Why Local: An Examination of Motivations and Barriers to Integrating Local Food in Saratoga Restaurants

By Lauren Markram, Julia Paino, and Holden Greene

Environmental Studies Program Skidmore College
May 6, 2013
Introduction

Over the past hundred years, individuals in the United States have become industrial eaters (Curtis, 2008, Inwood, 2008). As food production has grown in size and scale to generate maximum yields, the human interaction and relationship with food has largely disappeared, leading to a state in which people are both psychologically and geographically distant from their source of food (Pollan 2007). While eating food grown near you was once a logical and unquestioned act, it has now become a movement for those concerned about the freshness, quality, and environmental footprint of their food (Inwood, 2008). To meet the growing consumer demands for an alternative to the industrial food system, value labels of “organic”, “fair trade”, and “local” have emerged. According to a recent consumer survey conducted by Whole Foods Market, the “local” label has recently replaced “organic” as the top of consumer demand (Satran, 2012). Of 2,274 adults surveyed, forty-seven percent claimed to be willing to pay more for fruit, vegetables, meat and cheese produced near their homes (Whole Foods Market Food Trend Tracker, 2012).

With “local” becoming the new determinant of fresh healthy food, those involved in food production industries have begun to sell local products, marketing them as healthier for both the planet and body (Cloud, 2007). The culinary industry is one such community that has begun to capitalize on the consumer demand for local food, with high end restaurants such as Blue Hill in New York City maintaining a well-respected and reviewed menu based fully on products grown on their own local farm located in Westchester, NY (Cloud, 2007). In a recent survey of 1,834 chefs conducted by the National Restaurant Association, locally sourced meats, seafood, and produce were considered the most valuable out of a list of one hundred and ninety-eight popular food items and trends due to increased consumer interest in such items (NRA, 2013). As locally
produced foods increase in popularity, questions of how to accelerate and sustain this burgeoning trend arise. Will acceleration occur due to consumer demand for information on the origin of their food? Will restaurants begin to incorporate local foods as a means to differentiate themselves from competition (Curtis, 2008)? Or will a growing environmental consciousness lead restaurant owners to purchase locally based on ethical motivations?

There is a considerable body of research that attempts to address these questions by analyzing the benefits and complexities of local food structures as well as why businesses purchase, sell, and promote goods in a certain way. However, there has yet to be a study that combines these theories to understand the business of sourcing local food to restaurants. In this study, we seek to combine existing research on food systems theory with market theory in order to: determine why Saratoga restaurants purchase local, analyze the existing barriers to incorporating greater amounts of local food into menus, and understand the consumer demand for local foods. Ultimately this information will help craft solutions that address the existing market inefficiencies and foster greater use of local foods in Saratoga. By conducting this study, we hope to address the current gap in the existing research on local food systems and help create a framework for a more socially and environmentally integrated food system within Saratoga County (Lyson, 1999).

**Why Study the Saratoga Springs Local Food System?**

There are currently two main motivations for focusing on the Saratoga Springs local food system: the growth of consumer demand for local food, and the growing availability of such foods. There is a budding potential for the development of a local food shed in Saratoga County as evidenced by the expansion of the farming community, which has increased from 592 farms covering 74,976 acres to 641 farms encompassing 75,6660 acres between the years of 2002 to
2007. More importantly, between those years the market value of products sold increased from $33,228,00 to $58,226,000 annually, evidencing a shift in the agricultural framework of the county towards a greater number of local independent farms (2007 Census). Due to the growing availability of local food in Saratoga, there is a clear need to develop an infrastructure that will allow for a more efficient distribution of local goods. While most produce is currently sold at the Farmer’s Market, there are alternative avenues that are not yet fully utilized.

Saratoga’s restaurant industry is one of the most significant avenues for expanding demand to meet the growing supply of local foods. Saratoga currently supports one hundred and forty restaurants in a city of 29,309 people. According to the National Restaurant Association, this makes Saratoga Springs the city with the second highest number of restaurants per capita in America, following San Francisco (Allen, 2011). The large presence of agriculture within the community coupled with the thriving restaurant industry makes Saratoga Springs an ideal case study for understanding complexities of integrating local food into restaurants due to the abundance of both producers and consumers. Further, due to the presence of a higher socioeconomic class of many residents in Saratoga and tourists during the track season, restaurants in the county may gain significant benefits from incorporating local foods into their menus as a means to differentiate themselves in the competitive market.

**Why Restaurants?**

We chose to focus on the restaurant industry of Saratoga due to the immense impact that the culinary community has on the economy of the county. Due to the significant amount of food that is purchased, processed and sold in Saratoga restaurants every day (especially during the peak season), we felt that a movement to shift food sourcing away from large-scale distributors and toward local producers would have a significant positive impact on the local economy and
generate enough consumer demand to drive growth within the local farming sector leading to a
greater number of local farms. This assumption is supported by existing research that asserts
chefs and restaurant owners occupy an important space in food distribution system that allows
them to generate greater interest in local food among customers and farmers/distributors they
source from through the use of signs, promotions, and menus (Inwood, 2009). In this sense, the
culinary community has the potential to increase public demand through educating patrons and
employees on the benefits of local food. Currently in the United States, nearly fifty percent of the
food dollar is spent on food eaten away from home, mostly in restaurants. This equates to
national restaurant sales of $558 billion in a single year (National Restaurant Association, 2008).
A shift in sourcing ingredients from large-scale distributors to small local farms in the restaurant
industry has the potential to greatly affect the current agricultural framework toward a more
sustainable system (Schoenfeld, 2011).

**History of US Agriculture and the Benefits of Local Food**

By the early 20th century over 50% of the US workforce was engaged in small-scale
agricultural work (USDA, 2005). Today less than 1% of America’s workers are farmers (EPA,
2010). This figure helps conceptualize the extent of how radically the Unites States food system
has changed over the last 100 years. The modern food economy was shaped by the major
technological, geopolitical, and social developments of the later part of the 20th century and is
highly reflective of our capitalist roots. This complex network that feeds our country has
developed far beyond simple producer-consumer relationships that characterized the more
antiquated food markets of the pre-industrial America (Lyson, 1999).

Vertical integration and the centralization of food production/processing methods
continues to be a defining characteristic of this new food economy where development is driven
almost entirely by the private sector. The effect of government subsidies and a focus on growth models has become stronger with every passing year and has been largely responsible for the virtually unchecked growth of large agro-industrial food giants like Cargill, Tyson, and Monsanto (Halweil, 2000). These and many other developments have led to a call among Americans to re-localize the nation's food system. This concept continues to gain support as the negative social and environmental side effects of our current system become more apparent. This can be reduced to the fact that, as Michael Pollan points out, “the globalized industrial food distribution systems that have developed over the years was not designed to be environmentally sustainable” (Pollan, 2007).

The environmental impact of this global food network continues to grow and contribute to the degradation of our land, water and air (Norberg-Hodge & Gorelick, 2008). Inevitably any restaurant that relies on this food system to supply its base ingredients is potentially and inadvertently contributing to the global depletion of top soil, over eutrophication in oceans, rainforest development, and global climate change just to name a few (Smith, 2010). Supporting local food markets is quickly becoming recognized as a good way to reduce the environmental impact of food generated by the average consumer. Because locally sourced, produced, and consumed food travels only a few hundred miles, transportation emissions are reduced significantly. The fewer miles that food travels, the fewer inputs needed to bring the food from its point of production to the consumer (Halweil, 2000). Given the fact that today the average food item travels around 1,500 miles, this alone significantly reduces the impact of local food (Pirog, 2003).

The benefits of local food aren’t limited to food miles. Other perks like the tendency for smaller farms to typically engage in more responsible farming practices than the larger industrial
alternatives. Practices like crop rotation, use of natural fertilizers, pesticides, and sustainable water management all are largely employed in many small-scale operations. These and other practices ensure the long-term well being of things like soil and water quality, which are both vital factors to consider if we plan to be able to supply food for our growing population (Evans, 2008). Because of the overall decrease in the impact of local food coupled with smaller scale farming operations, “local” can typically be considered as a more environmentally sustainable means of food productions than the non-local alternative provided by the globalized food market.

**Food Systems Theory**

Food systems theory seeks to explain the detriments of the current agricultural paradigm while highlighting the emergence of an alternative food production system. Much of the research focuses on critiquing the existing system as unsustainable agriculturally and economically (Pollan, 2007). As a solution, the research emphasizes increasing the use of local foods by measuring the availability of food from a local food shed (Martinez et al., 2010), using CSAs to build connections between local farmer and customer (Sharp, 2002), and better labeling of local products (Satran, 2012). Throughout the literature, communication has been highlighted as an essential key to reinvigorating a sustainable agricultural production system. By rebuilding the links between consumers, restaurants, and farmers, a solid relationship infrastructure will be fostered to allow for the proliferation of local products.

In New York, the number of farms has declined steadily from 215,597 farms in 1910 to only 32,306 farms by 1992 (Lyson, 1999). Due to the rise of large-scale monoculture agricultural production, the infrastructure that once linked local production and local consumption in New York has completely broken down. Therefore, the rising movement to eat locally must address the framework of the food market system through rebuilding the links and relationships between
producers and consumers. Facilitating a relationship between consumers and local producers would not only enforce solidarity through a greater communication network, but would also connect consumers to their food sources while they enjoy safe, tasty, high-quality food (Pellerito, 2012).

While it is widely recognized that locally produced food is generally more expensive than food coming from large distributors, many consumers are willing to pay more for local and sustainable food, stating that the price reflects the quality (York, 2012; Feldmar, 2012). According to one restaurant owner, “our patrons love the changing menu according to what’s in season. In this modern world, most of our daily activities are divorced from nature and the seasons. I think people crave a connection with things that are real, which is why seasonal menus are becoming more and more popular” (Pellerito, 2012). In this way, consumer demand acts as a vital component to shifting the agricultural paradigm as the market will adapt to meet the desires of consumers, especially for those willing to pay a premium for local food.

Beyond price, small farms are threatened by everything from severe weather to pest infestation, especially for those attempting to forgo the use of pesticides in favor of more natural growing practices (Feldmar, 2012). Other widely cited barriers for greater integration of local foods into menus include lack of communication between stakeholders, transportation and distribution of goods, consistency, reliability, and overall availability of local food (Woods, 2006; Iowa State, 2006). However, for those restaurants willing to tackle these barriers, there are plenty of associated benefits. Because chefs' reputations are based on the quality and uniqueness of the ingredients they use (Kelley, 2006), local foods are an important way that restaurants may differentiate themselves in the market and retain a competitive advantage (Porter, 1980).
Market Theory

Corporate social responsibility has become increasingly salient as businesses adapt to meet consumer demand for more sustainable, environmentally friendly products and services. The driving forces behind this green wave include the many consumers who stress the importance of knowing exactly what is in the products that they are purchasing and how safe they are for themselves, their families, and the environment (Esty & Winston, 2006). This demand for sustainability has put substantial pressure on businesses looking to maintain a competitive advantage (Porter, 1980). This phenomenon also presents businesses with an opportunity to feed this growing demand for offering healthy alternatives, including locally sourced products. For example, Whole Foods, a leader in providing healthy, organic foods, has become one of the fastest growing supermarkets in the country due to the increasing demand for healthier and more sustainable options (Esty & Winston, 2006). Research suggest that businesses using the environmental lens are more entrepreneurial than their competitors and are better equipped to find opportunities to help customers who are mindful of their environmental footprint (Esty & Winston, 2006).

The restaurant industry in Saratoga Springs faces intense competition due to the high volume of operating restaurants in the Saratoga County Region. With over 140 restaurants, residents and tourists have a wide variety of choices on where to dine (Saratoga Chamber of Commerce, 2011). Concerns about nutritional value, chemical inputs in food production, and energy costs of transporting foods great distances are becoming increasingly important to consumers. These various concerns have led to growing demands for local food choices on a national scale (Pollan, 2007). Owners as well as executive chefs are often responsible for the sourcing of ingredients in restaurants. Chefs who seek out locally grown produce may do so
“because they think it's fresher and of better quality than what comes through a traditional food distributor” (McLean, 2009). Locating local food suppliers, however, is not always an easy task and may be inconvenient for restaurant owners who have easier access to major food distributors. In order to pursue local options, which often coincide with higher prices, there needs to be an incentive for restaurants to choose local over conventional items as well as a readily available source of local foods.

The growing demand for higher quality, farm to table foods provides restaurants a way to differentiate themselves from competitors (Porter, 1980). Even transnational corporations such as Wal-Mart are shifting their business practices to appeal to the consumers on a local level. Wal-Mart recently announced that, due to increasing demand for local products, they were committed to doubling the amount of local foods in each of their stores by year 2015 (Swanson, 2013). Once local foods are integrated into the menu, restaurants are more likely to attract eco-tourists or people whose destinations are based on ecology or socially conscious beliefs (McLean, 2009). The restaurant industry is particularly elastic and responsive to consumer behavior. With local options becoming increasingly popular in many sections of the culinary community, restaurants will need to transition their practices in order to meet the shifting demand (Burrows, 2004). By meeting the demand for local, higher quality food choices, restaurants can effectively transition to more environmentally sound practices while still focusing on their triple bottom line.

Transitioning to the usage of more local foods will, in many cases, need to be driven by monetary benefits. According to a recent study, many Americans now consider local food to be considerably more important than organic food options (Kearney, 2013). Many consumers, “embrace local food options because they believe it helps local economies...delivers a broader and better assortment of products...and provides healthier alternatives” (Kearney, 2013).
Moreover, the study concludes that in all income segments, 70% of consumers are willing to pay a premium on local foods (Kearney, 2013). The implications of the study suggest that many restaurants can appeal to consumer demand by focusing on foods that originate from a closer proximity rather than spending excess money on organic products. Integrating local foods into a restaurant's menu can also be a successful way for restaurants to reach a more reliable, higher paying niche market. Presenting the potential revenue growth is an essential factor in small business owner’s willingness to become more sustainable. Transitioning to more sustainable, local practices can drive revenue growth and increase customer loyalty (Lee, 2008).

**Research Focus**

Our objective is to analyze the relationships between local food producers, restaurant owners, and consumers, in order to identify and address the market inefficiencies that prevent integration of local food into the Saratoga restaurant industry. In combining food systems theory with market theory, we intend to overcome the current gap in existing literature. While food systems theory often overlooks the role of competition, which has the potential to increase the use and valuation of local foods, market theory addresses this concept while neglecting to connect local food to restaurants and acknowledge the impact of food systems on the availability of local foods. Our research seeks to use both theories in tandem to explore how restaurants may achieve product differentiation by using local foods, and how that information can be used to stimulate increased linkages that will facilitate the growth of local food production in Saratoga County.
Methods

The initial step in our study involved reviewing existing literature to determine the gaps in previous studies of food systems theory research on connections between local farmers and restaurants. From the process of reviewing thirteen relevant studies, we were able to determine that five main methods were pursued: restaurant analysis (interviews and surveys), farmer analysis (interviews and surveys), consumer surveys, patron focus groups, and menu analysis.

We noted a gap in existing literature as no one study engaged all methodologies in order to understand various stakeholder perspectives. In noting this gap, we set out to engage each of the previously mentioned methods to ensure restaurant, farmer, and consumer perspectives all factored into our findings. The farmer and restaurant interviews were essential to understating the food systems theory side to our research through revealing barriers and benefits to greater incorporation of local food into Saratoga menus. The consumer survey, focus group, menu analysis, and GIS data were crucial to understanding how restaurants could achieve product differentiation though the incorporation of local foods. Table 1 in the appendix displays the methodological approaches of reviewed literature as well as our own.

Menu Analysis

To attain an idea of how restaurants in Saratoga value local food, we analyzed the menus of all one hundred and forty restaurants listed on the Saratoga County Chamber of Commerce website and placed each restaurant in a category of “local-ness” based on how food was marketed. We utilized a diffusion of innovation framework in creating the boundaries for each category (Inwood, 2009). Just as this theory divides groups into five categories based on their adoption of innovations, we rated each restaurant on a scale from “no local” to “hyper local” based on how they advertised their use of local foods on menus. Because restaurants convey the
aspects of their business that they most value through advertising, we determined that a menu analysis would reveal the usage of local food, as well as the extent to which local was used for product differentiation (Curtis 2008, Ortiz 2010). The following table depicts the categories of how each restaurant was rated:

**Table 2: Use of Local Food on Menus**

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description of Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>No local</td>
<td>No mention of where food comes from</td>
</tr>
<tr>
<td>Low</td>
<td>Does not state that it is local, but claims to be seasonal and fresh</td>
</tr>
<tr>
<td>Medium</td>
<td>States that sources locally but does not have any information about what farms/local producers are sourced.</td>
</tr>
<tr>
<td>High</td>
<td>States local and has section that lists which farms sourced</td>
</tr>
<tr>
<td>Hyper local</td>
<td>Menu has section listing farms source from and also mentions names of farms to explain origin of each food item within dish</td>
</tr>
</tbody>
</table>

**Results**

When beginning our research we had no knowledge on the current state of local food sourcing in the Saratoga restaurant industry, but hypothesized that it would be reasonably high due to the large presence of farmers, the success of the farmers market, and the competitiveness of the restaurant industry in this region. The menu analysis results conveyed that our hypothesis was incorrect, as few restaurants advertise the presence of local foods on their menu. Of the 140 restaurants evaluated, 70 made no mention of local food, with only 16 restaurants openly advertising commitment to local producers through the inclusion of farm names on the menu (see figure 1). Of those 16 restaurants that advertise their use of local food, 50% were categorized as “high end”, while 19% were America comfort food, 19% were cafes, and 12% were pizza/Italian (see figure 2). These findings were essential to our research, as they provided evidence that there is a great deal of room for growth in the field of local food sourcing and use of local food as a
means of product differentiation within the Saratoga restaurant industry. The fact that 80% of Saratoga restaurants market little to no use of local food gave a new purpose to our research, which was to find a way to shift the current baseline towards greater use and menu marketing of local foods.

Figure 1: Percent of Saratoga Country Restaurants that Advertise Local Foods on Menus

<table>
<thead>
<tr>
<th>Percent of Restaurants Advertising Local Food</th>
</tr>
</thead>
<tbody>
<tr>
<td>50%</td>
</tr>
<tr>
<td>30%</td>
</tr>
<tr>
<td>6%</td>
</tr>
<tr>
<td>6%</td>
</tr>
<tr>
<td>6%</td>
</tr>
</tbody>
</table>

8% of the restaurants advertise a low level of local food.
Discussion

Menus act as an essential form of internal marketing as they are the only piece of printed advertising that are sure to be read by the guest (Pavesic, 2009). Because there is an economic incentive for each food-service provider to differentiate themselves from competitors, the menu becomes a tool that conveys to consumers what the restaurant values; whether it is atmosphere, a particular theme, or their alliance to a value label such as vegan, organic or local (Moulatsiotis, 2012). A well-designed menu can educate and entertain the customer as well as be a communication, cost control, and marketing tool for a restaurant (Pavesic, 2010). Because the menu gets the customer excited about the meal they will consume, restaurants that appeal to consumer interests in regard to the freshness and authenticity of their food will likely be able to
draw greater attention to their product. The existing literature on food systems conveys that people often express interest in local food due to a growing desire to feel connected not only to the food consumed, but also to the person responsible for cultivating that produce. This is illustrated in the recently popularized mantra, “shake the hand that feeds you.” With the ultimate message that the relationship between producer and consumer must be rebuilt so that people will grow accustomed to knowing and caring about the manner in which their food is grown (Pollan, 2007). With the establishment of these vital relationships, a local infrastructure of communication will begin to blossom, allowing a greater flow of money within the community. Therefore, the use of local foods in restaurants would be mutually beneficial, as restaurants could potentially increase profits through product differentiation while simultaneously building the infrastructure for a more effective local food shed.

While many of the restaurants that we deemed to have a high degree of local food on menus were categorized as “high-end”, there were some outliers such as Comfort Kitchen, the Local, and Harvest and Hearth, which serve reasonably priced American style comfort food while still maintaining a commitment to sourcing locally. So while half of those restaurants that have taken on local sourcing are high end with relatively high price tags, the other 50% maintain an average price range, showing that it is possible for restaurants to commit to local sourcing while maintaining reasonable price margins. In an interview with Chef and Owner of Comfort Kitchen, Rory Moran, he claimed that he was able to overcome the price issue because he planned each meal keeping in mind the fact that he would be sourcing locally. If a restaurant absorbs the cost of buying local into their strategic plan, then it is far easier to make their menu items a reasonable price that is slightly inflated to reflect the incorporation of local products.
**Restaurant Motivations for Using Local Food**

In order to assess the motivations behind restaurant owners’ food choices, we conducted a series of semi-structured interviews with restaurants in Saratoga County. Although we requested interviews in person with over twenty restaurants, we were only able to conduct thirteen. Anecdotal contributions from some interviewees were valuable for understanding the unique perspectives of local food systems given that little prior research had been conducted on potential barriers of bringing more local products into restaurants. We sought to interview individuals who were responsible for purchasing decisions (Dunne et. al, 2011). Our interviews were primarily with the owners and head chefs of the restaurants and therefore those responsible for important food and marketing decisions. (Dunne et. al, 2011). Each of the thirteen interviews was semi-structured and lasted between 30 min and 1 hour. For open-ended questions, we categorized answers and recorded comments during the interviews (Dunne, et. al, 2011). The interviews were structured to assess the choices of chefs and restaurant owners in Saratoga Springs in regard to food choices and to more thoroughly understand the competitive restaurant industry. The interviewing process enabled us to gain insight into both the costs and benefits of incorporating local food into restaurant menus. In addition, the qualitative interviews were used to assess any barriers that may prohibit the integration of local foods into the restaurants. The interviewing process was also a tool for better conceptualizing how each restaurant differentiates itself from its competitors.

Next, we used Geographic Information System (GIS) and the menu analysis data to plot restaurants on a map of Saratoga County based on their categorization of local food marketing in order to determine if there was any correlation between location and local food use.
Results

Table 3: Motivators for Restaurant use of Local Food

<table>
<thead>
<tr>
<th></th>
<th>Niche Market</th>
<th>Sustainability</th>
<th>Education</th>
<th>Lifestyle</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Local</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50 South</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Mouzon House</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Comfort Kitchen</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>One Caroline</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coffee Traders</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Four Seasons</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Healthy Living</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Chianti</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boca</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forno</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pasta Penne</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harvest &amp; Hearth</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

When beginning the interview process, we hypothesized that those currently using and advertising local foods in menus were driven by the concept of product differentiation. Because the restaurant industry in Saratoga Springs is so highly competitive, it would make sense for each business to attempt to differentiate themselves in the market place, with local food offerings being one means to do so. Our findings defied the theory that local food use and marketing was driven by a business decision, as out of the 13 total restaurants interviewed, 54% were motivated to use local items in order to fill a market niche for local, sustainable items. 62% of restaurants used local foods in order to stay sustainable and appeal to an environmentally conscious customer base. 31% of the restaurant owners felt that education was a motivator in their decision to use locally sourced products. 62% of restaurant owners felt that the use of local foods reflected their own personal lifestyle and was an essential component to the culture of the

18
restaurant. Location served as a motivator for 31% of the restaurant owners, who communicated that in order to differentiate themselves from competitors, they used local foods to provide higher quality products. Of these categories, location and niche market acted as a means of product differentiation, while those of education, sustainability, and lifestyle are considered ethical motivations.

GIS findings convey that there is not a definitive correlation between restaurant location and degree of local food sourcing. This is due mostly to the fact that there were only 16 out of 140 restaurants that discussed using local food in their menus. Therefore, we did not have a large enough sample size to draw solid conclusions. While the GIS data does not provide a solid finding in regard to restaurants using local foods due to their location, the GIS data provide a helpful visual representation of the stark contrast between how many restaurants are sourcing locally as opposed to those that are not.

*Image 1: This image displays all restaurants located in Saratoga Springs along with their associated local food categorization. Light green depicting the no local category on a scale to dark green representing hyper local.*
Image 2 shows that half of the restaurants in the hyper local category are located on Broadway, with the rest found in off-Broadway streets or in neighboring towns such as Ballston Spa. Image 3, which depicts the location of all the “no local” restaurants shows that restaurants in this category are similarly dispersed. Therefore, no solid conclusions may be draw in regard to the hypothesis that restaurants located further away from Broadway would use local food as a means to draw in a niche market of consumers.

Discussion

The qualitative interviewing process of the thirteen restaurants provided valuable insight into the motivations and interests of restaurant owners and why restaurants choose to integrate local foods into their menus. The primary factors contributing to restaurants’ incorporation of local foods into their menu reflected the theories of product differentiation, stakeholder theory, and individual conscience. Product differentiation is “appropriate where the target customer segment is not price-sensitive, the market is competitive or saturated, customers have very
specific needs which are possibly under-served, and the firm has unique resources and capabilities which enable it to satisfy these needs in ways that are difficult to copy” (Porter, 1980). In order to gain a competitive advantage in the restaurant industry, capitalizing on product differentiation not only fills a niche but can also be economically rewarding.

Out of the 13 total restaurants interviewed, 54% were motivated to use local items in order to fill a market niche for local, sustainable items. Rory, owner of Comfort Kitchen, located in the heart of downtown Saratoga Springs, felt that his restaurant would be offering something unique to the community by providing local options. Rory explained that his restaurant was “fulfilling a niche” and helping differentiate him from competitors. Gina, owner of Harvest and Hearth similarly felt that product differentiation was essential in the highly competitive restaurant business. Location served as a motivator for 31% of the restaurant owners who felt that the use of local foods helped differentiate their restaurant from the various other dining options. According to Gina, “the restaurants location, situated next to Saratoga Lake, is off the beaten path and using local foods helps emphasize that [they] are different from the general Broadway crowd”, offering “real good healthy food”.

The Local, located a short distance from the Main Street in Saratoga, provides a variety of menu items with the inclusion of local products whenever possible. Tim, chef of The Local, communicates that his motivators for using local ingredients are primarily due to the superior taste and quality that local items provide. Taste and quality were a recurring theme throughout the interviewing process, revealing that product differentiation can be achieved not only through the presence of local foods, but also through the superior taste that results from its use (Keeling-Bond et al., 2009). Product differentiation in the restaurant industry can also be achieved outside of ingredient choices. Bill Gathen, marketing director for the DZ restaurants emphasized the
importance of “being unique and offering a different atmosphere”. According to Mr. Gathen, DZ restaurants are different “not just through unique food but also through the experience”.

Stakeholder theory suggests that, the better a firm establishes good relationships with various stakeholders, the better its overall financial performance (Donaldson & Preston, 1995; Freeman, 1984). When the demand for local food increases and customers require higher quality products, restaurants are forced to improve their sourcing practices and in turn create a competitive advantage (Esty & Winston, 2006).

Out of our thirteen interviews, 62% of restaurants used local foods in order to stay sustainable and appeal to an environmentally conscious customer base. When interviewing Scott from Coffee Traders, located in the heart of downtown Saratoga Springs, he communicated several important factors influencing sourcing decisions. According to Scott, “the use of fair trade and organic foods has been increasingly requested” and as a result, Scott has chosen to “increase the quality of his products in hopes of satisfying the customers”. Due to “lack of access to local foods”, Scott explains, he must focus on affordable ways to provide the highest quality, which often translates into “organic but not quite local products”. Scott suggested, however, that if he were guaranteed a large customer base of clients willing to pay more for local products, that he would adapt his business practices to meet consumer demand. Being small business entrepreneurs, restaurant owners have the ability to integrate environmental responsibility into their restaurant’s overall mission more easily, especially if there is increasing demand for local products (Larson, 2000).

Interviews at the Mouzon House revealed that offering a wide variety of locally produced foods can also be financially rewarding. According to the hostess at the Mouzon house, “many customers are willing to pay significantly more for local, higher quality foods” which is a
“tangible motivator” for sourcing local ingredients. The motivation for incorporating local foods to meet the demand of customers willing to pay more is an effective way of using product differentiation to fill a niche market. Moreover, because reputation is critical to the success of a small firm, restaurants are likely to be more responsive to stakeholder concerns and demands (Besser, 1999). This responsiveness is particularly evident at the local level where restaurants are directly affected by the feedback and approval or disapproval from local stakeholders (Perrini, 2006). At the DZ restaurants, Mr. Gathen emphasized the necessity of satisfying the customer. In order to ensure “the utmost satisfaction” the DZ chain puts “tremendous effort into hearing feedback from customers through surveys and questionnaires”. According to Mr. Gathen, little feedback indicated any need to increase the presence of local food. Instead, DZ restaurants are able to satisfy their primary stakeholder, the customer, through providing upscale, esthetically unique dining options. The DZ restaurant chain unlike the restaurants choosing to incorporate local foods into the menu, relies on product differentiation through the restaurant atmosphere and overall aesthetics. While restaurants can achieve product differentiation through the incorporation of local foods, other small businesses seek to differentiate themselves through other means such as overall aesthetics. Mr. Gathen reaffirmed the importance of achieving product differentiation to highlight the unique qualities that the DZ chains offer. Creating a unique atmosphere for customers has proven valuable in setting the DZ restaurants apart and drawing in a steady stream of loyal customers.

Lastly, the results of the thirteen interviews revealed that individual conscience had a significant impact on the structure of a restaurant and determined the quality of foods provided. The results from our interviews reveal that on individual level, providing local foods can be of utmost importance for both educational and personal reasons. Out of the total 13 interviews, 31%
of the restaurant owners felt that education was a motivator in their decision to use locally sourced products. Local foods are perceived by many as safer, higher quality, and less environmentally destructive than conventional foods (Pollan, 2007). Providing local foods can also be a way to raise community awareness on the importance of consuming only locally produced items (Norberg-Hodge et al., 2008).

In our interviews, 62% of restaurant owners felt that the use of local foods reflected their own personal lifestyle and was an essential component to the culture of the restaurant. Many of these restaurants communicated the importance of running a business in the same sustainable way that they live their daily lives. For example, keeping a low carbon footprint and avoiding conventional, mass-produced products were a common theme among those who wanted to reflect their own lifestyle in their restaurant business. At Comfort Kitchen, Rory explains that he “is happy to see the extra money spent on local foods going “to farmers, not a middleman” and sees his restaurant as “not only a business, but also an art and a perspective.” Gina at Harvest and Hearth felt intrinsically motivated to promote change when she became “aware of an increasing disconnect between people and food sources and chose to structure [her] restaurant as a local food provider to help transform the food system”. Providing healthier food also motivated Kim, owner of Fifty South, to open her own locally themed restaurant. Driven by her desire to live life sustainably, Kim chose to open an environmentally conscious restaurant business to spread her love of food and educate others on the importance of consuming local, organic products. According to Kim, promoting sustainable changes in the community must come from the consumer and from “individual purchasing power and the decisions of what we choose to support”. Promoting systematic change is a top priority to Kim, who feels that through her restaurant, she can help educate her community and help improve consumer behavior.
The desire to transform the current food system away from conventional products and towards locally produced foods was readily discussed throughout many of the interviews. Motivations extended beyond financial gain and instead were based in genuine desire to promote sustainability and provide the best quality products. The interviewing process revealed that product differentiation is of high importance, as hypothesized, especially for the higher end restaurants that to attract a niche market. Personal beliefs were similarly of high importance to many of the restaurant owners. Several interviewees communicated that their personal beliefs superseded economic decisions due to their own values. While the results are significant, there is likely to be a limited number of restaurants operating from the viewpoint of personal beliefs. Thus, increasing the number of restaurants using local foods will depend on the willingness of customers to pay more for higher quality, locally produced items. If a larger number of customers are willing to pay more for local foods, product differentiation will ultimately result in the incorporation of more local foods throughout a variety of restaurants in the Saratoga region.

**Consumer Demand for Local Foods in Restaurants**

To develop a greater understanding of consumer demand in the market of local food and to determine various dining behaviors of local residents, a consumer survey was distributed. We received a total of 195 responses. Each survey assessed the attitudes and opinions of local citizens on food choices, with an emphasis on local products and willingness to spend more for higher quality (Dunne, et all, 2011). We sought to determine the preferences of residents regarding local foods and their general attitudes toward local foods. While we are unable to generalize from the convenience survey, it provided an exploratory means of assessing the current status of demand for local foods among Saratoga residents.
**Survey Results**

Our local food survey revealed considerable customer interest in local foods, with 60% of respondents stating that the presence of local food affects their decisions of where to dine (see figure 3 in appendix). Residents were also asked to evaluate a number of statements about local food. The results showed that support for the local economy and the freshness of local food garnered the greatest number of responses, as they received 184 and 182 positive responses respectively. This means that 94% of Saratoga residents believe that when spending money on local food, they are buying fresh ingredients while putting money directly back into the community (see Figure 4). These figures are in line with findings in food system theory literature, which states that customers are most interest in the economic, nutritional, and environmental aspects of local foods (Curtis, 2008; Pollan, 2007; Cloud, 2007).

When asked if residents would be willing to pay more for local food at a restaurant, 88% responded yes (see figure 5), with 51% of those individuals agreeing to pay between 5 and 10% more on a restaurant bill that included locally sourced ingredients, and 18% of individuals being willing to pay 10% or more (see Figure 6).

Of the 195 residents surveyed, 1% claimed to never eat out, 50% said that they eat out 1-3 times per month, 30% said 4-7 times, and 19% claimed to dine out more than 7 times per month. This is significant, as the 19% of consumers who frequent Saratoga restaurants have a large influence on the market. Therefore, restaurants looking to improve their profit margins should value the opinions of this group of diners due to the large amount of money they spend in restaurants each month. Due to the importance of this group of frequent diners, the results were narrowed to focus specifically on this section of consumers in order to draw a contrast to the overall consumer demand. Results show that residents who dine out seven or more times per
month are even more interested in and willing to pay more for local foods than the general public. 65% of frequent diners claimed that the presence of local foods affects their decision on where to dine (see figure 7), with 91% of respondents stating that they would be willing to pay more for local foods in restaurants (see figure 8). The most striking difference in the results between the general consumers as opposed to frequent diners was evidenced in the amount that residents were willing to pay for local foods in restaurants. Of those who dine out 7 or more times per month, 41% were willing to pay over 10% more on the final bill, with 40% willing to pay between 5-10% (see figure 9 in appendix).

Survey Discussion

The restaurant industry is infamous for being highly competitive. Nowhere is this more true than in Saratoga County, which maintains one restaurant for every two hundred and nine residents (NRA, 2010). Due to the extreme competitive nature of the industry, it is essential that food service providers acknowledge how to gain competitive advantage through meeting the needs and desires of their consumer base. To do so, restaurants must be willing to change and adapt according to the interests of their consumers (GRRT, 2012). Because consumer demand plays such a vital role in determining how a chef or owner will design their dishes and menus, we deemed it necessary to assess the demand for local food in Saratoga through the distribution of a public survey. Based on findings from our interviews with chefs and owners, few restaurants actually conduct surveys to analyze such demand for certain products but rather rely upon informal channels such as personal experience or online reviews. Therefore, the restaurant chefs and owners in Saratoga are likely to be unaware of the overwhelming consumer interest in local foods among residents. Providing these statistics to restaurants, or potentially conducting a more comprehensive consumer survey that targets a greater percent of the consumer base, could be a
possible avenue in which to accelerate the supply of local foods in restaurants. With such quantitative data, restaurant decision makers would be exposed to the fact that consumers not only want more local foods when dining out, but also are willing to pay more for these options.

One of the most significant findings within the consumer survey was the fact that frequent diners were much more willing to pay more for local foods in restaurants, as 41% were willing to pay over 10% more, compared the general public in which only 18% stated they would be willing to pay that amount. This evidences that among the frequent diners, there is major potential for restaurants to attract higher paying customers through product differentiation. This concept was highlighted in restaurant interviews, with Tim James from The Local stating, “I think the Saratoga community is pretty open to the premium on food that uses these high quality local ingredients. That’s where we're lucky too, Saratoga is more of an affluent community so they're more willing, and there’s not a lot of restaurants that do it. So the people that want it will go search you out.” It in this sect of competition and product differentiation where market theory proves essential in the task of shifting the baseline toward greater integration of local foods in menus, as ethical concerns will only ever motivate a small percentage of the population while potential for greater profits will prompt a larger audience to change behavior. In this case, toward local food sourcing.

**Focus Group**

To further assess consumer demand from a qualitative perspective, a focus group consisting of 8 individuals with a high degree of restaurant patronage was also conducted to understand the values and behaviors of those individuals. The focus group served as a method for analyzing the factors that contribute to where to dine and what food choices are made while dining out. Questions such as how they choose where they eat and which factors determine their
restaurant choices provided insight into the characteristics that Saratoga County residents look for in their consumptive preferences. Moreover, our focus group enabled us to investigate the perceived value of local foods and the factors that contribute to making the choice to pay more for local products (Zapeda et al., 2004). While the survey was able to generate a large number of responses to assess overall demand for local foods, the qualitative data attained from the focus group was essential to understanding why there is such a great deal of interest.

**Focus Group Discussion**

During the focus group the survey results were supported, as seven out of eight individuals claimed that they would be willing to pay more for local food. Each person in this group had a different motivation for being willing to accept the extra costs. However, most people agreed that the main motivation would be to receive better quality, fresh food. Further, members of the focus group were overwhelmingly interested in the idea of feeling more connected to their source of food, with one individual stating, “there’s just something special about enjoying a meal when you know the guy who planted, grew, and cared for it before it reached your mouth. I like to go to the market on Saturdays so can put a face to many of the farms. If a menu listed the farm that it got its ingredients from, I would be much more willing to purchase that meal and to pay a little extra for the knowledge that I’m putting money back in the hands of someone I know.”

Such findings are extremely significant, as one of the most commonly cited barriers to increasing sourcing of local food is price (Woods 2006, Mindi 2005). However, these results show that restaurants would be able to absorb the extra costs of buying local by increasing food prices, as consumers are willing to pay for food that they determine to be fresher, tastier, healthier, and more environmentally friendly. Further, the survey findings evidence that local
food may act as a valuable marketing tool for restaurants that currently source locally but do not advertise their efforts, as consumers would be more likely to choose an item made from local ingredients even if it maintained a higher price tag (Alfnes, 2010).

While six out of the eight focus group members claimed that they valued local food highly, and that the presence of local food affected their decision on where to dine, many of those individuals struggled to name what restaurants in Saratoga do source locally. One individual claimed, “wow, I guess I can’t really think of any right now. I don’t think that information is readily available to us as consumers, so it’s difficult to think of places on the spot.” Such a comment shows that while people value local food and desire to dine at restaurants that offer such menu items, the majority of restaurants in Saratoga do not use or local foods or have a marketing campaign for such items.

With the knowledge that 88% of Saratoga residents were willing to pay more for local foods, it seemed clear that using market theory such as that of Michael Porter’s product differentiation would suggest that restaurants could potentially make major gains by increasing local foods and adapting to meet consumer demand. Why, then, were only 12% of restaurants in the county sourcing and marketing local foods? It is in this question that market theory alone falls short, and requires the contribution of food systems theory, as barriers to local food production and distribution play a significant role in preventing a greater incorporation of local foods into menus.

**Barriers to Local Food Usage by Restaurants**

Along with the thirteen restaurant interviews, two rounds of informal interviews were conducted with local food producers at the Saturday Farmers market on two separate weeks. The
The purpose of these interviews was to gain an understanding of the stakeholder relationships between local food providers and restaurants from the perspective of the farmer. The questions specifically aimed to understand whether a given food producer had existing business with any restaurant in the Saratoga area, whether they were content with the existing business arrangement, whether they were interested in increasing the amount of business they conducted with local restaurants, and what the barriers that make these relationships less beneficial for the farmer are. This information helped to gain a general understanding of how farmers generally feel about selling to restaurants as opposed to regular individual customers.

**Results**

*Table 4: Barriers Identified by Restaurants*

<table>
<thead>
<tr>
<th></th>
<th>Price</th>
<th>Transportation</th>
<th>Scale</th>
<th>Consistency</th>
<th>Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chianti</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Boca Bistro</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Forno</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Pasta Penne</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>50 South</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Mouzon House</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Coffee Traders</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Comfort Kitchen</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>The Local</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Harvest and Hearth</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Healthy Living Market</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Max London's</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>One Caroline</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Four Seasons</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Table 4 displays the various barriers to incorporating local food into menus expressed by restaurant owners and chefs. The scale/supply of local foods along with consistency and price of such supply were most commonly cited as prohibitive factors during in depth interviews.
Table 5: Barriers Identified by Farmers

<table>
<thead>
<tr>
<th></th>
<th>Price</th>
<th>Transportation</th>
<th>Scale</th>
<th>Consistency</th>
<th>Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheldon Farms</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Gomez Farms</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Saratoga Apple</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Quincy Farms</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Pleasant Valley</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Elihu Farm</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Kilpatrick Farms</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

Table 5 similarly conveys farmer’s perceptions of what significant barriers exist that are currently preventing a greater amount of local food sourcing in restaurants. While both restaurants and farmers cited price as a significant issue, other claims of scale/supply and consistency that were listed by restaurants were not mirrored in our discussions with farmers, as only 3 out of 7 farmers felt that scale would be an issue. This disconnect acts as evidence of communication gaps between restaurants and producers, as farmers have a better grasp on how much food is available and the consistency of their supply but this knowledge has not been conveyed to restaurants that may have a misunderstanding of what is currently available.

Discussion

The interview process was ultimately the most effective means of assessing the barriers for both farmers and members of Saratoga’s culinary community that limit local food use in Saratoga’s restaurants. The observation that both farmers and restaurants consistently identified similar barriers as limiting factors to local food use proved especially useful for developing suggestions that would increase local food use in Saratoga. Price was a common concern among farmers and restaurants alike. Kim Klopstock, owner of the restaurant Fifty South, raised the
question, “How do you do the right thing and still pay your bills?” A concerned raised by a farmer from Pleasant Valley reflected of the issues of pricing saying that he had no real interest in selling to restaurants at wholesale prices when the farmers market was a functional retail outlet. There were other barriers that proved significantly less obvious like the lack of efficient means for communication between these two stakeholders. Tim James, executive chef at the local, commented, “What's hard is you need to go seek them out and meet with them”, this represents the feelings of many other restaurants in the area which is that contacting and interacting with farmers is difficult and can act as a deterrent.

Price and communication represent only two of the five most significant barriers that this project has identified within the market for local foods in Saratoga. The remaining three barriers: transportation, consistency of supply, and scale of local operations were also salient for both farmers and restaurants alike. These five barriers constitute the main inefficiencies within the market for local food in Saratoga and are a crucial factor when considering how to foster greater local food use. For several farmers, the financial incentive to sell their stock to restaurants is significantly lowered because many owners and chefs will only purchase at wholesale prices and often don’t buy enough to make the discount feasible. One farmer remarked “why would I sell a box of produce to a chef at a discount when my retail customers come every week and buy even more than they do?” The basic reality is that given the expenses that each stakeholder incurs, the price is too low for farmers to sell at wholesale and too high for restaurants to purchase a large quantity of their inventory at retail value.

The relatively high price of local food limits the quantity that a restaurant can purchase. Chefs and owners are constantly faced with the choice between purchasing from a commercial food supplier and local food producers. Tim James of The Local comments on this ultimatum,
“for local beef it costs $8 a pound, right now and I use a high quality certified Angus from a distributor that's $3.99 a pound”. This is often the case where local foods can be significantly more expensive than the commercial alternative (Iowa State, 2006). This promotes restaurants buying bulk from a commercial supplier and only purchasing select items in small quantities for things like weekly specials. Many of the restaurant interviewees expressed that if the cost of local food went down, they would likely purchase more.

A second barrier that is somewhat related to price is the issue of transportation. Both restaurants and farmers view the responsibility of exchanging goods as a burden. This is evident in both Table 4 and Table 5 in which approximately 50% of restaurant and over 80% of farmers identified transportation as an issue limiting the exchange of local goods. Each feels that the cost associated with this exchange is too great and stretches an already thin profit margin even further. Many chefs find that going to the biweekly market is time intensive and inconvenient. Some expressed a desire for an exchange that was quick and efficient but find that, because the market is also a venue for retail consumer purchasing, the experience is more time and effort intensive.

For farmers delivering 2-3 boxes of produce is “hardly worth the gas used for the trip” as a Kilpatrick farmer stated. Along with the time lost to drive from farm to restaurant, often there just isn’t the incentive to pursue restaurants as a buyer. One solution to this issue that has been implemented with limited success is the multiple delivery approach, or delivering to multiple businesses on the same trip. This can potentially remedy the disincentive for farmers but often lacks an effective means of organization between stakeholders, which eventually leads to a gradual breakdown of the system.
The lacking organizational capacities of these two stakeholders is a result of the third barrier hindering the growth of Saratoga’s local food market. Communication was identified by both actors as having a crucial role in facilitating the connections that lead to a mutually beneficial business arrangement. Chef James said this about what it takes to foster this connection, “with a new farmer, you make sure you call him every other day, buy something even if you don’t need nothing. You have to understand they are trying to make their money and make a name for themselves too.” Communication not only helps connect individuals whose interests may be aligned but also helps foster a community of farmer’s and chefs who are familiar and able to freely engage with one another (Curtis, 2008). Farmers and restaurants frequently stressed this level of communal interaction as one of the most important factors for facilitating efficient interactions and a more symbiotic business environment.

Currently these interactions and relationships between restaurants and farmers develop slowly over time and involve a significant element of trial and error to match compatible stakeholders. Developing this relationship can also be very energy intensive, Gina Michelin of Harvest and Hearth restaurant said, “I would like to source from multiple farms but it’s difficult to coordinate, often it’s just not feasible in terms of the amount of time input needed”. This illustrates how the lack of effective means for communication has hindered the adoption of local food within local restaurants. This is especially detrimental as a barrier for new restaurants where they are often unfamiliar with how to engage with farmers even if they are able. This is a lesson that owner and chef of Comfort Kitchen Rory Moran stressed he had to learn early on saying, “If you want to be local or farm to table, you need to be in contact with the farmers. It’s about that relationship as well as the food”. Providing a medium to help foster a larger and more accessible
community would help build on existing relationships, as well as help to create new ones and has generated interest among both stakeholder groups.

Scale and consistency are also two factors that limit the appeal of farmer-restaurant exchanged (Woods, 2006). Many farmers are often unable to supply the total amount of any one good that a restaurant would require per week. This is especially true for new entrants, the owner of Quincy farms expressed just this saying; “we’re pretty new so we can’t supply restaurants with a consistent supply”. This is an important issue for restaurant owners because customers often develop a taste for any one dish and often return to have that same experience. This is also a point that makes the stability and year round supplies of food from a distributor more appealing. Even restaurants that choose to work with local producers are forced to purchase from a distributor because of this demand for a non-seasonal consistent supply of certain items. Eli Goldsmith, owner of the Healthy Living Market in Wilton said, “obviously we have to make compromises. In winter we have to get tomatoes from further away because they can’t grow around here”. This represents one of the most difficult barriers to address because many consumers have grown accustomed to eating non-seasonal diets.

These barriers ultimately represent inefficiencies that inhibit the growth of Saratoga’s local food markets and by crafting solutions that specifically target these barriers, especially through increasing communication, the re-localization of Saratoga’s food supply chain will gradually become a more feasible alternative to a dependence on a globalized food network.

Solutions to Rebuilding the Local Food Market

The purpose of determining the existing market inefficiencies and barriers to local food sourcing in Saratoga restaurants was to find potential solutions to facilitate greater interaction and efficiency between stakeholders. It has been established that due to the expansion of large-
scale agricultural practices at the expense of small farms, the local food infrastructure across much of the United States has deteriorated (Lyson, 1999). It is this lack of a communication framework between farmers, restaurants, and consumers that has led to the current state in which only 12% of the 140 Saratoga restaurants openly market their use of local food in menus. While various barriers to greater integration of local foods were cited during our interviews with restaurants and farmers, it became clear that lack of communication was the key failure that led to other issues of price, consistency, supply, and distribution.

For example, although price remains a significant obstacle due to farmers desires to sell at retail prices at the market while restaurants seek out wholesales prices from large distributors, the consumer demand and willingness to absorb the extra cost of buying local has not yet been considered in the equation. With an overwhelming majority of 88% of residents surveyed claiming to value the freshness, quality, and economic impact of local food enough to pay extra for these benefits, restaurants may be more wiling to adapt menu prices to reflect the quality of their ingredients. A prime example of this occurring successfully was discussed in an interview with Tim James from The Local, where he claimed, “A lot of times during the summer we do a fresh tomato and mozzarella salad with local ingredients and it’s almost double the price as now. I also doubled my price but they sell like crazy. If you give people good food at a good price, there will be a positive response.”

During chef and restaurant interviews, we noted a great deal of uncertainty and lack of knowledge from restaurants not currently sourcing local in regard to what, when, and how farmers grow their food. Similarly, during farmer interviews, an uncertainty of what types of food products the restaurants desired was expressed. Therefore, we determined the necessity of a communication tool that would enable restaurants to educate farmers on what types of food they
were seeking, while farmers could simultaneously educate restaurants about their growing practices and seasonality of produce.

Due to the rise of social media as an effective tool of communication and distribution of information, a website that would allow for important farmer to restaurant interactions to occur would be a possible solution to aid the facilitation of a local food infrastructure. Social media has begun to find its place in virtually every business in the United States today because of its effectiveness at interacting with a target stakeholder. Until now this interaction has primarily been geared in the direction of establishments reaching out to patrons. The proposed solution in this case is to provide a virtual space that would allow for the free communication between business partners with shared interests with the purpose of addressing the inefficiencies that limit the spread of local foods.

Practically this means that for the farmer, they would be able to post what they are growing, how much they will have, how often, and potentially even the price. This would allow for restaurants to browse and even search for a given quantity of a specific food item at a given price. This would greatly increase the ease of purchasing local and address an existing barrier on for restaurants, which is currently that they simply do not have the time to reach out to farmers individually to attain such information. The website would also allow for farmers to update their inventory for restaurants to view as they change. A farmer able to post that they have a large amount of potatoes that have not sold at market and are looking for someone to buy is more likely to find a suitable purchaser if able to post this in one central location which restaurants browse rather than contact each restaurant individually to make the sale on their own.

Each farmer and restaurant having their own social media profile allows for the information relevant to these interactions to be more accessible by both stakeholders and
provides an opportunity for a much more efficient exchange of goods and services, which in turn generates more cash flow and reduced costs for both. Establishing these relationships and building a community between stakeholders is the key to unlocking the stored potential for local food use in Saratoga restaurants.

**Conclusion**

Our analysis sought to explore whether product differentiation could increase local food consumption at various restaurant locations. The results of our comprehensive methods suggest that product differentiation is a key motivator to the inclusion of local products in restaurant menus. Our menu analysis further revealed that the current adoption of local products in restaurants is very low due to existing barriers such as price, consistency, scale, transport, and communication. However, our findings that consumers maintain a high demand for local foods and a willingness to spend more for these items reveal that there is a potential for restaurants to successfully differentiate themselves in the market through the use of local foods. Lastly, our focus group of frequent diners and subsequent analysis of the frequent diner surveys revealed that demand and willingness to pay for local food was most prevalent amongst this particular consumer demographic. The cited reasons for such interest in local food were due to a desire for authenticity, a stronger local economy, and a unique experience at dining locations. These findings along with those of the menu analysis indicate that restaurants are not fully capitalizing on the niche market for local, higher quality food products in Saratoga.

The results of our research indicate that restaurants choosing to integrate local ingredients into their menu have the potential to attract more customers and allow premium prices for higher quality products. Given the highly competitive restaurant industry in the Saratoga area, it is
essential for restaurants to establish effective channels of communication with all stakeholders including the farmers and consumers. Due to the high demand for local foods and willingness to pay higher prices, our results are intended to help restaurants effectively pursue a strategy of sourcing more local ingredients. While not all restaurants will choose to use local foods in their menu, our results indicate that small businesses can effectively fill a niche market and achieve product differentiation through this channel.

Our interviews with restaurants and farmers suggest that although local food sourcing is currently a difficult and time intensive process due various existing barriers, the introduction of a social media site may have the potential to break down these barriers and allow for greater communication between stakeholders. Once these connections are established, a framework for a more efficient local food market may be born. However, there are still several barriers that need to be addresses. Supply is the most significant of these long-term barriers, as farmers conveyed that they would only truly be willing to sell in large amounts to restaurants once they have a surplus of produce that cannot be sold at retail prices in the market. While stores such as Healthy Living Market believe this is a non-issue, as supply will grow to meet the burgeoning demand, this gap between demand and supply may take some time to be met. In the mean time, the building of stakeholder relationships within the local food shed are vital, and will act as a solid infrastructure for the local food market once such supply is provided.

While more restaurants may begin to incorporate local ingredients due to consumer interests and the ability to differentiate themselves in the market, it is important to acknowledge that some of the barriers noted in our research will only truly be addressed through a change in public policy. Voting with our forks can only take reform so far (King, 2009). Therefore, political actions and votes to change The Farm Bill is the next step to shifting the agricultural
framework of the U.S. toward the promotion of sustainable, local, fresh and healthy food.

The U.S. Department of Agriculture currently distributes between $10 and $30 billion in subsidies to farmers annually (Edwards, et al., 2010). More than 90% of these subsidies go to farmers of five crops – wheat, corn, soybeans, rice, and cotton. Further, the biggest 10% of farms receive 74% of all US agricultural subsidies (King, 2009). The result of these subsidies can be seen at any supermarket, where the real price of fruits and vegetables increased by nearly 40% between 1985 and 2000 while the real price of soft drinks declined by 23% (Pollan, 2007). Not only do subsidies to agribusiness facilitate the current obesity epidemic in America that threatens national health, but they also hurt the ability for small farms to compete on a competitive level.

Price as a barrier to incorporating greater amounts of local food into restaurant menus was a recurring concern in the literature as well as in our interviews with chefs and farmers. The reason for this is that the Farm Bill, which does almost nothing to support farmers growing fresh produce, instead aids large agricultural firms (Pollan, 2007). Essentially, to level out the playing field, subsidies must transition away from agribusiness and instead be reallocated towards smaller and more sustainable farms (Mackey, 2013). This would foster an agricultural system better equipped to make healthier, environmentally sustainable local foods more accessible to the public.
### Appendix

**Table 1:** Displays the various methods taken by previous studies exploring the topic of local food sourcing to restaurants. The final category displays the methods undertaken in our study, evidencing that we were able to fill the methodological gap in previous literature by engaging all stakeholder perspectives.

<table>
<thead>
<tr>
<th>Existing Literature</th>
<th>Restaurant owner/chef interviews</th>
<th>Farmer interviews</th>
<th>Consumer survey</th>
<th>Patron focus group</th>
<th>Menu analysis</th>
<th>GIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marketing Local Foods to Gourmet Restaurants (Curtis, 2008)</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessing Barriers to Expansion of Farm-to-Chef Sales (Schmit, 2010)</td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessing Costs of Using Local Foods in Independent Restaurants (Sharma, 2009)</td>
<td>x</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sustaining Local Agriculture in Colorado (Starr, 2003)</td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Success Stories in Locally Focused Agriculture in Maine (Ross, 2006)</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Locally Produced Food in Restaurants (Alfnes, 2010)</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing Locally Produced Foods: Washington County, Nebraska (Mindi, 2005)</td>
<td></td>
<td>x</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer Willingness to Pay Premium for Locally Sourced Menu Items (Ortiz, 2010)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>Approaching Foodservice With Locally Grown Products (University Nebraska, 2003)</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing Fresh Produce to Restaurants (Ernst, 2011)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
</tr>
<tr>
<td>2006 Kentucky Restaurant Produce Buyer Survey (Woods, 2006)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local Food Connections: Economic Impact of Use in Restaurants (Iowa State University, 2006)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restaurants, chefs and local foods: diffusion of innovation framework (Inwood, 2009)</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local food in Saratoga Restaurant Industry</td>
<td>x</td>
<td></td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>
Figure 3: Displays how local food affects decision on where consumers dine

Does Presence of Local Food Affect Decision on Where to Dine?

- Yes: 60%
- No: 40%

Figure 4: Displays consumer beliefs toward local food

Which of the following statements about local food do you believe to be true?

Beliefs Toward Local Food

<table>
<thead>
<tr>
<th>Belief</th>
<th>Number of People</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthier</td>
<td>110</td>
</tr>
<tr>
<td>Safer</td>
<td>100</td>
</tr>
<tr>
<td>Tastier</td>
<td>110</td>
</tr>
<tr>
<td>Fresher</td>
<td>180</td>
</tr>
<tr>
<td>Stimulates Local Economy</td>
<td>200</td>
</tr>
<tr>
<td>Better for Environment</td>
<td>150</td>
</tr>
</tbody>
</table>
Figure 5: Displays consumer willingness to pay extra for local food

Are You Willing to Pay More for Local Food?

- Yes: 88%
- No: 12%

Figure 6: Displays how much money willing consumers would pay on a final bill for a meal that incorporated local ingredients

How Much More?

- Little (1-5%): 31%
- Medium (5-10%): 18%
- Much (10%+): 51%
Figure 7: Displays how presence of local food affects frequent diner’s decision on where to dine

**Does the Presence of Local Food Affect Where Dine? (7+ per Month)**

- Yes: 65%
- No: 35%

Figure 8: Displays the willingness to pay for local food in restaurants from just the frequent diners who eat out in Saratoga 7+ times per month

**Willing to Pay More for Local Food? (7+ per Month)**

- Yes: 91%
- No: 9%
Figure 9: Displays how much more frequent diners are willing to pay on a final bill at a restaurant for a meal incorporating local ingredients.
Works Cited


<http://inderscience.metapress.com/content/f652671077x362v7/?target=contribution&id=F652671077X362V7>.


Processing Center, Food, "Approaching Foodservice Establishments With Locally Grown Products" (2003). Reports from the Food Processing Center, University of Nebraska-Lincoln. . http://digitalcommons.unl.edu/fpcreports/1


