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**Building Success of Food Hubs
Through the Cooperative Experience
- A Case Study Perspective**

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PROJECT SUMMARY

A regional food hub is a business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand (Barham, 2012). While food hubs, per se, have existed for many years, they are receiving renewed attention (and public and private support) as a promising tool through which farmers can market product grown on their farms to access various supply chains. These businesses can serve as a mechanism for small- and mid-sized farmers to access multiple market channels and for large volume buyers to access local or regionally-sourced foods. Fruit and vegetable cooperatives have had decades of experience in sourcing, marketing, and distributing produce on behalf of their members. The experiences in sourcing member product and meeting customer demands by these cooperative businesses, coupled with the social role that cooperatives play within their respective memberships, provides useful information in strengthening emerging food hub businesses so that they remain a viable market opportunity for small and mid-size producers.

Findings of the 2013 National Food Hub Survey show that the most successful food hubs are for-profit and cooperative in structure (Fischer, 2013). Cooperative-structured businesses are formed when a group of people come together to overcome a challenge that each have experienced individually or to take advantage of an opportunity, which by working together will mutually benefit everyone. A cooperative acts in the interests of its member-owners and may reduce transaction costs through group action, improve bargaining power, and/or provide services to members that are not available elsewhere in the market. The cooperative is democratically controlled and a board of directors represents the interests of the members. Members own and control the cooperative as they vote for directors who represent them. A cooperative allows members to pool capital and to share risk with profits returned to individual members in proportion to use.

Case studies are an appropriate means of investigation when unique or interesting stories can be told. Case studies provide the opportunity to explore individuals and organizations through more than one lens to understand complex relationships. This report focuses on the experiences of four cooperatives in aggregating, marketing, and distributing produce on behalf of their members. Face-to-face interviews were conducted with the general managers and board chairs of Eden Valley Growers Cooperative (Eden, NY), Tuscarora Organic Growers Cooperative (Hustontown, PA), Upstate New York Growers and Packers (Oriskany, NY), and Capital District Cooperative (Menands, NY). Information from the interviews was used to develop individual case studies and to identify best practices used by these businesses (as food hubs) in aggregating, marketing, and distributing produce on behalf of their members.

Each of the cooperatives had a story to tell and that history is the basis for the culture that develops inside the cooperative. The cooperative was formed because of a shared need or common opportunity identified by the early members. The cooperatives provide opportunities for members to gather together to discuss growing techniques, produce handling, and marketing

trends. Networks are developed that can be useful to solve problems. This culture is also shared by the employees of the organization and demonstrated by them as they hold farmers accountable to deliver the desired produce and negotiate with buyers to achieve the highest prices possible for the cooperative on behalf of the members.

Several key challenges associated with the successful startup and ongoing operations of food hubs were articulated from the recent literature. This project addressed each of the challenges through the lens of the cooperative food hubs studied.

Table 1. Best practices to mitigate key challenges

KEY CHALLENGE	SUCCESSFUL COOPERATIVES
Balancing supply and demand	<ul style="list-style-type: none"> • Work collaboratively with grower members to construct pre-season commitment plans identifying the level of available supplies and expected delivery dates to construct weekly sales forecasts. • Pulse the buyers in the off-season to evaluate their buying experience and gain knowledge of products needed in the next season.
Consistent product quality and food safety standards	<ul style="list-style-type: none"> • Farmer members wash, sort, grade, and pack at the farm prior to delivery to the aggregation facility. • Product inspected upon delivery and tracking number assigned. • Product handled to maintain quality and safety standards of the buyer and to minimize risk and liability of foodborne outbreaks.
Aggregating sufficient quantities of product to be sold at competitive prices	<ul style="list-style-type: none"> • Devote sufficient time to establish and maintain strong relationships with buyers AND their member-suppliers. Trust and reputation are important in both dimensions. Most buyers will not contract to purchase product. • Utilize sales staff to manage expectations of buyers as member-farmers may not have the capacity to deliver desired quantity at specified time. • Recognize long term growth requires the cooperative to encourage members to expand production along with securing more buyers or larger volume buyers. • Develop a brand for marketing purposes, recognizing the brand may not transcend the market channel in which the product is sold.
Changing consumer preferences	<ul style="list-style-type: none"> • Recognize the pallet of the consumer is becoming more diverse. • Understand that farmers will grow limited quantities of new products until they gain experience in production and have confidence (through their cooperative) that there is sustained demand.
Accessing infrastructure at reasonable cost	<ul style="list-style-type: none"> • Operate cooling and refrigeration facilities with the capacity to adjust temperature and control moisture to levels that maintain product quality and extend shelf-life for a diverse range of products. • Understand that transportation costs are one of the largest costs to the business, especially long distances. • Conduct careful analysis of infrastructure costs when evaluating the investment in a building, purchase of a truck, or contracting for refrigeration space, long-hauls, and deliveries.
Business stability	<ul style="list-style-type: none"> • Recognize that the member’s capacity to produce, the cooperative’s capital, facilities and staff need to be in balance across the business. • Hire staff with expertise in the food system and provide training when necessary.

INTRODUCTION

A fundamental shift in the farm and food sector began in the 1930s as farms became larger and wholesale market channels emerged to serve consolidating food retail chains as the number of mom and pop and corner grocery stores diminished. In spite of the shift, the traditional retail opportunities for local foods continue today. They include direct to consumer sales from the farm stand located on the farm and the farmer bringing product to sell at a farmer's market. More recently consumers have purchased shares of the harvest to source local foods through Community Supported Agriculture (CSAs). Furthermore, renewed and increased interest in purchasing local foods has led to a variety of marketing and sales opportunities with wholesalers, retail outlets, institutions, and government food security programs. Food retailers recognize customer interest in local foods. Some retailers work directly with food suppliers to source local foods. Other retailers have task wholesalers to secure the needed product. This unmet demand presents opportunities for small- and mid-size farms. The challenge is that a critical mass of local product must be aggregated, marketed and distributed at a price point acceptable to the buyers in intermediated market channels.

Food hubs have emerged as a popular tool through which farmers can collectively market product grown on their farms to access various supply chains. These businesses can serve as a mechanism for small- and mid-sized farmers to access multiple market channels and for large volume buyers to access local- or regionally-sourced foods more efficiently. Food hubs are organized in numerous ways. They can be privately owned, created through a non-profit organization, or organized as a cooperative-structured business. Food hubs share strategies similar to direct marketing efforts of farmers by emphasizing high quality and special attributes such as local or organically grown. Food hubs also share strategies of larger-scale enterprises by aggregating product of sufficient quantities to minimize the costs per unit sold and build economies of scale. Large scale procurers are challenged in 'scaling down' procurement and distribution processes to access local foods. Food hubs can serve as a mechanism of sufficient economic and physical scale and organizational structure to intersect with large scale distribution networks and meet the end customers' expectations on price, social and environmental value, and nutritional goals.

Cooperative-structured businesses are formed when a group of people act together to overcome a problem or secure an advantage that they could not achieve by acting independently. Cooperatives have acted as food hubs for several decades. Farmer marketing cooperatives are often formed to address a myriad of food hub marketing issues, such as combatting market power of large downstream buyers, addressing economies of scale in processing and distribution, reducing producer transaction costs, and improving access to markets. Food hubs, no matter their business structure, will face challenges in aggregation, processing, marketing and distribution of products much like farmer marketing cooperatives who have engaged in similar

activities. Important lessons can be learned from these operations. The experiences in sourcing member product and meeting customer demands by these cooperative businesses coupled with the social role that cooperatives play within their memberships provide useful information in strengthening food hub businesses so that they remain a viable market opportunity for small- and mid-size producers.

BACKGROUND

Many small- and mid-scale farms face similar challenges marketing and distributing their products, primarily because of the difficulties in linking to food supply chains (typical supply chain links include: inputs; producer; processor; broker; distributor; wholesaler; retailer; consumer). Accessing appropriately scaled markets is difficult for small- and mid-scale farms as supply chains become more polarized (King et al., 2010). This polarization is due in part to the consolidation of large-scale, supermarket retail and wholesale operations. These markets demand large volumes, low prices, and consistent quantities and qualities that meet increasingly strict safety standards. The procurement systems in such markets are often vertically and horizontally integrated, global in scale, and aim to maximize efficiency. In addition, the cost of wholesale marketing of food products has increased considerably over the past four decades, mainly because of rising costs of labor, transportation, food packaging materials, and other inputs used in marketing (King et al., 2010; Lyson et al., 2008; Richards and Pofahl, 2010; Sexton, 2010; Tropp et al., 2008).

Small and mid-scale farms can access direct retail markets where there are lower barriers to entry (e.g. Community Supported Agriculture, farm stands, and farmers' markets); however, where direct markets are located in proximity to farms, sales are often limited by small, remote populations and the seasonality of the markets. In fact, there is growing evidence that it is difficult for small, commercial farms to earn enough revenue simply through direct-to-consumer (D2C) sales if the farm is located in a rural region (Brown & S. Miller 2008; Schmit & Gómez 2010; Timmons & Wang 2010). The difference in sales opportunities is also evident when comparing total local food marketing sales through D2C markets and intermediated channels (i.e., grocers, restaurants, institutions, regional distributors). Specifically, in 2008, farmers' local food marketing sales in the United States were \$4.8 billion, but only \$877 million of which were sales from producers that exclusively used D2C markets (Low and Vogel, 2011). Farmers using intermediated channels, either in conjunction with D2C or on their own, represented the remaining \$3.9 billion in sales (Low and Vogel, 2011). That said, access to larger intermediated marketing channels is often difficult for individual producers given limited quantities of products to market and wholesale buyers' resistance to working with a number of small, heterogeneous suppliers.

Recent attention towards the development of regional food hubs has expanded marketing efforts to retail, wholesale, and institutional channels, and these efforts are often combined with a

commitment to utilize small- to medium-sized local producers whenever possible (Barham et al., 2012). A regional food hub is a business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand (Barham et al., 2012). In the past five years, there has been a proliferation in the number and recognition of new and existing food hubs across the United States. In New York State alone, four emerging food hubs were awarded \$3.6 million in funding in 2013 by the New York State Regional Economic Development Councils, and a feasibility analysis for a fifth is underway.

While new and alternative business models are developing to meet varied food hub objectives, food hubs in various forms have existed for many years. The characteristics of a cooperative as a user-owned, user-controlled business that distributes benefits on the basis of use can provide unique advantages as a business model for existing and emerging food hub operations. In particular, potential strengths of the cooperative food hub model are the ability to draw upon the expertise and resources of their member-owners, and to promote collaboration and understanding of each member's skills that may lead to greater resilience and improved returns (Borst, 2010).

The National Good Food Network's Food Hub Collaboration, an organization that has concentrated on understanding the characteristics, successes and challenges of food hub operations, found that, of the 168 food hubs they identified, 21% were cooperatively owned, either as a consumer food cooperative or as a producer cooperative and 32% were organized as nonprofit organizations (Barham, 2012). In a comparison of the nonprofit and cooperative food hubs, Diamond and Barham (2012) find that each business type needed to consider which roles they were best suited for and how the limitations of each can be mitigated in building strategic partnerships. For example, they found that cooperatives can benefit from partnering with nonprofits for training and education, and nonprofits can benefit from partnering with cooperatives by improving their access to infrastructure controlled by the cooperative (Diamond and Barham, 2012).

Between 1987 and 2000, the number of fruit and vegetable cooperatives decreased by one-third in the United States, primarily due to the consolidation of the food sector (King et al., 2006). However, counter to the national trend, the number of fruit and vegetable cooperatives in the Northeast U.S. increased from 27 to 40 firms or a growth of 48% over the same time period, with small-scale cooperatives or 'micro-cooperatives' (with less than \$2 million in sales) accounting for 68% of all cooperative businesses. Micro-cooperatives are presumed to fill market niches (e.g., local, source (grower) identified products) not satisfied by large cooperatives or mass market-grower-shippers and distributors. Indeed, of the cooperative managers and directors interviewed in the study of *Small-Scale Grower Cooperatives in the Northeast United States*, 80% recognized that their single strongest competitive advantage in the marketplace is

providing a quality product, followed by service, and product diversity, while over 70% of managers believed that being locally-based was a distinct competitive advantage (Hilchey et al., 2006).

The experiences of small-scale fruit and vegetable farmer marketing cooperatives can provide important insights into the challenges that similar types of emerging food hubs will face in addressing local and regional food systems demands, along with the strategies to overcome those adversities while maintaining member loyalty. In the USDA study discussed above, the biggest challenges viewed by management and directors were delivering a consistent volume of product, delivering a product of consistent product quality, becoming a supplier of choice, and maintaining member commitment (Hilchey et al., 2006). Supply commitments for smaller-scale operations may be particularly problematic if members include a mix of part time farmers and full time growers (Hilchey et al., 2006). Cooperatives may or may not require their members to provide 100% of their produce grown to the cooperative and in many cases the cooperative is one of numerous outlets for their produce. Further, small-scale growers, like part time farmers, may be more reluctant to expand production in the face of growing demands for firm products. Growers whose primary work is off-farm and small operators who engage in direct farm to consumer marketing have less time to spend growing additional produce (Martinez et al., 2010). Similarly, other studies have found that the challenge most cited by food hub operators is the difficulty in balancing supply and demand and managing growth (Barham, 2012). Growing consumer demands for local, source-identified food products has renewed attention towards the cooperative business model and, in particular, farmer marketing cooperatives for small- and medium-scale fruit and vegetable producers interested in serving new local intermediated marketing channels. In addition, food hubs, no matter their business structure, will face challenges in aggregation, processing, marketing and distribution of products much like farmer marketing cooperatives who have engaged in similar activities, and important lessons and best management practices can be learned from these operations. Understanding how similarly organized farmer marketing cooperatives have coped with these types of changes will provide useful insights for food hub owners in anticipating and planning for growth in supply.

Cooperatives

The business structure of a food hub can take many forms – sole proprietorship, non-profit, corporation, or cooperative. A cooperative structured food hub is grounded in three tenants – member-owned, member-user, and member-beneficiary. The goal of the business is to provide service at cost and a fair return to the member in proportion to use. A cooperative is more likely to align its social mission with business objectives when it is formed (Diamond and Barham, 2012). A cooperative-structured food hub serves to aggregate the growers as members and amass the products that they grow. The cooperative will market and distribution services on

behalf of its members. Producers interact differently with food hub businesses that they own. They expect to have involvement in governance and oversight. In non-cooperative structured food hubs, the relationship between the farmer and the food hub is transactional (Feenstra, et al., 2012). A cooperative-structured food hub is appropriate when a group of farmers recognize that as individuals they cannot access new market channels because of limitations on the amount of product they can provide individually to potential buyers. Farmers come to know that by working together they can pool capital to secure needed resources and manage risk to their individual businesses. A cooperative-structured business is appropriate when farmers as owners develop a cooperative culture, policies and protocols that provide benefit to them as members and strengthen opportunities in the marketplace.

Findings of the 2013 National Food Hub Survey showed that the most successful food hubs are for profit and cooperative in structure. Cooperatives tended to be the lowest cost businesses to operate (Fischer, et al., 2013). Cooperatives are well known business structures that farmers voluntarily join, are democratically controlled, with members providing the operation and investment capital as needed. One of the challenges of food hubs is to access capital to establish and grow the business. A cooperative must be adequately capitalized to be successful. Each member will purchase one share of common stock. The stock usually has a nominal value and allows the member to vote at meetings of the cooperative and elect directors. Other capital is secured by members making equity contributions relative to use of the cooperative, the cooperative providing opportunities for members to purchase preferred stock, or obtaining debt capital.

Cooperatives form when a group of individuals identify a common need to be met, a problem to solve, or opportunity to secure together that each as an individual is not able to achieve independently. Cooperative-structured businesses are most successful when they aggregate sufficient product to access larger market channels on behalf of their members and serve the needs of niche market channels. A small group of producers will lead the initial organizational efforts. During the formation of the organization, one or more of the members may voluntarily manage or charge a fee for service to the cooperative to aggregate, market, and provide distribution logistics on behalf of the members. When growers are actively involved in carrying on these functions, they understand the challenges to overcome to achieve success. At the same time growers are tasked with managing their own farm businesses, thus the cooperative should hire professional staff to run the business (Cleveland, 2014; Day-Farnsworth, et al., 2009 Fischer, et al., 2013; Feenstra, et al., 2012; Hand, 2010; Matson, et al., 2013; Schweser and Sisser, 2013). Through time the business should reach a point to hire management staff. A cooperative-structured business is not without its challenges. A University of Wisconsin Extension study found that, “The cooperative model offers a horizontal leadership structure. Without clear responsibilities and delegation, this model will result in disorganization leadership

imbalance, and fatigue.” Concerns are raised that cooperative food hubs can suffer from a model of management by consensus (Borst, 2010).

Aggregation

Cooperatives may or may not require their members to provide 100% of the produce grown to the cooperative and in many cases the cooperative is one of numerous outlets for their products. Similarly, other studies have found that the challenge most cited by food hub operators is the difficulty in balancing supply and demand and managing growth (Barham, 2012). Contractual arrangements between growers and food hubs are ineffective as weather conditions impact growing conditions and subsequent harvest dates. Pre-season growing and harvesting plans made between growers and food hubs are mechanisms to anticipate what product will be available along with the expectation for when it will be delivered (Day-Farnsworth, et al., 2009; Flaccavento, 2009; Joannides, et al., 2013). Pre-season conversations with potential buyers provide guidance on consumer trends, product desired, quantity needed, and packaging preferred.

Cooperatives tend to pay members for pooled price. Pooling is a market practice distinct to cooperative-structured businesses. Similar, undifferentiated product supplied by each grower will be ‘pooled’ or commingled, marketed, and sold together. Each producer who participates in the pool is paid the average price received for all the product of like quality delivered during the time allocated to the pool. The members share of the pool proceeds is determined by the volume of product contributed and can be adjusted to reflect a premium or discount to account for quality differences. A typical pool will provide advance payment to the producer near the time of delivery. Final payment is made to the producers once the product in the pool is sold, the costs of handling, marketing, and transporting the product has been deducted and the pool is liquidated.

The successful sale of food products is dependent on providing quality and consistency. Growers must deliver produce to standards recognized by the marketplace. The United States Department of Agriculture, Agricultural Marketing Service has developed a set of standards based on measurable attributes that describe the product. Food safety standards and traceability are addressed through Good Agricultural Practices (GAPs) and Good Handling Practices (GHP). Organic production practices are verified through the National Organic Program (NOP). Food safety requirements are highly dependent on the buyer. Large buyers usually require food safety certifications. Smaller buyers are concerned about food safety but may not require food safety certification. No matter the size of the buyer or the buyer’s food safety requirements, a tracking system is an important risk management tool for a food hub operation. Tracking systems are also a means to differentiate regional products and production methods and build transparency. All of which can lead to price premiums (Fischer, et al. 2013). The information should be

retained with the product, regardless of the downstream buyer (Hand, 2010). Competitive advantage can be secured when product delivered exceeds minimum standards. Food hubs can create product manuals in addition to industry criteria and require producers to grow to specific standards (Day-Farnsworth, et al., 2009; Dreier and Taheri, 2009; Flaccavento, 2009).

Infrastructure to support aggregation activities of the food hub is important to maintain product quality. Food hubs tend to be located closer to farmers to reduce transportation costs on the part of growers and to build economies of scale to reduce distribution costs (Matson, 2013). Facilities must be of sufficient capacity to maintain product quality. Most food hubs have warehouse and offices and some have packing sheds and processing facilities (Fischer, Matson 2014). Warehouses should have temperatures that maintain the integrity of the product and be of sufficient size to store product of the largest buyers (Day-Farnsworth, et al., 2009; Flaccavento, 2009). The facility should have loading docks with size and scale to properly handle product delivered by farmers. The loading dock is the place to inspect the product upon delivery, inventory the product and apply labels for tracking purposes and sequence control (Joannides, et al., 2013; Stevenson, 2009). The loading docks also need to be of sufficient size to move product in a timely manner from the warehouse to trucks for distribution.

Food hub operators are challenged to grow the business. The balance of resources (supply of and demand for product, facilities, labor, capital) to conduct business in the short-term coupled with the goal to expand the business in the future is critical to the success of the cooperative-structured food hub. Growth requires a two-pronged approach – understanding demand and building supply. Interaction with consumers and buyers is critical to build the knowledge of trends, needs, and expectations. Interaction with farmers is important to determine willingness and capacity to expand production or provide new products. Growth through new products can be costly as farmers need to learn how to produce a new product, determine the cost to grow the new product and be convinced that the new product has traction in the marketplace (Dreier and Taheri, 2008). Farmers, new to the food hub, can increase supply of product for sale. It is important that farmers understand the types of products needed by the food hub and the quality standards for delivery.

Cooperatives also provide the opportunity for members to come together to learn from one another. For cooperative-structured food hubs, future members may go through a probationary period after which an evaluation is conducted by the cooperative's management or board of directors to determine if performance expectations were met (Schweser and Sisser, 2013; Shuman, et al., 2009; Stevenson, 2009). Season extension technologies are important to extend the supply of product available and maintain a presence of the food hub in the market place. When members cannot supply sufficient product to the cooperative, the cooperative may purchase product from other producers who can provide produce that meets the same quality standards of the cooperative. When the members of a cooperative experience a crop failure and

cannot meet the delivery schedule outlined in their cropping plan the cooperative may secure product from other growers closest to the aggregation facility. Crop failure can extend into large geographic areas. Costs to transport the nearest product can be prohibitively high. It is important to notify the buyer that the product cannot be sourced so that the buyer can respond to its customers. Occasionally contracts for large volume purchases are signed between buyers and sellers. Under most circumstances there are no formal purchasing agreements. The trust and strength of the relationship between the food hub operator and the buyer is key to future growth (Cleveland, et al., 2014; Matson, et al., 2013).

Marketing

Food hubs are a means for individual producers to access intermediated channels. Product can be marketed in two primary ways. First, product is aggregated into larger quantities. The product will be marketed similarly to large volume buyers based on quality, quantity and price. Product can also be marketed based on its attributes or values, e.g. location, production system (sustainability, organic, grass fed), etc. Product marketed in this fashion includes a “story to tell” that transcends to each buyer in the channel. High touch marketing efforts such as in-store demonstrations, on-line farm profiles and point of sale merchandising are several examples marketing specific attributes (Day-Farnsworth, et al. 2009). Other keys to success include sharing of information relevant to the customer across the channel, building strong relationships between buyers and sellers, and creating a sense of trust. The flow of information about what consumers will purchase, prices to be paid, supply needed, supply available between farmers, the food hub and the buyer provides feedback mechanism about market potential and market conditions. The feedback mechanism is important as farmers scale up production to fulfill the demand for product needed by food hub to grow its business and serve its customers. These are key ingredients to build a trusting relationship, which is important when negotiating price culminating in the purchase of product (Cleveland, et al., 2014; Hardy and Clause-Holz, 2008; Matson, et al., 2013). Early on, it is important to the identity of the farm in the market to establish marketing claims. As trust is built, there is less need to specify which farm produced the product or create a third party verification system as the brand of the food hub is representative of the product and the service expected by the buyer (Diamond and Barham, 2012).

Distribution

An efficient delivery system is key to ensure quality product is distributed in a timely and cost effective manner to the buyer. Whether leased, owned, or contracted, trucking and logistics management are the most costly expenses of a food hub. The delivery system should be scaled to the volume of product to be moved. Most food hubs own a few trucks (Matson, et al., 2013).

It is important to constantly evaluate the costs of delivery. Food sourced from local farms and delivered to local buyers travels shorter distances than food in mainstream channels. Moderate aggregation to increase load size coupled with shorter transportation distances can result in significant fuel savings, especially near metropolitan areas (Hand, 2010). Fuel expended per unit of product delivered depends on the size of the load and the distance traveled along the delivery route. Food hub operators should investigate the cost efficiencies of existing distributors before creating their own distribution network (Appel, 2008; Flaccavento, 2009). Many established local and regional transportation firms have the capacity to deliver product. Vehicles used for delivery must have the necessary equipment to keep the product at the desired temperature, maintain quality, comply with traffic safety regulations, and be driven by a licensed driver with good customer service skills.

Food distributors may provide ‘food hub’ activities. A survey of food distributors found that they see a need to source locally produced food products for their clients (Hardy and Clause-Holtz, 2008). They are particularly sensitive to the needs of their diverse customer base. Consistent and constant supplies of products are important. Distributors recognize some products are only seasonally available. They have a tendency to avoid dealing with individual producers as experience has shown that most farmers do not produce adequate supply or consistent quality to meet the expectations of their clients. One solution to this dilemma is that growers organize cooperatives or producer groups to aggregate product to be sold to the distributor. Communication between distributors and producers is critical to the success of this relationship.

DATA COLLECTION PROCESS

Case studies are an appropriate means of investigation when unique or interesting stories can be told. Case studies provide the opportunity to explore individuals and organizations through more than one lens to understand complex relationships (Baxter, 2008). Case studies support the deconstruction and reconstruction of a topic of interest. The case study approach is appropriate when the focus of the study is to answer “how” and “why” questions and when the boundaries are not clear between the subject of interest and the environment in which it exists. One of the weaknesses of the case study is the tendency to answer question that is too broad or a topic that has too many objectives for one study. It is appropriate to place boundaries around the case. Such boundaries might include time and place or time and activity. A multiple case study approach allows comparisons and contrasts to be identified across each case study.

Cooperatives selected for the project have aggregated, marketed and distributed product on behalf of their members between 10 and 80 years. Project investigators utilized the United States Department of Agriculture, Rural Development 2012 Directory of Cooperatives and contacted the Cooperative Development Institute (South Deerfield, MA) and the Keystone

Development Center (York, PA) to identify potential cooperatives for the study. To build geographical diversity inside of the region it was decided to interview one cooperative in Pennsylvania, one in New England, and two in New York State. Tuscarora Organic Growers Cooperative (Hustontown, PA), Eden Valley Growers Cooperative (Eden, NY), and Upstate New York Growers and Packers (Oriskany, NY) were approached and agreed to participate in the project. Several successful cooperatives headquartered in New England were invited to partake in the project. Unfortunately they declined to participate. Capital District Cooperative (Menands, NY), located in Eastern NY agreed to participate. The cooperative has members in New York, Vermont, Massachusetts, and Connecticut. Vegetables account for the majority of product handled by the cooperatives participating in the project.

Survey instruments were developed to build consistency across the case studies. More information about complex relationships is disclosed when questions are open-ended. Publications focused on aggregating, marketing, and distributing products from farms to various market channels were reviewed prior to the development of the survey instruments. The project included three survey instruments. The first was a General Information Survey (Appendix A) to be completed by the General Manager of the cooperative. This survey focused on the history, current status, size and scale of the operation, labor force and sales data. A second survey was created for the Board Chairman or President of the cooperative to learn about farmer- member attitudes when supplying product to a cooperative along with the Board's role in governance and decision-making related to aggregation, marketing, and distribution of product (Appendix B). A third survey was developed for the General Manager or Chief Executive Officer of the cooperative (Appendix C). Survey questions focused on the activities of the cooperative and services provided by the organization to its members and customers. Presidents of all four participating cooperatives were interviewed. General Managers of Tuscarora Organic Growers and Upstate New York Growers and Packers were interviewed. The Sales Manager of Eden Valley Growers Cooperative was interviewed. Capital District Cooperative did not have a general manager on staff at the time of the interview. The Capital District Cooperative Board Chairman answered questions regarding the management of the business. Each interview took 2 to 3 hours to complete. The Capital District Cooperative does not take ownership of the product sold at the market. A supplemental survey was developed and sent to all members to gain understanding of products sold at the market, market channels into which product was sold, volume of sales through the cooperative, distance to market, etc. Survey response was negligible. As a result, phone interviews were conducted with 15 members (approximately 10 percent of the membership).

CASE STUDIES

Cooperative-structured businesses serve the needs of their members. A cooperative must first aggregate members with the desire to work together to achieve a common goal. During the formation of the cooperative, members share similar values regarding the need for the cooperative. In many cases the location, size of the members' farms, the crops grown, even the ownership, management, and labor requirements can be very similar from one member to another. All businesses change through time. Externalities such as government regulations, consumer trends, price of inputs, consolidation within the sector, etc., will impact the cooperative business and the members' businesses. As member businesses change the value of the cooperative to its members can remain the same, become more important, or less important. For the cooperative to remain successful the services that the cooperative provides and resources in which it invests should be in alignment with the needs of the members. This report focuses on 4 cooperative-structured businesses located in the Northeastern portion of the United States with product distributed to buyers throughout the Northeast, Baltimore-Washington, D.C. area and occasionally along the East Coast (Figure 1).

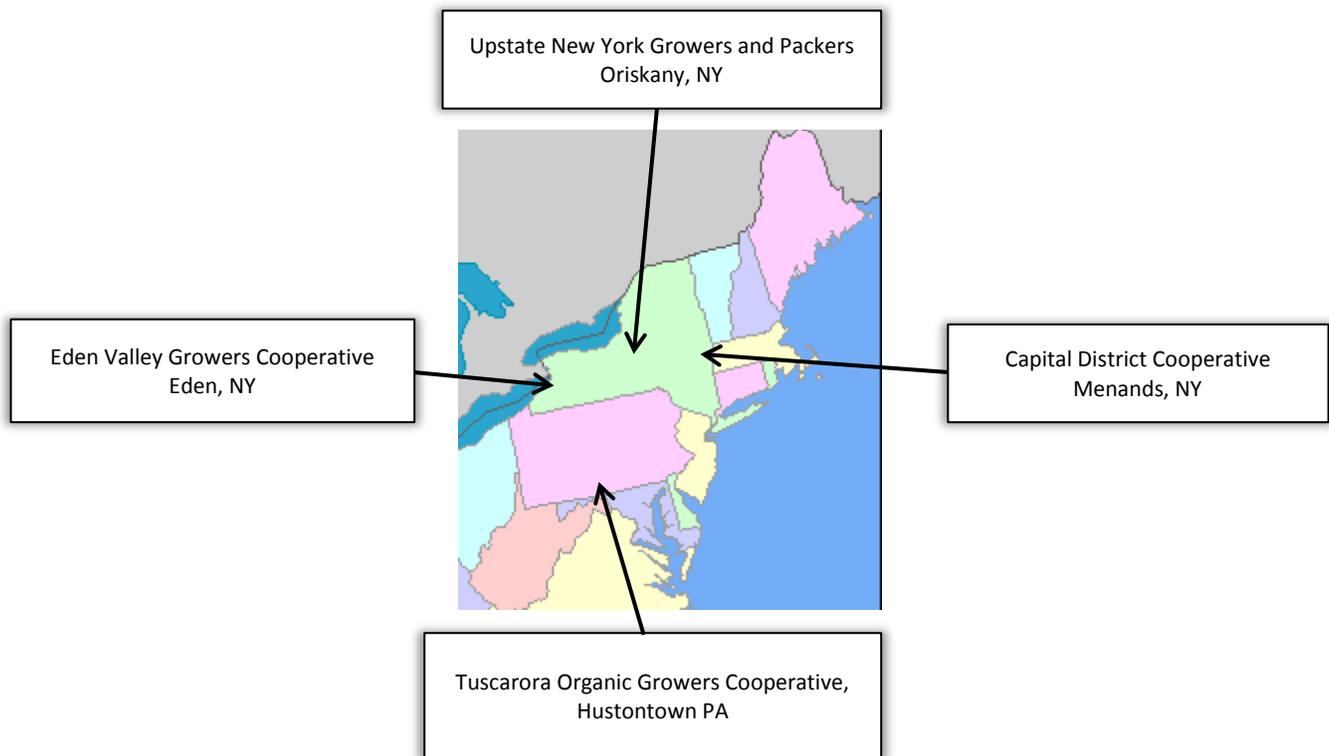


Figure 1. Headquarter locations of case study cooperatives.

Case Study #1. Eden Valley Growers, Inc.

Eden Valley Growers, Inc. is a cooperative-structured business owned by 10 member farms located approximately 20 miles south of Buffalo, NY. The cooperative provides 'one-stop-shopping' for fresh produce – peas, summer squash, cabbage, broccoli crowns, cucumbers, sweet corn, beans, cauliflower, tomatoes, peppers, winter squash, eggplant, pumpkins and gourds to wholesale distributors and retail outlets. The cooperative is also a mechanism where members will pool purchases for greenhouse materials (soil mixes and fertilizer) and packaging materials for their



respective businesses at a significant discounted price.

Members agree to growing and harvesting protocols that meet Harmonized Good Agricultural Practices with Global Markets Addendum and practices of the New York State Produce Quality Assurance Program. All produce is grown using Integrated Pest Management practices. Most of the produce is sold to wholesalers and grocery store chains located less than 300 miles from the cooperative's distribution facility.

BACKGROUND

Prior to 1956, vegetable growers in the Eden Valley area would load their pick-up trucks daily during the harvest season, leaving their farms between 2:00 a.m. and 3:00 a.m. to travel to the Clinton/Bailey Open Market. Each farmer tended to grow a variety of vegetables. They sold their produce independently of one another to restaurants and grocery store owners in the early morning. As the day progressed the quality of the fragile product diminished. Near the end of the day the product not sold through the open market was transported across the street to the wholesale packing houses. The packing houses paid minimal prices for the product they purchased. There was little incentive for farmers to expand their businesses. Limitations to expansion included size of the truck to transport the product, stagnate number of buyers, and minimal prices paid by wholesalers for surplus product.

In 1956 Eden Valley Growers, Inc. was formed by 23 farmers who owned and managed approximately 1,000 acres of hand-harvested vegetable crops. The purpose of the cooperative was to serve as an alternative market channel to the packing houses. Less than 100,000 cases of product were sold in the first year. The cooperative provided an opportunity for farmers to join together to aggregate product for sale and to jointly hire a person to market their produce. The cooperative was able to market product on behalf of its members at prices higher than they would receive individually from the packing houses. It soon became apparent that an aggregation facility was needed. In 1958 construction was completed that included a cooler to cool and refrigerate produce. The investment in the facility was a turning point for the

cooperative. Instead of focusing on second or under-grade quality produce, the cooperative now focused on sourcing and marketing the highest quality produce from its members. Members were no longer limited by what they could sell from their truck on any given day. The sales area expanded as more customers were served from distances further away from the cooperative's aggregation facility. Farmers changed their production focus to become specialists of a select number of crops rather than a grower of a variety of vegetable crops.

Today the mission of Eden Valley Growers, Inc. is 'to provide the highest quality produce in a timely fashion.' Cooperative members are associated with 10 farms who own and manage 1,000 acres. Between May 1 and December 31st the cooperative ships over 500,000 cases of product on behalf of its members. Farm sizes range from 10 to 400 tillable acres. Most of the members are located an average of 3 miles from the cooperative facility with the furthest member approximately 10 miles away. The cooperative employs 8 to 10 full time employee equivalents. Management staff is responsible for coordinating aggregation and marketing of the product. At the peak of the harvest season the cooperative has 4 employees handling the dock responsibilities and 8 truck drivers.

AGGREGATION

All produce grown by member-owners of Eden Valley Growers, Inc. is aggregated through the cooperative facility. Eden Valley Growers, Inc. does not have contractual agreements with its members, nor are any expected in the future. The culture of the organization and the values instilled from one generation to the next are critical to the success of the

"Quality standards are taught from one generation to the next."

- Board Chairman, Eden Valley Growers

cooperative. Present day members are the third, fourth, and fifth generations of the original founders. Culture comes from the oldest generation relating the stories of hardship of the past and the impact and

prosperity that the cooperative brought to the farm business. Awareness of the high quality of the product to be delivered to the cooperative is transmitted from one generation to the next. Third and fourth generation family members now belong to the cooperative. The cooperative is open to new members. A person seeking membership needs to build a relationship with a current member to learn and embrace the culture of the cooperative. The potential member needs to grow product desired by the cooperative and adopt the production practices of Harmonized Good Agriculture Practices, NYS

Produce Quality Assurance Program, and Integrated Pest Management protocols. In any given



Figure 3. Loading dock at Eden Valley Growers

year, the cooperative will purchase between 5 and 10 percent of product from non-members. This product is purchased to cover shortfalls, fill trucks, and increase diversity of product available. Non-members must subscribe to the same growing protocols of members.

Communication is critical to coordinate product delivery to the cooperative. Communication begins in the off-season when cooperative employees meet with each member-farm. The staff will share information on the desired produce to be grown, the quantities needed, and the expected delivery. Farmers will share expectations about the produce they plan to grow in the coming year. As the cooperative has matured, each farm specializes in 3 to 4 primary crops. From the meeting, consensus will be reached about what will be grown by the farm to be delivered to the cooperative. The pre-season planting meeting allows staff the opportunity to suggest new products desired by buyers. Farmers are conservative and cautious in their approach to growing new products. Small quantities are grown by a few interested growers. If the members can grow the crop successfully and if they are convinced that the cooperative can sell the product profitably, then more product will be grown. During harvest, cooperative staff will be in contact with the farmer via phone weekly to learn about the status of the crop to be picked the following week. Co-op staff will also contact the farmer via phone during a 2-hour period in the early morning during harvest to confirm orders for what is to be delivered and at what time. Another series of phone calls will be made in the afternoon for a status update.

The pre-season planting and delivery plan may be compromised by weather conditions, potential crop failure or crop surplus. Communication in these circumstances remains important. In the case of a surplus, farmers will give advance notice to the sales staff to allow them time to sell the product and put out a “deal” to customers if necessary. In the case of a shortfall, farmers will notify staff as soon as possible so that they can source product from another member or non-member, or when necessary notify the customer that the product is not available. Occasionally staff receives unanticipated requests from buyers for additional product. Members are contacted to determine if product is available. Farmers have the flexibility to pick and deliver the product in a timely manner to fill these orders.

Trust between the growers themselves and the cooperative staff is key to the success of Eden Valley Growers, Inc. Farmers must trust one another to deliver high quality produce

“Members recognize the competitive nature of the customer base and make adjustments as needed to keep markets satisfied.”

- Marketing Manager, Eden Valley Growers

within the designated time frame to the cooperative. Each vegetable species has a peak harvest window of 3 to 5 days. Cooperative staff schedules the deliveries to be made to the cooperative’s warehouse.

Product delivery is based on the delicate balance of knowing the maturity status of each crop at each member farm, volume available for delivery, capacity of the farm to make delivery at a given time, storage capacity of the warehouse, truck availability to move product out of the warehouse, and the product requirements and subtle nuances of a specific buyer.

The product is delivered to the loading dock of the Eden Valley Growers, Inc. warehouse. At the loading dock the produce is inspected by co-op staff. Product that passes inspection is

assigned a lot number. The organization utilizes the Produce Inventory Lot System to source-identify the product. The system provides a tracking mechanism to the farm from which it came and the day that it was received at the dock. Product that does not pass inspection is returned to the farmer for re-grading and packing. Farmers have found re-grading and re-packing to be costly so product delivered to the loading dock is of high quality. Once the product has been accepted and assigned a lot number it is moved into the 16,000 square foot refrigerated warehouse until it is placed on a truck and delivered to the customer. Product is moved out of the warehouse on a first in, first out (FIFO) schedule.

Research and design changes in cooling and refrigeration have lead Eden Valley Growers, Inc. to invest in equipment that preserves the integrity of the produce. A vacuum cooler installed in 1999 best preserves the quality of lettuce. A hydro cooler installed in 2002 is best for preserving the quality of sweet corn and a forced air cooler installed in 2004 is best for preserving the quality of cucumbers and peppers. Use of the vacuum cooler and hydro cooler is available to other growers on a fee for service basis. Most recently Eden Valley Growers, Inc. has invested in construction of new holding cooler with the next phase to include a Slush Ice Cooler to cool broccoli. The integration of cooling capacity and refrigerated warehouse space maintains the cold chain.

MARKETING

The cooperative is responsible for marketing all of the produce grown by members of Eden Valley Growers, Inc. Ninety-five percent of the product sold by Eden Valley Growers, Inc. is perishable vegetables with the remaining 5 percent being root vegetables, winter squash, and pumpkins. Fifty percent of the product is sold to grocery store chains and 35 percent is sold to wholesalers with the remainder sold to processors and food service. One person is responsible for all marketing activities.

Building and maintaining strong relationships with buyers is very important to the success of Eden Valley Growers, Inc. Relationships are built on trust, reliability, and good communications. The Eden Valley Growers Marketing Manager noted, “There are no secrets in the produce business.” In early winter cooperative staff meets with buyers. Buyers are especially attuned to the trends of their respective customers. They share these trends with the Eden Valley Growers Marketing Manager. Discussion also focuses on the product provided and delivered by the cooperative over the past year and expectations in desired products and quantities to be purchased and delivered in the coming year. Throughout the year cooperative staff has kept up-to-date on trade publications. They attend trade shows. Farmers have read trade publications and attend meetings to learn about new vegetable varieties, new production practices, and new consumer trends. Marketing staff will review the sales records of previous years. Once the information is collected the staff and the board of directors meet to share insights and perspectives on the

“There are no secrets in the produce business.
Your reputation is critical to your success.”
- Marketing Manager, Eden Valley Growers

demand for product in the upcoming growing season. Staff will develop a plan for the product needed for the upcoming growing season. Cooperative staff will meet with each farmer individually to suggest what the farmer could grow, how much could be grown and when delivery would be anticipated. The farmer will share his or her perspective on what they could grow. Consensus will be reached between the farmer and the staff member as to what will be provided from the farm for the upcoming growing season.

During the harvest season, Eden Valley Growers Marketing Manager will be in contact with buyers to share information on product availability and price. Buyers will place orders. Price may or may not be negotiated. Buyers will also notify the Marketing Manager if they plan to run a special promotion and anticipated product and volume needed. Based on this knowledge the cooperative staff will contact the farmer(s) to specify the product desired and request product delivery. Eden Valley Growers, Inc. operates on a pooled pricing system.



Figure 4. Eden Valley Growers logo on co-op owned tractor trailer.

Similar vegetables from each grower will be ‘pooled’ or commingled, marketed, and sold together. Each producer who participates in the pool is paid the average price received for all the product of like quality delivered during the time allocated to the pool. The members share of the pool proceeds is determined by the volume of product contributed and can be adjusted to reflect a premium or discount to account for quality differences. Pools at Eden Valley Growers Cooperative are one week in length. At the end of each week, a pool price is calculated for the product delivered. Farmers usually receive payment within three weeks of delivery, less a handling fee for each box received.

Balancing the supply of product available with the demand for the product is challenging. Much of the product is pre-promised to buyers based on the customer meeting in the off season and buyer trends from previous seasons. Plantings are staggered on each farm to extend the growing season and to minimize the chances that excess amounts of product will come to maturity at the same time. When excess product is expected or in some cases even planned, pricing and deals are set up with customers in advance in order that the product will move into that market channel. When customer demand is filled and the cooperative is still heavy with product, quantities are offered at a discount or out to price, as the product needs to be moved so that new product can flow into the warehouse. Commodity buyers are contacted. The cash price may or may not be known when the product is sold. A transportation charge will be assigned by the cooperative on the product moving long distances to reduce the cash value in the pool. When product demand exceeds supply the cooperative will purchase product from non-member farms that grow produce to the standards of the cooperative. In some circumstances, such as a crop failure, there is no product available. This is an industry-wide event that becomes known to buyers and suppliers. Eden Valley Growers marketing staff will notify the buyers that product cannot be secured. Notification to the buyer maintains a positive relationship with the

cooperative. Failure to notify the buyer will damage the trust of the buyer-seller relationship and the reputation of the cooperative.

Eden Valley Growers, Inc. has and will continue to be viewed by their customers as a local food supplier. During the early years of the cooperative most of the product sold was within 100 miles of the warehouse. At present most of the product is sold within 300 miles of the facility to customers (including those in New York City and Pittsburgh) who view the cooperative as a supplier of local produce. Interest in locally-sourced foods has increased the demand for product from the cooperative. Chain grocery stores have emphasized that they source their product locally. Eden Valley Growers, Inc. has developed a brand that is placed on each case of product and on packaging for consumer purchase. One grocery store chain brands Eden Valley Growers as a source of local foods. A competing grocery store chain has requested that the farm be prominently featured on the packaging. Eden Valley Growers will be responsive to their customer needs, whether it means the Eden Valley brand or the individual grower label. The local food movement has provided 10 percent to 15 percent higher returns on product from retail buyers. Reliability of high quality product delivered at the desired time to retail outlets is critical to receive these price premiums.

DISTRIBUTION

Cooperative staff schedules delivery and transportation of product to the location desired by the buyer. Delivery is accomplished by 8 truck drivers hired seasonally to drive 4 tractor trailers and 4 box trucks owned by the cooperative. These drivers deliver product to local buyers. An additional driver is contracted to deliver product at



Figure 5 . Portion of Eden Valley Growers truck fleet.

longer distances. As a consequence to current and anticipated regulatory changes in the trucking

industry and expectations in expanding the business, Eden Valley Growers expects to rely more

“Truck drivers have to be personable and service oriented as they interface with staff and buyers.”

–Marketing Manager, Eden Valley Growers

on long distance haulers. Technological changes in truck performance have reduced environmental impacts. Deliveries are coordinated to minimize fuel consumption. A reliable truck fleet and seasoned, reliable drivers are keys to the

successful movement and delivery of product. Trucks carry the Eden Valley Growers logo and truck drivers wear Eden Valley Grower hats. Truck drivers have to be personable and service oriented as they interface with the staff of the buyers.

COOPERATIVE GOVERNANCE

Eden Valley Growers Cooperative has five people who serve on the board of directors. As cooperative membership decreased the number of board members decreased from seven to five members. The board officers include a President, Vice President, Secretary, and Treasurer. The board has a standing Labor Committee to deal with human resource issues and ad hoc committees, which may include both board and non-board members. Each director serves a three-year term. The cooperative has two types of stock. New members must purchase one share of common stock within the first year of membership. This share of stock provides the member the right to vote and eligibility to serve on the board of directors. The other stock is purchased by members when there is a financial shortfall by the cooperative and the board of directors determines that members should make an additional investment. Most recently the board of directors decided to allow one share of non-stock membership. The non-stock membership was given to the cooperative's general manager in recognition of his dedication to the growth and success of the cooperative.

An important change was made by the Eden Valley Growers board of directors to align the business year of the cooperative with the growing season of its members. The cooperative's books close in March. Thus members are aware of the profit made by the cooperative in the preceding year of the upcoming growing season. Produce is sold through the growing season and accounts receivables are mostly paid by November. Management has evaluated the physical wear and tear of equipment and emerging trends in the marketplace. This allows them to make recommendations to the board regarding needed capital improvements or funds to explore emerging opportunities. As the growing season is complete, grower-members have evaluated the profit and loss of their respective operations. After all of these factors are considered, the board of directors determines the portion of net returns to be retained by the cooperative and the portion to be distributed to member-farms. Patronage is allocated to member farms in proportion to the number of boxes that were delivered from each member farm and sold by the cooperative.

Another important service provided by the cooperative to its members is to aggregate orders for inputs of planting supplies. The members of Eden Valley Growers, Inc. have substantial greenhouse operations. Members aggregate orders for potting mixes, water soluble fertilizers, containers, plastics and drip tape supplies to receive large volume discounts. This has proven especially helpful for small farms, as they receive the same quantity discount as larger growers. Reduction in costs of inputs has increased profitability of the cooperative's members. This service also builds loyalty of the members to the cooperative.

KEYS TO SUCCESS

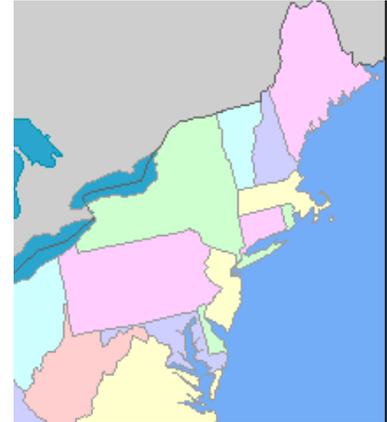
Several reasons have led to the success of Eden Valley Growers Cooperative. Management and staff noted the importance of trust, integrity, and good communications. Members instill from one generation to the next the importance of delivering high quality produce to the cooperative. Growers trust each other and trust the staff to coordinate delivery of product to the aggregation facility at a point beneficial to the member and to the cooperative. The pre-season planting plan is necessary to anticipate and manage supply of product available.

Communication by phone daily and sometimes hourly is necessary during the harvest season to anticipate the quantity of product and time of delivery. At the same time there is a need for flexibility. Building and maintaining strong relationships between the cooperative and buyers is important. Providing a quality product and meeting the expectations of the buyer is critical. If expectations cannot be met, the relationship can be preserved if the cooperative notifies the wholesaler or retailer in advance so that the buyer can purchase product from another source and in the case of the retailer, modify promotional materials.

“Trust is a greater goal. There can be resentment between members when one member views his crop as ready to harvest and sees the same crop being harvested from another member’s field. Members have to trust that management and the organization to achieve the greater goal.” – Board Chairman, Eden Valley Growers

Case Study #2. Tuscarora Organic Growers Cooperative

Tuscarora Organic Growers Cooperative serves 44 member-owners mostly located in central Pennsylvania. The cooperative is a wholesale market channel for farm members. The economic goal of the cooperative is to provide service at cost to members and provide high quality organic produce, berries, eggs, and plants to retail grocery stores, food cooperatives, and restaurants mostly in the Baltimore-Washington, D.C. area. All farms are certified organic and adhere to additional guidelines developed by the cooperative, which describe the protocols in harvesting, grading, packing, and storing the product prior to delivery and safe food handling



practices. These guidelines meet or exceed industry standards. There are no signed contractual agreements between the member and the cooperative as to what the member shall supply to the cooperative. Cooperative staff works with each farmer to develop a pre-season Commitment Plan of product to be delivered to the cooperative at specific times. The Plan is not a contract but rather describes the good-faith effort on the part of the member to deliver the designated product at the designated time and the cooperative to sell the product at the designated time. Members sell product to the cooperative and most sell to other customers as well. Members may purchase product from the cooperative to enhance their product line. The cooperative is also a mechanism by which farmers pool orders for potting soil, boxes, labels, seed potatoes, and organic pest and weed control products.

BACKGROUND

Tuscarora Organic Growers Cooperative began in 1988 as an informal group of 3 neighboring farmers who harvested organic fruits and vegetables, which were transported to and sold at farmers markets in the Baltimore/Washington, D.C. area, approximately 150 miles from their farms. During the first growing season they sold 1,500 cases of product over 5 months. Three circumstances converged near the same time which provided the impetus to expand the collaboration from 3 farms to 7 farms. First, customers (consumers, chefs, food cooperatives) had increased awareness and desire to purchase organically grown produce. This demand and market opportunity could not be adequately supplied by the three individual farms. Second, organic production techniques had become more standardized and third-party verification allowed for products to be labelled “certified organic.” Third, changes came in the wholesale market channel. Early on, organic produce sold through the channel was not of sufficient



Figure 7. Sign post at Tuscarora Organic Growers located at New Morning Farm.

quantity to meet the needs of buyers. Organic produce was not differentiated from conventional produce. As a result, organic growers received prices similar to conventional farmers. A wholesaler who sold organic produce closed his business providing an opportunity for someone else to serve his customers. The seven farms working together achieved economies of scale, which allowed them to act as a produce wholesaler to meet the increasing demands of restaurants and food cooperatives and to sell product at a premium price in the marketplace. The experience of the group working together increased through time. They came to realize that the marketplace was predictable. Farmers coordinated plantings to level the supply and meet demand. One part time employee was hired to aggregate, market, and distribute the product allowing farmers to focus on growing the product. They developed a reputation in the marketplace for the delivery of high quality product. Sales doubled from \$75,000 to \$150,000 from 1991 to 1992. The group continued the informal collaboration for 5 years.

Pivotal changes occurred in 1992-93. Leadership emerged in the group. Cooperatives need a strong leader and advocate in their early years. Jim Crawford, Early Morning Farms provided this leadership. The group purchased a used refrigerated trailer (tractor trailer box) and placed it inside of a rented garage to serve as an aggregation hub. Employees were to be self-directed. It became apparent that the facilities and employee performance would not support the long term goals of the farmers. A full time employee was necessary. The group needed a building to aggregate product. Ownership of assets required that the collaboration of farmers become a formalized business. In 1993 the cooperative was formed and Crawford offered space on his farm to construct the building with an office and loading dock to receive and refrigerate produce. Crawford had trucks which could be used to transport product to buyers. Over the next 5 years the number of growers doubled.

In 2013, Tuscarora Organic Growers Cooperative had sales of \$3.3 million. Sales have increased 10 to 15 percent each year. Over a twelve month period they market over 100,000 cases of product from 44 members and 15 non-members. The average member farms 8 to 10 acres. Originally the cooperative handled 50 products. Today the product list includes 1,200 items from 200 products. Ninety percent of the product offerings are considered “standard stuff.” Size of the packaging builds diversity of the product available to customers. Produce is sold mostly to retailers, restaurants, and to their own members. A Commitment Plan developed by the farmer denotes amount of produce to be delivered to the cooperative. Tuscarora Organic Growers has developed Quality Guidelines which stipulate the quality of product to be delivered to the cooperative. In addition to aggregation, marketing, and distribution of the product from member farmers, members pool purchase of input supplies to receive quantity discounts and hold seasonal trainings where members learn from industry experts or share information with each other. The cooperative is staffed by 4 full time employees. During the harvest season 18 part time employees will be hired, with one-third of them working on the dock and the remainder serving as truck drivers or as a “driver’s helper.”

AGGREGATION

Tuscarora Organic Growers Cooperative does not have a contractual supply agreement with its farmer members. The cooperative sales staff recognizes that customers are not willing to commit to future product purchases. “Buyers want to shop around.” Staff examines the records of previous sales to predict the amount of product needed at any given time during the growing season. They also generate a production history of product delivered by the member to the cooperative. Tuscarora Organic



Figure 8. Aggregation facility of Tuscarora Organic Growers Cooperative.

Growers has created a customized database from which to generate these reports. Individual members and co-op staff meet in mid-winter to review the history of products delivered to the cooperative and then build a Commitment Plan for the coming growing season. The plan includes the produce to be grown, the amount to be delivered, and the time of delivery. The Commitment Plan represents a good faith effort on the part of the farmer to deliver the desired product at a designated time period to the cooperative. Product is graded and packed at the farm. Product exceeds industry

quality standards as it is graded to the Quality Guidelines established by the cooperative. Farmers located close to the cooperative’s aggregation facility deliver produce twice each week. The majority of members are within 50 miles of the facility. Two other farms serve as

“Having one or more conversations with individual farmers is important when developing the Commitment Plan.”

- General Manager, Tuscarora Organic Growers

collection centers for farms further away. They provide delivery services to the aggregation facility. Tuscarora Organic Growers Cooperative’s aggregation facility includes over 3,800 sq. ft. with partitions that can be set at 6 different temperatures. The facility also includes 1,800 sq. ft. to store dry goods.

Approximately half of the cooperative’s members market all of the produce they grow through the cooperative. Cooperative staff is in constant contact with farmers and buyers during the growing season. They contact farmers to see if they are on target to deliver the product specified in the Commitment Plan. Shortfalls of product can occur. The shortfall can occur because poor weather conditions reduced crop yields or buyers wish to purchase additional product. When a shortfall occurs, co-op staff first contact members whom they understand might fill this need. If the members cannot fill the need they will contact selected non-members who grow to the cooperative’s specifications to procure the needed product. At other times, farms may have a surplus product available above the Commitment Plan, which they offer to sell through the cooperative. Farmers cannot automatically deliver surplus product to the cooperative. They must contact the organization’s sales staff in advance to see if there is a market for the produce. The staff will work aggressively to find a buyer for the product and notify the farmer to deliver the product once they know it can be sold.

Customer demand for product during the early years of the cooperative exceeded supply. The organization sought to expand its membership base. Ten years following its organization supply and demand reached equilibrium and less emphasis was placed on recruiting new members. Presently the cooperative brings in 2 to 4 new members each year. Prior to acceptance the potential member must complete a Commitment Plan and grow product for one year to the specifications of the plan. The plan and subsequent performance will be reviewed by staff and the board of directors. If the potential member provides satisfactory performance based on the Commitment Plan, (s)he will be offered a membership to the cooperative. The average grower has 8 to 10 acres in production with smaller growers having 2 to 6 acres and the largest growers having 70 to 300 acres. Each member predicts that they will have small growth from year to year. The over-riding strategy of the cooperative is that a broad variety of product will be available over long periods of time. Small quantities of new products will be grown to meet the culinary innovations desired by the chefs and consumer demands through food cooperatives. More “new” product will be grown as increased demand is identified and the farmers gain experience in producing the crop.

When the product is delivered to Tuscarora Organic Growers, it is inspected for quality. Source identity is maintained for tracking purposes. Each case will include the name of the farm and the name of the certifying organization. The case is assigned a lot number that includes the date of harvest and date of delivery. Root crops lot numbers include the date it was packed at the farm (not harvested) and the day it was delivered.

Peak sales activity occurs during the harvest season. Farmers have adopted season extension technologies to expand the growing and harvest season. The cooperative has expanded its offerings to include grapes, mushrooms, and eggs from member farms. Outside of the growing season, Tuscarora Organic Growers Cooperative maintains its presence in the market place , by purchasing organic citrus fruit from organic growers located in Florida.

MARKETING

Individual farmers had established relationships with restaurant chefs and stores before the cooperative was organized. These chefs cared about organically grown food and wanted to buy from local farmers. This culture continues today. The cooperative encourages visits by potential customers to visit the cooperative and member farms and hosts annual farm tours. When trends indicate that new product may be desired or when customers express a desire for new products, Tuscarora Organic Growers Cooperative will contact members to learn if they are currently growing the product or if there is interest in growing the product. A small amount of product will be grown and offered to prospective buyers along with recipes using the product. The Tuscarora Organic Growers leadership team has noted that “the public is more curious in the foods they eat. They want to try new things.”

“We have a very aggressive staff on the phone to make sure product is sold and that product is delivered.” – General Manager, Tuscarora Organic Growers

Original market channels served by Tuscarora Organic Growers included restaurants and stores in the Baltimore-Washington, D.C. area. The cooperative continues to sell within these channels and sells to wholesalers and chain stores. The organization's market niche is small scale customers who would normally purchase product from a large distributor with an organic line. The cooperative does not sell pallet quantities for the most part. The scale of operations of Tuscarora Organic Growers is aligned and similar to the scale of business of their customers. The cooperative can be more attuned to meeting the expectations of the buyer. The cooperative's success is based on slow incremental growth with knowledge developed on small scale experience before growing to a large scale. Demand for locally-sourced products has increased along with the competition from businesses focused on meeting this demand. The cooperative's competitive advantage in the marketplace is based on its reputation to consistently provide high quality produce. Each case sold is labeled with the grower's name and the cooperative's label. When marketing produce, Tuscarora Organic Growers Cooperative does not differentiate the product of one farm from another nor does it segregate product from one farm to be delivered to a specific customer. The cooperative does not brand the grower's name intentionally.

Tuscarora Organic Growers Cooperative serves as a wholesale outlet to its members. On average, the cooperative pays approximately 40 percent of what the current retail price is for any

"Nothing is set in stone in the market place. We are now established and have the flexibility to move from market channel to another. Because of the quality of the product, it really sells itself."
- General Manager, Tuscarora Organic Growers

given product. Retail buyers account for 45 percent of the product sold and restaurants another 45 percent. Approximately 20 percent of the members purchase product from the cooperative accounting for 10 percent of gross sales. The culture of the organization is that if a product is

needed by a member and can be sourced from another member, the transaction will move through the cooperative, not circumvent the cooperative. Members will not compete against the cooperative for the same customer.

Approximately 50 percent of members market 100 percent of their product through the cooperative. The remaining members have established outlets for their product separate from the cooperative. Farmers are paid through pool pricing. Similar vegetables from each grower will be 'pooled' or commingled, marketed, and sold together. The members share of the pool proceeds is determined by the volume of product contributed and can be adjusted to reflect a premium or discount to account for quality differences. Each producer who participates in the pool is paid approximately 70 to 75 percent of the pooled price. The remaining 25 to 30 percent covers the costs of running the cooperative.

DISTRIBUTION

Cooperative staff schedules delivery and transportation of the product to the location desired by the buyer in the Baltimore-Washington, D.C. area. Six box trucks are available to move the product from the Hustontown aggregation facility to the Baltimore-Washington, D.C.

area. The cooperative does not own any trucks to transport product. From its inception, Tuscarora Organic Growers Cooperative President and Early Morning Farm owner, Jim Crawford provided trucks for the cooperative to transport produce on a contracted rate per mile. The cooperative hires the drivers and the driver's 'helper'. The number of customers has increased to a point where the truck fleet does not have the capacity to make the necessary deliveries in a timely manner. To overcome this barrier product moves on the box trucks to the Baltimore-Washington, D.C. area where it is off-loaded to 'jobbers' contracted by the cooperative to make the deliveries.

COOPERATIVE GOVERNANCE

Tuscarora Organic Growers Cooperative has 9 persons serve on the board of directors. Officers include President, Vice President, and Secretary/Treasurer. There are no standing committees and ad hoc committees are rarely formed. As membership increased the number of directors increased from 7 to 9 persons. The board trusts the staff to manage the cooperative and staff identifies needs of the cooperative to the board. The board of directors is an "important source for overall planning" and makes all of the major decisions.

"Farmers should farm. Managers should manage. When you decide to own assets, it's time for an organized business."
- Board Chairman, Tuscarora Organic Growers

There is a \$100 membership fee to join the cooperative. The purpose of the cooperative is to provide a wholesale market channel to its members at cost. Any profit realized by the cooperative is retained in allocated equity. There is no unallocated equity. Patronage has been returned to member 3 times since the inception of the cooperative. When it was returned it was through a qualified allocation.

Slow incremental growth has been the key to success of the cooperative. Changes are small and incremental, practiced and perfected before going to the necessary scale. A key question asked by the board of directors when making a decision is, "What is the simplest thing we can do to accomplish the goal?" Good management is important to success. The management team brings recommendations for change to the board. When members bring product to the aggregation facility they become aware of needed infrastructure and facilities changes. The board of directors will decide whether or not the cooperative should purchase an asset or contract for services.

Good management hired by the board of directors is important. Early on the cooperative recognized that they should hire staff to manage the cooperative. The observation of the early organizers was that 'managers should manage' so 'farmers can farm.' The cooperative has had 3 managers since its inception. The board of directors has found that the person serving as the general manager should be aligned with the vision and goals of the cooperative board. Cooperative staff need to be aggressive in selling the product to customers and assertive with members to meet the obligations of the Commitment Plan. The staff has developed a robust record keeping system that has enabled them to predict the supply and demand of produce during the growing season.

KEYS TO SUCCESS

Tuscarora Organic Growers Cooperative has between 10 to 15 percent growth each year since the original 3 growers decided to work together. Chris Fullerton was hired by the board of directors shortly after the cooperative was formed. He embraced the vision of the board and developed an implementation strategy to expand the number of members and buyers. There are several reasons for the success of the Tuscarora Organic Growers Cooperative. Minimal risk through slow incremental growth is key. The culture of the organization is to identify “the simplest thing you can do to accomplish the goal. Everything should be done on a small scale first to gain experience and if successful, then scale up.” A reputation of providing high quality product in the marketplace is critical and will make the business a preferred supplier and achieve higher price points. Aggregation, marketing and distribution are chaotic during the harvest season. Production coordination is critical. A Commitment Plan stating week that product will be expected for delivery along with the week that delivery will stop brings some order to the chaos. Good recordkeeping is important to build predictability. Hire staff and trust them to manage the day to day operations of the business. Recognize when it is time to hire additional staff and build a team with skills complementary to one another. Efficiencies within the system can be achieved by utilizing existing resources and expertise, in the case of contracting with a farmer with excess trucking capacity and trucking companies that can make timely deliveries in a specific sales area.

Case Study #3. Upstate New York Growers & Packers

Upstate New York Growers & Packers is a cooperative business located in Central New York State in Oriskany, NY, approximately 40 miles east of Syracuse. The cooperative was formed in 2004 as a mechanism to develop value-added products utilizing raw produce from member farms and to aggregate products to access large retail outlets. The cooperative is owned by 18 members who provide a variety of organic and conventionally grown vegetables and fruit during the growing season to wholesale and retail outlets. Other



products available from the cooperative include gourds, honey, and hops. The cooperative has value-added products available including bakery products, vegetable soup, fresh and Moon Brine pickles made from product grown by its members. The majority of produce is sold to local buyers within 300 miles of the Oriskany aggregation facility. All members have adopted minimum USDA food safety standards. Most members practice Harmonized Good Agricultural Practices and will move to Global Food Safety Initiative (GFSI) standards. The cooperative serves as a wholesale market channel for its members. Members are not required to sell all of the produce they grow through the cooperative.

BACKGROUND

Early organization efforts of a cooperative usually fall to one or two persons who will ‘champion’ the project to secure a membership base and organize the business. Originally UNYG&P was to be an organization for Oneida County farmers. As a result of a request made by a local farmer and county legislator, Cornell University Cooperative Extension, Oneida County secured grant funding through the NYS Department of Agriculture and Markets to form the cooperative. The cooperative was formally organized in 1 year. The 12 original producers were located within 20 to 30 miles of one another. The cooperative was formed to provide small- and mid-size farms the ability to achieve economies of scale in the marketplace to sell fresh fruits and vegetables and develop and sell branded cooperative products. The cooperative partnered with Nelson Farms, a value-added, food processing incubator to develop a vegetable soup and the Golden Butternut cookie from raw ingredients sourced from member farms. The cooperative also secured grant funding to develop a wash and packing line for green and yellow beans.



Figure 10. Upstate New York Growers and Packers logo.

Upstate New York Growers and Packers is a ‘farmer-owned, statewide marketing cooperative selling all grades of produce from all sizes of farms to all types of wholesale and retail buyers.’ The cooperative contracts with a local wholesaler, who serves as the general manager and is responsible for aggregation, marketing, and distribution of member produce. Membership has increased from 12 to 18 growers located from Albany, NY to Buffalo, NY within 50 miles of Interstate 90 (NYS Thruway). Member farms average between 50 and 500 acres. Some farms have increased in size to accommodate next generation family owners. Members have the capacity to expand production when they are confident that the cooperative can market the product at a price point that will provide an acceptable margin. In 2013 the cooperative shipped over 45,800 packages.

Most of the organization’s members are multi-generation farm businesses with standing buy-sell relationships with local buyers prior to the formation of the cooperative. The culture of the organization is that the cooperative will not compete against an individual member for the same account. The purpose of the cooperative is to serve as a wholesale market channel for its members, secure access to customers not currently served by members, build economies of scale to serve new customers, and develop value-added products sourced from member’s raw ingredients. The cooperative has had interest in and development of value-added products since its inception.

AGGREGATION

There is no formal supply or marketing contract between the member and the cooperative. Farmers receive a supply template in January-February of each year with the request to list the crops or products to be sold through the cooperative, approximate availability dates, crop/product capacity, crop/product package (amount and type) and the estimated

“Managing expectations of the farmer is critical to maintain the relationship between the cooperative and its members.”
-General Manager, Upstate New York Growers & Packers

wholesale asking price. Farmers return these forms in April. The forms are then tabulated to estimate what product will be available for delivery and when delivery can be expected. The actual product delivered may or may not be the same as the earlier estimate. Differences are

influenced by weather conditions that impact the quantity and quality of the product available and market prices. Members are not obligated to sell product through the cooperative if they can receive a higher price elsewhere. Ninety-five percent of the product handled by the cooperative is sourced from member farms. Most of these farms are within 40 to 60 miles of the aggregation facility with the furthest 220 miles away. Each grower is located in a micro-climate,



Figure 11. Packing equipment stored at George’s Farm Products, Inc. Oriskany, NY

which influences the growth and harvest of the produce. The micro-climates expand the season, level supply of product available, and reduce risks to the cooperative for crop loss from extreme weather events.

Product sold through the cooperative is sourced from current members, new members and non-members. “Managing expectations” of the farmer is critical to maintain the relationship between the cooperative and its members. Net price quotes are provided on a daily basis. Based on the supply template, management contacts growers and shares the expected price that day. The farmer then chooses whether (s)he will sell. When demand for product exceeds anticipated supply, management will consider which growers planned delivery of the product, which growers may have surplus available, which growers ‘need the business’, and the price point that the grower might be willing to accept. Upstate New York Growers & Packers is open to accepting new members. To be a member, a farmer should grow product lucrative to sell and, or product that will diversify the product line currently offered by the cooperative. A new member may have additional skills and experience (e.g. public relations, accounting, marketing) useful to the cooperative and should be enthusiastic about the cooperative business model. If member farms are unable to fill the demand, product will be sourced from non-member farms, many located within 100 miles of the Oriskany aggregation facility. Approximately 2 percent of the product is sourced from Ontario, Canada. Product is graded and packaged at the farm to industry standards. When it arrives at the aggregation facility it is inspected and when accepted is given a sticker with a lot number. Upstate New York Growers and Packers services two large retail accounts. Product for the large retail accounts is brought to the Oriskany aggregation center where it is repackaged to customer specifications. If members have surplus product available they have the option to sell the product through the cooperative. They contact the cooperative manager to receive a price quote and then make the decision to sell.

MARKETING

Primary customers of the cooperative are wholesalers, national retailers, and food banks. Demand inside each of these channels has broadened and the cooperative works to aggregate sufficient product to meet the demand. When members complete the supply templates in early

When entering a market channel or a new customer the board of directors asks, “What are the margins? How soon will we be paid? Can we get the desired price? Do we have the experience to grow the product? Can we do this well?” – President, Upstate New York Growers & Packers

April, they indicate the price range in which they are willing to sell. Product pricing is based on the supply and demand in the marketplace. Prices paid for product in the Northeast are mostly influenced by prices paid in New Jersey and Pennsylvania as product from those locations comes to market two to three weeks in advance of

produce in New York State. Prices are also influenced by product from the Ontario, Canada greenhouse industry. Management contacts the member and quotes a net price on a daily basis. The farmer then makes the decision to sell or not sell the product through the cooperative. A 10

percent fee is attached to the sale price of each package with half to pay the manager for marketing and handling the product and half returned to the cooperative.

Organized as a Sub Chapter T cooperative, the law allows the opportunity for members to talk openly about trends and prices they see in the industry from both production and market perspectives. The growers and cooperative management have access to price quotation services and trade magazines from which to base decisions on how they can achieve the best price in the marketplace. The board and management consider the price point, the margin on the product, time of payment, interest and experience in growing and handling the product, and the logistics in product delivery when making decisions to enter or exit a market channel or develop and maintain a relationship with a new or existing customer. Success is measured through year to year growth and appropriate margins. Ultimately the cooperative asks, “Can we do this well?”

Buyers’ expectations influence the actions of the cooperative and its individual members. Historically growers planted with the expectation of 10 to 15 percent product surplus, which may never have been harvested. The surplus was a hedge against a poor growing season. This ‘surplus’ may or may not have been desired by produce buyers. In some cases buyers made promises to purchase product before or during the planting season. Many times these promises did not come to fruition. Today, growing produce is expensive and farmers “no longer get excited about the retail promise that does not come to pass.” The cooperative has been successful in securing several larger accounts that now “absorb the surplus.” The mindset of the growers has changed. They continue to grow the “surplus” but grow it based on the needs and expectations of these larger buyers.

Upstate New York Growers and Packers has noticed and benefited from large retailers interested in tapping into the local food movement. The cooperative was approached by C. H. Robinson, a company that manages supply chains and coordinates and tracks shipments between clients such as Upstate NY Growers & Packers and client’s customers such as BJ’s Wholesale Clubs interested in acquiring locally sourced products. Produce is brought to the Oriskany aggregation facility where it is repacked into co-op branded packaging to the retailer’s specifications and then transported to the buyer’s warehouse. A grower whose product is repacked receives a pooled price. Similar fruits and vegetables from each grower will be ‘pooled’ or commingled, marketed, and sold together over a specified time. The members share of the pool proceeds is determined by the volume of product contributed and can be adjusted to reflect a premium or discount to account for quality differences. The members of the cooperative readily admit that as individuals they did not have the size and scale necessary to serve these accounts.

Growers in Upstate New York (outside of New York City) see tremendous opportunities to serve an increasing demand by New York City residents (Downstate) for locally grown products. GrowNYC , a non-profit wholesale operation, located in Long Island City, NY has engaged in several efforts to forge relationships between Upstate growers and Downstate consumers. GrowNYC opened the Wholesale Greenmarket on the Hunts Point Peninsula in 2013 and provides an opportunity for the members of Upstate NY Growers and Packers to

provide product to NYC buyers. Food cooperatives and cooperatives formed by restaurant owners interested in procuring locally grown products provide new marketing opportunities for Upstate New York Growers and Packers.

The cooperative developed value-added products which include the Golden Butternut Squash cookie and vegetable soup. The cookie includes squash, applesauce, and honey sourced from member farms. The applesauce is produced at a member farm and squash is pureed at a company located in the Hudson Valley. The cookie was developed to be used in school food service. The cookie's product content meets standards that allow the cookie to be classified as either a vegetable or a fruit. The recipe was perfected to reduce the number of food additives found in bakery products. One local school regularly purchases the cookie made by a bakery located in New York City. The cooperative introduced the cookie to a local grocery store chain. The chain chose not to stock the cookie. The cooperative faces two challenges. Neither the cookie nor the vegetable soup can be produced and sold at a price affordable to school food service. The investment in research and development of value-added products is high. The retail grocery store was interested in a product line rather than a single product. As a result sales of value-added products have been limited.

Slow incremental growth and matching the capacity of the cooperative with the needs of the buyer is important. Aggregating product for members builds sufficient quantity to fill niche markets of various buyers at a price point appropriate for the farmer, the buyer, and the cooperative.

DISTRIBUTION

Upstate New York Growers and Packers own no warehouse facilities or truck fleet. The overhead charged to each package delivered to the Oriskany aggregation center (owned by the cooperative manager) pays for the cost of handling the product, warehouse storage, and repacking when necessary. The manager makes phone calls to sell produce to buyers and buy produce from member-growers. Product is scheduled for delivery to the aggregation center and local trucking companies are contacted to secure a truck to deliver the product to the designated buyer. Most of the product from the member farms is delivered to the Oriskany aggregation center. In some cases farms further from the aggregation center may share a truck to make the delivery to the center. In other circumstances farms with the desired quality, quantity, and packing capacity located closer to the buyer than the aggregation center will deliver directly to the buyer. Transportation costs are minimized as cooperative product will be loaded on the truck with produce from the manager's wholesale business.

Distribution can impact product quality. For example, sweet corn was picked and delivered to the aggregation facility. It was repacked, sold and transported to the buyer's warehouse, put on another truck and returned to the retail outlet for sale located near the original grower. The quality of the sweet corn had visibly deteriorated. The grower was embarrassed and upset to see the product branded with the Upstate New York Growers and Packers logo in a local store. Logistic changes were made to allow the product to move directly from the

aggregation facility to nearby stores rather than pass through the buyer's warehouse. Product quality to the end user has improved.

COOPERATIVE GOVERNANCE

Upstate New York Growers and Packers has seven people who serve on their board of directors. The board officers include a President, Vice President, Secretary and Treasurer. There are no standing committees. Each member owns one share of stock valued at \$200. The cooperative is in its early stages of its life cycle. Sources of revenue for the cooperative include per unit retains of the product handled and grant funding. The board of directors has not paid any patronage refunds to the members nor has it revolved or expects to revolve any equity for the foreseeable future. One of the principle responsibilities of the board of directors is to hire a general manager for the cooperative. Several persons have served as general manager with most of the salary of the position paid through grant funds. The board of directors was dissatisfied with the performance of most of their general managers. They recognized that compensating a full time general manager through grant funding was not sustainable. They recognized that the cooperative needed a professional manager with expertise in food wholesaling, preferably produce marketing and distribution. As a result the cooperative contracted with a local fresh market wholesale distributor to aggregate product when required, repack the product when necessary, and manage distribution logistics. This has proven to be a good solution for the cooperative to access expertise and facilities.

"One can quickly become addicted to grants. There are consequences when the wrong people are hired and the board does not provide the necessary oversight." – President, Upstate New York Growers & Packers

One of the goals of Upstate New York Growers and Packers was to develop value-added products from ingredients sourced from the members. The members hold several assumptions concerning value-added products. One assumption is that a formalized business structure would secure outside funds for development of new products utilizing raw ingredients from member farms. A second assumption is that a formalized organization would have the capacity to quickly respond to opportunities that might present themselves. The cooperative was successful in

"There has been evolution but no revolution. We have sold to large retail buyers because of the co-op. Everyone has gotten some benefit from the co-op. It is slightly different for each member and their circumstances." – President, Upstate New York Growers & Packers

sourcing grant funds for green bean washing and packing infrastructure. Research and development to add value to a raw product can be costly and time consuming. Significant time can be invested before a new product and product lines are ready to market. Value-added products provide both challenges and

opportunities. The cookie and soup products are costly to manufacture. The product is only available in upscale markets. Upscale markets are interested in these products but prefer to carry a product line rather than a single product. A product line has not been developed.

The President noted that there has been “evolution but no revolution.” The members are not bound to sell all of their produce through the cooperative. Many of the members had long standing relations with local retail outlets prior to the formation of and membership to the cooperative. The culture of the membership is that the cooperative will not compete with the members’ sales accounts. This has forced the cooperative to seek out buyers further from the aggregation facility.

KEYS TO SUCCESS

Several reasons have led to the success of Upstate New York Growers & Packers to date. The supply template provides an estimated tabulation of the amount of product that will be available at a given price along with an indication of what the grower expects to be paid. Matching the capacity of the members to supply product with the demand of the buyers through slow incremental growth strengthens relationships between members and the cooperative and the cooperative and its customers. Aggregation of product from individual farmers cooperatively allows them to access larger buyers whom they could not have served individually. Good communication and price transparency is critical to “manage expectations” on the part of the farmers and buyers. Good communication strengthens relationships within each supply channel. Efficiencies within the system can be built by utilizing existing resources and expertise, in the case of hiring a local wholesaler to serve as the general manager to coordinate the aggregation and marketing efforts on behalf of the cooperative and to coordinate the logistics of distribution.

Case Study #4. Capital District Cooperative, Inc.

The Capital District Cooperative, commonly known as the Capital District Farmers Market in Menands is located in Eastern New York, just north of the City of Albany. The cooperative is owned by 130 members. Capital District Cooperative is an organization committed to providing a location where farmers can bring their products to sell directly to consumers, other farmers, and wholesalers through the Farmers' Market. The Farmers' Market includes a paved area and covered shed where farmers can display and sell products from their farm. The Farmers' Market also includes several wholesale distribution houses who rent their facilities from the cooperative. Farmers have the option to sell directly to the wholesalers. The cooperative does not take ownership of the product nor manage any of the sales between growers and their customers. Members are not required to sell all that they produce at the market. One of the key benefits of the cooperative is that farmers purchase product from one another and from wholesalers to augment produce offerings to their Community Supported Agriculture (CSA) customers and their own farm stands.



BACKGROUND

The Capital District Cooperative was officially organized in 1933 after 16 years of study. Farmers were the first to know the benefits of cooperating together. Members of the Albany County Farm Bureau first suggested a marketing organization be formed in 1916 and sought out the assistance of the Albany Market Gardeners' Cooperative Association in 1918. Being close to the State Capitol, other agencies support the formation of the cooperative including the New York State Department of Agriculture and Markets, Albany City Administration, Albany Chamber of Commerce and the New York State Agricultural College. Early organizers of the cooperative were determined to create a marketplace where a large quantity and wide variety of product grown by nearby farmers could be brought together and made available to stores, shops, restaurants, and food processors.



Figure 13. Capital District Cooperative logo on welcome sign.

“The market was a means to concentrate numerous sellers and buyers into one place to establish robust competition amongst sellers under free market conditions.” (Capital District website) The market provided a means for farmers to sell to peddlers, mom and pop neighborhood stores. Through time, farmers sold to small, local retail grocery store chains. Product was also sold to wholesalers who then transported the goods for resale in New York City.

Site location was critical to the success of the market. The market was located close to the Menands Bridge, which provided easy access for farmers on the east side of the Hudson River. It was also located near a railroad and a major highway connecting Albany to New York City. The market was also close to the Cities of Albany, Schenectady, and Troy, each with their own farm market. Once the Capital District Market was established the other three markets closed. As they closed, more farmers turned to the Capital District Cooperative to sell product through the market. When the cooperative was first formed, members lived within the nine surrounding counties, with an average of twenty miles from the market. Today members are located in the 15 counties surrounding the City of Albany with other members located in Vermont, Massachusetts, and Connecticut. The Capital District Cooperative continues to “provide a central and proper location for local Capital District agricultural producers to market their product.” (Mission statement) The cooperative contracts with a real estate management company to manage the physical facilities (open air market area, pole shed, wholesale houses, wine and spirits distributor, lumber yard, tractor trailer driving school)

AGGREGATION

The cooperative serves as an aggregation point for its members to come together to sell their produce. The cooperative holds a Wholesale Market three days each week from early May through the end of October for members to display and sell products to buyers in intermediary market channels, especially to the wholesalers located around the perimeter of the market. The Saturday Retail Market provides farmers an opportunity to sell produce at retail prices directly to consumers. The cooperative makes allowances for the “Dailies,” non-members with small quantities of product to sell who rent space on an as needed basis.

The cooperative contracts with each member to allocate space at the market from which product is sold. A lottery system is used as a means to determine which space a member will utilize for the coming growing season. Members have the flexibility to choose the quantity, quality, and types of product they bring to the market at any given time. Membership parallels trends in the farm sector. There are fewer members. The farms of many of the members have grown larger through time. Farm size will remain stable until farmers become confident of consumer trends that indicate opportunities to sell additional product. Farm operators have the capacity to scale up. New and beginning farmers sell at the market. Most sell as a “Daily” as they do not produce the quantity of product needed to supply a wholesale market.

MARKETING

The cooperative has a website and membership brochure to promote the business. Both the website and the membership brochure include the cooperative’s logo. Farmers are responsible for promoting and marketing their product to their respective buyers. The cooperative name is not on the packing materials. Grower preference and buyer preference determine if the farm or grower’s name will be associated with the product as it moves through the market channel.

DISTRIBUTION

The cooperative serves as a distribution hub for its members. Capital District Cooperative provides the physical site where wholesaler buyers and growers come together to buy and sell product. The site includes a paved area, covered shed, office, and buildings located around the perimeter of the paved area. The cooperative has hired a real estate management company to manage the facility. In 2014, eight wholesale buyers had offices and storage facilities at the market. Produce arrives on trucks owned, leased, or contracted by farmers and once sold is loaded onto the buyers trucks.



Figure 14. Covered sales area at Capital District Cooperative

COOPERATIVE GOVERNANCE

The Capital District Cooperative board of directors consists of 15 persons. Terms are staggered with five directors elected each year for a 3-year term. The President, Vice President, Secretary, and Treasurer serve as the cooperative's Executive committee. The Building and Maintenance Committee is the only standing committee. Other committees are formed on an as-needed-basis. In 2009 the members amended the bylaws to allow up to 2 'outside,' non-member directors to serve on the board. An outside director must have proven business experience. The board recognized that insights and perspectives of other people could be useful to the cooperative. This change resulted in many of the senior directors to not seek re-election. The board is now viewed as more progressive. Board decisions are timelier and board members are younger than their predecessors. A lottery is held at the cooperative's annual meeting to assign vendor stalls in the market for the coming year.

The cooperative has common and preferred stock. When a person chooses to join the cooperative (s)he completes an application and purchases a \$25 share of common stock. The new member will be on probation for one year before becoming a full member. The probation period is a means for the cooperative to evaluate if the new member can assimilate into the culture of the cooperative and be respectful to others at the market. The cooperative has preferred stock as well. Early on the preferred stock could be owned by anyone willing to pay the purchase price. Concerns were raised over the 'true' ownership of the cooperative. As a result when ownership of preferred stock changed, the cooperative purchased the stock back. Members have the option to purchase preferred stock. The board of directors has stipulated that a dividend should be paid on the preferred stock on an annual basis. The dividend has been as much as 6 percent. Net reserves have not been refunded to the members and no equity has been revolved. Income sources to the cooperative include stall rentals by members, rentals by the 'Dailies' and lease fees from the wholesale buying houses, lumber yard, and tractor-trailer

driving school. Much of the income is used for real property taxes, utility bills, facilities maintenance, and staff.

KEYS TO SUCCESS

The cooperative has been in business for over eighty years. The farm and food industry has changed significantly. Capital District is true to its mission of providing a place where buyers and sellers of product can come together to share information and transact business. The market is close to the Interstate, which allows wholesalers to put product on trucks for delivery throughout the Northeast and Mid-Atlantic states. The Board of Directors has made decisions to align the cooperative and management with the needs of its members. This alignment includes contracting a real estate management company to manage the facility rather than hiring a full time manager. The cooperative provides a mechanism for persons with smaller quantities of product to sell at the market on a daily basis. Participating in the market as a 'daily' allows the farmer to build skills in marketing his or her product and provides an occasion to for the cooperative to determine if the farm should be offered the opportunity to join the cooperative.

DISCUSSION AND FINDINGS

Food hubs are commercial businesses or non-profit organizations that coordinate the aggregation, marketing, and distribution of source-identified food. Vegetables and fruit account for a significant portion of the products sold through food hubs. *Findings of the 2013 National Food Hub Survey* indicate that 25 percent of food hubs focused on produce only. Of the remaining food hubs, which sell products other than fruits and vegetables, 68 percent of total sales were from produce (Fischer). The study also found that over 80 percent of food hubs offered aggregation, marketing, and distribution services and over half sold to wholesale and retail customers, and provided product storage. Less than one-third provided repacking and packaging services and less than 20 percent provide any value-added processing such as canning, cutting, freezing, etc. The case-studies used in this report are similar to food hubs in the aforementioned study.

Aggregation

Table 2 shows that the majority of product aggregated and sold through the four cooperatives is fresh and perishable vegetables.

Table 2. Product aggregated by percent of sales

Cooperative	Vegetables		Fruit		Other
	Fresh or perishable	Root	Soft	Tree	
Eden Valley Growers	95	5	0	0	0
Tuscarora Organic Growers	96	0	2	0	2 (eggs)
Upstate NY Growers & Packers	75	25	<1	0	0
Capital District Cooperative	50	10	5	15	20 (plants)

A limited amount of product is categorized as stored vegetables (root crops or winter squash). The Capital District Cooperative does not take ownership of the product sold at the market, nor does it track the product sold at the market by its members. A supplemental survey was developed and sent to all members to gain understanding of products sold at the market, market channels into which product was sold, volume of sales through the cooperative, distance to market, etc. Survey response was negligible. As a result, phone interviews were conducted with 15 members (approximately 10 percent of the membership). Fruits and vegetables are sold at the Capital District Market along with bedding and vegetable plants and hanging flower baskets.

Table 3. Cooperatives by number of members, size of farms and distance from aggregation facility.

Cooperative	Number of members	Size of farm		Distance to aggregation facility	
		Range (acres)	Average (acres)	Average (miles one way)	Furthest distance (miles one way)
Eden Valley Growers	10	10-400	200	Less than 3	10
Tuscarora Organic Growers	44	2-70	9	50	224
Upstate NY Growers and Packers	18	50-500	125	25	214
Capital District Cooperative	115	<1-700	30	30	95

Food hubs are a means for small- and mid-size farms to aggregate sufficient quantities of product to sell into intermediary market channels. The *2012 U. S. Census of Agriculture* indicates that over 80 percent of farms harvesting vegetables, potatoes, and melons for fresh market in the Northeast United States range from 0.1 acre to slightly less than 25 acres (by calculation, Table 38, U. S. Census of Agriculture, 2012). Table 3 indicates that many of the farmer members of the Tuscarora Organic Growers Cooperative are small scale as the average farm size is 8 to 10. It should be noted that Tuscarora Organic Growers, Upstate New York Growers and Packers, and Capital District Cooperative members are not required to sell all the produce grown through the cooperative. The cooperative serves as an additional wholesale market channel for its members. Thus, the amount of product sold through the cooperative may be a fraction of total farm production and total farm sales. The size of the farm does not depict the actual acreage of product that is grown and sold through the cooperative. Eden Valley Growers requires that all produce grown on their member farms must be sold through the cooperative. The majority of the members are small- and mid-scale producers. While the amount and product mix sold through the cooperative is a decision made by each farmer (with the exception of Eden Valley Growers), all cooperative board chairs and general managers were confident that when needed members could increase production to fill new marketing opportunities.

Most of the farmers are located within 25 miles of the aggregation facilities with the furthest members located over 200 miles from the facility (Table 3). Eden Valley Growers is a member of Upstate New York Growers and Packers Cooperative and furthest distance from the aggregation facility located in Oriskany, NY. Capper-Volstead protection allows cooperative

members to meet together to discuss prices in the marketplace. This is identified as an important benefit to members of Upstate New York Growers and Packers. Miles from the aggregation facility provides an indication of time spent delivering product to the aggregation facility. Average time spent delivering produce by Eden Valley Growers producers is between ten to twenty minutes while Tuscarora Organic Growers producers may travel on average of one hour to as much as ninety minutes, one-way. The location of aggregation facilities is dependent on the choices made by the farmer members who first organized the cooperative.

Findings of the 2013 National Food Hub Survey indicate that 48 percent of food hubs are located in metropolitan counties with more than 1 million residents and 17 percent of food hubs are located in counties with a population between 250,000 to 1 million persons. The report also “suggests that proximity to a highly populated area may be important for the financial success of food hubs.” (Fischer, et. al., 2013). Three of the four case studies are located in counties with a population of more than 250,000 persons. Tuscarora Organic Growers Cooperative is located within a county of less than 20,000 persons. When first organized, none of the cooperatives were located in a neighborhood that would be characterized as urban or in place with the shortest distance being between the aggregation facility and the buyers. Rather, the aggregation facilities were located in a place deemed convenient to the farms of the member-owners. One commonality among each of the case studies is that all are located near a major transportation corridor that provides easy access to farm members driving longer distances to deliver product to the aggregation facility and interstate access to buyers located in metropolitan areas.

Table 4. Percent of total product procured from members, distance delivered one-way

Product procured from members (distance one-way)	Eden Valley Growers	Tuscarora Organic Growers	Upstate NY Growers & Packers	Capital District Cooperative
< 100 miles	90-95	87	90	95
100 to 400 miles	0	1	5	0
>400 miles	0	0	0	0

Table 4 shows that approximately 90 percent or more of product aggregated by the case study cooperatives is from farms within 100 miles of the aggregation facility. Tuscarora Organic Growers requires all products to move through its facility for distribution. In select situations, growers located long distances from the facility will pool product at strategic locations for

delivery to the warehouse. The members of Upstate New York Growers and Packers are located along the 300-mile Interstate 90 corridor. Product will be brought to the aggregation facility in Oriskany, NY. In limited situations farmer-members are located closer to the buyer than the aggregating facility. The cooperative will coordinate the sale and time of delivery and the farmer will delivery direct to the buyer. A minority of members of the cooperative are located over 200 miles from the aggregation facility. Transportation costs to deliver product are very high compared to members who live closer. These long-distance members provide added benefit to the cooperative. They are located in micro-climates that extend the growing season and product available for sale by the cooperative. They may be located in areas conducive to growing produce not grown by farms closest to aggregation facilities that add to the product mix available from the cooperative.

Table 5. Percent of total product procured from non-members, distance delivered one-way

Product procured from non-members (distance one-way)	Eden Valley Growers	Tuscarora Organic Growers	Upstate NY Growers & Packers	Capital District Cooperative
< 100 miles	5-10	13	2	5
100 to 400 miles	0	1	5	0
>400 miles	0	0	0	0

Product is procured from non-members during periods of shortfalls or in times of excess demand that cannot be fulfilled by the members. Table 5 shows that less than 15 percent of produce is procured from non-member sources. Each of the cooperatives had established relationships with growers nearby. Non-members must grow and supply product equal to or exceeding the standards pre-identified by the cooperative. Cooperative leaders view sourcing product from selected non-members as a source of new members as these farmers have an understanding of the culture of the organization and grow to the specifications required by the cooperative. A cooperative may source product from non-members as a means to diversify the product mix and to maintain a presence in the marketplace outside of the regular growing season. For example, Tuscarora Organic Growers Cooperative will source organic citrus fruit from Florida and organic cranberries from Massachusetts

Two of the biggest challenges faced by food hub operators are balancing supply and demand and consistently delivering high quality product. Table 6 summarizes the responsibilities of the members when interacting with the cooperative. Three of the four cooperatives have pre-

season growing or commitment plans. The plans are not contractual but deemed ‘good faith efforts’ on the part of growers to grow and harvest the vegetables and deliver them at the designated time. Contractual arrangements were deemed ineffective as weather events can alter yields and planting and harvesting dates. Supplemental produce was purchased to cover shortfalls when members could not provide the required product. Eden Valley Growers requires all produce grown on member farms to be sold through the cooperative. From their inception, Tuscarora Organic Growers and Upstate New York Growers and Packers Cooperative have served as a wholesale market channel for their respective members. Members of Tuscarora Organic Growers and Upstate New York Growers and Packers have roadside stands and customers, separate from the cooperative.

Table 6. Cooperative protocols

Cooperative	Pre-season growing plan	Market agreement	Product from non-members	Pricing	Packing for shipment	Food safety protocols
Eden Valley Growers	Yes	100% of produce from members sold through cooperative	Yes	Pooled	At the farm	Harmonized GAP required
Tuscarora Organic Growers	Yes	No	Yes	Pooled	At the farm	National Organic Standards and co-op’s guidebook protocols
Upstate NY Growers & Packers	Yes	No	Yes	Pooled and other*	At the farm and at the facility	GAP and member preference**
Capital District	No	No	Yes	Does not take ownership	At the farm	GAP and member preference**

*Product that is repacked at facility is pooled. Growers disclose preferred prices to receive as part of the pre-season growing plan.

**Cooperative does not require Good Agricultural Practices (GAP) certification. Some growers are GAP certified and others choose not to be certified.

Each cooperative approaches product quality in different ways to achieve similar results. Eden Valley Growers requires members and non-members to comply with Harmonized Good Agricultural Practices (GAP) protocols. More importantly than the GAPs protocols is the culture of the cooperative and the training of quality standards instilled by one generation to the next

generation-member. Tuscarora Organic Growers requires members and non-members to meet National Organic Standards. More important is the member commitment and responsibility to produce to quality standards set out in the cooperative's guidebook protocols. Tuscarora Organic Growers customers have not suggested that produce be GAPs certified. Food safety protocols and GAPs certification are at the discretion of the individual members of Upstate New York Growers and Packers and Capital District Cooperative. Many of the larger farm members are GAPs certified to meet requirements of customers they serve beyond the cooperative. Regardless of the certification, the produce delivered to the loading dock will meet USDA specifications for quality, grade, and pack. All packing is done at member farms of Eden Valley Growers and Tuscarora Organic Growers and Upstate New York Growers and Packers. For some larger, specialty orders, Upstate New York Growers and Packers product will be repacked to buyer specifications at the Oriskany aggregation facility. Washing, sorting, and packing are done by Capital District members on their respective farms. Packing may be done to industry standards or may be done in accordance with pre-arranged preferences on the part of the buyer.

Cooperative employees are constantly on the phone during harvest to coordinate the sale and delivery of product to the buyer and procurement and delivery of the product to the aggregation facility. The delivery is inspected by employees to insure quality standards before it is assigned a tracking number and moved into the cooler or refrigerated storage space. Product not meeting standards is refused and returned to the farmer for repacking. Product standards are usually met because the farmers understand the need for quality. They also recognize the cost and inconvenience of repacking produce rejected at the dock.

Marketing

All four cooperatives are a wholesale market channel selling at wholesale prices. Members receive wholesale prices minus a handling fee to cover operations costs of the cooperative. Between 50 and 90 percent of the members of all 4 cooperatives sold less than \$100,000 of product through their respective cooperative with almost two-thirds selling less than \$50,000 (Table 7). Half to two-thirds of the members had sales of less than \$50,000.

Table 7. Distribution of percent of members based on sales of product through the cooperative

Cooperative	<\$50,000	\$50 to \$100,000	\$100,001 to \$250,000	\$250,001 to \$500,000	>\$500,000	Cooperative Income
Eden Valley Growers	40	10	10	0	40	\$6.6 million
Tuscarora Organic Growers	68	24	6	2	0	\$3.3 million
Upstate NY Growers & Packers	50	30	15	5	0	\$1.3 million
Capital District Cooperative	64	14	14	7	0	\$850,000 rental income

All produce grown on Eden Valley Growers members' farms is marketed through the cooperative. Tuscarora Organic Growers' and Upstate New York Growers and Packers' members must honor the pre-season commitment plan. Once the plan is met, the members can and do market and sell to other buyers. Members who choose to ignore the pre-season commitment plan will lose standing in the cooperative. Culturally, Tuscarora Organic Growers and Upstate New York Growers and Packers have an unwritten policy that the cooperative will not compete against its members for customers already served by members prior to joining the cooperative and the member will not compete against the cooperative for a customer served by the cooperative. For Upstate New York Growers and Packers this has meant securing buyers along the Eastern seaboard. Capital District Cooperative allows members choices in the type and volume of product they will sell at the cooperative facilities. The cooperative provides a site for farmers to bring produce to market. Produce will be purchased by buyers to be resold at retail prices.

Table 8. Market channels served

Market channel	Description	Eden Valley Growers	Tuscarora Organic Growers	Upstate NY Growers and Packers
Distributor/wholesaler	Product purchased by buyer for resale	Secondary (35)*	Secondary (11)	≤ 5%
Institution	To institutions (schools, hospitals, prisons)	≤ 5%	≤ 5%	0
Restaurant	Direct to restaurants	0	Primary (28)	0
Processor	For further manufactured products	Tertiary (10)	≤ 5%	≤ 5%
Grocery stores	Direct to grocery stores, mid-to large-retail chains	Primary (50)	Primary (33)	Primary (95)
Specialty stores, CSA, clubs, catering	Direct to gourmet, natural, health, other	0	Secondary (13)	0
Food bank	Emergency food aid, assistance	0	0	≤ 5%
Direct	Cooperative store or off the dock, member-to-member	0	Tertiary (9)	0

*Percent of total sales in () derived from market channel

Each cooperative was asked to estimate the amount of produce sold through various market channels. Table 8 summarizes the primary, secondary, and tertiary market channels served by three of the cooperatives. Capital District Cooperative does not take ownership of the product. Conversations with a select group of members indicated that farmers participate in a variety of market channels and no strong conclusions can be drawn as to the preponderance of product sales in one channel versus another. Sales to grocery stores and to wholesale food buyers and distributors are important market channels of each of the three cooperatives, with the cooperatives serving customers in New York State and along the Atlantic seaboard. The cooperatives sell little to no produce to institutions such as hospitals, colleges, schools, or prisons. Institutions require contracts and have a bidding process. Pre-season growing plans are more fluid and by default recognize the influence of weather which makes it difficult for the organizations to meet the expectations of institutions. The size and scale of Eden Valley Growers and Upstate New York Growers and Packers prevents them from serving individual restaurants. Few sales were made to food banks, organizations, or non-profits serving persons challenged by food security issues. Food banks could be an opportunity for these cooperatives and food hubs in the future as many food banks will purchase product at wholesale market rates.

Each cooperative has demonstrated success in the market channel in which they were originally formed to serve. Half of the Eden Valley Growers sales are to retail grocery store chains headquartered in Western New York with another third sold to wholesalers for resale. A small proportion is sold for further processing with the remainder to institutions. Tuscarora Organic Growers has been particularly effective in selling into a variety of channels. The cooperative was an early innovator in providing high-quality, organic produce to a variety of customers. The cooperative has increased volume of produce to meet the increasing needs of its clientele and has worked to perfect packaging desired by customers. The success of the organization can also be attributed to a highly motivated sales staff driven by the belief that their efforts in selling the produce are critical to the success of the farm members. Restaurant trade is particularly important to Tuscarora Organic Growers. The cooperative was originally formed to meet the needs of chefs and customers attending farmers markets in the Baltimore, Washington, D.C. area. Almost one-third of the sales is through restaurants. Many consumers prefer organically grown produce. Grocery stores are motivated provide convenience to their customers by offering organic produce at their stores. Another third of the sales is to grocery stores. Approximately 10 percent is sold to wholesalers for resale and a similar amount is sold to Community Supported Agriculture (CSA) farms, buying clubs, and caterers. One of the similarities between Tuscarora Organic Growers and the Capital District Cooperative is that farmers will buy from other farmers to diversify product for sale or supplement the quantities available at farm stands, roadside markets, farmers markets, or other customers. Upstate New York Growers and Packers sells the vast majority of product to large retail, national-branded customers. In spite of their size, national brands recognize customer preference for locally grown produce. This customer preference forged the relationship between the cooperative and nationally-branded stores.

One of the marketing mechanisms for local foods is to build relationships between local farmers and the buyers of their products. Good relationships between buyers and suppliers were identified as critical to the success of cooperatives participating in the study. Most buyers will not contract for purchase in advance. Timely communication, trust and respect are critical to build and maintain relationships. Several of the cooperative leaders indicated that, “There are no secrets in the produce business.” An experienced, well-trained sales staff is important to the success of a food hub enterprise. The sales manager of Eden Valley Growers had worked as a produce buyer for a retail grocery store chain. He had established relationships with buyers and understood the perspective of the buyer as he sold product on behalf of the cooperative. Upstate New York Growers and Packers contracted with a local vegetable wholesale distributor to serve as their general manager and distributor to sell product on behalf of the cooperative. Tuscarora Organic Growers had a seasoned sales staff that understood buyers’ needs and expectations.

Collecting information from and about the buyer and examining trends in the industry is important. This is accomplished in several ways. Cooperatives examine the historical procurement patterns of individual buyers through spreadsheets that they have developed. Sales people talk to the buyers to measure satisfaction in purchasing product from the cooperative and when necessary take corrective actions to solve the problems. Buyers provide feedback to the cooperative in the purchasing behaviors of their customers, which is shared to growers via the cooperative’s staff. Farm members will then adjust the type and quantity of produce to be grown in the following year. Each entity inside the supply chain is monitoring and assessing upstream and downstream business trends to project the impact and assess the opportunities for their own businesses. Managers mentioned that historically, little time is spent attending or exhibiting at industry tradeshows. Cooperative leaders are coming to the realization that there is a need to attend select tradeshows to access and build relationships with larger buyers.

Table 9. Product branding and promotion

Cooperative	Cooperative brand retained	Farm brand retained	Cooperative website features members	Special events for buyers and customers
Eden Valley Growers	At discretion of the buyer	At discretion of the buyer	Yes	No
Tuscarora Organic Growers	At discretion of the buyer	No	Yes	Yes
Upstate NY Growers & Packers	At discretion of the buyer	No	Yes	No
Capital District Cooperative	No	At discretion of the buyer	Yes	No

Branding is one mechanism to differentiate a company and the goods and services it provides from its competition. Table 9 summarizes the cooperatives efforts in branding and promotion. The Capital District Cooperative does not brand the cooperative as its purpose is a site for growers to come together to sell product for resale. Individual farmers at the Capital District Cooperative have built long term, multi-generational relationships with their customers to become “the farmer of choice.” The cooperative is an intermediary between the farmer and the buyer who may or may not sell to the end user. As product is pooled and sold by the cooperative, the cooperative’s brand becomes the mechanism to distinguish the merchandise in the marketplace. The retailer will determine how the product will be marketed through sale flyers and in-store promotions. The retailer will determine the packaging required and the point of sale promotion materials. The cooperative’s brand can featured to raise awareness of the

source of the product. The retailer may prefer to feature individual farmer-members in point of sale promotions. Eden Valley Growers provides produce to two competing grocery store chains. Both chains promoted their efforts to source local product. One chain chose to feature the cooperative as the source of the product. The other chain chose to feature the individual farmers as members of the cooperative at point of purchase. The websites of the case studies provide a vehicle for cooperatives and their members to “share their story” of who grows the product, how it is grown, and where it is grown. Tuscarora Organic Growers will host special events for customers and is open to customers visiting their facilities. Eden Valley Grower members will meet with buyers of retail chains to learn about the buyers’ needs, expectations and consumer trends.

The sales price is influenced by numerous factors. Location is one reason. Fruit and vegetables come to market earlier in the Southeast than the Northeastern United States. Upstate New York Growers and Packers mentioned that prices in New Jersey and Pennsylvania influence prices paid in New York State and along the Eastern Seaboard. Upstate New York Growers and Packers and Eden Valley Growers mentioned competition of hydroponically grown produce sourced from Canada. Weather variability also impacts supply. Two examples cited were the glut of product from favorable early season growing conditions in the Northeast coinciding with a normal growing season in the Southeast. Cold, wet weather reduces the window of time for planting, resulting in significant amounts of product ready for harvest and for sale at the same time late in the season.

Whether a surplus or deficit of produce of during the harvest season, communication is important to maintain and possibly strengthen seller-buyer relationships. The cooperative is in contact with its members to understand if the crop harvest will align with the Pre-season Commitment Plan. The sales force contacts the buyers to determine the quantity, the price, and the delivery schedule of the product. When Eden Valley Growers expect an excess of available produce, the salesforce is notified and a buyer may be offered a “deal” as a means to move the product at a discounted price. This transaction may or may not result in the produce being “on sale” in the grocery store. When Eden Valley Growers and Upstate New York Growers and Packers are heavy with produce, they are forced to find buyers at distances further from their respective market areas. One “local” alternative to cooperatives and large scale growers is the Hunts Point Market in New York City. Low crop yields may prevent the cooperative from making delivery of produce desired by the buyer. This is not necessarily viewed as a failure, as many times a disease or weather condition may have decimated the crop. Some cooperatives prefer to “share the pain” equally with all customers. Others may provide limited produce to preferred customers. It is important that the buyer be notified in a timely manner about the product shortfall. Trust and respect are maintained as sufficient notice is given to the buyer to allow the buyer to source product from another source, consider substitutions, redesign

promotion campaigns or simply place a sign in the produce aisle stating why a particular product is not available. Cooperatives in the case studies have become “suppliers of choice” because they deliver at the specified time the quality and quantity of produce preferred by the buyer at a price reasonable to both parties of the transaction.

Distribution

Aggregation facilities and transport mechanisms to move product from the cooperative to the buyer are diverse. This diversity stems from the evolution of the cooperative, the capital available for investment in buildings and equipment, the infrastructure necessary to maintain the product quality, and the capacity to deliver the produce at a time preferred by the buyer. Each of the case studies accomplishes these tasks in a different way. Table 10 summarizes the facilities and ownership of infrastructure used to aggregate and store produce.

Table 10. Facilities resources

Cooperative	Facilities			
	Ownership	Description*	Office*	Other*
Eden Valley Growers	Owned by cooperative	15,875	1,035	7,200 dry storage
Tuscarora Organic Producers	Owned by cooperative	3,857	1,500 to 1,800	1,000 dry storage
Upstate NY Growers & Packers	Contractual arrangement w/co-op manager	3,100 permanent 400 seasonal	1,000 shared w/co-op manager	1,500 packing area
Capital District Cooperative	Owned by cooperative	25 acres	1,500	a) Open market area – 75,000 b) Covered shed – 25,000 c) 8 buildings for food, beverage or spirit wholesalers – 48,000 d) Leased space, non-food businesses – 66,000

*square feet

Eden Valley Growers Cooperative has invested in various cooling systems that preserve the quality of the produce as the storage facilities and warehouse space has increased to reflect the increase in produce handled. Tuscarora Organic Growers Cooperative has increased the size of the warehouse and has segregated areas in which the temperature can be adjusted to maintain the quality of produce stored at a particular time. Refrigerated storage capacity has grown as the growers have increased product sold through the cooperative to meet the increased demand of

the buyers. Upstate New York Growers and Packers does not own any cooler space. The cooperative’s general manager is also a wholesale food distributor. The cooperative utilizes the refrigeration space owned by the General Manager and space for repacking when necessary. The Capital District Cooperative functions as a wholesale farmers market. The property the organization owns includes a large, paved, open-air area and pole shed. A lottery is held at the cooperative’s annual meeting. Vendor stalls for the upcoming growing season are assigned based on the draw. The Capital District Cooperative leases space to wholesale produce houses located on the perimeter of the property. These wholesalers sporadically purchase produce from the growers who come to the market to sell.

The truck fleet used to deliver produce from the cooperatives to their buyers is mixed in size and ownership. Table 11 summarizes the transportation resources and ownership of infrastructure used to deliver produce.

Table 11. Transportation resources

Cooperative	Transportation	
	Owned	Contractual
Eden Valley Growers	4 box trucks 4-5 tractor trailers 2 pick-up trucks	For long haul
Tuscarora Organic Growers	6 box trucks contracted through Early Morning Farm	Outside jobbers for delivery in Washington, DC area
Upstate New York Growers & Packers	No vehicles owned	Arranged through co-op manager
Capital District Cooperative	Transport vehicles not required as cooperative does not take ownership of product sold at facility	

Eden Valley Growers is the only cooperative to own trucks outright. The fleet includes 4 box trucks and 4 tractor trailers to make deliveries. Occasionally produce is sold to buyers more than 400 miles from the aggregation facility. The cooperative staff has a list of local, over-the-road drivers with the flexibility and willingness to long-haul produce to distant buyers. Tuscarora Organic Growers do not own delivery trucks. The cooperative’s aggregation facility is located at the farm of the cooperative’s President. Since its inception, Tuscarora Organic Growers has contracted with Early Morning Farms to provide delivery service. At various times, the trucks cannot make deliveries in a timely manner to the numerous stops in the Baltimore/Washington, D. C. area. During these peak times, the cooperative will contract with local “jobbers.” Produce from the Early Morning Farm trucks is transferred to the truck of the “jobber” who subsequently

makes the deliveries. Upstate New York Growers and Packers does not own any trucks. All delivery logistics are handled by the General Manager who utilizes local trucking firms to make short- and long haul deliveries. The Capital District Cooperative takes no ownership of the produce. Transportation is at the discretion of the farmer and buyer.

Cooperative leaders indicated that transportation costs are one of the largest expenses incurred by the business. The margin on the type of products sold is impacted by the cost of trucking. The percent of transportation costs on high-value produce is less than the percent of transportation costs on low-value produce. Eden Valley Growers charges additional fees against the pool price when produce is long-hauled. Efficiencies are built into the system when trucks are fully loaded when leaving the aggregation facility. Eden Valley Growers and Tuscarora Organic Growers do not back-haul. This allows the trucks to return in a timely manner for reloading and eliminates phyto-sanitary issues. Upstate New York Growers and Packers rely on local trucking companies to make deliveries. The onus is on the freight company to decide whether they will back-haul freight. The trucking industry is complex. New trucks are expensive to purchase and are an asset that depreciates in value rather than appreciating in value. Manufacturers incorporate new technology to design trucks to be more fuel efficient. This technology adds to the purchase price of a new truck. Some buyers are interested in food miles and reducing the green footprint. Transportation regulations change and must be adhered to which has increased costs.

Human Resources

Interviews with General Managers or senior-level staff and ancillary conversations with other staff members demonstrated their dedication to doing their jobs well. They were committed to farm members receiving the benefits of the cooperative business. Cooperative employees were very versatile and able to perform additional tasks beyond their core responsibilities when necessary. At any given time during the harvest season a person might be responsible for contacting a farmer about delivery, on the loading dock receiving and inspecting produce, or maneuvering the forklift to move produce on or off a truck, into or out of the cooler. The sales force needed to be aggressive. They need to understand and evaluate changing market conditions as they negotiate prices. They need to know the subtle nuances of the buyers to provide the desired product. Persons working with the farmers need to be assertive and hold the growers accountable to the Pre-season Commitment Plan while recognizing the weather conditions that will impact the time and quantity of produce delivered.

Table 12. Staffing

Cooperative	Aggregation	Marketing	Distribution	Management /Support	Staffing Notes
Eden Valley Growers	2 managers	1 manager	4 on the dock 8 drivers	2 managers 2 support staff	Mangers wear multiple hats depending on need
Tuscarora Organic Growers	1 FTE*	1 FTE	6 on the dock 4 drivers 2-3 'driver helpers'	1 manager	Distribution staff seasonal
Upstate NY Growers & Packers	0.1 FTE	0	0	0.1 FTE	Contract with wholesaler to manage cooperative; 25 people work at the height of the growing season to repack tomatoes, provide warehouse functions
Capital District Cooperative	0	0	0	1 Office manager 1 Facilities/maintenance 0.25 FTE Facilities manager	Contracts with real estate management company to manage property

*FTE is Full Time Equivalent

Staffing patterns are diverse and reflect the needs of the individual cooperatives. The cooperatives had both full time and seasonal employees. Table 12 shows the individual staffing patterns of each of the case studies. Staffing patterns need to be aligned with the goals of the cooperative. Each cooperative had management staff and the managers with experience in the industry. Managers tended to have responsibilities year round for the organization in spite of the seasonal nature of the business. During the off season managers would examine trends in the industry, review the past growing season with current buyers and growers, contact future buyers, and negotiate pre-season commitment plans with growers. Eden Valley Growers and Tuscarora Organic Growers hire additional labor in the harvest season to receive and load produce and truck the produce to buyers. Upstate New York Growers and Packers contract for a portion of the local produce distributor to manage the cooperative and rely on his expertise to hire labor as needed for repacking and securing the necessary truck for delivery. Through insights provided by an outside board member, Capital District Cooperative concluded that they needed someone to manage the property as their core business is to provide a site for the buying and selling of

produce. They contract with a local real estate management company to provide the service and have other staff to maintain the property and manage the office.

Good management is key to the success of cooperative ventures. Eden Valley Growers has secured top level management in two ways. The cooperative has benefited from top level management through internal promotions. More recently they have hired a marketing manager with industry experience. Management of the remaining cooperatives has been mixed. Early on Tuscarora Organic Growers concluded that there was a need for more active oversight of management before the board of directors hired a person who shared similar values of the cooperative, was goal oriented to make sure the cooperative grew, provided the necessary services valued by members, and built a team environment with staff to accomplish the objectives of the cooperative. The manager chose to leave the cooperative and new management was hired who had different methods and vision to grow the cooperative. This led to conflict with staff and with the board of directors. The cooperative conducted a successful search for a new manager. Values and goals between the board of directors, management, and staff were realigned and culture was re-established. Sales of the cooperative continue to grow each year and additional investment has been made in the facilities. Several people filled the role of full time manager of the Upstate New York Growers and Packers Cooperative with salaries paid mostly through grant funding. The board's perspective indicates that managers were not meeting the goals of the board of directors. As a result, they hired a wholesale vegetable distributor to manage the cooperative via a part time, contractual basis. Capital District Cooperative had a full time manager. Membership and participation by members in the cooperative had declined through time. The cooperative's largest asset is its facilities where members bring produce to sell. The board of directors determined that at present the focus of staff should be on maintaining the facility. A real estate management company was hired to provide the oversight of the facility. Cooperative staff provides routine maintenance and staff the cooperative's office. The Capital District Cooperative President serves as the General Manager.

COOPERATIVE ENTERPRISE

A cooperative-structured food hub is appropriate when a group of farmers determine that by working together they can achieve economies of scale to successfully access intermediary marketing channels by collectively aggregating, marketing, and distributing products sourced from their farms. When capital resources of one farm business are not sufficient to achieve a desired outcome, cooperatives provide a mechanism for farmers to pool capital to hire professional sales and marketing management, gain access to refrigerated warehouse facilities, transportation resources, and services based on the needs of the members at lower cost per unit than would be achieved independently. The capital expenditures to expand a refrigerated warehouse or purchase an additional delivery truck to transport product can be prohibitively high

and risky for an individual farmer. These same investments shared by a group of farmers reduce the risks to each farm and provide access to needed services. Farmers can become cooperative member-owners by purchasing one share of common stock, usually priced at a nominal value. Member-owners elect a board of directors from their peers. These directors represent the interests of the members at board meetings. Cooperative-structured food hubs need to be competitive in the supply channels in which they operate and profitable. An additional benefit to the food hub member-owners is that the board of directors has the discretion to return a portion of the cooperative's net returns to each member in proportion of use of the cooperative.

CONCLUSION

Food hubs are mechanisms by which small- and medium-sized farmers can collectively aggregate, market and distribute product from farms to meet demand for local foods in retail, wholesale and institutional market channels. The focus of the study was to examine best practices utilized by cooperative food hub businesses as they aggregate, market and distribute produce on behalf of their members. Interviews of four cooperative general managers and presidents were conducted to identify practices that will lead to the success of food hubs, regardless of business structure, as they aggregate, market, and distribute products from small- and medium- size farms. The following best practices were identified.

Aggregation

- A pre-season growing plan is useful to anticipate deliveries of product. It will be a useful tool to gauge when product is available for sale and project the quantity of the product is available.
- It is important to have a reliable and known source of product to supplement shortfalls of the traditional suppliers of the food hub.
- Product should be washed, sorted, graded, and packed at the farm to pre-defined standards.
- Customers may not require verification or industry-standard food safety protocols. Customers should be monitored as food safety expectations may change. Regardless of customer's expectations of food safety standards, product should be handled in a safe manner to reduce the potential for contamination or rejection by the buyer. Safe handling practices reduce the potential liability of the food hub. Product should be assigned a tracking number.
- Growing product is costly. Customers will desire new products. Use caution when deciding how much new product should be grown. Contact growers who may have had prior experience in growing the 'new' product to determine interest.
- Staff need to be assertive and hold producers accountable to deliver the quantity and quality of product at the desired time.

Marketing

- Relationships with buyers are critical. Exceed buyer's expectations in quality and service. Constantly ask, "Can we do this well?"
- Pulse buyers in the off-season to gain insight into expectations for product quantities in the upcoming growing season and to learn of consumer trends.
- Provide proper notification to the buyer when the desired product and quantity will not be available.
- Know that most buyers will not contract with their suppliers.
- When cultivating new buyers, make sure that the food hub and its suppliers are aligned with the capacity to provide the desired product at the specified time.
- Staff need to be aggressive in selling product. Staff need the ability to 'make deals' when necessary to sell product.
- The food hub is not obligated to take excess produce from growers unless a buyer and price have been identified prior to taking delivery.

Distribution

- Constantly evaluate the cost of moving product.
- Product requires delivery in a timely manner to maintain quality and buyer satisfaction. The flexibility to use supplemental resources such as 'jobbers' or independent truckers are two methods to meet that goal.
- Facilities should be aligned with the needs of the food hub. There is no 'one size fits all.' Expansion and investment should be slow and incremental.
- Cooling and refrigeration should reflect the needs of the product to maintain quality and extend shelf life.

Strong and positive relationships between people, be it the farmer-growers and the food hub, food hub management and staff, or the food hub and its buyers are critical to the success of the business. Food hub businesses need to balance the amount of product they procure and the amount of product they can sell in a timely manner. It is important to be aware of trends external to the business in order that the business finds opportunities to continue expansion. Transportation of produce was mentioned as one of the largest expenses of each cooperative. More research is necessary to understand the costs of transportation and to determine where aggregation facilities should be located. Food hubs are successful when they secure the needed high-quality product at the desired time, pay farmers market price in a timely manner, properly compensate employees, provide produce at a price point attractive for resale, deliver product at the time preferred by the buyer, and secure sufficient profits for returns on investment and adequate capital for reinvestment.

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Appendix A. General Information Survey



Cornell University
Charles H. Dyson School of
Applied Economics and Management

**Cooperative Marketing Solutions
to Meet Local Food Channel Demands**

**GENERAL INFORMATION
SURVEY**

A research project conducted by Cornell University, Charles H. Dyson School of Applied Economics and Management and funded through the USDA Federal State Marketing Improvement Program in collaboration with the Cooperative Development Institute and Keystone Cooperative Development Center.

The purpose of the project is to utilize the experiences of cooperative-structured businesses with small and medium scale member-producers in aggregating, marketing, and distributing source-identified products into existing and emerging market channels to identify best management practices useful to emerging food hubs. The best management practices of these successful cooperative businesses will be shared through project reports, educational meetings for cooperative leaders and food hub managers, and web-based training materials.

Permission is requested to record interviews. Participating cooperatives are invited to review and comment on the project reports prior to publication. If you have additional questions, contact:

Roberta Severson, Cornell University, 234 Warren Hall, Ithaca, NY 14853; phone: 607/255-1987; email: rmh27@cornell.edu

GENERAL INFORMATION:

Name of the cooperative:

Address of the cooperative:

Person supplying following information:

Contact information: Phone number _____ Email

1. Cooperative history:

A. When was the cooperative organized? _____

- B. How many members did the cooperative have when it was first organized? _____
 - C. What was the geographical location of the members when the cooperative started?
 - D. What was the approximate average distance between the cooperative aggregation facility and the majority of the members when the cooperative was first formed?
 - E. How far away was the furthest member from the cooperative aggregation facility when the cooperative was formed?
2. Current status:
- A. What is the geographical location of the members today?
 - B. What is the approximate average distance between the cooperative aggregation facility and the majority of the members today?
 - C. How far away is the furthest member from the cooperative aggregation facility?
3. Do members sign a supply or marketing agreement? (Circle YES or NO)
- A. If YES, please share a copy of the agreement.
 - B. Does the cooperative source product from non-members? Why or why not?
 - C. If your cooperative sources product from non-members, what is the geographical area from which that product is sourced?
 - D. Based on total product sales in any given year, on average, what percent of product is sourced from non-members?
4. A. Are all products aggregated in a central location? (Circle YES or NO)
- B. If NO, please explain how product is aggregated.
5. Please estimate the distribution of members based on sales of product.

Value of sales to the cooperative	Percent of members
Less than \$50,000	
\$50, 000 to \$100,000	
\$100,001 to \$250,000	
\$250,001 to \$500,000	
Greater than \$500,000	
TOTAL	100%

6. What are the current physical assets (office space, warehouse, packing shed, etc.) of the cooperative?

Number of physical locations	
Total office space (sq. ft.)	
Refrigerated warehouse space (sq. ft.)	
Freezer warehouse space (sq. ft.)	
Packing shed (sq. ft.)	
"Other" space (sq. ft.)	Describe use:
Motor fleet (number of>>>)	Tractor Trailers: Box Trucks: Pick Up Trucks: Cars:

7. How many employees (classified by primary job responsibilities) are currently on the payroll?

Primary Job Responsibility	Number of employees (FTEs)
Product Aggregation (including limited processing and packing)	
Product Marketing	
Distribution	
Management/support staff	
Total employees (FTEs)	

8. Please share the percent of total sales of the cooperative to each of the following market channels?

SALES DATA:

MARKET CHANNEL	DESCRIPTION	PERCENT OF SALES
DISTRIBUTOR/WHOLESALE	Purchase product for resale	
FOOD SERVICE	Resale to institution (schools, hospitals, prisons)	
RESTAURANTS	Direct to restaurants	
PROCESSOR	Further manufactured products	
GROCERY STORES	Direct to grocery stores	
SPECIALTY PRODUCTS	Direct to gourmet, natural, health stores	
FOOD BANKS	Emergency food aid, assistance	
DIRECT	Cooperative store or off the dock	
TOTAL		100%

9. Based on the products aggregated by the cooperative, please share the percent of total sales by product category.

PRODUCT CATEGORY	DESCRIPTION	PERCENT OF SALES
Vegetables	Perishable	
	Root vegetables, squash, pumpkins	
Fruits	Berries/soft fruit	
	Tree Fruit	
Dairy	Refrigerated	
	Frozen	
Meat	Refrigerated	
	Frozen	
Eggs	Refrigerated	
Other	Please describe:	
TOTAL		100%

10. From the central aggregation point of the cooperative, please share the percentage of product that travels the following distances.

MILEAGE DATA:

DISTANCE (one-way, miles)	PERCENT OF PRODUCT PROCURED FROM MEMBERS	PERCENT OF PRODUCT PROCURED FROM NON- MEMBER SOURCES	PERCENT OF PRODUCT SALES
Less than 100 miles			
100 to 400 miles			
More than 400 miles			
TOTAL PERCENT	TOTAL PROCURED 100%		TOTAL SALES 100%
Furthest distance one-way			

PLEASE PROVIDE THE FOLLOWING DOCUMENTS:

1. Member supply/marketing agreement (if applicable)
2. Most recent annual report with balance sheet and income statement.

Thank you for providing this important information!

Appendix B. Board Chairman Survey



Cornell University
Charles H. Dyson School of
Applied Economics and Management

**Cooperative Marketing Solutions
to Meet Local Food Channel Demands**

A research project conducted by Cornell University, Charles H. Dyson School of Applied Economics and Management and funded through the USDA Federal State Marketing Improvement Program in collaboration with the Cooperative Development Institute and Keystone Development Center.

**BOARD CHAIRMAN
INTERVIEW**

The purpose of the project is to utilize the experiences of cooperative-structured businesses with small and medium scale member-producers in aggregating, marketing, and distributing source-identified products into existing and emerging market channels to identify best management practices useful to emerging food hubs. The best management practices of these successful cooperative businesses will be shared through project reports, educational meetings for cooperative leaders and food hub managers, and web-based training materials.

Permission is requested to record interviews. Participating cooperatives are invited to review and comment on the project reports prior to publication. If you have additional questions, contact:

Roberta Severson, Cornell University, 234 Warren Hall, Ithaca, NY 14853; phone: 607/255-1987; email: rmh27@cornell.edu

GENERAL INFORMATION:

Name of the cooperative:

Name of Board Chairman:

Phone number: _____ Email address:

COOPERATIVE HISTORY

1. What was the market failure or opportunity addressed by working cooperatively?
2. What is the unique advantage in organizing the business as a cooperative?

3. Briefly describe the history of the business and changes to present day functions.
 - a. Original mission/vision and objectives
 - b. Current mission/vision and objectives
 - c. Original market channels
 - d. Current market channels
 - e. Services provided to members at start up
 - f. Services provided to members today

COOPERATIVE GOVERNANCE:

1. How many directors currently serve on the board? _____
2. What are the titles of the officers of the cooperative?
 - a. Are there any board sub-committees that focus on aggregating, marketing, or distributing products of member-producers?
 - b. If yes, what was the motivation to form such committees?
3. How has the structure of the board of directors changed (e.g. more or less board members, etc.) as the organization has evolved?
 - a. What motivated such changes?

FINANCE:

1. What are the current membership fees and equity investment to become a new member of the cooperative?
2. What is the equity plan of the cooperative? How is equity revolved?
3. How does the cooperative determine what net returns will be distributed to members in cash?

- a. Net returns distributed as allocated reserves?

- b. Net returns distributed as unallocated reserves?

COOPERATIVE MEMBERSHIP AND PRODUCT AGGREGATION:

1. Does the cooperative have a closed or open membership?
 - a. Why?

2. How would you describe the size and scale of member farms today?
 - a. How has the size and scale of member farms changed (or not) since the cooperative started?

 - b. How do you see the membership evolving (or not), in the future, in terms of size and scale of production?

 - c. Do members have a willingness and resources to scale up production?

 - d. How will members respond to changing product needs of the cooperative?

 - e. Do members have flexibility to respond to changing market needs?

3. Does the cooperative have supply and/or marketing agreements with the members? YES NO
 - a. If yes, how have these agreements determined? What role does the board of director's play in crafting member marketing or supply agreements?

 - b. What are the requirements for members to deliver product to the cooperative?

- c. How are the agreements allocated across the membership?
 - d. How have these agreements changed through time?
 - e. What motivated these changes?
- 4. Is the cooperative looking for new members?
 - a. How do you solicit new members?
 - b. What are the criteria to become a member?
- 5. Does the cooperative accept non-member product? Why, or why not?
- 6. What are the current services provided by the cooperative to members?
 - a. How have these services changed through time?
 - b. What additional services will be requested by members in the future?
 - c. How might this impact the cooperative in the future?
- 7. In your view what are the keys to success, activities or services to maintain member loyalty?
- 8. What role does the board play in identifying and selecting the various market channels in which the cooperative will operate?

- a. What factors does the board take into consideration when making the decisions to enter or exit a given market channel?

MARKETING:

1. Have you seen an increase in demand for locally-sourced products in the intermediary market channels in which you operate?
 - a. How has that demand impacted the cooperative?

2. How does the cooperative connect producers to consumers in the various market channels? (For example – maintain farm name as branded product or maintain cooperative as a branded product)
 - a. Is it important?

3. Some cooperatives have showcased members to connect producers to consumers. What role do members play in branding the cooperative to the various intermediary channels in which the cooperative markets product? (For example – “meet the grower” events, farm featured on cooperative website, etc.)

DISTRIBUTION:

1. What role does the board play in directing resources towards product distribution through market channels or is it a management recommendation with board approval?

2. What factors does the board take into consideration when making decisions regarding allocation of resources towards product distribution?

3. What advice would you give to a start-up cooperative business focused on aggregating, marketing, and distributing locally-sourced foods?

Thank you for your time in providing answers to these questions!

Appendix C. General Manager Survey



Cornell University
Charles H. Dyson School of
Applied Economics and Management

**Cooperative Marketing Solutions
to Meet Local Food Channel Demands**

A research project conducted by Cornell University, Charles H. Dyson School of Applied Economics and Management and funded through the USDA Federal State Marketing Improvement Program in collaboration with the Cooperative Development Institute and Keystone Development Center.

**CEO OR GENERAL MANAGER
SURVEY**

The purpose of the project is to utilize the experiences of cooperative-structured businesses with small and medium scale member-producers in aggregating, marketing, and distributing source-identified products into existing and emerging market channels to identify best management practices useful to emerging food hubs. The best management practices of these successful cooperative businesses will be shared through project reports, educational meetings for cooperative leaders and food hub managers, and web-based training materials.

Permission is requested to record interviews. Participating cooperatives are invited to review and comment on the project reports prior to publication. If you have additional questions, contact:

Roberta Severson, Cornell University, 234 Warren Hall, Ithaca, NY 14853; phone: 607/255-1987; email: rmh27@cornell.edu

GENERAL INFORMATION:

Name of the cooperative:

Name of CEO or General Manager:

CEO or General Manager Phone Number: _____ Email address:

AGGREGATION:

1. Does the cooperative have supply and/or marketing agreements with the members?
 - a. If yes, why are supply/marketing agreements important?

- b. What role does management play in crafting member marketing or supply agreements?
 - c. What circumstances (e.g. co-op profitability, regulations, market conditions) trigger a change in the agreement?
 - d. If no, why is there no contractual arrangement with cooperative members?
2. How does the cooperative evaluate what products and quantities of products are needed from the members?
- a. How does the cooperative balance the supply of product available with demand of product on a day-to-day or week-to-week basis?
 - b. How does the cooperative deal with over-supply of a product?
 - c. What does the cooperative do to notify members of the anticipated demand for a product?
 - d. From a management perspective, how confident are you that members will provide the requested product in a timely manner?
 - e. How does the cooperative address under supply, if for example, farmer-members were to experience a crop failure?
3. How is source-identity maintained?

MARKETING:

- 1. Have you seen an increase in demand for locally-sourced products in the intermediary market channels in which you operate?
- 2. How has that demand impacted the cooperative?

3. What opportunities do you see in the future for local, source-identified foods?

4. Does the cooperative maintain the farm identity of the product for marketing purposes? YES
NO

5. If yes, how does the cooperative maintain source identity and traceability of the member product?

6. Is member branding part of the cooperative's marketing strategy? Or service provided to members?

7. Does the cooperative have a cooperative brand label for marketing purposes? YES NO

8. How is the cooperative brand maintained or preserved through various market channels?

9. In which market channels do you directly sell product?

MARKET CHANNEL	DESCRIPTION	CHECK ALL THAT APPLY
DISTRIBUTOR/WHOLESALER	Purchase product for resale	
FOOD SERVICE	Resale to institution (schools, hospitals, prisons)	
RESTAURANTS	Direct to restaurants	
PROCESSOR	Further manufactured products	
GROCERY STORES	Direct to grocery stores	
SPECIALTY PRODUCTS	Direct to gourmet, natural, health stores	
FOOD BANKS	Emergency food aid, assistance	
DIRECT	Through cooperative store or off the dock	

10. Has the cooperative always been in these channels?
 - a. What changes have occurred inside of these channels?
 - b. How did the cooperative respond to these changes?

11. How do you decide in which channels the cooperative will participate?

12. What strategies or processes does the cooperative utilize to identify new market opportunities?

13. What are the indicators (sources of information, trends, etc.) that you consider when deciding to enter or exit a particular market channel?

14. What value-added services or activities are conducted by the cooperative to prepare the product for each market channel? **(check those that apply)**

SERVICES	MARKET CHANNELS							
	DISTRIBUTOR OR WHOLESALER (Purchase product for resale)	FOOD SERVICE (Institutions including schools, hospitals, prisons)	RESTAURANTS (Directly to restaurants)	PROCESSOR (For further manufactured products)	GROCERY STORES (Direct to grocery stores)	SPECIALTY PRODUCTS (Direct to gourmet, natural, health stores)	FOOD BANKS (Emergency food aid, assistance)	DIRECT (Through cooperative store or off the dock)
Washing								
Grading								
Packing								
Transportation (Co-op to market channel)								
Marketing with co-op brand								
Marketing with source identified (farm) brand								
Other, please describe								

15. How have these services mentioned above changed recently?
 - a. What motivated these changes?
 - b. What processes have you developed or use to identify emerging needs of customers within a particular market channel?
 - c. What other services will market channels expect in the future?
 - d. How will the cooperative respond to these expectations?
 - e. How does management evaluate the success of these changes?
16. Given limitations of resources (staff/financial) available, how does management determine what resources will be allocated for marketing purposes?
17. How does management evaluate if the resources invested in marketing purposes provided the expected returns?

DISTRIBUTION:

1. What services (e.g. packing, transportation logistics, etc.) does the cooperative provide in each market channel to distribute the products that have been sold?
2. How have these services changed over time?
3. Have these changes been driven by the buyers?
 - a. Have these services been provided by the cooperative as a means to secure competitive advantage?

4. How has food safety regulations impacted the cooperative?

5. How do you see transportation/distribution/logistics changing in the future?

6. How will these changes impact the cooperative?

7. Given limitations of financial resources available, how does management determine what resources will be allocated for distribution purposes?
 - a. How does management evaluate if the resources invested for distribution functions provided the expected returns?

8. What advice would you give to a start-up cooperative business focused on aggregating, marketing and distributing locally-sourced foods?

Thank you for your time and assistance!

Appendix D. Capital District Member Survey

1. What is the value of sales of product that you sold at the Capital District Market during the 2013 growing season? Check the box that applies.

Value of product sold at Capital District Market	Check the appropriate box
Less than \$50,000	
\$50,000 to \$100,000	
\$100,001 to \$250,000	
\$250,001 to \$500,000	
Greater than \$500,000	

2. What percent of your sales at the Capital District Market was sold into the following market channels?

MARKET CHANNEL	DESCRIPTION	PERCENT OF SALES
Distributor/wholesaler	Purchase product for resale	
Food service	Resale to institution (schools, hospitals, prisons)	
Restaurants	Direct to restaurants or chefs	
Processor	Further manufacture products	
Grocery store	Direct from you to grocery stores	
Specialty products	Direct to gourmet, natural, health stores, food co-op	
Food banks	Direct for food aid, assistance	
Direct	Farmer to farmer	
	TOTAL	100%

3. Based on the products that you sold at the Capital District Market, please share the percent of total sales by product category?

PRODUCT CATEGORY	DESCRIPTION	PERCENT OF SALES
Vegetables	Perishable	
	Root vegetables, squash, pumpkins	
Fruits	Berries/soft fruit	
	Tree Fruit	
Dairy, Eggs, Meat	Refrigerated	
	Frozen	
Other (ex. bedding plants)	Please describe:	
TOTAL		100%

4. What value-added services do you provide to prepare the product to be sold at the Capital District Market for each market channel? (**check those that apply**)

SERVICES	MARKET CHANNELS							DIRECT (To other farmers)
	DISTRIBUTOR OR WHOLESALER (Purchase product for resale)	FOOD SERVICE (Institutions including schools, hospitals, prisons)	RESTAURANTS (Directly to restaurants)	PROCESSOR (For further manufactured products)	GROCERY STORES (Direct to grocery stores)	SPECIALTY PRODUCTS (Direct to gourmet, natural, health stores)	FOOD BANKS (Emergency food aid, assistance)	
Washing								
Grading								
Packing								
Transportation								
Labeling with farm brand								
Other, please describe								

5. How far do you travel from your farm to the Capital District Market (one way)?

DISTANCE ONE WAY	CHECK THE BOX THAT APPLIES
Less than 100 miles	
100 to 400 miles	
More than 400 miles	

6. Based on total farm sales in 2013, what percent of your product sales is sold at the Capital District Market?

PERCENT SALES	CHECK THE BOX THAT MOST CLOSELY APPLIES
0-25%	
22-50%	
51-75%	
75-99%	
100%	

7. In what way is the Capital District Cooperative important to your farm business?

OTHER A.E.M. EXTENSION BULLETINS

EB No	Title	Fee (if applicable)	Author(s)
2015-05	Building Success of Food Hubs Through the Cooperative Experience - A Case Study Perspective		Severson, R.M. & Schmit, T.M.
2015-04	The End of Laissez-Faire, The End of History, and The Structure of Scientific Revolutions		Kanbur, R.
2015-03	"Assessing the Economic Impacts of Food Hubs to Regional Economics: a framework including opportunity cost"		Jablonski, B.B.R., Schmit, T. and Kay, D.
2015-02	Does Federal crop insurance Lead to higher farm debt use? Evidence from the Agricultural Resource Management Survey		Ifft, J., Kuethe, T. and Morehart, M.
2015-01	Rice Sector Policy Options in Guinea Bissau		Kyle, S.
2014-22	Impact of CO2 emission policies on food supply chains: An application to the US apple sector		Lee, J., Gómez, M. and Gao, H.
2014-21	Informality among multi-product firms		Becker, D.
2014-20	Social Protection, Vulnerability and Poverty		Kanbur, R.
2014-19	What is a "Meal"? Comparative Methods of Auditing Carbon Offset Compliance for Fuel Efficient Cookstoves		Harrell, S., Beltramo, T., Levine, D., Blalock, G. and Simons, A.
2014-18	Informality: Causes, Consequences and Policy Responses		Kanbur, R.
2014-17	How Useful is Inequality of Opportunity as a Policy-Construct?		Kanbur, R. and Wagstaff, A.

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