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Problem Statement

Food markets are becoming increasingly globalized. Over the last few decades, the global food supply chain has transformed from a series of shorter and independent product transfers to more unified, coherent, longer term and larger scale operations with transparent relationships among supply chain actors (Bourlakis and Weightman, 2004). At the same time, local food is viewed as a potential source of value by different actors in the food supply chain (Forsman and Paananen, 2002). There exists a substantial discussion in the literature regarding the importance of sourcing local food products. Despite a number of caveats (e.g., Saunders, et al. 2009), there is a perception that local food production and consumption is more environmentally sustainable (e.g., Born and Purcell, 2006). There is also an argument that localized flow of food products within the supply chain enhances health, food security and well-being of individuals and communities (e.g., Winter, 2003; Guptill and Wilkins, 2002). This emphasizes that a wide range of perceived social, economic and environmental benefits are claimed to be driving developments in local food systems. Consequently, a number of consumers are changing their food consumption habits seeking local food products for a variety of reasons (Adams and Salois, 2010). This has led to the emergence of local food systems that encompass the production, processing, distribution and consumption of local food products. Despite these trends, however, some authors (e.g., Born and Purcell, 2006) question the sustainability of the local food systems, and the strict focus on local that could confuse “ends with means” leading to what they call “the local trap” (p. 196).

This paper examines and explores the role of the conventional supply chain in sourcing local food products. Research on the food supply chain until now has been devoted to multi-national collaborations or the supply chain for relatively large food businesses and industries. In contrast, relatively little attention has been directed towards the local food supply chain. Conceptually, both the conventional supply chain (retailers, wholesalers and processors) and the emerging alternative supply chain (e.g., farmers’ markets, Community Supported Agriculture (CSA) initiatives, and institutional markets) can play a significant role in developing a local food system. Empirical studies in this area have either been focused on specialized or niche market dimensions of local food systems or on the nature and form of a local food system from the perspective of few segments of the retail sector (e.g., Ilbery and Maye, 2005a; Morris and Buller, 2003; Guptill and Wilkins, 2002). As a result, an increasing number of researchers in this area emphasize the need for and importance of conducting more empirical studies related to the supply chain for local food products.

Winter (2003) and Guptill and Wilkins (2002) suggest the need for more research to uncover and explore the patterns of local food purchasing, in particular, the dynamics in the retail landscaping, the motivation of local food purchasers and the consequences of their actions. Ilbery and Maye (2005a), in their empirical study that examined the retailing and processing aspects of local food products, underscore the importance of both the conventional and alternative supply chains in creating a market for local foods. They conclude their findings by emphasizing the need for future research to critically evaluate and assess the market potentials for these products and to better understand the supply chain especially from a retail perspective. Reviewing relevant literature on local food systems, Born and Purcell (2006) also recommend more empirical studies to explore questions especially related to the local food concept, its benefits, and the scale of participation by different supply chain actors.

Objectives

The purpose of the present paper is to examine and discuss the relationships and linkages between the conventional supply chain actors and the producers and/or suppliers of local food products. Specific objectives are to assess food supply chain actors, specifically conventional wholesalers' and retailers' perceptions and understandings of the local food concept, their experience in buying and selling local foods, perceived benefits and risks associated with sourcing these products, scope and form of emerging relationships and collaborations with local food producers, and future local food supply chain trends. The study will help researchers and practitioners understand the scale and form of local food sourcing practices, and potential market opportunities and challenges for the conventional supply chain actors to participate within the local food system. This would enrich the debate over and contribute towards the development of pertinent conceptual and empirical approaches in investigating and understanding the local food systems.

Conceptual Framework: The “Local” Concept and the Supply Chain for Local Foods

In this study, we applied the following conceptual frameworks and approaches that potentially provide the theoretical and empirical basis for analyzing the supply chain for local food products. The first approach discusses the relevant school of thoughts that focused on describing and conceptualizing the local food systems. The second and third approaches include the concept of customer value and supply chain management, which involve understanding the complexities of customer value perceptions and management of supply sources, flow of products and information, as well as supply relationship building (Woodruff, 1997; Flint, 2004). The fourth approach focuses on the Short Food Supply Chain (SFSC), a conceptual framework designed to address supply chain issues related to local foods.

1. A number of authors have recently attempted to conceptualize local foods and recognize their economic importance. Some studies use terms such as alternative food systems or networks (Renting et al., 2003; Holloway et al., 2007), community food systems (Peters, 1997), or civic and demographic agriculture (DeLind, 2002) to frame and conceptualize local food systems and economies. Despite these efforts, there appears to be no generally agreed and widely accepted definition of local food. One school of thought emphasizes local food to be food that is produced, processed, marketed and consumed within a geographically circumscribed area (Morris and Buller, 2003). The criticism towards this approach is that, although local food is defined in terms of distance between producers and consumers, there is no clear agreement on the limiting distance and the geographical boundaries (Jones et al., 2004). There is also a challenge to map these spatial relations onto specific social or environmental relations (Hinrichs, 2003).

A second school of thought focuses on “locality food” looking into “locality” as value added for a broader market, and distinguishing the concept from “local food” that focuses on geographical dimensions (Murdoch, et al. 2000; Renting, et al., 2003). In this context, the concept of “locality food” defines local based on the “quality” dimension. The product has an identifiable geographical region but it is not necessarily consumed in the

same region or locality. It can be sold through different market outlets at the national or international level promoting primarily its unique characteristics attached to its source or production process. Products are identified and distinguished using product labels, certification systems and other production parameters such as artisanal, traditional, farm based, organic or natural to define and differentiate the quality of the specific product coming from a specific geographic area. One other related approach is based around the environmental, social and cultural dimension of local food rather than focusing on geographical distances, administrative boundaries or specific quality dimensions (Ilbery and Maye, 2005a). Here more important is the linkage and networking within a given community (Feagan, 2007; Jones et al., 2004) and the creation of environmentally and ecologically sound production and marketing practices (O'Hara and Stagl, 2001). These conceptual variations in defining local food reflect the theoretical and methodological challenges to understand and analyze local food systems, and the potential dissimilarities of local food systems among different groups, regions and localities caused by a combination of socio-economic and environmental factors. In the present study, the geographical dimension has been the conceptual framework applied in assessing and analyzing the supply chain for local food products.

2. In recent years, the supply chain management literature has focused on supply chain collaboration approaches and supply source selection criteria to improve product movements and value to the consumer. Some authors emphasize the need for increased collaboration between supply chain actors at various levels in order to create a more efficient and responsive supply chain that could provide additional value to the end customer (Gunasekaran et al., 2001; Matopoulos et al., 2007). Collaboration is viewed as a departure from “normal commercial relationships” or “spot market transactions” to a “relational exchange” (Matopoulos et al., 2007, p. 178). Matopoulos et al. (2007) distinguish two pillars in the framework for the supply chain collaboration. The first pillar focuses on the design and governance of supply chain activities. This includes elements such as decision making on how to select appropriate partners, activities on which collaboration will be established (collaboration width), and identification of the level of collaboration (collaboration depth). The level of combination of these elements measures the degree and intensity of collaboration. The second pillar is related to the establishment and maintenance of the supply chain relationships and the associated benefits, risks, and reward sharing. These elements are also crucial in determining the level of collaboration. Studies on supply chain collaborations have until now mainly focused on large multinational companies. However, some recent studies indicate that successful and simple collaborative relationships can be created among smaller firms. Cadilhon and Fearn (2005), for instance, report on a long-term successful relationship between a relatively small produce distribution company and its local produce suppliers. The relationship that focused on sharing of basic information and supply coordination practices has led to an efficient produce distribution system.
3. Customer value creation is a prerequisite for a competitive advantage, and it is created when the benefits to the customer associated with a product or service exceed the offering's costs to the customer (Slater and Narver, 2000). A position of superior customer value is achieved when the seller creates more value for the customer than does

a competitor. The literature indicates product quality and market services as two of the numerous sources of customer value (Slater, 1997). Food products from small suppliers are usually associated with concepts such as differentiated products, niche products, value-added products or local food, which is expected to provide consumers and supply chain actors with added value in terms of an increased transparency of the food supply chain (Forsman and Paananen, 2007).

4. In recent literature, supply chains for local food products are mainly discussed within the framework of the Short Food Supply Chain (SFSC) (Ilbery and Maye, 2005b). Marsden et al. (2000) use this term to describe the supply chain for local food products. Key characteristics of the SFSC include the following (Sage, 2003; Marsden et al. 2000; Renting et al. 2003; Ilbery and Maye, 2005b): (a) Products that pass through the SFSC channel are commonly defined by the locality, region or by a specific producer. (b) The perception is that the consumer receives the products embedded with information about the mode of production, origin of the product, regional imagery and specific quality. This would help the consumer to make value-judgments about the product, and to create connections with the people producing it. (c) The distance between the primary producer and the end-consumer is reduced. It is perceived that successful communication with the end-consumer will help develop mutual trust and differentiate local products from other conventional and non-local products (Sage, 2003).

Marsden et al. (2000) identify the following three types of SFSCs.

- I. Face-to-face, where producers sell their products directly to the consumer on a face-to-face basis. Here the focus appears to be on local foods (geographical dimension) rather than on locality foods (quality dimension).
- II. Spatial proximity, where local food products are sold through local market channels including farm retail markets, food service outlets, and local food retailers and supermarkets.
- III. Spatially extended, where products are sold not only to consumers in the locality but also to consumers in other regions including online food retailing. Labeling and certification programs could be used to differentiate these products emphasizing the quality dimension.

The aforementioned literature review provides the basis to understand and assess the local food conceptualizations and supply chain operations in the study area. In particular, these conceptual frameworks will be applied to examine and assess the role of the conventional supply chain actors in building relationships with the local producers, as well as the dimensions, consequences, advantages and risks of sourcing local foods as perceived by these chain actors.

Methodology

The study applies a case study conducted in 2007 and 2008 in a six-county region of Southeast Michigan. This includes Genesee County and the counties of Jackson, Monroe, Lenawee, Washtenaw and Wayne that established a Food System Economic Partnership (FSEP). FSEP is an urban-rural collaboration devoted to enhancing community viability and catalyzing changes to

help create a local food system. Collaboration of urban and rural community leaders, farm business organizations and resource providers in the five-county region led to the formation of FSEP in 2005. FSEP currently provides research, education and outreach services and programs that help develop a local food economy. Some of FSEP’s recent activities, services and technical assistance programs include (1) business and product development services to new entrepreneurs and existing businesses in collaboration with the Michigan State University Product Center for Agriculture and Natural Resources, (2) services that could create linkages and relationships to increase sales of local food items through established retailers, (3) studies focusing on market development and retail and distribution networks for local foods in the region, and (4) services that support the development of alternative market outlets including farmers’ markets, CSAs, and farm-to-college/farm-to-school initiatives to increase local food sourcing by colleges, universities and schools in the area. Genesee County is in the process of establishing its own local food system.

Since the traditional research strategies are too limited in applicability and scope, the qualitative research paradigm including the case study has recently been recognized as an important research approach for the agri-business sector (Bitsch, 2005; Sterns et al., 1998). A case study approach enables researchers to identify, explore, describe and understand a complex phenomena, situation or event (Yin, 2009). The approach makes it possible to take a closer look at the phenomenon and consider it from a holistic perspective in order to study its unique features and commonality (Riege, 2003; Stake, 1995). Therefore, the case study approach was deemed appropriate for this study, because it helps explore and examine the supply chain actors’ roles, experiences and perceptions about local foods.

Data were collected from supply chain actors focusing on conventional retailers and wholesalers in the region (Table 1). Since the study pursued a case study approach, a sampling approach was not considered to identify target interviewees, rather interviewed retailers and wholesalers were selected from a list available from the region. In total, a list of 95 wholesalers, 149 independent grocery stores including convenience stores and 37 supermarket chain stores has been used to systematically identify and select case study retailers and wholesalers. For retailers, the study included local independent grocery stores, convenience stores and a supermarket chain store.

Table 1. Selected Case Study Conventional Retailers and Wholesalers

Retailers	Wholesalers
Supermarket chain store (1)	National wholesale distributor (1)
Independent grocery stores (7)	Ethnic-based wholesalers (3)
Convenience stores (3)	Wholesale-retail operation (1)
	Produce packer-shipper (1)

Interviewed retailers included one supermarket store, seven local independent grocery stores and three convenience stores. In the paper, wherever it is applicable, the term “local retail stores” will be used to refer to local independent grocery stores and the convenience stores as a group. Interviewed wholesalers include one large national distributor, one regional produce packer-shipper, three regional ethnic-based wholesalers and one wholesale-retail operation located in the region. In order to be considered for the study, (1) potential interviewees had to fit into one of the selected retail or wholesale categories, and (2) they should have an operation within the six-

county region. Interviewees were contacted by email and/or phone. All interviews were conducted in person at the interviewee's place of business. Interviews lasted in most cases between one and two hours.

Interview questions for both retailers and wholesalers included current food product sources, the local food concept, experience in sourcing local foods, future prospects for sourcing local food, relationships and linkages with local food producers/suppliers, as well as benefits, risks and challenges associated with sourcing local food. Following are some of the key questions interviewees were asked about local foods.

- What do you understand under the term local food?
- What are your past experiences in sourcing local foods?
- What types of relationships do you have with local producers?
- What type of local products do you normally buy?
- What are the major reasons for buying local?
- In the future, what factors would determine your purchase of local food products and your relationship with local food producers?

The interviews in each supply chain actor group were analyzed separately and then combined into themes based on interview protocols and frameworks designed for the study. Validity in the study process was enhanced by interviewing supply chain actors from different retail and wholesale categories that potentially have experiences of buying and selling local foods. Reliability was increased through the use of consistent semi-structured questionnaires in the interview process that led to the development of appropriate themes and comparable results in the study. Overall, despite the small number of cases used for the study, validity and reliability of the findings from the study stems from the following: (1) a systematic approach has been followed to select the cases considering the different segments of the retail and wholesale sectors. (2) Considerable time has been taken during the interview sessions to collect accurate information from each interviewee using the semi-structured questionnaire. (3) The same interview guidelines have been applied for retailers or wholesalers to compare and contrast their responses. This approach enabled the researchers to establish a chain of relevant information and evidence in the data collection phase. Triangulation of information from the different interviews in the analysis has contributed to reduce research bias.

Limitation of the study: Despite the validity and reliability of the findings from the study, the approach has some limitations. First, due to the limited number of cases and absence of a quantitative analysis, the present study will not lead to comprehensive analytical and/or statistical generalizations. Second, it is difficult to establish a cause and effect relationship in a case study approach. This makes it difficult to establish applicable correlations between variables. This is in line with the main concerns of a case study approach (Yin, 2009; Shugan, 2006; Tellis, 1997). In addition, due to the limited geographical scope of the study, the conclusions and recommendations from the study may not be generalizable and applicable in other areas with different socio-economic structures as well as environmental and ecological conditions. Despite these limitations, however, the present study contributes towards the local food debate and a better understanding of the relationships between the conventional supply chain actors and local food producers.

Description of the Case Studies

Retailers

The interviewed supermarket chain store is a chain with more than ten stores located in different parts of the country. The local *independent grocery* stores are much smaller retail stores compared to the case study supermarket store. Each interviewed independent grocery store has between one and three stores at various locations in Southeast Michigan. The annual estimated gross income per case study independent grocery store ranges between \$4 million and \$10 million. Some of these stores have an inventory of up to 3,000 different kinds of food and consumer products. The *convenience stores* are stores that are relatively small in size and provide a limited line of durable and packaged food products. They carry a very small amount of fresh produce.

Wholesalers

The large national distributor has its own product delivery systems and distribution centers that supply products to the distributor's individual stores and other markets in a given state or region. The distribution center carries a wide range of raw, processed and packaged food products, and the chain's operations cover a large geographical area. Food products from the distribution centers are sold to a wide range of retailers, food service outlets, institutional markets and other wholesalers.

The *regional packer-shipper* markets a variety of vegetables and grain products. Sales include what is produced on its own farm and produce delivered from the surrounding small farmers. It buys mainly vegetables and fruits, and packaging is done mainly on vegetables including potatoes, sweet corn, pepper and cabbage. It also provides different services to other farmers in the area. This includes a storage service if product is going to be marketed through its channel. It sells containers, bags, pallets, etc. to these farmers. About half of the vegetables are sold through brokers to large mass merchandisers and grocery stores in the region. The remaining half goes to smaller local grocery stores, restaurants and small distributors. The packer-shipper's preference is to strengthen its relationships with local grocery stores and small distributors.

The *regional ethnic-based wholesalers* are specialized in distributing food items (fresh produce and imported ethnic food products) within the region to ethnic markets, restaurants, small food specialty retail stores and other regional food service outlets. Their products are not sold through large supermarket chains. These wholesalers buy and sell a number of products including products that are not necessarily carried by large national distributors. Due to lack of adequate storage space to store large quantities of products for a longer period of time, some of these wholesalers are in some cases providing market services as a broker. Distribution of products is limited to Michigan locations, and in most cases to buyers within a few miles radius from the location of the distribution center. In order to meet special demands of their ethnic-based customers, these wholesalers are importing some food products from other countries.

The *regional wholesale-retail operation* is characterized by a large selection of food products and owns a packaging operation. Compared to the other regional wholesalers, it is relatively small in size, and its operation focuses on sales to independent grocery stores and regional wholesalers.

In this paper, wherever applicable, the term “regional wholesalers” will be applied to refer to the regional packer-shipper, the wholesale-retail operation and the ethnic-based wholesalers as a group.

Results and Discussion

Based on their organizational structures and operations, interviewed conventional retailers and wholesalers have different perceptions and understandings of the local food systems. Table 2 presents these discrepancies based on the following thematic areas: (1) The local food concept, (2) preferred local food products and producers, (3) local food experience, (4) benefits of buying local, and (5) future prospects for buying local. The following sections present and discuss the findings in these areas.

Table 2. Summary Results from Interviewed Supply Chain Actors

Local food concept	Food produced and marketed within a given county including products from neighboring counties	Food produced and marketed within a given state including products from neighboring states	Food produced and marketed within a given state including products from neighboring states	Food produced and marketed within a given state including products from neighboring states
Types of local food products	Fresh produce (fruits and vegetables)	Fresh produce and specialty livestock products including dairy products	Fresh produce (fruits and vegetables)	Fresh produce (fruits and vegetables)
Types of local food producers	Small-to-medium size producers	Small-to-medium size producers	Small-to-medium size producers	Small-to-medium size producers
Local food experience	Buy local food products; have direct contact with producers; limited purchase	Very limited contact with local producers	None	Participate through farmers’ markets and the regional terminal market
Benefits of buying local	“Local” not seen as a product differentiation factor; “local” helps in improving relationship with the local community	The “quality” dimension (differentiated and niche products - organic, natural, etc.) seen as a key factor in creating economic benefits	No economic or social benefit seen by actors; no information flow to product buyers or end-consumer	No information flow to product buyers or end-consumer; no unique economic or social benefit seen by actors
Future prospects for buying local	Priority to conventionally produced fresh produce; limited opportunity for buying and selling niche/specialty products	Priority to organic, natural or niche/specialty products; requires additional market services from producers/suppliers	Product could come from surrounding states, and price, volume and product quality will determine purchase activity	Wants to see large-size producers, and a regional wholesale market operation to enhance their local food purchase

Conceptualizing “Local”

There are divergent views among the supply chain actors in conceptualizing, defining and describing local food.

Retailers: For local independent retailers with just one store, local foods are food items produced, sold and consumed within a very small radius, mostly within a given neighborhood. For local retailers with two to three stores, local food represents food that is produced, processed and sold within a given county, including products from neighboring counties. For large regional and national wholesalers and supermarket chains, local food means food produced and sold within a given state including products from neighboring states. This indicates the existence of divergent views between the large chains and the local independent retailers in conceptualizing local foods. Local foods are viewed by most of the local retail stores and the regional wholesalers as food items produced by small-to-medium size producers who mainly supply fresh produce (fruits and vegetables). The supermarket views local food to include fresh produce as well as specialty livestock and dairy products including niche products from small local manufacturers.

Wholesalers: For the large national distributor, local food means food that is produced and marketed in relatively large geographical areas at the regional level. The interviewee from this distributor, for example, considers food imported from neighboring Canada to be local. For ethnic-based wholesalers, local food represents fresh produce that can be ordered and delivered from a local supplier, in some cases, over a 24-48 hour period. These wholesalers want to have their suppliers located very close within a few miles radius. For example, one ethnic-based wholesaler located in Detroit has the desire to source local produce from suppliers located within the city limit. Their buyers are mostly restaurants and other food service providers located very close to the distribution facility. For the wholesale-retail operation, if something is not produced in the locality, but imported from other areas within the state, that could be considered local. For the packer-shipper, local food represents buying food items supplied from neighboring farmers and counties.

This divergence in defining and understanding local food has an impact on the role and participation of each supply chain actor in the local food system. For the supermarket, the quality or “locality” dimension appears to be critical in buying local foods, while the geographical dimension appears to be more important for the local retailers and wholesalers. Most interviewed retailers and wholesalers, except the supermarket, consider fresh produce (fruits and vegetables) as the primary local food products they can purchase from the local producers. In terms of the types of local food producers, all interviewed retailers and wholesalers have the perception that the local food concept is primarily designed to help small- and medium-size producers.

Experience in Sourcing Local Foods

The interviewed supply chain actors did not provide actual figures on their purchases and sales of local food products. However, most of them indicated that local food accounts for a very small portion of food items sold through their channels.

Retailers: The supermarket has its own distribution centers that collect and deliver food products to individual retail stores. It sources food products from suppliers including large producers that meet its insurance, food safety and bidding requirements. Potentially, local food producers could supply products directly to a nearby store or a distribution center. But, until now, the supermarket's store has very limited contacts with local food producers and sourcing of these products is almost non-existent.

The local independent grocery stores use regional distributors to source food products. These retailers prefer to use these suppliers for the following reasons:

- The retailers have long term relationships with the distributors that led to the development of trust in sourcing food products.
- Price in most cases appears to be within an acceptable range.
- Logistics and delivery arrangements meet the retailers' volume requirements in a timely manner.
- Some retailers perceive that their suppliers have extended and excellent product selection. For the retailers, established reputation and name recognition play an important role in selecting suppliers.

Some of the independent retailers use what they call "back-up" sources for some products. Products are sourced from these sources if they are not available from the current distributor or retailers use these arrangements to purchase products from local producers during the growing seasons. In the latter case, the retailers need to have special arrangements and agreements with their established distributors in order to allow them to buy products from these other suppliers or producers. The interviews indicate that the local retailers (with the exception of some convenience stores) have experience in buying local. Some of them have local food promotional activities during the summer time using local newspapers, in-store flyers and signs. One local retail store advertises local farmers' produce by adding farmers' names on in-store produce signs. In some cases, names of farms are printed on product packages. Fresh produce including melons, tomatoes, sweet corn, asparagus, squash, potatoes, pumpkins, apples, small leafy vegetables, strawberries, raspberries, and flowers/plants are the most common items purchased by the retailers. Interviewees have the perception that the total volume of locally grown fresh produce sold through their channel is very small and limited to seasonal availability. In the past, some of the local independent retail stores had long-term local food sourcing agreements with the local producers. For example, one local retail store used to source produce from more than ten local farmers. However, in recent years, the number of local producers selling through this channel has been steadily declining. From the perspective of the local independent retailers, reasons for the low local food purchase performances through their channels include the following:

- A relatively small size of the produce department in their stores to handle a variety of fresh produce (for example, one local retail store estimated per week fresh produce sales per store to be \$35,000. Total fresh produce market share for the store is estimated at 3%. A second retail store estimated per week fresh produce sales at \$6,000 - \$7,000).
- The perception that their customers are not coming to the stores to primarily buy fresh produce.

- Inconsistent product labeling, packaging, supply and delivery by the local producers.
- The need for a significant amount of time and resource to find a local food supplier, and risks associated with frequently changing supply sources.
- Farm exits.
- Competition from the growing number of alternative market outlets (e.g., farmers' markets). The retailers also have an increasing liability and food safety related concerns to establish direct relationships with potential local food producers.

Wholesalers: Most of the interviewed wholesalers, except the packer-shipper, mentioned that their local purchase is very small. In addition, except the packer-shipper, the other wholesalers do not have direct contact and relationship with the local producers. The packer-shipper used to source fresh produce (mainly vegetables) from twelve local producers in recent years. Some of these farms are not selling produce through this channel anymore. The ethnic-based wholesalers buy fresh produce from a regional warehouse (wholesale market) where local producers are also selling their products. Some are buying at farmers' markets during the summer time. Although those selling in such markets at times could include non-locals, the wholesalers believe that what they are buying in these markets is mostly local.

Future Prospects for Buying Local

Retailers: From the perspective of the supermarket, future priority will be given to organic, natural or niche/specialty products with some purchase of the conventionally grown local fresh produce items during the summer time, when they are available from the region. Local producers need to provide additional market services to sell their products through this channel (e.g., use of standard packages, as well as meeting specific volume, quality and food safety requirements). For the conventional food products that come from local food producers, prices should be comparable with that of non-local products. However, the supermarket is willing to pay premium prices for value-added local food products. The supermarket's general preference is for purchasing high volume food products from fewer, larger producers or through local food aggregators in order to remain price competitive and to ensure product quality and quantity minimizing product safety related risks.

The local independent retailers are interested to continue buying conventional local food products. Following are some of their views regarding the issues associated with their local purchase in the future.

1. Future priority will be given to fresh fruits and vegetables. The major challenge, in this regard, will remain finding a way that enables them to source these products when they are available from local sources without affecting the relationships and agreements with their current suppliers. One option, as suggested by one interviewee, to minimize risk and the number of switches between suppliers is to work with local producers who can "be the first and the last to supply in season" – that means working with those local producers who can cover a longer supply season. The local producers should also be consistent and reliable in meeting price, quality, logistics and delivery arrangements as required by the retailers.

2. They want to pay competitive prices, preferably prices comparable with the wholesale market.
3. The retailers have the perception that organic, natural or niche/specialty food products would have very limited market opportunities through their channels. This contradicts some current assumptions about the benefit of such purchases through these channels. For example, Forsman and Paananen (2007) assume that small independent retail stores can use value added local food products to differentiate themselves from large chain stores. The retailers in the study area think that they are disadvantaged in terms of location and consumer demographics to carry these products. The case study region includes metropolitan areas such as Detroit and Ann Arbor. However, Since Detroit is a food desert area with no grocery stores in most neighborhoods, most of the interviewed independent retail stores are located in rural areas where consumers apparently have limited purchasing capacity. Therefore, the retailers do not see the benefits of carrying high priced value added local food products. They have the perception that the consumers coming into their stores are not willing to pay high prices for these products.
4. Interviewed local retailers indicated that in previous times local producers or suppliers initiated most purchases through their stores. Therefore, from their perspective, producers need to take the first step to initiate contact and establish linkages to increase sales through their channel. They have the perception that recruiting new local food producers would entail unnecessary risk and additional cost for them in terms of time and money until they find the right supplier that meets their purchase requirements and fits within the philosophy of their retail operation.
5. As long as basic purchase and procurement requirements such as price, quality and consistency in delivery are met, some local retailers perceive that volume will not be the decisive factor in making decisions to buy local. Since their fresh produce departments in store are relatively small, purchasing small amounts of produce items from individual producers would sometimes even be a good fit for their operation. But producers should be in a position to supply on a regular basis and supply should run for one week, one month or for part of the season as agreed upon. However, some other local retailers want to see a relatively large volume of supply that could run through an extended period of time covering a significant part of the supply season. These are large volume purchasers and also want to have long term relationships with large local farmers or local produce aggregators who can meet their supply requirements.

Wholesalers: Most of the interviewed wholesalers have interest in purchasing local produce items. For the large national wholesaler, product price, quality, volume, and supply consistency are the key factors that should be met in order to expand its involvement in the local food system. These are also important factors for the ethnic-based wholesalers. As mentioned above, the packer-shipper has an established relationship with some local farmers, although the number of farmers selling through this channel declined in recent years. It wants to keep this relationship, but it has less interest in recruiting new local producers. Except for the packer-shipper, the other wholesalers do not see the opportunity to buy local food directly from local producers unless they are large-size producers or products come through local food aggregators. Most of them

suggest improvements in the regional wholesale/terminal market operation to enhance their local food purchase.

Benefits of Buying Local

Economic factors and social interactions (e.g., local ties, trust) are assumed to be vital for the success of local food systems (Ilbery and Maye, 2005a). Respondents from the case studies differentiate between economic factors and social factors in determining future purchases of local foods. The local independent retail stores do not associate the term “local” with some kind of differentiated, value-added or niche product. But they perceive it as part of a community building effort, which can create a positive image for their operation. This is in line with some findings in previous related studies. Guptill and Wilkins (2002), for example, hypothesize that food retailers do take on certain identities with the communities they serve, and that these identities play a role in shaping the assortment of products they offer. The interviewed local retailers view the importance of sourcing local foods particularly in terms of improving their relationship with the local community. Otherwise, perceived economic benefits from carrying local foods are assumed to be limited, particularly considering the small share of the products in store, as well as associated risks and costs in terms of time and resources that could emerge as a result of frequent switches between suppliers. However, compared to the wholesaler and supermarket chains, the local independent retailers still tend to consider local foods as a potential source of competitive advantage. Therefore, these chain actors still have better relationships with selected local producers than the large chains.

For the supermarket, the quality dimension of local food products appears to be a key factor in creating economic benefits. Thus, focus would be on buying differentiated and value-added products from larger regional suppliers for a broader market. Otherwise, from its perspective, the supermarket would add some conventionally produced local food items to its product selection, if there is the perception that this action would help strengthen relationships and linkages with the local community. As in the case of the local independent retailers, it is aware of the need for carrying certain local food product lines to keep some of its current loyal customer base. If the local producer has some reputation and his/her products are expected to meet some of the standards in terms of product price, quality, delivery, and logistics, the supermarket would like to work with this producer to source local foods, not necessarily because of the unique economic benefits from carrying the products, but to increase social interaction and gain some respect from those loyal customers who are looking for local food products in the store or from local food support groups within the community. Otherwise, although there is an interest in buying local, the supermarket’s commitment to local food purchase appears insignificant. It still does not have an established local food focused marketing and promotion efforts. This indicates that, currently, customers are not receiving information through the conventional retail channel that enables them to make decisions and judgments about the value of local food. This also shows that the retailers do not see an added value from promoting local. The situation at the wholesale level is not much different. There is virtually no information flow through this channel to the buyer or the end-consumer about local food. In this regard, it can also be argued that the wholesale supply chain actors do not see significant economic and social benefits from carrying and promoting local.

Overall, besides price, volume and quality, the following factors appear to be equally and, in some cases, more important for the interviewed retailers and wholesalers to purchase and sell local food products through their channels.

1. Currently, social interactions and benefits appear to be much more important than economic benefits for these supply chain actors to participate in the local food system in the study area. In the long term, this would potentially support the development and expansion of economic interactions and benefits both for the producers and the supply chain actors. However, it is still challenging for the supply chain actors to identify and communicate the value of local foods with other downstream supply chain actors and the end-consumer.
2. A wide range of literature has been devoted to the importance of supplier reliability in the selection of supply sources (e.g., Katsikeas et al. 2004; Cox et al. 2007). Interviewed chain actors highlighted honesty and integrity of local food producers as one of the key factors in sourcing local foods. Inconsistent supply and delivery are among the factors that made local food purchase difficult for some of these conventional retailers and wholesalers. These buyers perceive that local food producers cannot deliver products and services on time with the features agreed upon. This incurs additional transaction and logistics costs for the buyers resulting in losses of money and trust.
3. Relationship building with local food producers appears to be the other key factor that affects local food purchase decisions. It seems that there is currently a gap to nurture new relationships between the supply chain actors and local food producers in the region. Apparently, both buyers and local food producers are not acting proactively to develop relationships. Almost all interviewed supply chain actors prefer to buy food products from local producers or other local suppliers who have long term relationships with them. These wholesalers and retailers mentioned that management of relationship-building is the most difficult part in buying local. Their main argument is that they lack the capability and resources to manage relationship-building with many local food producers. They also perceive that many local food producers do not have the capability to share valid information on supply, price and delivery arrangements and to build and maintain an effective relationship with their buyers.

Conclusions

A case study approach was applied to examine and explore relationships and linkages between local food producers and conventional food buyers from the perspective of retailers and wholesalers. The study identified that local food is desirable and interviewed retailers and wholesalers show an interest in sourcing these food products. There are, however, discrepancies among interviewed retailers and wholesalers in defining and conceptualizing local foods, and in the extent of local food sourcing experiences and practices. Local food for interviewed large supermarket and wholesale chains is food produced and sold within a broader geographic area including food products from neighboring states. For interviewed local retail stores, local food is food produced and sold within a given locality including neighboring counties. These divergent views and complexities in the perceptions of “local” indicate (1) the uncertainty surrounding

sourcing of local foods by the conventional supply chain actors, and (2) the challenges in analyzing and understanding the local food systems. These are in line with the findings in previous studies that point out the complexities and conflicting meanings of local tied with food products (e.g., Feagan, 2007, Allen et al.; 2003; Allen, 2004).

Interviewed retailers and wholesalers are sourcing local food products in varying degrees. In comparison to supermarket and wholesale chains, most interviewed independent local retailers have a good deal of experience in sourcing local foods. The amount of local food products purchased by these retailers, however, appears to be very small. This is attributed to a number of factors including store size, liability and food safety concerns, as well as product quality and logistical and delivery related issues. In addition, their current long term relationships with the regional suppliers are seen as major hindrances to create new relationships with the local food producers. For the interviewed supermarket and wholesalers, lack of suitable intermediaries to aggregate and deliver large volume local food products appears to be the main challenge in sourcing local foods. In addition, for the supermarket, sourcing of specialized local food products tend to be the focus, which cannot be supplied in large volumes by the local producers. In this context, it is still difficult to predict the future role of the supermarket in sourcing niche and specialized products from a given locality.

Overall, the findings indicate that market access for local food products are mainly based on existing relationships and linkages between the supply chain actors and the local food producers. In the literature, trust has been considered as one of the driving forces to improve seller-buyer relationships. Some authors describe trust as an important coordination mechanism that reduces uncertainty, and as a prerequisite to attaining superior performance and competitive advantage (e.g., Cox et al., 2007). The results indicate that local food market success within the conventional food supply chain depends not only on the traditional supplier selection criteria such as price, volume and quality, but also on factors such as trust, reliability and information-sharing that affects long-term relationships. Thus it can be argued and hypothesized that creating a viable market access for local food products through the conventional supply chain will primarily require enhancement of the information-sharing capability of the local food producers and the establishment of trust-based relationships and linkages with their buyers. It can also be hypothesized from present findings that, in comparison, at least in the study area, local foods have better market access through local independent retail stores than large supermarket and wholesale chains. However, one important signal from this study has been the steady decline in the number of producers who supply local produce items to the local retailers. It appears that these retailers are now facing competition from emerging alternative market outlets for local food products in the region (e.g., farmers' markets). This may suggest emerging tensions between the conventional food retailers and alternative market outlets for local food products, at least in the short-to-medium term.

Local foods also retain some differences in values for the interviewed supply chain actors. For most interviewed retailers and wholesalers, local food sourcing is important to gain some positive images among loyal customers and to enhance social interaction with community members who support the local food movement. In this regard, as Guptill and Wilkins (2002) point out, local foods could be used by the conventional retailers and wholesalers to meet demands of some of their sophisticated and loyal customer bases. Despite this, the results

indicate that the economic benefits from these products are limited and local foods are not viewed as differentiated products by most interviewed supply chain actors. Overall, although the findings from the present cases are not leading to the development and construction of theories or methodological approaches, the study helped in developing relevant hypotheses for future research works regarding the relationships and linkages between local food producers and the conventional supply chain actors including their local food purchasing experiences and practices.

Implications for Managers and Producers

In order to establish a sustainable long-term market channel for their products and a better relationship with retailers, local food producers and suppliers need to gain trust and reputation from their buyers. Producers can build upon the current momentum through the retail channel by being proactive, developing trust-based relationships, and providing timely and valid information on supply and delivery arrangements. Local food producers can particularly increase their market share through local retail channels by taking over some of the value-added functions (e.g., preliminary product sorting, grading and packaging) that is being provided by other chain actors. Production capacity and logistical arrangements will continue to be a challenge for most small-to-medium size local food producers. Advance purchase arrangements would help some of these farmers to pool resources to provide a range of products in sufficient quantities. For example, local retail stores can make arrangements with local food producers that they produce/plant specific items that are needed by their customers. In the long term, local food producers may need to collaborate to provide sufficient quantities of food items that meet their buyers' needs. One approach could be to form an association, a cooperative or a network that helps them pool their resources to market their products through different channels. Buying from these farm organizations or cooperatives will help buyers to reduce the time and resources spent on the administrative tasks involved in ordering, invoicing and making payment and delivery arrangements.

Buyers could also increase their participation in local food systems, if they develop and apply market-specific "local product purchasing specifications and guidelines" that help create a clear understanding about their demands with regard to local foods. Such guidelines and specifications would be useful in order to streamline the "local" supply and meet each buyer's need (wholesaler, retailer, food service producer or institutional market representative). Details of the guidelines could include listing of specific buyers' requirements that need to be met by each producer (e.g., formalities and procedures on contractual agreements, bidding, product quality, pricing, food safety, liability, delivery arrangements) when supplying local food products to individual stores or establishments.

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