bus system? That's fine. I'll do the driving for you no problem. Seriously, I'll volunteer. Nobody got to pay me. Yea get a system together...see if somebody can actually help out. Strawberry picking, apple picking...I mean you 'all bring in the apples and I'll bake all the darn pies and turnovers you want. I'll hand 'em out...I'll even supply the ingredients to supply me with apples you know? All them rotted apples on the ground, chop 'em up. (Focus Group Informant 1)

Two community members also express an interest in farming. One community member reflects a nostalgia for picking fruit, "I used to...I used to blueberry pick all the time...I'd take the kids to the farm and pick, you know? It's a whole lot cheaper to pick fresh strawberries than it is to buy it from the farmers market" (Focus Group Informant 2). Another informant reminisces about her co-op in Florida, "that's where we got our fruits and veggies...right fresh off the farm, you go in, you pick your own and you pay for them...what's wrong with Maine?"

Farming may be an important avenue for communities to be sustainable, as one informant suggests. For him, farming is “one of the biggest ways to food security” and self-reliance. He says,

So there's all those different elements of how I get food in an affordable way and you know I am pretty close to food stamps, but I am not quite there. And so I find myself in a difficult spot and growing food has helped me a great deal in like having food in my [pantry] that I want. The food that I prefer and take a ton of pride in because I grew it, you know, there's a lot of pride in having that in my pantry. (J.B.)

Greater community participation in growing food, as informants' report, may be a strategy for increasing local food access and an avenue towards greater community food security.

Federal Support

In addition to focus group participants' frustrations with the adequacy of welfare programs, four key informants talk about the need for change on a federal level. When asked what the next step should be for greater support of local foods, one storeowner responds,

And then you need the top down. I think there's a lot of bottom up, grassroots effort right now and you just need the state and the government to make it an authentic priority and not just your lip service to local food. You know until...yea until they do serious promotion of local farms and programs. (D.G.)

Clearly, some respondents believe that the federal government needs to put more energy and resources into local foods.

Three informants agree that policy change is one way the government can make productive changes. One farmer advocates for stricter SNAP regulations where people are encouraged to buy organic foods,

If you want to be on a welfare program then...here's what you can get with the food: fresh fruits and vegetables, you know, meats, breads, milk...not limit them to has to be Horizon or it has to be Hoods milk, it can't be organic. Well, we need to encourage them or give them that option because that's not fair to them if they are very conscious of their food system. (G.V.)

The benefits of allowing low-income community members to purchase organic foods are twofold.

First, they allow community members to purchase healthier foods, and second, it supports local

farmers (G.V.). An emergency food provider agrees with food stamp regulation, “personally, I think if they can regulate how the food stamps are working and what people are buying with them,” then

we can start to see greater changes in the system (J.B.). As mentioned earlier, what people buy with foods stamps, or bartering with them, may be difficult to regulate. A potential solution proposed by a farmer, who calls for greater change, is to offer CSA shares to community members instead of monetary handouts.

Another informant identifies challenges with government regulations. A food distributor for the state of Maine describes her business's conflict with the U.S. Food and Drug Administration,

Something that we've run into is that regulation is getting more and more onerous, so for us it's kind of understandable, 'cause you know like we have a certain scale of business and we go across state lines, but having dealt with FDA this fall, like they're identifying small producers as high risk, like above even others, and they try and focus on the areas of high risk first to address their backlog of people that they haven't visited...that's something that I really hope is not going to hit like a freight train and Maine's small agriculture movement...it was definitely a huge blow to our business in terms of the time that they took with us and just like the expending of capital that we had to do in order to immediately address some of their concerns and that's like the hard part of people that aren't financed well is like if you have... You can strategize all you want with your limited resources, but if you're being forced to do something outside that time frame that can be a really financial burden to come up with that immediately. (L.C.)

Her statement indicates that government regulations may impede agricultural businesses.

If the government is not supporting small producers, as the informant above suggests, the FDA might consider funding statewide efforts to address food insecurity. For example, one large-scale farm on the coast of southern Maine does food donations and wholesale to food pantries and nonprofits. This farmer sells surplus food to the hunger relief organization, Good Shepherd Food Bank through their Mainers Feeding Mainers program. A farmer describes her involvement in this program,

I see it as a way to more food to more people and having people who don't necessarily have the means to walk into my farm stand and purchase the product, have access to the same quality product that my other customers are getting and I am very adamant, very strict, about the quality of products that we send to food pantries. (P.J.)

These programs are different, because these organizations are “paying a wholesale price to farmers for the products, so they’re really treated like any other wholesale customer” (P.J.). The other advantage is a guaranteed market, because these organizations always have demand for food.

Essentially, this farmer is selling to a wholesale distributor who will supply other emergency food providers throughout Maine.

Some of the strategies informants and community propose to make local foods more affordable are subsidized markets, work shares, community farming and wholesale to emergency food providers. Across these strategies, informants identify a need for greater government support and funding.

Based on qualitative and quantitative data, affordability is a significant challenge for the Lewiston-Auburn community. Affordability influences buying behavior, use of food stamps, quality of food at EFPs and sustainability of incentive programs. Strategies recommended to address low-income populations are also centered on affordability. An emergency food provider says, “that whole system, it needs a lot of work. I don’t have any solutions. I really don’t. We just try to meet that need of those people that are really in need at an emergency level” (J.B.). The challenge of equal access is a perplexing issue, a “wicked” problem with no straightforward answers.

Low-income community members, who feel the burden of cost the most, provide some insight. One is that food is food. Unhealthy food is better than no food and local food might not be the priority. A second recommendation from community members is to expand the Lewiston Farmers’ Market: “talk is cheap...you know we need more things, we need more farmers' markets, we need more coops, we need more food to feed people” (Focus Group Informant 1). Finally, give more and waste less as one community member says,

A family of 10 you give them 1 can of tuna fish, 1 can of this, 1 can of this...man give them freaking food. Don't be stingy, the government's got enough thrown away, that's all it is plain and simple. It's waste and nine tenths of it is from the government, because they tell these certain restaurants and stuff well you can't donate this, you can't donate that...code this, code that...break the code, get off your asses and feed some people. (Focus Group Informant 1)

No matter how challenging and perplexing the issue of equal access may seem, a final informant sees hope in community and working together around food,

With the economy collapsing my financial world collapsed. One of the few things that I can afford to do is spend time with people that I buy food with. So just working together to get our

food is something we've sort of thrown out the window as a culture but to me this is kind of bringing it back. (J.B.)

IV: Market Feasibility: Important Considerations

Even in the economic downturn, the industry is still been growing and we've been growing, but growth in our sector is really challenging because of financing situations and that's true of the producers as well as the other pieces of the infrastructure and like we have a really unique and convoluted history. (L.C.)

Based on key informant feedback, the number and variety of markets to access local foods are expanding. An increase in food related start-up businesses across Maine mirrors this growth. Key informants refer to a variety of innovative businesses such as Northern Girl, Barrels Market, Crown O' Maine Organic Cooperative, Somerset Grist Mill, Maine Organic Milling and Jordan's Mobile Farm Stand. As the industry continues to evolve, these businesses are helping to define what a local food system looks like and how it operates.

Along the way, these businesses have faced some inevitable successes and challenges. A common feature across these start-ups is uncertainty about profitability and sustainability, "a lot of companies in Maine right now doing this work are start-up, you know, they're not profitable yet, but they didn't plan on being profitable yet" (L.W.). Some markets dependent on federal funding. Other independent business and small farmers depend on loans or operate on cash flow. Difficulties with cash flow means farmers are expending, "a lot of sweat equity, essentially free capital, by not paying themselves...the hidden costs of driving to various markets and not paying yourself are not sustaining" as one informant describes (L.C.). Despite challenges, two of the three farmers interviewed suggest they are becoming more business savvy. One says, "for me, it's being able to look at my farm stepping away...stepping back and looking at my farm as a business and not a farm...since I've been doing that my sales have been up" (G.V.). Business acumen can be really important, because, "most farms and most businesses actually, not just farms, really benefit from developing their business skills and their capacity...a lot of entrepreneurs don't have formal business training" (L.C.). Business knowledge can facilitate profitability and sustainability, which continue to be the crux of market feasibility for these new markets and start-up businesses.

Being business savvy means being able to adjust to a changing marketplace. One informant paints this reality, “this is the local food system...you just want to have expectation, but also be ready for flexibility because things go wrong” (J.B.). The local food system is described as a “risky sector” because businesses have to adjust to weather and changing consumer interests (L.W.). One agricultural investor lost money because of a “terrible season mostly due to the weather” where the farmer could not pay back their loan (L.W.). Another farmer talks about one “bad season” where it was “rainy, nobody wanted any produce” (P.V.). The weather not only impacted the crop that season, but it also caused low CSA participation the following year (P.V.).

Besides weather obstacles, businesses have to actively pursue new markets and consumers. One farmer does this by watching consumer trends,

I've always looked at trends. You know it intrigues me. You know asking and wanting to know why people are doing this. It is intriguing and frustrating at the same time. I am in an industry...that is now highly affected...I think more farmers need to be aware of that...they've got to stop looking at their farm as 24-7 hard work, and when they start doing that then...it doesn't feel like as much work. (G.V.)

In addition to market trends, managing costs is another aspect of market feasibility. One informant describes components of their market’s budget,

So this the year that they're really trying to figure out how do we shift structure. Make sure the entire market is bringing in enough income so that we can sustainably pay the market manager, pay a little stipend to the person that does the newsletter every week, pay a little stipend to the person who organizes all the educational programs at the market and pay for that person that attends the EBT machine. And that's looking like a budget of around \$10,000 bucks. (A.L.)

Being profitable also means developing a reputation within the industry:

I think our own maturing process as an organization, it's helping...helping us seem less risky as a proposition to people...we inherited a rather interesting business and it's been a lot of work to kind of hammer it together. Like there were no books, no systems, and no financing or anything at the point at which we took over, so it's been like...not overly tumultuous but enough that you know I think people have been watching and hoping that we can get our feet under ourselves. (L.C.)

Sorting out finances and creating a strong business foundation is one way to legitimize a business.

Building a reputation with producers and consumers is another. One storeowner had to build a relationship with farmers before they would deliver their products: “at the beginning we pick up [produce] sometimes just because we didn't have reputation yet, we didn't have the relationship, like if we wanted the stuff right away, we sometimes just had to go get it, because the farmers weren't necessarily that ready to...a lot were but some weren't...and now pretty much everyone delivers (D.G.). Both instances reflect the fact that a local food system is still developing and evolving. In the words of one farmer, “it’s about creating viable businesses and that happens by creating knowledge and understanding in the community as to what their role is in farm viability” (P.J.). Recording key informants’ experiences with this evolving industry helps to inform future entrepreneurs and markets.

In light of profit and sustainability challenges for these start-up local food businesses, the following section will integrate qualitative data from key informant interviews and the community focus group and quantitative data from surveys. The qualitative data summarizes informants’ recommendations for developing a successful market. The quantitative data will be used to determine the Lewiston-Auburn community’s willingness to enter these new markets. Together, the data suggest that the following considerations influence market feasibility: management, operations, technology, producer target and consumer target.

Management

Market Manager

One of the strongest themes across key informant interviews is that the success of any market or business depends on a strong, motivated manager. Two informants speak of having a “vision.” The first person says, “It’s not just like that question of management...it’s like having a vision and making it happen and there are people in the nonprofit world who are doing that...that entrepreneur, business person, nonprofit visionary person who is gonna kind of galvanize

something to make it happen” (L.W.). The second person says, “well it definitely takes people with a little bit of vision and motivation to start any group like that...so like you gotta have those few really motivated people or it’s going nowhere” (J.B.). One informant argues that dedicated management is even more important than funding, “I don’t care how much money you throw at into that. If people in management do not support programs it’s never going anywhere” (P.V.). Overall, half of the informants felt a manager is needed to galvanize people and lead the market.

Besides vision, informants talk about coordination, leadership, networking and accounting are important skills of a manager. First, a manager needs to be able to coordinate the supply of food from producer to consumer: “you need somebody who is going to be the coordinator and really figure out the distribution sites and your days when people are going to drop off food, what the time frame is for when people can pick it up and you look so you know kind of how the system works” (T.S.). Second, a manger needs to be a group leader: “I think good co-ops have, just like any business, a manager...you like ultimately want to ask who's in charge of a business and if it's a group of people and they've got the time and they're working well, okay that's who's in charge, but you need some kind of manager who works for the co-op and helps get all the work done” (L.W.). Third, a manger must have the time to network and build relationships: “I guess I'd say if I personally had a choice of like how to do this in a community I would just try to find somebody that has the time to make these relationships, has the time to basically find money to pay someone to push this forward” (J.B.). Last, a manager should have accounting knowledge, “get someone good on the inside who can do your accounting and bookkeeping, because the bigger the budget, the more programs you want to run, the more you really want to have good accounting practices for managing all that” (A.L.).

While skills are important, two informants suggest that a manager’s motivation trumps formal training. As one informant expresses,

I think finding the will to do it is the biggest thing, because if you've got the will to do it then anybody who's slightly analytical can create a Google doc and say like, okay well this week we want to have this much you know you just got to work backwards. (L.C.)

Another informant, involved in providing management assistance to start-up agricultural businesses, feels a manager can learn along the way. One of the managers she works with has no training in writing business plans, but this manager has been able to get the assistance she needs. The informant says, "I think that's exciting to just that...you can learn the stuff you need to learn to do these things, but it sure doesn't hurt for mentors along the way, you know who've done some parts of it before and get...assistance" (L.W.). Strong management appears to be an important prerequisite for a successful market.

For example, a manager can apply to anyone who wants to start a food-buying club. One food distributor for food-buying clubs says they rely on some "key mover and shakers" within each group (L.C.). This distributor articulates further,

I think in the beginning stages of a buying club, an organizer makes a big difference, you know you kind of have to wrangle people together and once people are getting into the habit of getting their products, then it's a lot easier because it's about the food, less about the organization. (L.C.)

People in the downtown community seem to agree. In response to the feasibility of a food buying club, one community member said, "I think if somebody led us the right way, I think we could do it, if people would help out with it. But yea we need stuff like that. We really do" (Focus Group Informant 1). Leadership can also come from someone in the community. The Maranacook Buying Club in Western Maine, for example, is currently in the process of transitioning from a hired market manager to community-based leadership (T.S.). The community organizer describes,

We are now in the process of transitioning to the club. So it has been subsidized. We've had funding to support a coordinator and now we are transitioning to having the club figure out how they want to operate it. I'm not sure where it is going to go yet, but I do think it's possible to do that. There are buying clubs already operating that are run by consumers and I think you have to have the strong enough core of members. (T.S.)

In addition to dedicated members, technology also makes it easier for those without prior experience to manage a food buying club. One informant who develops buying club software feels,

“I can teach almost anyone to do it. It doesn’t have to be a CPA, it doesn’t have to be an expert in communications or websites, technology, anything” and now a “majority of their time can be spent on education and garnering momentum for the group to get more together” (J.B.). The example of a food-buying club shows that management can come from various sources as long as the manager has motivation.

Knowing that a business manager is central to market feasibility, who will be the manager? Where is the initiative coming from? Based on the examples informants provided, no simple form of management predominates. In some cases, community organizers are in charge of the market, such as the Skowhegan Farmers’ Market, the Lewiston Farmers’ Market and The Pickup CSA in Skowhegan. In other cases, farmers take the initiative to expand their markets. For instance, all three farmers interviewed are involved with running an individual or multi-farm CSA (P.V., G.V., P.J.). These farmers are also involved in some innovative markets such as online food buying clubs and mobile farm stands (P.V., P.J.). Finally, in some cases, community members initiate the market. Based on informants’ feedback, this model is less prevalent. The Portland Co-op, run communally by 120 active members, is one example (J.B.). Understanding who is initiating the market is important, because it will shape management structure and the business plan.

Informants suggest that management can take different forms. Added skills are helpful but not necessary, if the given person has enough motivation, vision and will.

Structure and Expectations

Another important management consideration mentioned by key informants is expectations. Businesses or markets need to clearly establish predicted sales, prices and their relationships to consumers, producer and employers. To set these expectations, the market should determine its business structure, or as one informant recommends, “do a business plan” (A.L.).

Informants touched upon the various aspects of a business plan directly and indirectly. Plans include business details such as mission statement, market analysis, company description,

organization, marketing, funding requests and financial projections (SBA.gov). One storeowner's best advice is the following:

I would say just the number one thing is management just in terms of like focus and time and structure, and like be really clear whatever you set up, who's going to be doing what, if they're capable of doing it and that they're going to have the time to do it...you know resources, I know resources are always a variable...like I mean that's the biggest thing in hindsight, I would have been more careful really laying out how many employees we needed, how we were going to make sure all the aspects of our mission were covered. (D.G.)

Another community organizer recommends critically examining "sustainability and the business plan...trying to figure out what the business plan is that's going to generate enough for you to cover costs in the long term that makes sense" (T.S.). One informant describes financial projections and predicting sustainability,

We're trying to figure out "what if your sales don't grow 20%, what if they only grow 10%, then how does that impact your cash flow and your business"...helping sort of dive into the detail, then you kind of surface back up to the big picture of like, 'okay...that's what it means for how much money you need to raise, and so we're working pretty closely on this end.'" (L.W.)

As indicated, businesses must be able to adjust if sales are not as high as predicted. To this end, informants give advice for determining business structure and ensuring sustainability. The following will outline informants' recommendations on reducing costs, setting prices, establishing consumer and producer market commitment, and choosing between nonprofit or for-profit business structures.

Cost Reduction

To lower costs, one retail storeowner recommends reducing overhead and using funding wisely,

...minimize, minimize, minimize your overhead. I mean that sounds obvious. Like you don't need a storefront, don't have one. If you don't need to pay rent, don't pay it. If you don't need to make people employees, don't make them employees. You know like do as much as you can that and in a model that leaves you flexible...so like maybe when you have the funding...like if we can get this amount of money, these are the activities we're doing. If when you're grant money is really thin and we don't get much money, then these are the activities we can do be doing, but you're stuck with a \$300 overhead and a \$10,000/month pay role, so you can meet no matter what. (D.G.)

Another farmer employs a variety of strategies to reduce costs. This farmer works intimately with other farmers to sell their product at her farm stand or on her website. She only charges 10% of sales for other farmers to sell their products on her website. Likewise, she will also take a lower margin on other producers' frozen meat. Her reasoning is, "I'm selling more of my product, because people are coming to the door buying more products" (G.V.). She will even do the following,

If a producer is willing to take the loss...kind of the loss of the waste of something, I'll do something on consignment on my farm stand versus having to purchase. If I purchase it I am going to buy it wholesale from you and I'm gonna have to mark it up. If I purchase...if you put it in your retail, then I don't need to mark it up and the customer is getting variety. (G.V.)

This farmer also works intimately with her distributors to negotiate prices and create systems for recycling delivery boxes.

The Portland Food Cooperative, for example, also works as hard as possible to keep their mark-up costs for members as low. They charge 10% for operational and administrative costs such as electricity, bags, scales, markers, pens and paper, whereas Whole Foods charges 40% to 80% (J.B.). According to this informant, Whole Foods will "pay a chicken farmer less than what they should get, but they will charge the consumer more than they should, and so they get some chicken breasts that cost \$20," which is not affordable or accessible (J.B.). This informant also suggests cutting back as much as possible and eliminating any unnecessary infrastructure,

It pays for much bigger infrastructure that may not always even be necessary. You know an entire store freezer probably isn't necessary, because you don't have to have that much frozen product to serve the people that come to your store, so you could probably cut back. So just generally we work really hard to keep the price low because the minute you raise that percentage mark up you start turning into the rest of the stores. So we just work really hard and constantly revisit how to keep it affordable. (J.B.)

Price Setting

Price setting is another important consideration for businesses. One aspect of price setting is understanding the cost of production, including any hidden costs. A distributor for local foods across Maine says, "our prices, which are actually based on the cost of production for a sustainable

agriculture, they're not excessively expensive, but they're not like rock bottom either to like a conventional product that you buy in the supermarket, like you have all the hidden costs of the subsidies and some of the distribution parameters" (L.C.). According to this statement, her pricing structure accounts for the 'actual' cost of production and any hidden costs that may not be considered in our conventional food system. Other invisible costs of the local food system include the time and money it takes farmers to drive from market to market. As mentioned earlier, a lot of farmers expend "sweat equity" driving their product (L.C.). All three farmers mention transportation and the fact that time away from the farm is costly to their business.

Similarly, one storeowner emphasizes time management, "I guess that's another piece of advice is be conscious about which elements have a tendency to take over your activity and somehow anticipate that" (D.G.). Something as small as daily chores, for example, can be totally consuming and overwhelming,

I'm in my office trying to write a grant and then I'm back on the floor dealing with broken bottles of milk that just came in, and I'm like trying to do our book, and I'm you know trying to figure out how much the price green's at...you know our assistant manager will be like out the door to go to outreach to school and then she has to like race back, because she has to finish making lunch for the day. (D.G.)

Even volunteers may require more time and oversight than expected,

If you picture for example that you were managing this CSA pick up or whatever and you're laying out your management duties and you're saying like, okay and I'll be dealing with the customers and I'll be doing this and this and this while the volunteers are sorting and cutting. You really need to factor in that half of that time is going to be spent overseeing volunteers cutting and whatever. (D.G.)

Informants recommend a management structure that accounts, as much as possible, for all these visible and invisible costs. Once the appropriate costs of production are established, a business can more accurately set prices.

Successful price setting is also facilitated by clear expectations for managers and producers. Price setting requires conversations like, "Hi farmer, I want us to buy from you, how do we do that in a good way that works for you?" (J.B.). One retail storeowner, who has been working with most of

his producers for three years and describes their relationship as “pretty tight,” explains some challenges of setting prices with farmers,

Well the number one thing is that I had experience farming I think, and so it really is hard to talk about price. I've tried to and I've almost gotten to the point where I can just say this is what we're paying every week, so you don't have to discuss those with everyone. It's just a sensitive subject and it's so business-based. You need that someone that has an idea for want... you know if someone told me, your onions were \$3 a pound, I knew apparently that that's expensive for onions, so it helps that I knew that...you also can kind of feel it out...you usually get a pretty consistent read on at least the range that things go for...I mean I'd recommend trying to set prices every week that a group of people agree to, you know that like the management and maybe two farmers agree...\$1.50 per pound for onions period, I doesn't matter who brings it in or what and the hard part that this is what an onion is supposed to look like, 'cause people will call you like, "oh yea I got the best...oh these are perfect, yea they're great...you know their beautiful," and then they bring them in and they're like half rotten and dirty, you know, so managing those clear expectations, so when I ordered squash from you I'm thinking of a squash that's literally you know 8 inches long and 2 inches wide, and it's not something giant that you can play baseball with. (D.G.)

In this situation, farming knowledge helps the storeowner know what prices to expect. Also, the storeowner tries to set the same prices for all producers, which makes the market more equitable.

Another informant also emphasizes clear expectations,

I would say to be able to grow it you need to sort of like set the expectations for everybody. That's probably the biggest thing that people pay attention to and that means taking good care with your relationship with the farmer and what you expect of them. And also, you know, sometimes the farmer doesn't live up to the expectations, so you sort of want to evaluate how far off the goal am I with this person. (J.B.)

Market Commitment

To prepare for the event that farmers do not “live up to the expectations,” informants suggest managers require producers to buy into the market. Buy-ins serve a couple of purposes. First, it sets expectations between managers and producers. Second, farmers gain ownership and stake in the market. Two of the farmers agree with charges for participation, even if it a small amount. One farmer's theory is that farmers should buy-in so that they have investment in a program. She provides the following analogy,

It's just like when you donate to a presidential election. If I put \$50 towards Obama you bet I'm going to be backing him and I am going to speak out about him, but if I don't put my \$50 up,

I'm not hoping he's going to win the election. I have no stake in it. And I think that is true with anything. (P.V.)

Third, it protects the work of the managers. Even if farmers do not follow through with their orders, the market managers are still paid for their time and efforts (G.V.). The Lewiston Farmers' Market is currently trying to get more commitment from producers, "We are still growing and trying to establish ourselves as an integral part of the community and as a worthwhile market to invest time slash energy in to vendors. We've especially been working on vendor buy-in" (Blumnethal). Overall, buy-ins serve to make the market more productive both in terms of expectations and the level of commitment.

Likewise, the same buy-in strategy is important for consumers. Through the perspective of one farmer,

Ideally, it would be nice if you could get buy-in from the people that you want to buy, so they have stock. You know, I think if you want people on welfare if they can come in and volunteer and swap time for food, especially in this economy you have some pretty talented people that don't have jobs. I think it would be beneficial because one too it's not a hand out, it's not cheap food, and then they can see the value of just handling one side that goes into giving. That would be ideal. (P.V.)

In addition to work shares mentioned above, membership can also be a form of buy-in. The Portland Co-op requires a \$100 membership fee on top of the 10% market up fee charged for service and administrative costs (J.B.). The philosophy behind a membership is that everyone becomes a member owner, "You own it just like everyone else. You can vote on board members. You can be on the board. You can be on committees. You have the power to be part of what we do" (J.B.). A CSA is also a form of a buy-in, because consumers have to pay up front costs, even though they are not guaranteed 100% return. With a "CSA you get whatever the farmer has...and of course the idea's that your buying into...if they don't do well this year than you don't get much food, so you sort of buy into the sink or swim aspect" (J.B.). Upfront costs are important, otherwise as one community organizer says, two things can happen: "one is that you don't get the best deal, because [market managers] are not getting the money upfront, two is that you can have [people] coming

in...'jeez, I don't have the money this week, so I can't pick up my order. Now you have stuff sitting there that I bought that I now can't pay for" (B.R.). Consumer buy-in, such as work shares, membership fees and shared market philosophies, can help make consumers more committed to the market.

Nonprofit vs. For-profit

Another major consideration for a business is whether it will be nonprofit or for-profit. Three informants were asked to discuss the pluses and minuses of nonprofit versus for-profit organizations. Two of the informants are involved in for-profit work and the other is involved in nonprofit work. The two informants prefer their for-profit work, because profit adds incentive. The first informant says,

If you're gonna deal in the buying and selling of goods then I feel like you owe it to the people that you are buying from particularly to be for-profit, because of the way it dictates your mind space about the urgency of your work and the necessity of making it profitable which benefits everyone...there're times when the neutrality of being a nonprofit is really beneficial, but there are times when they want to know that your ass is on the line too, and that's going to engender a lot of trust. (L.C.)

The second informant says,

Where are for-profits maybe even better suited to do this work? And it's a question, but...I do have a bias. I think the for-profit people are...they have to do the sales or they don't get paid. Whereas nonprofit people can raise the people for their salaries and aren't...don't need to. (L.W.)

The theme across these responses is that nonprofits are less incentivized for profitability. Both respondents also believe that nonprofits have greater access to funds. The first informant says, "not that [nonprofits] necessarily have a huge bank role, but they have the capacity of getting essentially free money" (L.C.). The second informant says that one of the reasons nonprofits can get more money is because for foundations it is, "way easier for them to give to nonprofits" (L.W.).

A counter argument is that nonprofits can better handle "issues of public commons...education and outreach are also things that nonprofit are really well suited to" (L.C.). A second argument is that nonprofit funding is restrained by grant availability. In response to the

question, “are there any strategies that you employ to try to make local foods less expensive,” a nonprofit storeowner says,

No. That's probably one of the biggest problems, 'cause we need to pay farmers a good wage, we need to cover our overhead. I wish we could charge less. I wish we could give away more. There's not a lot we can do around price, and specifically many of the programs I've found don't subsidize the food itself, so like you can get a grant through outreach cooking classes and stuff. I can't find any grants...any grants that just basically like put money towards food that makes it more affordable. (D.G.)

In other words, nonprofits' access to money is influenced by the allocation of resources. In this particular situation, funding for this nonprofit storeowner comes through commission,

The other thing is that most of our funding comes through our sales, and 'cause it just occupies everything. You rely on it for your funds, for your income stream, and then you know inversely you have to spend a lot of effort on it and make sure that money's there, so we get a few grants and we have some membership dues that we get, but other than that we're mostly funded through sales. (D.G.)

Another challenge for this business is, “public image and message and expectations” (D.G.). People tend not to recognize his retail store as a nonprofit, which makes it hard to justify his business mission. At the same time, his business is unique because not many models combine nonprofit and retail. This storeowner is clearly divided between for-profit and nonprofit work,

Well now I'm both directions. A lot of what I'm dealing with now...you know really defining what it means to be a nonprofit and what you're doing. Personally from my experience here and I'm not even like really making this public yet, but this is our internal tension is that I would never mix retail and a nonprofit mission again. Like retail, no matter what becomes consuming, so I think to have a small retail element is fine, you know like, have a little farmers' market twice a week, like do whatever, but to have a fully stocked store to try and also do the things we're doing like educational outreach and cooking shows and all that is a challenge, so I don't...I wouldn't advocate for profit or non profit over one over the other, but I would make sure to be very specific which realms you're in. (D.G.)

An important message, whether nonprofit or for-profit, is to have clearly defined and advertised expectations. Again, “structure is huge, which structure you pick really matters” (D.G.). Structure shapes the business plan. For example, a nonprofit structure typically involves more volunteers. Expectations of volunteers in a nonprofit setting should be clearly defined:

I use the term a value proposition, be clear to volunteers both what the value it is you're offering in return for their time, whether it's literally like here's a t-shirt and 20% off, some incentive, and then on a material level and then a you know personal level, it's like what

exactly are you offering, you know the chance to meet other people, or like the experience of learning how to cook or whatever, it needs to be clear, and then on the inverse you need to be very clear what you expect of them. And then you just have to deal with the fact that you're always going to have you know strange people and crazy people and quiet people and awesome people, you know like motivated people, and all of the above. (D.G.)

Such recommendations are important for any market considering a volunteer or a work share option. One community organizer says, "I think volunteers are doable but you have to be realistic" (T.S.). A for-profit business structure, on the other hand, may better incentivize workers. The farmers' market in Skowhegan is fundraising to pay more of their volunteers:

What we're doing a lot of business planning around right now is saying, "okay to implement these really successful incentive programs which are bringing in many many more thousands of dollars takes up a person to man the EBT machine on market days, to run the cards, to teach people how it's gonna work when they get there and all that kind of stuff." And so...and then we're also realizing that the market structure, the officers have always been a volunteer position, but what incentivizes one busy farmer over another to take on all this extra responsibility of administering programs if you're not compensated in some way. Why would you compromise your own farm business by spending that much time on it if you're not paid, so we got a grant last year through the Specialty Crop, a block grant program in Maine to actually fund some of the staff time and that was great but still that's not sustainable thing, right? (A.L.)

Informants find that a nonprofit structure needs to have clear expectations for volunteers, while a for-profit structure might incentivize people to work harder.

Informants emphasize structure and clear expectations on multiple levels: business plan, cost analysis, price setting and relationship with producers, consumers and employers. One of the strategies proposed by informants is to have buy-in from both consumers and producers, so that all parties have a greater stake in the market. Another consideration is whether a business is going to be nonprofit or for-profit, knowing that the decision will impact business structure and funding.

Operations

Two key pieces of business operations cited by informants are time and location. When and where the market is held influences how successfully the market will capture consumers. From the perspective of one farmer, "I think any program that wants to get low income and the local

community, they need to make sure that their hours are going to work with the people that they're targeting. So hours is a big thing" (P.V.). The Western Maine Market did some surveying to figure out the best distribution site and time for consumers (T.S.). They found evening hours were better for their community. Their thinking was, "the people that had the money to buy local foods were working" (T.S.). The Skowhegan Farmers' Market is also strategically open at night to capture commuters on their way home (A.L.).

Tourists are another consumer target. When the Skowhegan market was located on route 201, it attracted more tourists than their downtown location (A.L.). Lewiston-Auburn, conversely, does not target tourists. The Lewiston Farmers' Market manager says, "it depends on what your location is, and we just don't get a lot of tourists coming through Lewiston-Auburn to begin with, so it would be better if our market was built on the foundation of local people and if we could bring in tourists at some point that's great, but that shouldn't be the foundation of the market" (S.B.). A central location is important for communities interested in targeting local residents. As another community organizer says, "if you had your distribution site within the community, I think that's an advantage for people, if it's at a good time" (T.S.).

One informant expressed concern that people might not want to pick up food from downtown L-A because of stigma. This informant thinks St. Mary's Nutrition Center has a reputation as a "poor person's program," which she expresses in the following,

There are some people who would be scared to come here [the Nutrition Center] and there are some people who're going to feel like because it is associated with the Nutrition Center it's a poor person's program and I don't want to be associated with a poor people program, because I am not poor and I don't want to give the perception that I am poor. I don't want my neighbors to think I am in need a hand out. It is a pride thing [and] self esteem things that comes into place. There would be people that wouldn't come and be part of it, if it's out of the Nutrition Center because of the mission of the Nutrition Center. (B.R.)

To attract different consumers, another community organizer suggests two market locations:

I think in terms of the low-income piece. If you guys did something, say and I am just brainstorming, but say you did a system where maybe you have a distribution location in a

low-income community and then you had one sort of centralized to downtown area where you are going to have your business people, and you had the farms dropping off both places on the same day. I think you could make that work. You could probably make it work for both a buying club or an online market, but the buying club might be able to offer that low income community better prices. (T.S.)

This idea might not apply to Lewiston-Auburn because its downtown has both businesses and low-income residences. However, the idea of multiple locations might make sense for community members who do not have access to the downtown.

Location aside, consistency may be an important factor. One informant says, “If you want to set a habit, the most important thing is going to set a location and just be there when you say you’re gonna be there” (B.R.). The Lewiston Farmers’ Market is a “typical example of something that’s in the downtown that people know is there and they know to go” (B.R.). Another community organizer holds the same opinion for their online farmers’ market, “it takes a while for people to change their habits and so if you have pick-ups more frequently than once a month you are going to have an easier time I think getting people to have the consistency” (T.S.). Consistency will help to establish expectations and slowly change buying behaviors.

A final theme from informants is to join efforts and use spaces strategically. A simple example is an online buying club in western Maine that uses a middle school for pick-ups. The school is a strategic location, because it is a landmark and has distribution facilities (T.S.). Another example is pick-up at a retail store. The advantage is that, “for some of these storeowners it drives traffic to their store and it’s a win-win situation. The people then are buying extra things at the store that they wouldn’t have necessarily stopped at because they are picking up their order” which helps consumers fill their orders (T.S.). One storeowner thinks a market could be established through one of Lewiston-Auburn’s existing programs,

If you’re trying to reach people with very limited experience with local foods, cooking and interacting with farmers, probably just like putting the opportunity out there wouldn’t bring in like hoards of people. But if you work through like the existing programs and their was like a drop off at one of the shelter or like I don’t know what, I mean you guys have got tons of social resources in Lewiston. (D.G.)

Another strategy is to have two markets on the same day. The Skowhegan Farmers' Market and Skowhegan CSA is a strong example. An informant says,

Actually our pick up day is Wednesday and we designed it with the Wednesday market in mind so that people come and pick up their share and then maybe they will go shop for adjunct things from the farms...it seems to work okay. Some people choose to stick around for the market and some people don't. We did intentionally do it in the afternoons so that it's 2 p.m. to 6 p.m. or 3 p.m. to 6 p.m. is the pick up time so that we're spanning the getting out of work hours, because people are coming into Skowhegan to work at the hospitals, the schools, the courthouses...and people are retreating home and those are some of the people that don't care to make that drive back into town on a Saturday when they are finally home on a weekend. So both the Wednesday market and the CSA really try to make that convenient for people to swing by, pick up their food, and drive home. (A.L.)

The times of the market and CSA are conjoined so that they can encourage people to stay for the market and capture workers on their drive home.

As informants suggest, when and where a market is located is critical to its success. Hours and location can be designed strategically to capture a higher percentage of consumers, which can include commuters, community members and/or tourists. Informants recommend locations that are well known, convenient, accessible and predictable. A final recommendation is to conjoin the time and location of more than one market to encourage additional participation.

Technology

In today's technological era, one of the tools utilized by start-up businesses and markets is the internet. As mentioned earlier, all informants use the internet to some degree. The latest innovation, however, is online ordering. Creative websites and newly developed software have helped to make online ordering possible, and farmers' markets, buying clubs and CSAs may operate online. Like anything, there are positives and negatives to this trend. Informants report that online ordering makes transactions easier for consumers and producers. Others suggest technology may take away from the human interaction that is valued in local food system. The ultimate question is whether producers and consumers are interested in and willing to participate in an online food buying system.

Online markets have many benefits for both consumers and producers. For the busy consumer, “there is nothing easier than ordering online so you can see what you got and then you go and pick it up. I mean you don’t have to deal with the grocery store. You already know what you got” (T.S.). The same informant feels “there is a group of people that is interested in purchasing local foods because of health reasons and wanting to support their local economy, they simply do not have the time to go to a farmers’ market or its just no their thing (T.S.). For the producer, online markets help them capture a new consumer base. An informant says, “I think the advantage of the online market is mostly for the farms, because if you could access a group of people that are able to have money and have a challenge with time, then that online market can provide them with a service that is going to plug them into local foods” (T.S.). The system is also more convenient and time efficient for farmers. A community organizer feels, “the farms that sell through online markets, especially in areas where their is a good population, love it because all they have to do is put the order together and drop it off. They don't have to sit at a farmers' market for a whole day” (T.S.).

New software programs help make online markets possible. Three informants discussed food buying club software, in particular. The first informant is a buying club software designer. The second is a farmer with her own website and CSA. The third is a community organizer who oversees management of an online farmers market and online food buying club. The buying club software designer says, “it makes ordering a lot easier for members and basically just gets rid of all this administrative work that is difficult so that they can get on with the grass-roots effort that a buying club really is” (J.B.). A distributor for food buying clubs concurs that the software “makes orders come to us in a form that is much easier to use in a lot of ways and it’s easier for the buying clubs on the other end” (L.C.). The software designer describes the convenience of his software:

The challenge as a group is doing what we call filling splits, which is what my software does really specially, like there’s no other. There’s really no other software that does that and they’re not really like a service like I am. And what that means is that if there is like a case of 12 cans of tomatoes if I want 3, well there’s 8 left and the club won’t order that case unless its full so like you would have to order...so if you order 8, we would order that inventory. (J.B.)

A community organizer likewise describes how the software facilitates “filling splits,”

...the software is pretty cool because what it enables the farm to do is to easily set up a minimum within the system as to what they want to sell to make a delivery. So if I'm doing eggs and I say for me justify going to Maranacook. I have to sell 12 dozen, then that is the minimum and when the customers get on there, they can each buy part that 12 dozen. If it doesn't fill, they have the opportunity at the end to say, the coordinator can email out say 'hey, we only have 11 of 12, so we want to buy an extra dozen eggs so that we can fill this order.' Or the farm can say, '11 out of 12 is good enough. I will deliver the 11 out of 12,' or they can say, 'No, I don't want to unless I get the full 12 orders.' So it lets the farm decide what they need to sell to make that worth their time and money. (T.S.)

As suggested, the preorder system creates a more predictable and stable market for farmers.

Conversely, one of the challenges of ordering in advance is that people forget what they ordered.

The software designer explains,

Very often with this preorder thing people don't remember what they ordered. It's a surprise. Same for me. Like I build software and I still can't figure out how to really go about informing everybody in advance so that they know what they're getting so they know how much money they need to have as well as like, you know, do I need my car or can I ride my bike, you know. Did I get anything? Should I bother showing up? And it's very difficult because we get the food in the afternoon and people pick it up in the evening and lots of people don't check their email for 24 hours. (J.B.)

One of the other issues with online ordering systems is who is going to oversee its management? Some software places more responsibility on the farmer; other programs emphasize the manager. The food buying club software mentioned earlier requires the administrator to input all the food from the farms. In another model, one community member describes how their online requires farmers to take more responsibility,

The farmers pretty much for the online market are just responsible for dropping off their orders. They have to do the label[ing] and the coordinator sorts them into packages for each customer. The farmers enter their information into that system themselves, so they have their own little webpage, which is also cool for them, and then they have, through the market, they have a page that they access where they enter in every week what they have available and how much they are charging and they can put up pictures of their farm and things like that, but they do that piece themselves. The software is pretty cool. At the end of the cycle the coordinator is able to email out to all the farms whose food was ordered from you. She downloads that information and then she gets a copy of it for customers. Every time someone places an order the software automatically generates an invoice for them and sends it to their email address telling them what they order and how much they owe. They can either use pay pal to pay for it or they can write a check. (T.S.)

When producers enter their own information, as in the above system, managers cut down on their administration costs, because, “having to enter all the product information is super time consuming” (T.S.). The same goes for websites, “you can pay for someone to manage your website or you could manage your own” (P.V.). Informants’ responses suggest the market manager should look into different types of software to decide what would be best for the producer, consumers and managers involved.

Two informants, one food distributor and one storeowner, are less keen on the use of technology. These informants suggest that technology impedes the human interaction that is valuable to a local food system. The food distributor thinks technology can be impersonal and believes, “our customers are easily as unique as our producers...and there’s a lot of you know handwork and paying attention to detail like trying to get things streamline but not...not making it sterile” (L.C.). This informant states,

...we don't really want our customers to be trained to think that local food is instantaneous or necessarily convenient. That sounds really counterintuitive, but you know like with an online ordering system, if you're ordering something and you get it like two days later, any day of the week, well that doesn't really take into account like succession bedding or bugs or frost or whatever, you know, so we find that our methods kinda help us to navigate the middle and set expectations where they kinda want to be. (L.C.)

With technology, in fact, this food distributor argues, “in a lot of ways you have a lot more freedom if you’re a private enterprise and if you’re not wedded to software” (L.C.). The other informant says, “I’m always a fan of limited technology, just because of what I said before, I think you need that human interaction to really build a movement, but at the same time, you know maybe some of the people that don't come in here and if they have the option of just going online while they are chilling at home and getting it delivered they'd be more likely to” (D.G.). On further reflection, he repeats the theme that a successful market needs a motivated manager. For him, a motivated manager is also someone who can work on an individual level with producers. He says,

The number one thing about software that people might not give enough credit to is no matter what system you set up it's going to be directly proportionate to the capability and the ambition of it's managers and so if you have a group of people set up an online thing and it just

relies on farmers like entering data and people entering orders and you just facilitate that, I don't think that's going to work very well...no matter what I still think you need someone on the ground...the system's only as good as good as it's information, so if you have someone talking to farmers on the daily basis and updating the information on the website and following up with customers and following up with farmers about deliveries and all that stuff it'd probably go well, but you can't rely the online system. (D.G.)

Another concern expressed by two informants is the challenge of changing buying behaviors and getting people to try online food ordering. A community organizer talks about the long process of changing behavior,

One of the challenges with the online markets I think is you have to get people to try them. And what you are really asking them to do is develop new buying habits. It's sort of like if a new store opens in town and you drive by it for two years and then you finally stop and you find out you like what they got and you maybe go again in two months and then you start going more frequently and now you always go there to do your shopping. (T.S.)

A farmer similarly has trouble getting through to consumers about the convenience of online ordering,

We've tried to educate our customers on they could actually order online their meats and they'll be there when they come to get their vegetables, but some of the people haven't gotten that yet. It would be real simple from my perspective, 'cause if they ordered meat online they could have it fresh. If they come to the farm stand it's frozen, and they also order seafood online, so they'd be able to have fish or whatever. (P.J.)

These two informants report that consumers have not changed their buying behaviors enough to fully adopt online ordering. Changing behaviors will take more time and education.

Informants provide various reasons why consumers may not be interested in online ordering. One important variable is computer access for low-income populations. Two community organizers agree that the "lack of owning a computer is not usually an issue anymore" (A.L.).

Another community advocate describes how people in downtown Lewiston-Auburn find ways to access the internet,

People may not have their own personal computers, but there are a lot of people that use their phones to get on the internet. There are people on Facebook that don't even have a phone. There are people that I am friends with that the only way I can ever reach them is to send them a Facebook message and then they find a phone to call me back or message me back. I think that the poorest of people in Lewiston who do not own a computer or any type of anything are able to get online at the library, at B Street, at DEC, a friend's phone, whatever. Does that

reach everybody? No. But if I was to have to pick the one venue that I would say is going to hit more people than not, it would be somehow through internet. (B.R.)

Discussion with the community focus group, however, suggests the low-income population does not have money to pay for the internet and at least three respondents do not think people would be interested in online ordering (Focus Group). The question of whether downtown residents have access to the internet generates contradictory responses.

Other barriers to greater acceptance of online ordering include quality, price and age of consumers. A couple downtown residents question the quality of food ordered online, “I want to go someplace and I want to look at it...I want to smell it” (Focus Group Informant 1). Similarly, a farmer does not think an online system will work unless is “super cheap” or convenient for farmers. In this informant's words,

It depends on who you want to target. I don't think the low-income people are going to buy online as much unless its super cheap, which you can't make that offer anyway. It's really tough because they have good farmers' markets now and I don't know what kind of support they're getting. I get mixed reviews from farmers. It depends on what they sell for products. I guess I think it's best if it could be attached to something they're already doing...somehow you have to connect into their life's schedule. (P.V.)

The same farmer asserts that consumer participation depends on age, “the youth now, I think, would be willing to buy food online. I think once you go past 34 there is some stigma or some sort, you would have to really push education to get it” (P.V.).

Survey data from the Lewiston Winter Farmers Market also indicate whether community members are interested in online ordering. When consumers at the Lewiston Winter Farmers Market were asked to respond to the following statement, “I would be interested in accessing local food through an online ordering system,” 77% of respondents were “somewhat interested” to “very interested” (Figure 15, page 126). A majority of Lewiston-Auburn residents who attend the winter farmers' market seem interested in online ordering.

Based on interviews and survey data, interest from farmers in online ordering is divided. One farmer feels “probably 5% of the farmers who are really active in the online world – facebook,

website, blogs, all of those things – and then the rest are starting to come on board because they are seeing the benefits of it” (P.J.). Another farmer reports differently,

Farmers’ don’t promote themselves well...none of them advertise. So it’s almost like...the joke is we’re our own worst enemy because we don’t do anything. We think if we grow it, you’ll buy it. ‘Cause we appreciate it. We respect it so you should too. So that’s why the Norway Market doesn’t do well. Nobody promotes it for them. Nobody sends out an email. One baker has like 200 and some people on facebook and she never puts anything about going to the market on her facebook. (P.V.)

If farmers do not use the internet to advertise, they probably are not likely to adopt an online ordering system. When vendors at the Lewiston Winter Farmers Market were asked to respond to the following statement, “I would like to sell my products through an online ordering system,” on average 64% of producers were “neutral” to “somewhat interested” (Figure 9, page 118). The data suggests that producers may be interested in online ordering, but the response is not overwhelmingly.

An important consideration is whether start-up local food businesses will use the internet or software to advertise and sell their product. There are various benefits to an online system for consumers and producers, such as convenience and a simplified administrative process. Based on survey data, there seems to be interest in an online system from the majority of producers and consumers. In general, consumers are found to be more interested than producers. Concerns are that people are not ready to change their buying behaviors, and technology might take away from the human interaction valued in local food system. Barriers towards greater adoption of an online system seem to include age, price, quality and internet access. In any case, consideration should be placed on who is going to be managing the system and how much responsibility will be placed on the involved parties. The most important issue is what will work best for the given community.

Producer Target

An important determinant of market feasibility is whether there is going to be an adequate supply of local food to support a community. The answer to this question is partly dependent on

farmers. Are Lewiston-Auburn farmers willing to participate in an alternative market? Will there be enough farmers to provide enough quality, quantity and variety of products to keep consumers returning? Qualitative and quantitative data from key informant interviews and the Lewiston Winter Farmers' Market producer survey will help answer these questions.

In order for producers to participate, the market must be worth their time and money.

According to one farmer, the market manager should incentivize producers to join their market,

If you came to me and said, "Gloria, we...we have 20 market vendors, we're looking for 5 more. We would love to have you come. \$150,000 comes through that market every week." I would be there. If you came to me and said, "\$5,000 dollars goes," you know I have to bring home over \$1,000 to justify my time 'cause it takes two of us. It's a lot of time. It's a lot of prep. I can't just go with my soaps or I can't just go with my yarn and think that's worth my time. So you need to get those numbers together to know how much money is going through that market and that will determine you know...then that gives you a marketing, like "listen, we have this much money going through the market every Saturday or once a month or whatever that number is. (G.V.)

Farmers are also busy people, and it costs them every they have to leave the farm to sell product (P.J.). As one community organizer says, "what's the incentive to do this chore over the other one that's waiting for you on the farm?" (A.L.). As an example, is not "economically feasible," for farmers to deliver one loaf of ordered bread, but if farmers were guaranteed 20 loafs of bread, then they would be more willing to participate (P.V.). It is hard because farmers do not necessarily have the time or education to manage accounting or organize these markets (P.V.). One community organizer feels that if someone set up the system for farmers it would certainly be worthwhile for them,

I think in urban areas this has great potential. When they see what they are going to be selling, if this thing takes off, it's going to be worth it for them...Here is what we are doing for you, we are setting up all the systems for you to market and sell your stuff and all you have to do is drop off an order every other week. And in your area, its a city so there are potentially huge... profit. I think it is worth it for them. They are getting free marketing. They are getting somebody else setting up the system for them. (T.S.)

Another important question is whether there is enough local agriculture in the Lewiston-Auburn area. Supply depends in part on the quantity of producers. One food distributor feels there is a significant amount of agriculture across Maine, "We have a ton of farmers no matter what the

practices are and there is a lot of them. We have a lot of land too, so that's great" (L.C.). This informant also suggests there is an increase in new farmers,

There is pretty high recruitment rate of new farmers in Maine, so I think that definitely impacts the farmers' markets. People talk about saturation...I think that's sort of to be expected when you have your innovators and your early adopters and now you're sort of in the bulk of people developing a behavior...there's enough maturity now that people are starting to see...I'm doing the same thing as everybody else, so what can I do differently, so that's kind of forcing people to think more creatively. (L.C.)

When asked how many producers are required to start a new market, one respondent said,

That's a good question. You could do it with even 15 to 20 farmers easily if they have enough product. You know I always think that with these types of things, you know, maybe starting out sort of low key and small and letting it develop. (T.S.)

Supply also depends on the size of producers. The larger the producer, the larger their scale of production, and both variables are correlated to producer sales. One informant discusses farmers' dilemma between scale of production and sales,

When I look at Lewiston and locals part of the problem with getting people to buy local is that farmers are not geared to sell large quantities, and usually they don't have a lot leftover that they are willing to let go of cheaper. Right now I think it's kind of a ying and yang. We want to build sales but we don't want to build production unless we have sales, and we can't get sales unless we have production. So I think that is a huge issue right now. (P.V.)

Many small producers attend farmers' markets because they are "not big enough to do other things" (P.V.). This farmers' observation is supported by the fact that more than half of producers (54%) at the Lewiston Winter Farmers Market are "small" and reportedly make less than \$20,000 in a year (Figure 1).

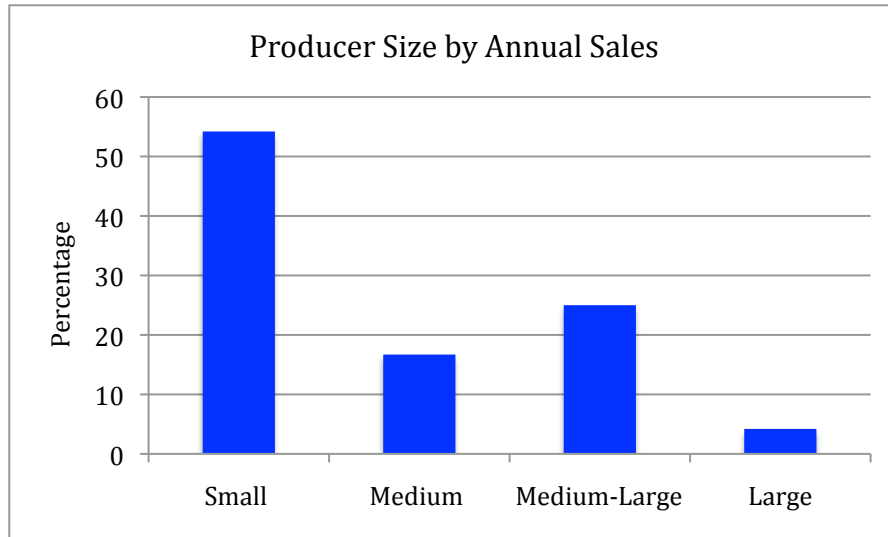


Figure 1. Size of producers at the Lewiston Winter Farmers Market based on gross annual sales. Small (<\$20,000), medium (\$20,000 - \$50,000), medium-large (\$50,000-\$250,000), and large (>\$250,000).

The small size of producers at the Lewiston Winter Farmers' Market is also reflected in the number of full-time, part-time and volunteer help producers' employ, which is very few. Over half of producers are self-employed (Figure 2).

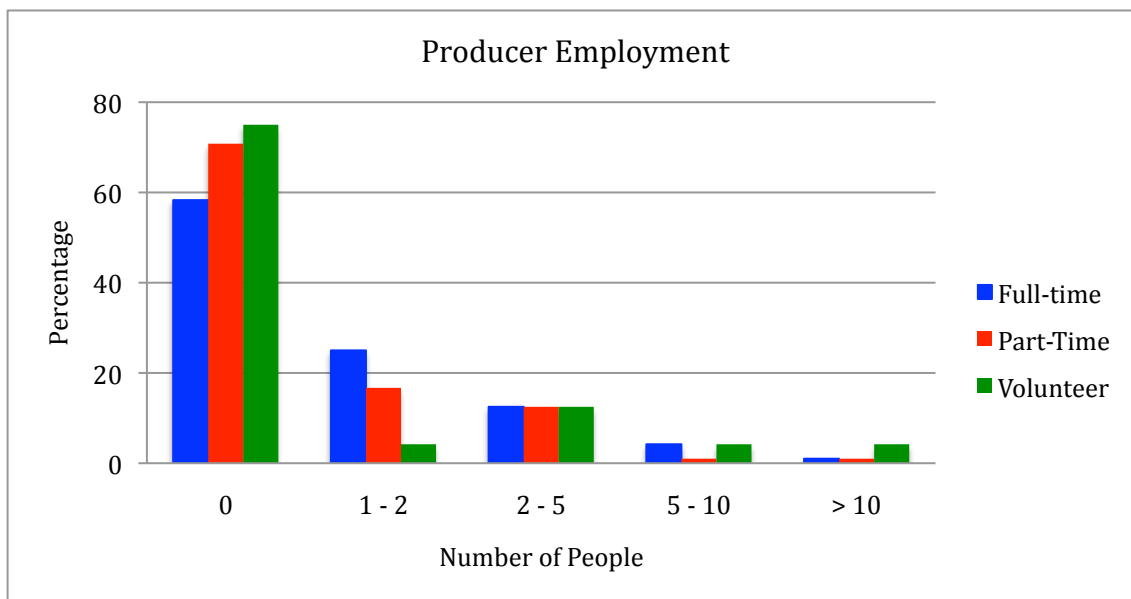


Figure 2. Percentage of full-time, part-time and volunteer work employed by producers at the Lewiston Winter Farmers Market 2011-2012.

Modest annual sales and few employees underscore the small size of producers at the winter market. The following figure illustrates the fact that for this large quantity of smaller producers, the farmers' market is their primary form of marketing. The next most popular form of marketing is direct-to-retail store (42%), which is followed by the two direct-to-consumer markets, CSA and co-op, but only seven and five people participate in these markets respectively (Figure 3).

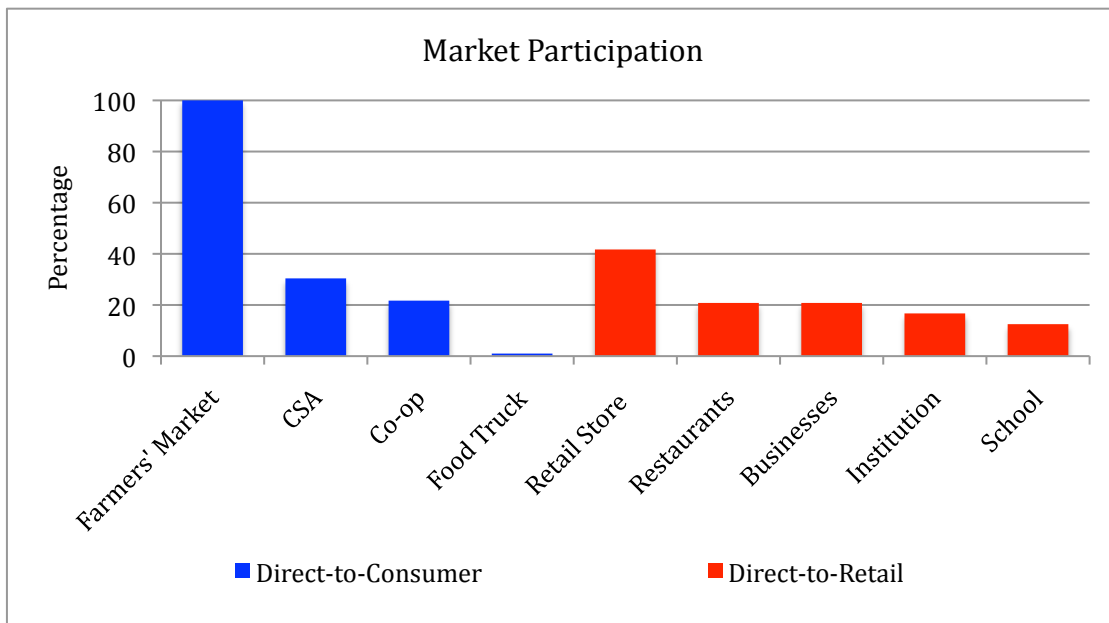


Figure 3. Percentage of producers' market participation in a variety of direct-to-consumer and direct-to-retail markets.

The following figures further break down producers' involvement in either direct-to-consumer or direct-to-retail markets. Producers report what percentage of their sales is attained from either marketing strategy. The two graphs below show opposite trends. Over 4 in 5 vendors find direct-to-consumer marketing takes 70% or more of their sales (Figure 4). Only one vendor finds direct-to-retail to take up anything greater than 60% of their sales (Figure 5).

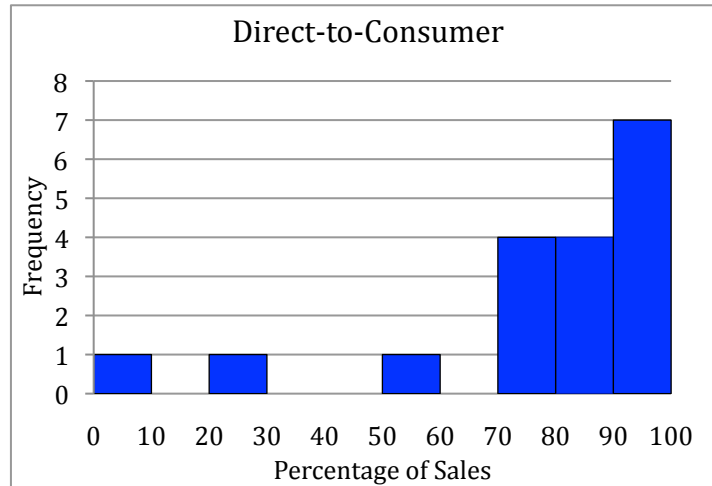


Figure 4. Percentage of producers' sales attained from direct-to-consumer marketing.

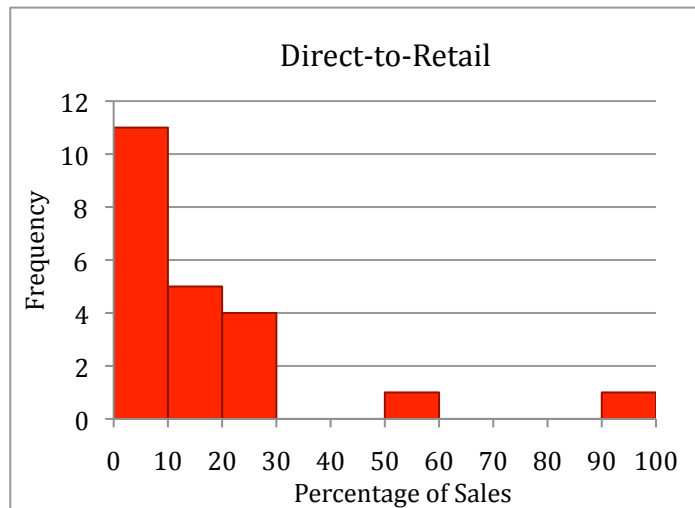


Figure 5. Percentage of producers' sales attained from direct-to-retail marketing.

While there may be significant number of small market vendors involved in direct producer-to-consumer marketing, informants suggest large producers also play an important role in market feasibility. In terms of quantity, larger farmers have much more product and tend to overplant. As one farmer says, “on a weekly basis we might have an excess of two to three hundred pounds of green beans going wholesale” (P.J.). Another farmer feels larger scale farmers are important, because “if you say you are going to have string beans then those farmers are definitely going to deliver string beans” (P.V.). In other words, large farmers are most likely to guarantee

product. The good news is that the same farmer thinks there are enough large producers in the Lewiston area (P.V.). Conversely, the member of the Portland Cooperative expresses concern over product diversity, “The biggest hole I see there is breadth of product...There’s available products in Maine and it’s getting bigger of the core staples, so like I can get corn meal and flour and oats from Maine. I would rather do that any day of the week, but that takes ordering from Crown O’ Maine” (J.B.). The suggestion here is that larger distributors, such as Crown O’ Maine, might need to be used to help “fill in the gaps” where small producers do not (J.B.). Diversity in the size of producers is likely to help ensure quantity and diversity for a given market.

Data from the Lewiston Winter Farmers’ Market provide some insight into the number and diversity of producers within the local Lewiston-Auburn area. The Lewiston Farmers’ Market manager feels they “could use more customers however, but the ratio for most vendors...OK” (S.B.). There seem to be a significant number of producers who operate near the Lewiston-Auburn area. The following figure shows that 71% of producers live within 20 miles of the market (Figure 6).

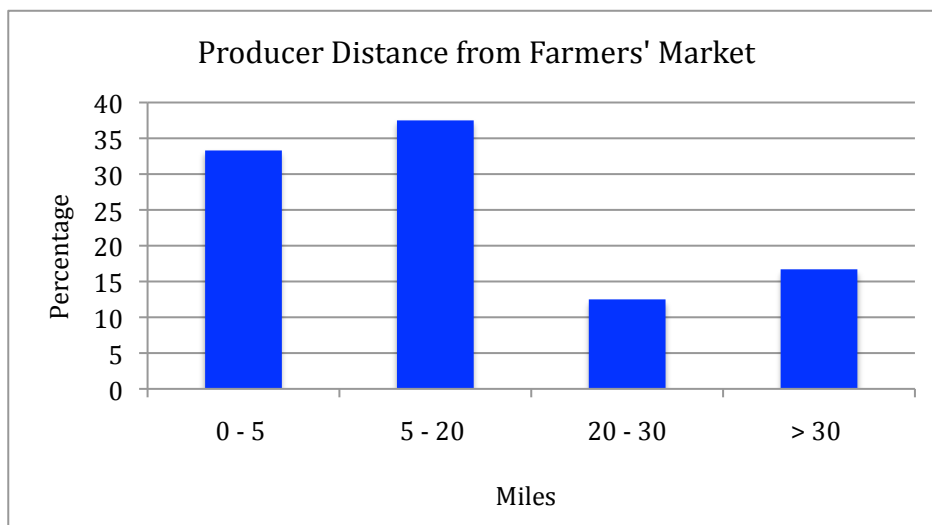


Figure 6. Approximate distance of producers from the Lewiston Winter Farmers Market.

Survey data also suggests that there is a diversity of producers within the local area, a responsibility of the market manager (Figure 7).

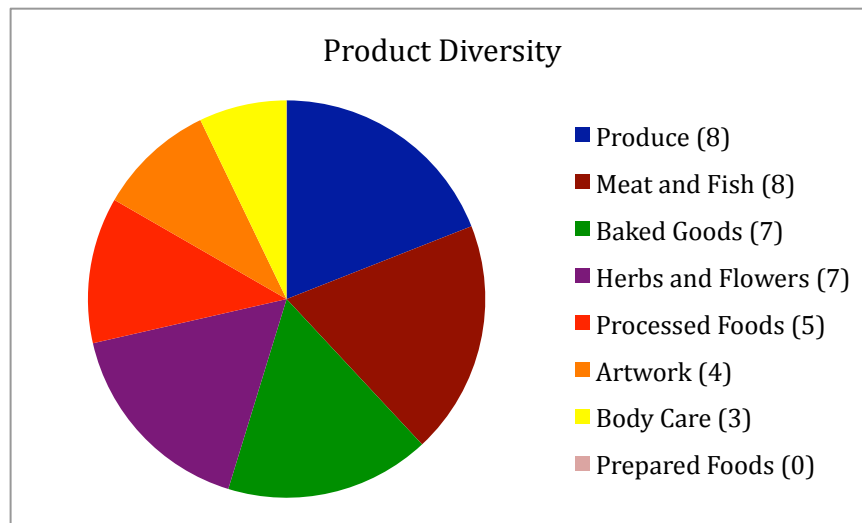


Figure 7. Product diversity at Lewiston Winter Farmers' Market.

A farmer makes the final point that no matter what – size, number of employers, diversity of products, distance from market – the scale of producers needs to match the scale of consumption, which will vary depending on the community (P.V.).

The majority of producers at the Lewiston Farmers' Market appear to be small, self-employed farmer who receive most of their sales from farmers' markets. Important questions are whether these producers are interested in expansion, and if so, would they prefer to participate in a direct-to-producer or direct-to-retail market? Producer survey data and interviews help answer this question. Two of three farmers who were interviewed would fall into the medium-large or large size categories. In this case, their perspective may be different from the majority of small producers at the Lewiston Farmers' Market. Other informants, such as a food distributor and an agricultural financial investor who are involved in local foods across Maine, also weigh in on these questions.

Based on qualitative data, one important theme across interviews is that farmers are increasingly agents with in the food industry. Farmers express their agency through their interest in innovative marketing and business strategies. Again, one farmer is looking at her "farm as a

business and not a farm” (G.V.). Increasingly farmers are trying to gain more ownership over their product and the supply chain. An example of this is Maine Organic Milling (MOM), a coop of 12 farmers who bought an old grain mill. Running a feed grain mill is “helping farmers get control of like the biggest crop input of their product, their feed” (L.W.). One informant, who is involved as an investor and business advisor through Slow Money Maine, feels farmers opened the mill, “partly to lower the cost of their grain and then partly so that they could have control over what went into their grain, their feed grain” (L.W.). Through this co-op farmers are taking more control over the supply chain, shortening it and making it more transparent.

Farmers also seem to be looking to create and own more infrastructure such as multi-farm storage, shared depots and processing/packaging centers. A food distributor describes what she means by a depot,

Where I was actually going with the infrastructure piece is that like we did this thing of kind of having depots looking to increase our efficiency with our pick-ups. Over the summer we go to Unity and there is like 20 farmers that we pick up from there and it was taking us like 3 hours to leave one town and we don't really have the time to do that. So Village Farm had a walk in cooler and they offered to be the depot, so people would bring it there by a certain time and we could go pick up at one location and it wasn't like sitting in someone's garage you if the truck runs later or whatever and that's something that like that equipment can be expensive to set up, but you get a lot of benefit out of it. (L.C.)

One farmer says that infrastructure is the “tipping point” of growth in the industry (P.J.). This farmer adds,

Farmers need to own the infrastructure. Don't go ask somebody to go and build something for us, farmers need to own the infrastructure and they need to participate in the profits of that infrastructure. (P.J.)

This farmer has plans for a “food hub” where she will be developing infrastructure on her farm, and developing storage and processing facilities. For her, it is all about “aggregation and distribution” through four formats: store, online, farm stand and institution (P.J.). Along the same lines, one informant mentions Maine Farm Land Trust’s Food Hub in Unity, which is trying to provide “shared cleaning and packaging facilities for farmers” (L.C.). “Food hubs” are a sign of the excitement around

larger scale infrastructure, particularly those initiated and owned by farmers, and collaboration across various sectors to make these facilities possible.

Part of movement towards more infrastructure is a reinvigorated excitement and interest in food processing and preservation. The canning, packaging and freezing of foods is helping to make local food sustainable year-round. A farmer talks about the processed goods she sells at her store, “I’m moving organically produced meats, vegetables...we have cheese that we make, we do a full line of bakery, full line of value-added canned goods, so you put food away. So it’s also teaching, or bringing to life, a way of life that kind of has gone away in terms of preserving food” (G.V.). Another storeowner suggests that processing could be incorporated into a market as an extra service to consumers,

The discussion of processing, that’s where a lot is going right now, both for individuals and institutions and stuff...which you might want to looking into incorporating...getting volunteers to peel and chop carrots, squash, tomatoes and all that, and then maybe part of the CSA is that people get prepared vegetables, because while I hate to encourage laziness, it’s its kind of often a hurdle for people, like if it’s the giant winter squash and they don’t want to take it home and deal with it. (D.G.)

Another informant proposed an idea that perhaps farmers could partner with an emergency food provider, such as Good Shepherd, to create a minimal cold storage and food processing facility. She imagines it would be “very low tech...basically you’re talking about little packs of baby carrots or French fries with local potatoes” (L.W.). Northern Girl has implemented such programs. Started in the fall of 2011, Northern Girl is a minimum processing and packaging facility that does peeling, cutting, slicing, dicing and freezing (L.C.). A knowledgeable informant describes their business intention,

The core of it is that we would like to take agriculture in the country and create more options for the farmers and create product in a form that can be used by institutions and schools you know ‘cause that’s the barrier. Like we’ve been selling carrots for 15 years and schools don’t really buy carrots but last...you know like this week we’ve sold cases of carrots sticks and so that high schools and elementary, which is really exciting (L.C.)

New infrastructure and businesses help make trends such as food preservation and processing possible.

Another question is whether Maine producers are interested in retail or wholesale marketing. A distributor who works with multiple farmers across Maine feels it depends on the farmer. This distributor describes its wide range of producers: “we work with about 160 farmers and producers over the course of the year, so not every week obviously, but there are farms that probably sell us a total of like 300 bucks a year versus farms that may do like \$50,000 to \$80,000 with us a year” (L.C.). In other words, some farmers do just one cash crop wholesale and clearly many do more. Farmers also may sell wholesale if they have a surplus, because it is a stable option, but it pays less (L.C.). Other reported trends are that involvement depends on age and geography. For example, a lot of farmers south of Augusta are doing direct producer-to-consumer marketing and farmers who have kids in college may cut down on their production (L.C.). Another farmer feels,

Growers we have are expanded their spaces and what they're growing...The farmers that I know are expanded to wholesale versus the setting up the time and needing the infrastructure to go to a farmers' market in the summer, 'cause that too has its headaches. (G.V.)

Looking at the Lewiston-Auburn area, vendors at the Lewiston Farmers’ Market, seem to be interested in expansion. As reported, 87.5% of vendors say they are currently looking to expand their market (Figure 8). Producers’ interested in alternative markets range mostly from “neutral” to “somewhat interested.” Interest in alternative markets and weekly produce delivery is slightly higher (Figure 9). Given the option to expand, producers did not prefer one market significantly over another (Figure 10).

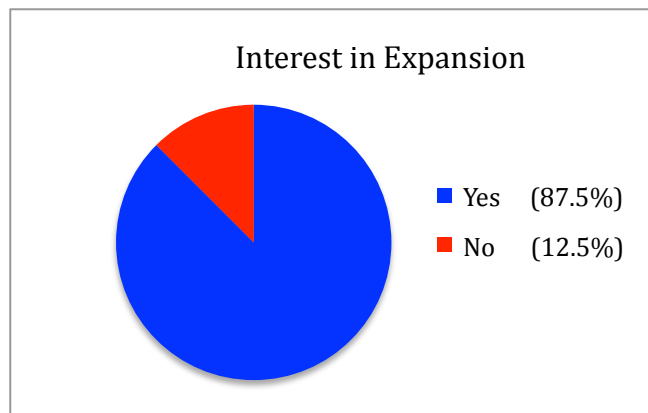


Figure 8. Percentage of producers currently looking to expand their market.

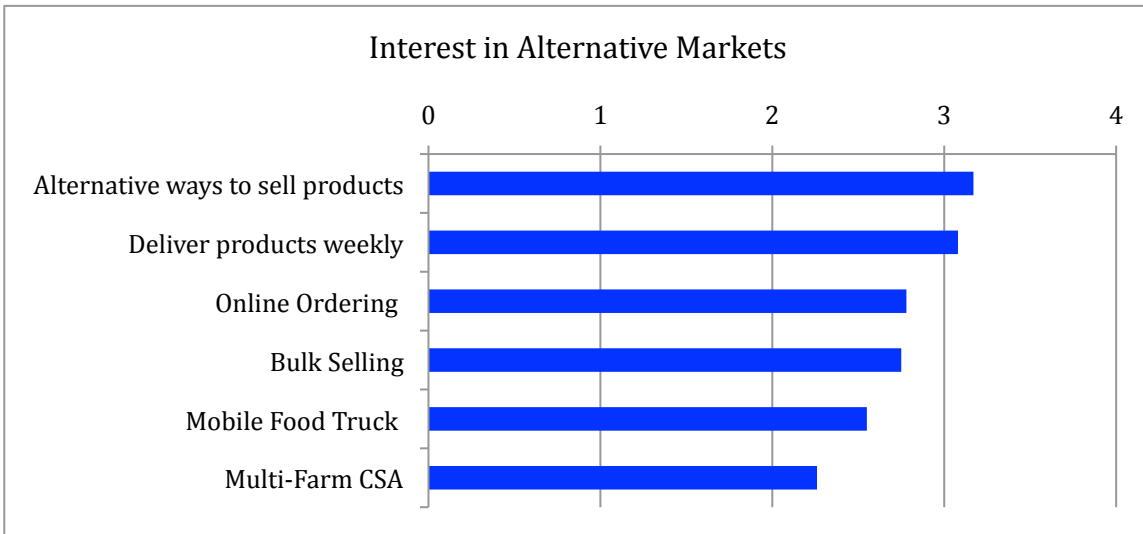


Figure 9. Producer interest in alternative direct producer-to-consumer markets. (1 = not interested, 2 = neutral, 3 = somewhat interested, 4 = very interested).

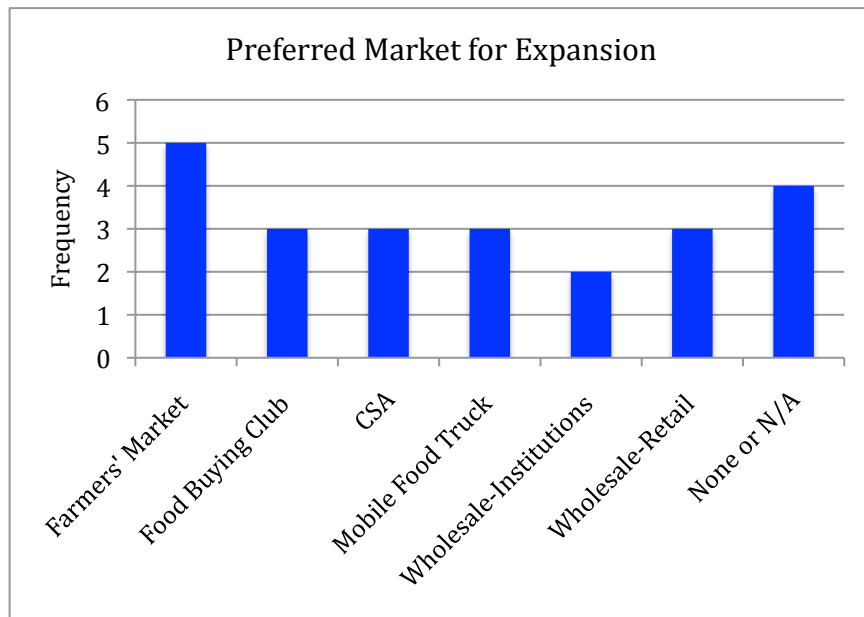


Figure 10. Producer first choice market given the option to expand.

(*For respondents who misread the question and chose greater than one market, their second choice was included in the data to represent their most preferred market option)

In thinking about marketing feasibility and producers, the first consideration should ensure that the market is worth producer's time and money. If producers are willing to participate,

managers must then ensure there is enough quantity and variety of food across producers to sustain the market. Informants recommend a combination of small and big farmers to sustain the market and to fill gaps in product diversity. Based on the qualitative and quantitative data there seems to be variety of produce in good supply within the Lewiston-Auburn area. The producers that attend the winter market, however, tend to be small, self-employed and involved predominately with farmers' markets. A significant percentage of these producers seem interested in expansion, but no one market is preferred over another. There is also no consensus over producers' movement towards wholesale or retail marketing. A final informant theme is growth in infrastructure, such as food processing/packaging centers and multi-farm storage, a sign of increased producer agency and collaboration within the industry.

Consumer Target

Another important determinant of market feasibility is whether the Lewiston-Auburn community will support an alternative form of marketing. The answer to this question is partially dependent on the consumers. The Lewiston-Auburn community target has limited income. This section describes informants' responses to the feasibility of a market tailored towards communities with limited income, followed by the results from the Lewiston Winter Farmers Market consumer survey.

Informants reiterate the importance of knowing your consumer base and establishing who you are going to target. Understanding your consumer base is important, because "consumers really determine how well farmers do at the markets" (G.V.). This informant thinks the "Serious answers need to come from consumer. You know, what prevents you from coming here? What can we do to make it work, you know?" (G.V.). As one farmer says, "all things will work, it just depends on who you're targeting, 'cause if you are targeting the affluent, even though they need education, but they're more willing to try new things, they want clean and they want, you know the top quality"

(P.V.). A community organizer echoes the importance of community demographics, “If you can get people to give you average household income for marketing reasons it is helpful, because it let's you know who is going to be more likely to use this and how do you sell it to them” (T.S.). This organizer further recommends that, “you have to have a good blend of customers because you need enough people to support the system and enough people that are willing to pay a higher price since often times local food is higher, but I don't think much higher than what you would buy in the grocery store” (T.S.). Apparently, consumers' status is an important indication of market feasibility.

Observations from 3 out of 5 farmers and storeowners, whose livelihood is directly dependent on selling local food, reveal frustrations or difficulty in low-income participation. As mentioned earlier, one storeowner finds the biggest challenging is getting people to shop healthier. Two farmers would like to support their community but have had difficulty. One farmer says,

The other goal I had...how to reach a community, getting community involved, serving as a community source of good food. I'm still working on developing, trying to develop that relationship with the community because I struggle, you know I have the same problem here in Turner, Maine. (G.V.)

What this farmer has actually done in the “last three or four months is stop spending any energy on getting community to support us and I am really working on getting the word out about what it means to be local, why it's important and giving” (G.V.). This farmer is returning to the Portland Farmers' Market, one to two hours away, to “start bringing back people again” that “truly support and believe in what we're doing” (G.V.).

Another farmer does not want to travel to Portland, because she would like to serve her community. She tells an anecdote of a fellow farmer:

Like this one farmer in the summer, he knows exactly what his costs are. He produces pork and chicken and little bit of other stuff. He knows he can't sell around here so he travels to Portland once a week. We have a goat cheese lady that travels to Portland for her best sales and meat people, so anyone that wants to get the true value of their money goes to Portland where the sales are higher. Other smaller famers like myself 'cause we're part of, probably a little you belief too, but I want to feed my community. (P.V.)

Despite her altruistic desire to serve her community, she admits that “if I was going to start it over again, I probably would’ve done my CSA, start them earlier and I probably would have targeted more affluent people just become like an elite farmer, so that kind of scrubs anybody below” (P.V.). Key informant responses reveal the challenges of serving communities with limited income.

The demographics of other markets reveal that middle and upper income families are largely supporting the movement. A member of the Portland Cooperative describes their member base as a “little specific” with mostly educated whites who “can afford to go to a place like Whole Foods but they are educated enough that they want to...they know that they can make better choice” (J.B.). A farmer also observes class divides in her business, “food has become a social thing and a status thing...they’re relying on somebody else like Whole Foods to dictate to them what is local quality organic, rather than them doing the research themselves” (G.V.). Her frustration is that “as a farmer we need to make a living, you know, we don’t need to charge, you know umpteen thousand dollars, but why do we have to go to Whole Foods to sell you our product, because money isn’t an issue with this group” (G.V.). Another example is the Maranacook Middle School Online Buying Club, which is largely supported by people with expendable income (T.S.). An informant discuss the success of this market,

Theoretically, it should be at a lower price but what we are finding in this particular project, however, is that the farms are not selling at a lower price. I think because they don't have to. The customers in that area are relatively affluent and they seem to be fine, and that project is going gangbusters. There was over one 150 members. They were selling \$2,000 every ordering cycle. (T.S.)

On one hand the success of this market is positive for farmers. On the other hand, it potentially excludes low-income consumers, perpetuating class and health divides. Based on these examples, upper to middle class people seem to be the main consumers of local foods.

Looking at Lewiston-Auburn in particular, the Lewiston Farmers’ Market consumer survey reveals who is participating in this market, why they are attending and what their interest is in alternative markets. The average consumer at the market is white, 46 years old and lives 1-5 miles

away from the market (Figure 11 and 12). The percentage of white consumers (93.9%) is significantly higher than other ethnic category offered (African, Hispanic and other) (Figure 11). Perhaps this statistic reflects one farmer's feelings that the "huge population" of Somali refugees in Lewiston are "not going to support it...they'll grow stuff and they'll support each other...any money they have is going back to their country....when you're looking to see how to target, or how to move food, I think they need to be left out of the picture" (G.V.).

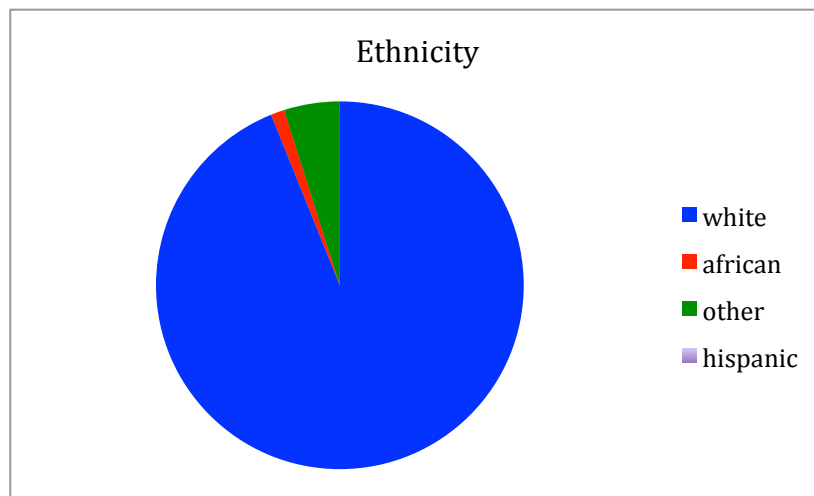


Figure 11. Consumer ethnicity at the Lewiston Winter Farmers' Market.

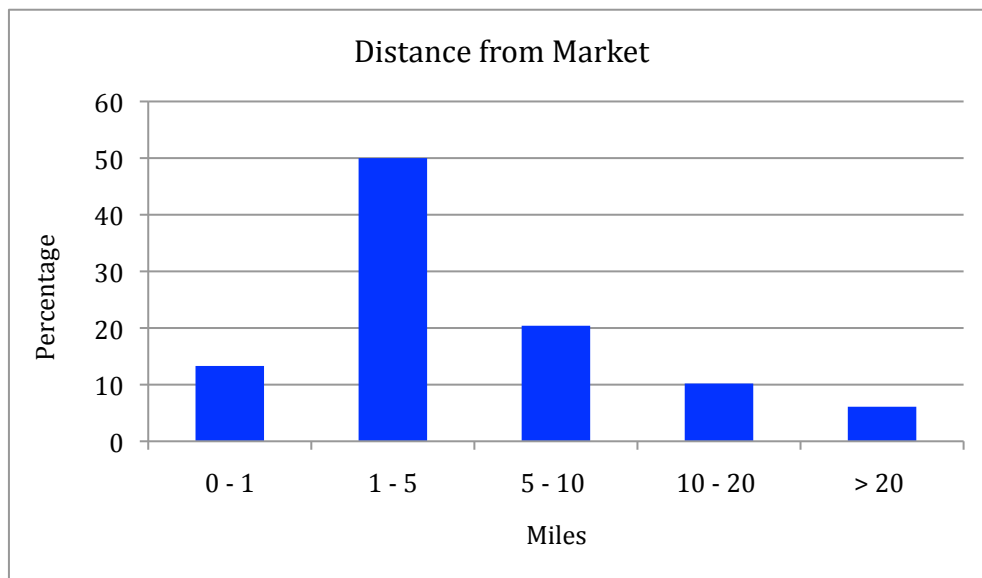


Figure 12. Consumer distance from the Lewiston Winter Farmers' Market.

The survey data also reveal why people attend the market. The top three responses were to support local agriculture and businesses, to access local products and the quality and condition of products (Figure 13).

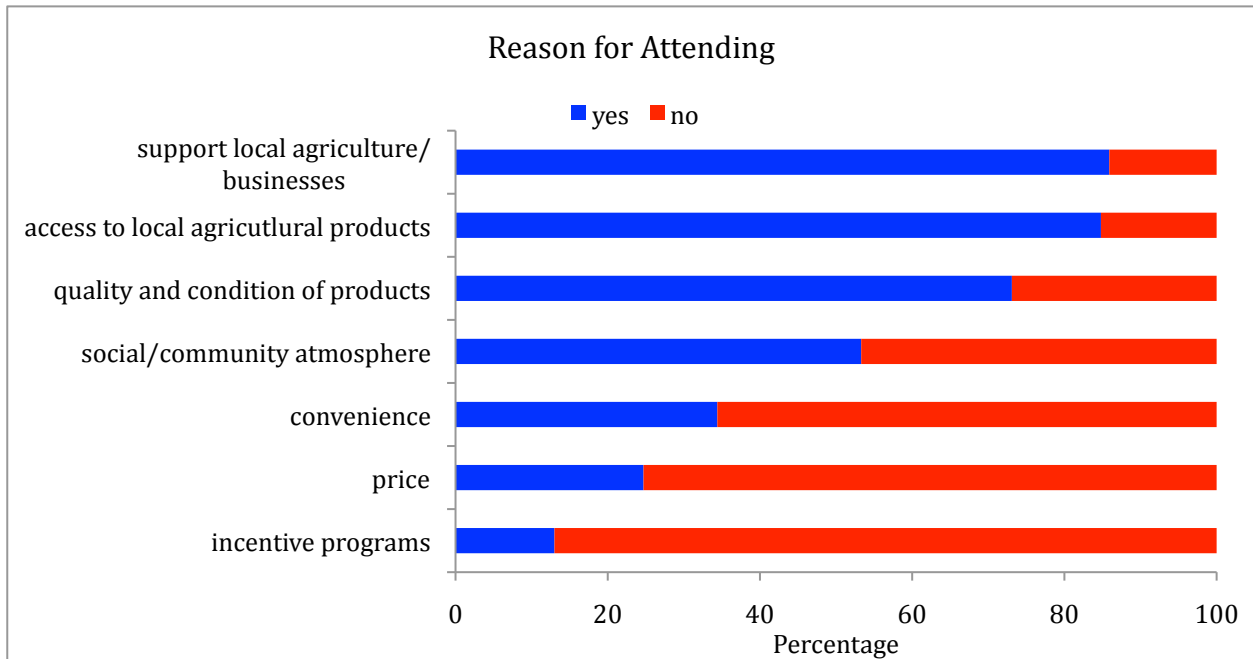


Figure 13. Consumers’ reason for attending the Lewiston Farmers’ Market.

Interestingly, price and incentive programs were not a major reason for attendance, which suggests low-income consumers are not attending the market (Figure 13). Responses from the focus group concur with this observation. Most community members said they had never attended the winter market, and at least two did not know it existed. A community member has never been to the winter market because “I enjoy the fresh food...in the summer. In the winter it’s not the same. I mean yea they have...but it’s just not the same” (Focus Group Informant 1). This community member provides an explanation for why people are not attending,

Maybe a lot of people don’t know days or times and they just...or you know ‘cause its not really broadcast...yea when an advertisement comes on TV for certain stuff it’s like we do accept food stamps, we do accept cash, we do accept major credit cards, whatever, but they need to involve the food stamp thing too, so that people know, “hey I can go there and get something if I need it. I don’t have to feel like a fool if they don’t accept my food stamp card. [...] [in reference to

store in the downtown] Put the signs up. Let people know. Don't hide it. It's not hurting anybody. It's not embarrassing. You know? (Focus Group)

Another farmer conversely feels that people may feel embarrassed about their food stamps. She says, "I think they have such low self-esteem that they can't connect with people...you know they are intimidated" (P.V.).

The consumer survey also reveals perceived barriers to local food access. Less than 40% found cost to be a barrier and only 2.9% found food preparation to be an issue, which was identified as a "disconnect" by informants in a previous chapter (Figure 14).

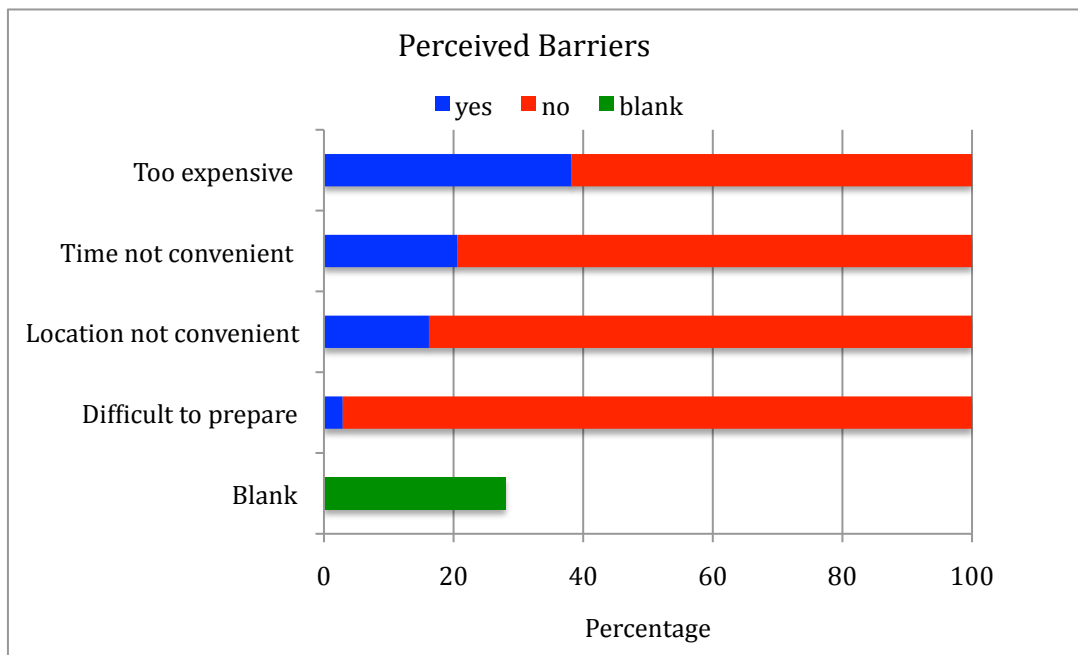


Figure 14. Consumers' perceived barriers to local food access.

Of all responses, 7% deliberately wrote that they see no barriers and 29% of people left this question blank, which suggests they did not see any barriers as well (Figure 14). Overall, consumers did not seem to report many barriers to local food access.

Finally, the consumer survey reveals consumers' interest in alternative markets. The average response for 7 out of 8 categories fell between "somewhat interested" to "very interested"

(Figure 15). No particular market seems to be preferred. In general, CSA seems to be valued over mobile produce vendor, online ordering and food buying club respectively (Figure 15).

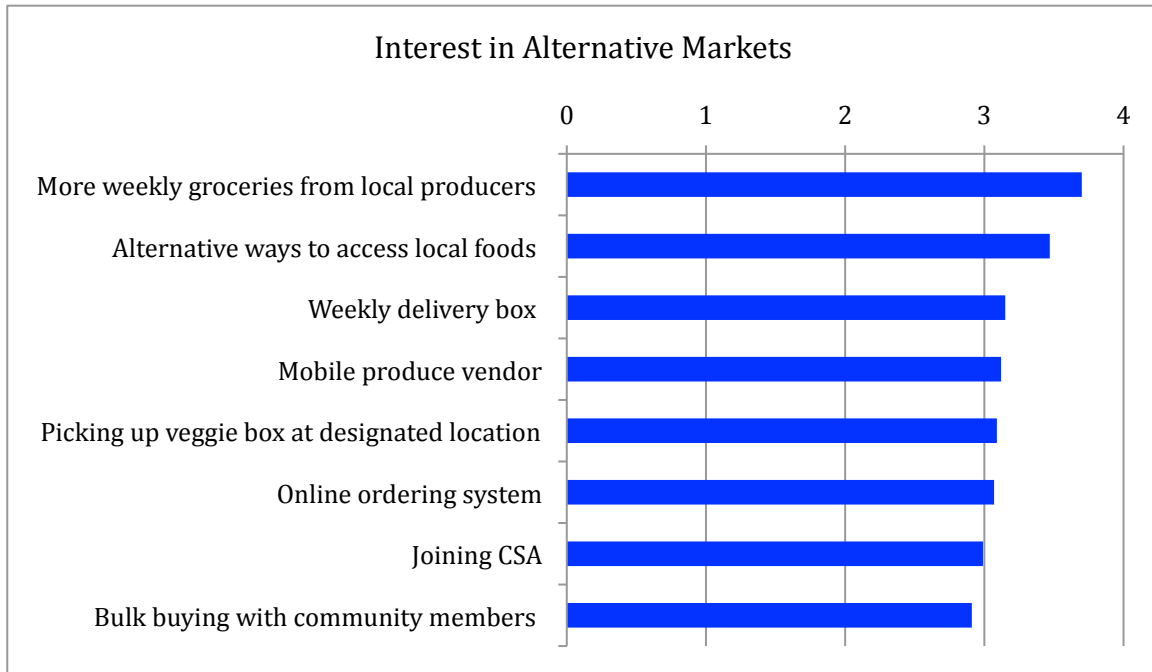


Figure 15. Consumer interest in participating in alternative markets. (1 = not interested, 2 = neutral, 3 = somewhat interested, 4 = very interested).

Granted, these data are collected from a biased group of community members, but they suggest consumers would be interested in participating in an alternative market.

Findings from informants, community members and survey data reveal that predominantly affluent community members support local food systems. A minority of consumers attends the market for incentive programs and few see price as a major barrier. The majority participates to support local agriculture and businesses, as well as, the quality and condition of products. The focus group indicates that participation at Lewiston-Auburn farmers' market is probably higher in the summer. Producers express an interest in supporting their local community, but have received little backing from low-income consumers. The final theme from informants is to understand your consumer base in order to match their needs as best as possible.

The synthesis of qualitative and quantitative data within this chapter identifies a variety of factors that determine the feasibility of marketing local food systems to the L-A community. From these data, five overarching themes were identified: management, operations, technology, producer target and consumer target. Most important are that markets need a strong manager with a “vision” and ability to galvanize community support. Further, it is important to set structure and clear expectations through a business plan. Using hours and location strategically to capture a higher percentage of consumers, even conjoining multiple markets if possible is also preferable. A fourth consideration is whether a market will use technology, which can be convenient and time efficient on one hand and impersonal on the other. Consumers and producers suggest interest in an online ordering system, but interest has not resulted in action. A fifth consideration is determining the market’s producer and consumer targets. Producers seem increasingly involved in the business aspect of their farms looking for greater agency, infrastructure and collaboration. Consumers likewise seem willing to enter new markets, more so than producers. Both agree the low-income population is difficult to serve. With the influx of start-up business and farms, there is still much to learn as these businesses help shape and define the local food industry.

Conclusions

The purpose of this research is to assess the feasibility of increasing local food access to limited income communities in Lewiston-Auburn. The community organization, Good Food for Lewiston-Auburn, requested specific evaluation of the following four direct producer-to-consumer markets: farmers' markets, community supported agriculture (CSA), food buying clubs and mobile food trucks. Quantitative and qualitative data was collected to capture community feedback on the above strategies. Representatives for Good Food for Lewiston-Auburn helped develop the following research objectives:

6. Understand what direct producer-to-consumer markets, or resources and infrastructure to build direct markets, currently exist in Maine and Lewiston-Auburn;
7. Learn what gaps need to be addressed and/or filled to increase direct producer-to-consumer markets in L-A;
8. Learn from expertise and background of key informants;
9. Assess community understanding of direct producer-to-consumer marketing and interest in buying local foods;
10. Assess farmer willingness to enter new markets if made available and/or what resources they need to meet increased demand.

These objectives drove the design of 12 key informant interviews, 98 Lewiston Winter Farmers' Market consumer surveys, 24 Lewiston Winter Farmers' Market producer surveys and 1 downtown community focus group.

Prior to data collection, research was conducted on local food systems and direct marketing. Direct marketing falls into two categories: direct-to-consumer and direct-to-retail/foodservice. Direct producer-to-consumer marketing, the focus of this study, transfers produce straight from farmer to consumer. Direct marketing creates a mutual relationship between producers and consumers. The middleman distributor is removed and the farmer assumes responsibility of storage, packaging, transportation, distribution and advertising. Circumventing the middleman has economic and environmental benefits, such as, support of local businesses, decreased pollution from transportation and inter-community cash flow. A shorter supply chain also means greater transparency and accountability. Literature shows that producers involved in direct producer-to-

consumer marketing are typically small, self-employed farmers. They tend to employ multiple marketing strategies and must be innovative and resourceful in the evolving local food industry. Direct marketing of local foods equals higher sales return, autonomy and competition for small farmers in contrast to larger supermarket chains monopolizing the organic industry. Direct marketing is a small but growing segment of the agriculture industry.

A literature review also reveals the pros and cons of farmers' markets, community supported agriculture, food buying clubs and mobile food trucks. Farmers' markets are the oldest but most popular form of direct marketing cross nationally. They are recognized for a higher level of community interaction and relationship building, providing a social space for the enjoyment of food, activities and entertainment. Community supported agriculture (CSA), on the other hand, has existed since the 1960s in a movement towards for more organic and less processed foods. CSAs are recognized by consumer commitment to producers' success and challenges. Food buying clubs are a form of cooperative where a group of community members pool their resources to buy in bulk from farmers at a wholesale price. Food buying clubs require a high level of community support and engagement. Finally, mobile food trucks are motorized vehicles that sell either fresh produce or made-to-order healthy, cooked food. Their advantage is mobility and affordable start-up costs. Mobile food trucks are attractive for entrepreneurs and people interested in targeting different locations. All four markets achieve the end, except with different assets and challenges.

Chapters two through four synthesize the qualitative and quantitative data collected from key informant interviews, surveys and one focus group. The second chapter on food systems and community finds that communities can encourage value shifts, change buying behaviors, shape the market and build social capital. Obstacles to greater adoption of local foods include the perceptions that local foods are too expensive and the observations that fewer people cook, shop seasonally and shop at local markets due to inconvenience. Local food buying is challenging, because it preferences middle to upper class populations with time, energy and resources. Informants suggest more

education to help change buying behaviors. Current outreach initiatives include cooking, produce and nutrition classes at the market place or in public spaces such as schools and community centers. Other methods are educational pamphlets and online marketing. Informants also stress the valuable educational and social exchanges that occur from personal interaction and frequent communication.

Across different people in the agricultural sector – farmers, businesses, nonprofits, community partners – informants report a growth in relationship building and networking in Maine. Expanding networks are a reflection of budding interest in local agriculture and a sign that people are working together. The development of agriculture investment groups and emerging community Food Policy Councils cross nationally evidence this interest. Practical benefits of state and regional networks include collaborative efforts, gathering more fiscal support, sharing business skills and diversifying food grown across Maine. Informants suggest a local food system depends on these interwoven networks.

The third chapter on equal access and its application to Lewiston-Auburn emphasizes affordability as a major barrier to communities with limited income. Affordability influences buying behavior, use of food stamps, quality of food at Emergency Food Providers (EFP) and sustainability of incentive programs. The dependency on food stamps and cycle of poverty makes changing buying behaviors for this population extremely difficult. Informants recommend ideas for reduced or incremental payment options. Another suggestion is work shares or more community garden participation. Finally, informants report a need for more federal support. Low-income community members, who feel the burden of cost the most, believe they need more resources and food. Their opinion is people need to give more and waste less. Given these difficult circumstances, unhealthy food is better than no food and local food is not necessarily a priority.

The final chapter on market feasibility combines qualitative data and quantitative data from the Lewiston Winter Farmers' Market consumer and producer surveys. From these data, five

overarching themes were identified: management, operations, technology, producer target and consumer target. Most important are that markets need a strong manager with a “vision” and ability to galvanize community support. Further, it is important to set structure and clear expectations through a business plan. Using hours and location strategically to capture a higher percentage of consumers, even conjoining multiple markets if possible is also preferable. A fourth consideration is whether a market will use technology, which can be convenient and time efficient on one hand and impersonal on the other. Consumers and producers suggest interest in an online ordering system, but interest has not resulted in action. A fifth consideration is determining the market’s producer and consumer targets. Producers seem increasingly involved in the business aspect of their farms looking for greater agency, infrastructure and collaboration. Consumers likewise seem willing to enter new markets, more so than producers. Both agree the low-income population is difficult to serve. With the influx of start-up business and farms, there is still much to learn as these businesses help shape and define the local food industry.

Findings underscore the challenge of implementing markets that sell local foods to communities with limited income. According to literature and research, direct producer-to-consumer marketing represents a growing industry that is particularly active in Maine. Unfortunately, research suggests local foods are predominately supported by middle to upper class people who have the time, energy and resources to access it. Barriers to greater adoption of local foods include the fact that local foods are seen as too expensive and observations that fewer people cook, shop seasonally and attend local markets due to inconvenience. Informants also report consumers are not making the healthiest or most cost effective buying decisions. Low-income community members are particularly challenged, because affordability drives their access to local foods. Informants suggest education and communication are important steps in changing behavior. Adoption of a local food system by communities with limited income will require larger economic and value shifts.

Appendix A: Example key informant interview questions

1. What kind of work do you do and how is it related to food security, local foods, community, marketing, etc.?
2. How would you describe the local food movement in Maine? Can you speak specifically to Lewiston, ME?
3. Are you familiar with the term “direct producer-to-consumer” marketing? (If not, explain)
4. I have been focusing my research on farmers’ markets, community supported agriculture (CSA), food buying clubs and/or mobile food trucks. Are you familiar with any or all of these? (Describe any they are not familiar with)
5. Do you know of any successful direct producer-to-consumer marketing strategies in your area or in Maine? Can you describe them?
6. I am trying to determine what kinds of resources and/or infrastructure may already exist in Maine or Lewiston/Auburn to help strengthen its local food system. Do you know of any programs, example models, funding or the like which may help develop these new marketing strategies? Can you describe them to me?
7. What about strategies for increasing access or affordability for communities with limited income?
8. In relation to this topic, do you know of any resources that might help inform my research? (Other model communities, personal contacts, academic/internet research?)

Appendix B: Example focus group questions

General

1. Do you all live in walking distance of here?
2. Do you like to cook?
3. Does anyone garden?
4. Where do you get food?
5. What are your thoughts on healthy eating?
6. Are you happy with food access in the community? Anything you would change? Barriers?

Federal Programs

1. Do you receive any help from the government to purchase food? Which programs?
2. What do you buy with food stamps? Where?
3. Do most people in the community receive food stamps?
4. Anything you would change about food stamps?

Farmers' Markets

1. Did you know Lewiston has a winter and summer farmers' market?
2. Do you or someone you know attend? How often?
3. Why do you think people attend the market?
4. Why do you think some people don't attend the market? What are some barriers to attending the market?
5. Is there anything you would like to see different about the market? (hours, vendor diversity, location)
6. What are your thoughts about cost?
7. Did you know about incentive programs at the market?

Local Food

1. Any ideas for getting more healthy food to the downtown?
2. Do you think buying local food is something people try to do in this community?
3. Would you like it if there were other ways (other than farmers' market) to access local food in L/A?

CSA

1. Would you like it if more of your weekly groceries came from local farmers and producers (including milk, eggs and meat)?
2. Would you be willing and able to pick up a box of locally grown foods at a designated location? How often?
3. Where would be a convenient location?
4. Would you be able to pay the farmer before you received your delivery? (\$25-\$50/week)

Food Buying Club

1. Do you think people would be interested in working together to buy large quantities of locally grown foods at wholesale price?

Mobile Food Truck

1. Do you think people might be interested in buying food from a mobile food truck?
2. Would it be better if the truck parked in a designated location (could be multiple) or traveled around to different parts of the neighborhood?

3. Do you think people in the community would be interested in any of these alternative markets?
4. Which option sounds most interesting?
5. What would work best in this community? (CSA, Food Buying Club, Mobile Food Truck)

Online

1. Do most people in the community have access to the internet?
2. Do you think people would be interested in buying food online? Why or why not?
3. What would need to happen in order for people to be interested in buying food online?

Appendix C:

Lewiston Winter Farmers' Market Consumer Survey

We are surveying Lewiston Farmers' Market customers about direct producer-to-consumer sales and how to best increase access to all consumers, especially those with limited income, while supporting local producers. The data will be used by Good Food for Lewiston (GFL) to develop and support approaches that create sustainable food system solutions. You can refuse to answer any question at any time, and you do not have to complete this survey. Your responses will be anonymous and all data will be analyzed together.

By responding to the questions below, you are agreeing to have your data analyzed for use by Bates College and the Nutrition Center.

Age: _____

Race or ethnic background (circle one): White African Hispanic
Other

1. How often do you shop at the Lewiston Farmers' Market (Winter and Summer):
 - a. In the winter:
 - first time
 - twice or more over the season (November-April)
 - monthly
 - b. In the summer:
 - 1-2 times per season
 - once a month
 - 2-3 times per month
 - weekly

2. How far away do you live from the Lewiston Farmers' Market? (check one)
 - walking distance (0 - 1 mile)
 - 1 - 5 miles
 - 5 - 10 miles
 - 10 - 20 miles
 - greater than 20 miles

3. Why do you attend the Lewiston Farmers' Market? (check all that apply)
 - quality and condition of products
 - price
 - convenience
 - access to local agricultural products
 - support local agriculture/businesses
 - social/community atmosphere
 - incentive programs (such as Double Dollars)
 - other (please specify): _____

4. Is there anything you would like to see different about the Lewiston Farmers' Market? (hours or day of operation, number of vendors, location, types of vendors?)

5. Good Food for Lewiston wants to expand programs that increase access to locally grown foods in L/A but is still in the planning stages. The following questions are meant to assess consumer interest in supporting new programs.

	not interested	neutral	somewhat interested	very interested
I would like additional ways (other than the farmers' market) to access local food in L/A	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like for more of my weekly groceries to come from local farmers and producers (including milk, eggs and meat)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would be interested in getting a weekly box filled with locally grown foods that met at least half of my grocery needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would be able to pick up such a box of locally grown foods weekly at a designated location during the growing season	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would be interested in joining a CSA (Community Supported Agriculture) to purchase upfront a "share" of a local farmer(s) seasonal crop that I would receive weekly	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to work with people in my community to purchase bulk quantities of locally grown foods at wholesale price	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would buy from a mobile produce vendor that travels to my neighborhood	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would be interested in accessing local foods through an online ordering system	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. Are there any barriers which prevent you from buying local foods? (check all that apply)

- Too expensive
- Time not convenient
- Location not convenient
- Difficult to prepare
- Other (please explain below)

7. Any other comments or ideas?

Appendix D:

Lewiston Winter Farmers' Market Producer Survey

We are surveying producers near Lewiston, Maine about direct producer-to-consumer sales and how to best increase access to all consumers, especially those with limited income, while supporting local producers. The data will be used by Good Food for Lewiston (GFL) to develop and support approaches that create sustainable food system solutions. You can refuse to answer any question at any time, and you do not have to complete this survey. Your responses will be anonymous and all data will be analyzed together.

We want to know a little about your business...

1. Where is your business located? _____ (city, state)
2. How would you classify your business?
 - small (less than \$50,000 gross annual sales)
 - medium (\$50,000 to \$250,000 gross annual sales)
 - large (greater than \$250,000 gross annual sales)

3. How many people do you employ?

	1-2	2-5	5-10	>10
full-time (greater than 15 hours/week)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
part-time (less than 15 hours/week)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
volunteer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. What kinds of products do you sell? (check all that apply)
 - produce
 - herbs and flowers
 - processed foods (jams, jellies, honey)
 - prepared foods (soups, quiche)
 - baked goods (pies, pretzels, bread)
 - artwork (pottery, stationary, candles)
 - body care (soaps, shampoo)
 - other (please specify): _____
5. How many miles are you from Lewiston, Maine?
 - 0 – 5 miles
 - 5 – 20 miles
 - 20 – 30 miles
 - greater than 30 miles

We want to assess your participation in a variety of markets...

1. Direct Producer-to-Consumer Marketing: Do you source food or other products to any of the below programs? (check all that apply)
 - Farmers' Markets
 - Community Supported Agriculture
 - Cooperative/Food Buying Club
 - Mobile Food Truck
 - Other (please specify): _____

2. Approximately what percentage of your sales is attained from Direct Producer-to-Consumer Marketing? _____ %

3. Direct Producer-to-Retail/Foodservice: Do you source food or other products to any of the below programs?
 - Retail Store
 - Schools
 - Restaurants
 - Businesses
 - Institution (other than school)
 - Other (please specify): _____

4. Approximately what percentage of your sales is attained from Direct Producer-to-Retail/Foodservice? _____ %

We want to know about your interest in expansion...

1. I am currently looking to expand my market:
 - yes
 - no

2. If I had the option of entering one of the following markets it would be:
 - Farmers' Markets
 - Cooperative/Food Buying Club
 - Community Supported Agriculture (CSA)
 - Mobile Food Truck
 - Wholesale to schools, hospitals or other similar institutions

Wholesale to stores or restaurants

3. Good Food for Lewiston is involved in expanding programs that increase access to locally produced goods in Lewiston/Auburn but is still in the planning stages. The following questions are meant to assess farmer interest in supporting alternative programs. Assume these options would satisfy the price points for your goods.

	not interested	neutral	somewhat interested	very interested
I would be interested in producing goods for L/A through different avenues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would be willing and able to deliver products to a designated place in downtown Lewiston on a weekly basis during the growing season	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to sell my products to community members in large quantities at a wholesale price	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to work with other surrounding farmers to combine products and sell them as a package to consumers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to source food to a produce vendor that sells in highly populated areas of Lewiston & Auburn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to sell my products through an online ordering system	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. Are there any barriers which prevent you from expanding your market?

5. Are there any resources you might need to help expand your market?

6. Any other questions or comments?

Appendix E:

List of Key Informants

1. Tanya Swain
2. Jeremy Bloom
3. Pat Verrill
4. Barbara Rankins
5. Leah Cook
6. Amber Lambke
7. Gloria Varney
8. Penny Jordan
9. Jason Brake
10. Linzee Weld
11. David Gulak
12. Sherie Blumenthal

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